

**AMREF DIRECTORATE OF LEARNING SYSTEMS
DISTANCE EDUCATION COURSES**

**MALARIA MANAGEMENT, PREVENTION
AND CONTROL**

**UNIT 9
Community Based Management of
Malaria and Fever in Children**



**Allan and Nesta
Ferguson Trust**

Unit 9: Community Based Management of Fever and Malaria in Children

A distance learning course of the Directorate of Learning Systems (AMREF)

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INTRODUCTION

Welcome to Unit 9 on Community Based Management of Fever and Malaria. So far we have learnt that malaria is a public health priority in Sub-Saharan Africa. We can reduce its burden by recognizing symptoms and providing timely and effective treatment, especially to pregnant mothers and children below the age of five years. Recently, the Ministries of Health in different countries developed new specific community intervention strategies for malaria control. In this Unit we shall discuss two examples drawn from Kenya and Uganda. These are the Home Based Management of Fever and Malaria (HBMFM) in children below 5 years of age in Uganda and the training of shopkeepers, drug vendors, and community IMCI in Kenya. Using these two examples, we shall look at the principles and elements of Community Based Management of Fever and Malaria (CBMFM).



It is the responsibility of every health worker to implement the community based management strategy and the Responsibility of the National Malaria Control Programme to develop policy guidelines

LEARNING OBJECTIVES

By the end of this unit you should be able to:

- Define community based management of fever and malaria;
- Explain the importance of community based management of fever and malaria;
- Explain the objectives of CBMFM and the training of retailers;
- List down the key elements of the home based management of malaria of retailers;

- Outline the role of health worker in community based management of fever and malaria in children;
- Explain the similarities and differences of the two methods implemented in Uganda and Kenya.

9.1 Definition of Community Based Management of Fever and Malaria particularly in Children

Community based management of fever and malaria in children is a strategy that aims at giving community members the opportunity to participate in malaria control.



ACTIVITY

Why is community based management of fever and malaria an important part of malaria control? List 7 important facts about CBMFM

i)

ii)

iii)

iv)

v).....

vi)

vii)

Confirm your answer as you read the following discussion.

9.1.1 Importance of Community Based Management of Fever and Malaria particularly in Children

Children, especially those under the age of five years, are more vulnerable to Malaria than people of other age groups.

Against this background all efforts should be made to ensure that all children with fever are treated early and promptly.

There are many reasons why CBMFM is an important part of malaria control activities. Some of these reasons are:

- i) Over-the-counter (OTC) drugs or self-medication at home is very common. Studies have shown that 60 – 70% of childhood fever episodes are first treated through self-medication using drugs obtained over-the-counter (Mwenesi *et al*, 1999);
- ii) A local shop selling antimalarials may be the only accessible source of effective treatment for many people who live a long way from health facilities;
- iii) The condition of children with malaria deteriorates very quickly and they may die;
- iv) In the vast majority of cases people using OTC drugs do not use correct drugs or doses. Fever cases are often treated with analgesics and/or underdose of anti-malarials;
- v) Widespread under-dosing practices encourage the development of resistance to anti-malarial drugs;
- vi) Community participation in malaria control is encouraged and the commitment and awareness is enhanced. In this way, community members can own the process of taking care of their health;
- vii) Public-private partnership is encouraged when working with private drug retailers.

9.2 Methods Used in the Community Based Management of Fever and Malaria in Children

In this unit we shall look at two case studies which illustrate the methods used in CBMFM in children. The first case study is drawn from Uganda and it describes home based management of fever and malaria in children, while the second case study looks at the policy of the Kenya government on training of shopkeepers.

9.2.1 CASE STUDY A: Home Based Management of Fever and Malaria In Children In Uganda.

Home Based Management of fever and Malaria (HBMFM) was a strategy designed by the Uganda Ministry of Health and its partners, in order to improve the management of fever and malaria at the household level among children under-five (U5) years of age. This strategy is specific to Uganda although it can be adopted in other countries depending on the local conditions.

Before you read on, do Activity 2, it should take you 5 minutes to finish.

**ACTIVITY**

From the definition we have given in the section above, why do you think home based management of fever and malaria is important?

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Confirm your answer as you read the following discussion.

There are a number of reasons why the government of Uganda adopted Home based management of fever and malaria in children. Malaria is the most common cause of ill health and death among children under five (U5) years of age in Uganda. About 95% of children brought to health facilities with fever suffer from Malaria. If children with malaria are not treated promptly, they quickly develop complications that are sometimes fatal. The Home Based Management of Fever and Malaria strategy was designed to address this problem.

The other reasons are that only 49% of the population in Uganda lives within 5Km of a formal health facility. Similarly, only 42% of parishes (districts) have health centres where families can receive treatment for Malaria.

Therefore the home-based management strategy was meant to solve part of the inadequacies in the health system.

About 83% of fever cases are managed outside formal health facilities, this intervention (strategy) is therefore timely.

In many cases (79%) the modern type of medicine is used for treatment. Unfortunately most of this treatment is taken in incorrect or incomplete doses and sometimes in dangerous combinations. The HBMFM strategy has come up with a solution of correct medicine in correct dose and combination.

Having learnt about the importance of Home based management of fever and Malaria in children, let us now turn to the objectives of home based managements of fever and Malaria.

- ***Objectives of Home Based Management of Fever and Malaria***

The following are the objectives of the home-based management strategy:

- To increase the proportion of children who have access to pre-packed anti-malaria drugs at household level. For example, the target was to increase access to 60% by the end of the year 2003;
- To increase the proportion of children who receive early treatment with pre-packed Chloroquine and SP within 24 hours of the onset of fever. For example, the target by the end of 2003 was to increase the proportion to 50%;
- To increase the proportion of children with complicated fever who receive prompt referral to qualified health workers. For example by the end of 2003, the objective was to increase this proportion to 50%.
- To increase the proportion of health facilities that offer appropriate care of children with fever and Malaria.

So far we have looked at the HBMFM strategy in Uganda, its definition, importance and objectives. Let us now turn to the elements of the Home based management strategy.

- ***Elements of Home Based Management Strategy***

The key elements of the strategy include:

- Training two mothers per village to serve as drug distributors;
- Providing high quality pre-packaged drugs (Homapak) at village and household level;

- Supplying drugs through public and private sectors;
- Mobilizing communities particularly mothers to treat fever within 24 hours of onset;
- Teaching both mothers and drug distributors signs of complicated Malaria that require referral;
- Improving quality of care at health units and ensuring the proper
- Management of severe Malaria.



Have you ever heard of Homapak?

What is HOMAPAK?

In the second key element of the home based strategy you came across the term Homapak. It is now time for us to discuss Homapak.

Homapak is pre-packaged Sulfadoxine / Pyrimethamine (SP) and Chloroquine for children between 2 months – 5 years of age. Homapak is available through community distributors in Uganda. It is a first line drug combination for the treatment of simple Malaria. It is usually in two forms:

- (i) Red packet for children between 2 months and 2 years.
- (ii) Green packet for children between 2 years and 5 years.

- ***What is the drug combination in Homapak?***

The Homapak uses a drug combination of SP and Chloroquine. SP and Chloroquine are a first line drug combination for treatment of Malaria in Uganda (What is the situation in your country?). This combination has been found to be a

very effective antimalarial drug in Uganda. SP has general brand names including Fansidar, Falcipar, Kamsidar, Malarif, Maladexin and Malarex , etc.

Dosage in Homapak.

The principle of treatment of Malaria which we discussed in Unit 4 is applicable to Homapak, especially in countries with similar treatment policy.

The following table gives a summary of dosages for Homapak.

Table 9.1. Drug dosages in Homapak.

AGE	DAY I	DAY II	DAY III	HOMA PAK
2 MONTH – 2 YEARS	½ Tablet sp ½ Tablet Choloquine	½ Tablet chloroquine	½ Tablet chloroquine	RED HOMAPAK
2 YEARS – 5 YEARS	1 Tablet SP 1 Tablet chloroquine	1 Tablet chloroquine	1 Tablet chloroquine	GREEN HOMAPAK

NOTE: Although in this section we have discussed the Homapack as a Specific case used in Uganda, the drug content/dosage will change as soon as the new treatment policy is implemented.

Having looked at one of the approaches used in Uganda for the community-based management of fever and malaria, let us now look at the second case study from Kenya.

9.2.2 CASE STUDY B: Training shopkeepers

In the Kenya National Malaria Strategy (2001), one of the four priority areas for malaria control was to improve access to early effective treatment for fever. One method that Kenya has adopted to make this priority achievable is training of shopkeepers.

- ***What is the training of shopkeepers strategy in Kenya?***

This is a process by which existing shopkeepers undergo a training programme to enhance their knowledge of the sale of MOH recommended anti-malaria drugs and their correct dosage. The drug retailers who are trained are selected from an existing pool of established shopkeepers involved in selling household consumer products in addition to Over The Counter (OTC) drugs.

- ***Objectives of training shopkeepers on management of fever and malaria***

The overall aim of training shopkeepers is to reduce the burden of malaria deaths and disease in communities. This can be achieved by:

- Improving access to effective anti-malarial drugs, and;
- Promoting early treatment of childhood fevers with correct dosage of MOH recommended anti-malarial drugs.

- ***Elements of the strategy for training drug retailers***

The key elements of the strategy include:

- Training shopkeepers trainers (PHTs, Community Resource Person
- (CORPS);
- Determining location and types of retail outlets for drugs;
- Selection of shopkeepers and Training;

- Location and types of other public and private health providers;
- Determining Health seeking behaviour in the community, and reasons for these behaviour;
- Assessing common practices amongst shopkeepers, and reasons for these;
- Ensuring that retail outlets stock MOH recommended antimalarials and Antipyretics of good quality;
- All community members should have trained retailers within reasonable Walking distance (2 Kms) from home;
- Shopkeepers and community members should know and understand the following:
 - The need to treat childhood fevers quickly with correct dose of recommended anti-malarial drugs;
 - The types of anti-malarial drugs recommended by the MOH and how these should be used according to age, including supportive treatment with antipyretic drugs within 24 hours of onset of symptoms;
 - The signs that indicate that assessment by a trained health worker is needed (referral).

Those two case studies have illustrated two methods that are being used in community bases management of fever and malaria in children. Next let us look at your role in CBMFM.

9.3 Roles of Health Workers in Community Based Management of Fever and Malaria in Children

You have now known about Community based management of fever and Malaria, the implementation and supervision of such strategies is key to achieving the community-based management of fever and malaria in children, You as a health worker, have a pivotal role in this strategy.

Before you read on, do Activity 3, it should take you 5 minutes to complete.



ACTIVITY 3

What role would you as a health worker play in implementation of CBMFM?

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Confirm your answer as you read the following discussion.

As a health worker you are responsible for the successful implementation of new anti-malarial programmes such as CBMFM. The following are some of the ways in which you can play a role in implementation of the strategy:

- Advocate for financial allocation for malaria control at national budget and district development plan. This is your role as policy makers together with other formal policy makers;
- Advocate for Community based management of fever during speeches, planning meetings and other gatherings. This is your role as a health worker – manager;
- Mobilize community members to fight Malaria through appropriate treatment and other Malaria control measures for example insecticide treated nets, LLINs etc;

- Be a role model. Treat fever promptly and appropriately and use ITNs;
- Ensure that your community members have access to anti-malarial treatment and that members are within walking distance from trained shopkeepers (Kenya) or other community health workers;
- Counsel and educate your community on the nearest drug outlets operated by trained retailers.

Conclusion

We have now come to the end of this unit. In this unit we learnt about community based management of fever and Malaria in children. We learnt that home based management of fever and Malaria and the training of shopkeepers are important strategies designed by the Uganda and Kenya Ministries of Health respectively, to improve the management of fever and Malaria at household and community level. We also learnt that your role as a health worker in the implementation of these strategies is to advocate for financial support for Malaria control activities, advocate for community based management, mobilize the community and be a role model. We noted that the Homapak and shopkeeper retail outlets use the same treatment principle as the one we discussed in the Unit 4 on treatment of Malaria.

You should now review the learning objectives for this unit outlined at the beginning of this unit. Check if you have achieved all of them. If there is anything you are not sure about, review the relevant section again. If you feel confident that you have achieved all of them, complete the attached Tutor Marked Assignment before you proceed to the next unit.

Practical Assignment

Instructions:

Visit 4 trained shopkeepers incognito posing as a potential customer. Find out if they:

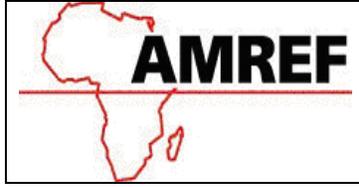
- Stock MOH recommended drugs;
- Know and give correct dosage for different ages and correct instructions;
- Know the signs that indicate the need for referral to a trained health worker.

If in your country you do not have similar programmes as described in the case studies, for home based management of fever and malaria, please describe how the management of fever and malaria is carried out at home.

Feedback:

Prepare a short report of your findings and the action you have taken and send it to your tutor.

Enjoy the rest of the course!



**AMREF DIRECTORATE OF LEARNING SYSTEMS
DISTANCE EDUCATION PROGRAMME**

Student Name _____

Student Number: _____

Student Postal Address: _____

**DISTANCE LEARNING COURSE ON MALARIA
Tutor Marked Assignment
Unit 9: Community Based Management of Fever and Malaria**

1. Define Community Based Management of fever in children.

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2. Describe the two methods used in community based management of fever and malaria in children.

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3. a) Name the five key elements of Home Based Management of fever and Malaria strategy as described in the case studies, and give explanation for each of these elements.

	Element	Explanation
(i)
(ii)

- (iii)
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- (iv)
.....
- (v)
.....

b) Name the five key elements of Training shopkeepers for Management of fever and Malaria strategy, and give explanation for each of these elements.

	Element	Explanation
(i)
(ii)
(iii)
(iv)
(v)

Congratulations! You have come to the end of this assignment. Please write your name and student identification number in the space provided. Then send the assignment to AMREF or bring it in person. If you have encountered any problems in this unit, write to us. We shall be happy to give you relevant responses to enable you cope with the course.