

EDUCATION FOR SAFE MOTHERHOOD

## Tutor's Handbook

Continuing education material for use by  
Midwifery Tutors for registered/enrolled  
midwifery personnel



MATERNAL HEALTH AND  
SAFE MOTHERHOOD PROGRAMME  
DIVISION OF FAMILY HEALTH  
WORLD HEALTH ORGANIZATION  
GENEVA

**MIDWIFERY TRAINING: FIELD TESTING VERSION**

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## TABLE OF CONTENTS

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INTRODUCTION .....	1
STRUCTURE OF THE MODULES .....	3
TEACHING-LEARNING METHODS .....	4
Lectures .....	4
Discussions .....	4
Group Work and Feedback .....	5
Tutorials .....	5
Student Seminars .....	5
Practical Exercises .....	5
Community Visits .....	5
Clinical Teaching .....	6
Drama and Role Play .....	6
Case Studies .....	6
Learning Games and Quizzes .....	6
Workshops .....	7
ASSESSMENT OF STUDENTS .....	7
CONTENT OF THE TRAINING MODULES .....	7
Module 1: The Midwife in the Community .....	7
Module 2: Postpartum Haemorrhage .....	9
Module 3: Obstructed Labour .....	10
Module 4: Puerperal Sepsis .....	10
Module 5: Eclampsia .....	11
PLANNING FOLLOW-UP ACTIVITIES .....	12

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## INTRODUCTION

Every year approximately 200,000 million women become pregnant in developing countries - more than 500,000 of them will die of pregnancy related causes, and 50 million will suffer a significant complication of pregnancy. Additionally, seven million perinatal deaths occur as a result of maternal health problems.

To provide health care to mothers and babies, material and human resources must be used effectively. Maternal health care must be strengthened so that it is offered on a continuum, beginning with conception, through pregnancy and delivery to the newborn baby. The continuum of care must be provided from the community through to the referral hospital in order to bring about a significant reduction in maternal mortality and morbidity.

The person best equipped to provide community-based, appropriate and cost-effective maternal health care is the person with midwifery skills who lives in the same community as the women she treats. Most of the interventions required for the mother and newborn are within the capacity of a person with midwifery skills. Experience shows that upgrading the skills of midwives<sup>1</sup> to enable them to deal with obstetric emergencies can reduce maternal mortality.

To support the upgrading of midwifery skills so that countries can strengthen maternal health services, a set of midwifery training modules has been developed by the Maternal Health and Safe Motherhood Programme of the World Health Organization.

The impetus for the development of the training modules came from the Pre-Congress Workshop on Midwifery Education: Action for Safe Motherhood, held in Kobe, Japan in 1990 under the joint sponsorship of WHO, ICM and UNICEF. The midwives and midwife educators from developing countries who attended the workshop recognized that the midwifery training curricula in use in their countries were not designed to meet current training needs. As a consequence, they designed an innovative framework for midwifery education which addressed safe motherhood. The aim in

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<sup>1</sup> The preparation of these midwifery training modules has been based on the definition of midwife adopted by the International Confederation of Midwives and the International Federation of Gynaecologists and Obstetricians in 1972 and 1973 respectively, following amendment of the definition formulated by WHO, as follows: "A midwife is a person who, having been regularly admitted to a midwifery educational programme duly recognized in the country in which it is located, has successfully completed the prescribed course of studies in midwifery and has acquired the requisite qualifications to be registered and/or legally licensed to practise midwifery."

designing the framework was to use the concepts of community, prevention, treatment and follow-up to deal with the main causes of maternal death. It was on the basis of this framework that the midwifery training modules were developed.

The modules are designed to be used in continuing education or in-service training programmes for enrolled/registered midwives. The modules are intended as teaching resources for midwifery tutors and can be used in conjunction with or as part of an existing continuing education or in-service training programme, or where necessary can provide the basis for the development of a new programme.

The modules are not, however, meant to replace midwifery textbooks which deal with care during normal pregnancy, labour and delivery, but are instead intended to serve as the basis for teaching midwives to respond appropriately to the major causes of maternal mortality - haemorrhage, obstructed labour, hypertensive disorders of pregnancy, and sepsis - and thus contribute to making motherhood safer.

The modules include a wide variety of teaching and learning methods, but the emphasis is on student participation. The midwifery tutors who use the modules will have their own varied and rich experience which can be drawn upon in discussions and exercises. Yet perhaps the most important thing the tutor can communicate to midwives is enthusiasm - enthusiasm to put their education into practice and thereby promote safe motherhood.

The modules aim to help midwives develop into practitioners who are able to think critically and make clinical decisions on the basis of sound knowledge and understanding.

It is assumed that midwives who undertake training using the modules will already have basic skills such as measuring blood pressure, performing a vaginal examination, conducting a normal delivery, giving an injection or setting up an intravenous infusion.

A variety of other skills are included in the training modules because they are considered essential to comprehensive midwifery practice and yet are often not sufficiently covered in basic midwifery training courses. In some countries some of these skills may not be a part of midwifery practice and, indeed, may be seen as the responsibility of the medical practitioner rather than of the midwife. However, the training modules have been developed based on the belief that competent midwives with a range of essential skills can make a significant contribution to the promotion of safe motherhood.

## STRUCTURE OF THE MODULES

As mentioned earlier, the training modules deal with the main causes of maternal death. There are five modules in the series; the first module deals with the midwife in the community, while modules 2, 3, 4, and 5 each cover specific problems which may lead to maternal death.

Each of the training modules is self-contained and can, if necessary, be taught in isolation from the other modules. The modules are, however, intended to complement each other since together they present a comprehensive approach to dealing with the major causes of maternal mortality and morbidity. It is advisable, therefore, to plan a training course designed to enable midwives to work through all five modules.

While the modules can be taught quite adequately with the material and resources contained in each of them, extra resources may well be useful. For instance, further resource material, particularly related to safe motherhood, may be requested from WHO.

The material in the modules is presented in a structured way. However, because modules 2, 3, 4, and 5 deal with specific problems, a common framework has been used for these modules. Each of these modules begins with an introduction to the specific problem and is then followed by the related avoidable factors, how to identify the problem, treating the problem, and learning the required clinical skills.

Module 1 follows a slightly different pattern from the others in that it deals not with a specific problem but with the general issue of maternal mortality and the importance of community participation in helping to make motherhood safer.

The midwifery tutor will find four types of material in the training modules:

- **Introduction to the session** (in a grey shaded box), which describes
  - the aim of the session
  - the objectives of the session
  - the plan for the session, which sometimes includes teaching-learning methods, time required and resources needed.

- *instructions for the tutor* (in italics), which explains how to lead the session, step-by-step, and sometimes includes suggested methods for assessment;
- **supplementary material for the tutor** (in normal lettering), which gives details of the teaching content for both theory and practice;

- **instructions for students** (labelled as instructions for students or instructions for group work) which provide guidelines for individual or group activities. These instructions can be either photocopied for the students by the tutor or written down by the students themselves.

## TEACHING-LEARNING METHODS

The modules propose a range of teaching-learning methods designed to maximize student involvement. Students are required not just to take notes during lectures but to analyze specific problems and propose ways of dealing with them. There is emphasis on the practical application of the training material; hence, community visits included in the modules are an essential part of the learning process.

### Lectures

Lectures are unavoidable when large amounts of information - much of it new information - have to be transmitted to students. However, lectures are made more interesting if visual aids are used. These may be diagrams, graphs, pictures, slides, photographs, drawings or models. The training modules include a variety of visual material for tutors to use in their lectures. All the facts and figures needed by tutors are included in the modules and tutors may wish to photocopy some of this material for students. In addition resources such as documents, newsletter articles and chapters of books are provided as supplementary information for students.

### Discussions

An essential aspect of the lecture method of teaching is to have a discussion with the class afterwards. Always allow time for this since it provides students with the opportunity to ask questions about information that is unclear to them, as well as to make contributions on the basis of their experience. It is important to allow students to express themselves;

however, assertive students should not be permitted to dominate the discussion period.

## **Group Work and Feedback**

Many of the sessions in the modules involve group work. The groups should be kept as small as possible (preferably not more than 6 students per group) and the aim should be to have a mix of different types of personalities in each group. It is also important to ensure that there is sufficient space for the groups to meet without disturbing each other. Each group will need a facilitator who will be responsible for keeping the discussion going, encouraging everyone to contribute, and ensuring that the group completes its work. In addition, each group will require a reporter who will take notes and provide feedback to the whole class on behalf of the group.

## **Tutorials**

A tutorial is a meeting between a tutor and a student or a small group of students. Tutorials are time-consuming but they are important for discussing students' progress. Tutorials usually follow a specific learning activity and give students an opportunity to express their concerns to the tutor and, in turn, give the tutor an opportunity to get to know students better.

## **Student Seminars**

A student seminar gives students a chance to play an active part in teaching others. In order to be effective at the seminar, students need to prepare well for the topic to be discussed. One or more students usually assume responsibility for presenting the topic. In this regard, the tutor should help students to access the required information and suggest possible visual and other aids.

## **Practical Exercises**

Practical exercises require students to demonstrate an activity or a skill in front of the class. It is important in these situations to provide clear instructions to the students about the activity/skill they are to perform. Above all, students should not be made to feel embarrassed about doing this.

## **Community Visits**

Community visits (including a visit to a hospital or health facility) can be both instructive and enjoyable experiences for the students. The material in the training modules can be made more relevant by relating it to what the students see and do in the community. Community visits must, however, be organized efficiently. It is important to choose a community that does not take too long to reach. The tutor should arrange transport for the students and also fix appointments for the students to talk with community leaders or health personnel. If communities in the area are particularly small, divide the class between two or more villages. Students should be paired and each pair should visit



one or two families. Students should show appropriate behaviour on these visits.

### **Clinical Teaching**

Clinical teaching is extremely important in this training course because the clinical skills students learn can mean the difference between life and death for the women in their care. Help students to understand the importance of these skills and the way they are carried out. Stress the need for skill to be combined with speed, gentleness and tact in order to save lives, minimize damage and maximize the cooperation of the woman. Arrangements with the staff at the health facilities where clinical teaching is to take place must be made in advance. Moreover, the students' visits to these facilities for the purpose of clinical practice should not disturb routine care. When students are learning hands-on skills, supervision must be provided by the tutor or by another trained and experienced midwife.

### **Drama and Role Play**

Drama and role play is used from time to time to emphasize points made by the tutor. In both cases students are asked to act out a real or imaginary situation. In drama students make up their own characters and to some extent their own story in order to illustrate a particular point. In role play students take the part of specific individuals such as the midwife, the village leader, the distressed relative or the worried mother. Students who are putting on a performance will need to meet some time (perhaps several times) to plan. The discussion which takes place after the performance is not intended for assessment of students' acting abilities; it is for assessment of the situation that was portrayed during the performance.

### **Case Studies**

All technical modules give the opportunity for presenting case studies as the basis for evaluating the effectiveness of care in specific situations. Students will be able to learn from their own experience as well as from that of others. The intention of case studies is not to criticize the practice of others; instead, students should be encouraged to look at past practice and see what lessons can be learned for the future. It should be noted that patient confidentiality should be maintained in the case studies.

### **Learning Games and Quizzes**

Learning games and quizzes also occur from time to time in the modules. It is always a good idea for the tutor to play the learning game first with colleagues or friends in order to understand just how it works. Quizzes are useful from time to time not just as entertainment but as a means of checking that students have understood what they have been taught.

## Workshops

A workshop is a period of planned activity on a specific issue, often with a presentation by a guest speaker. Where workshops are recommended in these training modules the content and programme are suggested. Workshops require careful planning with regard to the content, timetable, and facilities. However, they provide an opportunity to invite other people in addition to the tutor to contribute to the training course.

## ASSESSMENT OF STUDENTS

Throughout the training modules there are sections entitled *Assessing competence*. These sections provide guidelines for tutors to assess the clinical competence of students. When using these guidelines, it is important for the tutor to actually observe the student performing the skill being assessed. It is also important to have provided students with adequate opportunity to practice clinical skills prior to assessing their competence. **It should be noted that the assessment of clinical competence constitutes the major component of student assessment in the modules.**

Other opportunities for assessment will be available during group work, tutorials, student seminars, learning games and quizzes, and during community visits.

## CONTENT OF THE TRAINING MODULES

### Module 1: The Midwife in the Community

This is the first module of the series and introduces students to the overall problem of maternal mortality and morbidity and to the concept of safe motherhood. The module begins with an illustrated story (available with slides or as a video) that shows how certain social, economic and cultural factors, combined with delays in seeking medical care, put mothers at high risk of complications.

The second session of the module involves a visit to a community, the first of four such visits in this module. The idea is that students should be assigned to a community in order to help women there achieve safe motherhood. The tutor will be responsible for making arrangements for these visits and for identifying persons for the students to meet. It is important to select a community where it is practicable both to implement safe motherhood activities and to continue them

while the module is being taught. The community visit should be seen not just as an educational exercise for the students but as a practical means of establishing safe motherhood for the benefit of the women who live there. Whenever the group of students makes a visit to the community, it may be helpful for the tutor to take along a small quantity of medical supplies in case anyone in the community needs medical care. This will help show that the student group has the interests of the community at heart.

Once students understand how a variety of factors can affect maternal health, they will learn the importance of prompt referral. "Delay means death" is a slogan used often in this module and it is a slogan midwives and other health care personnel will do well to remember when faced with cases of complicated cases.

Session 9 of this module consists of a detailed guide to carrying out a "community profile" to work out - in statistical terms - the ratio of maternal and neonatal deaths to live births in the community. Depending on the level of general school education among the students, it may be necessary to spend a little time before this session to teach some basic mathematics.

Finally, the module gives students an opportunity to see for themselves how their activities in the community could have made a difference and what the obstacles to change were.

In addition to community visits and classroom lectures, the sessions of Module 1 involve students in group work, tutorials, a board game called "Walking where Mrs X walked", and optional drama and role play. Students will learn to respond to uncertainty and need in real situations (in the community); they will be encouraged to use a problem-solving approach, treating women and their families as partners rather than patients; and they will be able to assess the need for a system of safe maternity care that identifies women at risk and uses referral and reporting systems. Students will be given an opportunity to work with community leaders, colleagues and others in constructive ways in order to promote safe motherhood.

On completion of Module 1, students should be able to:

- understand the factors that contribute to maternal mortality, especially in their own country and locality;
- undertake community visits in order to
  - listen to the needs of families,
  - discuss their problems,
  - determine priorities,
  - provide care that will promote safe motherhood;
- identify which risk factors can be reduced, and how;
- form partnerships with families, communities and colleagues;

- devise ways to address issues that may interfere with the promotion of safe motherhood;
- assess whether community attitudes, beliefs and taboos concerning childbearing are helpful, harmful or irrelevant to the health of women and their families;
- conduct interviews, collect information and analyze data to compile a community profile.
- evaluate effective community-based maternity care.

It is estimated that students will require eight full days to complete Module 1. This is calculated on the basis of 24 students, one tutor, three hours in a half-day and six hours in a full day, though the time required to complete the community profile is not included in this calculation. The time will, of course, vary according to the distance to the community that is visited and the transport available.

Even if the total module is taught in separate sessions over a period of weeks, it is advisable to present sessions 1-4 fairly quickly one after the other, such as in a study block of 3-4 days. Some parts of the module may also be taught in the community. Students may find it helpful to stay in the village and learn about safe motherhood as they live and work with community members.

## **Module 2: Postpartum Haemorrhage**

In order that students may fully understand how postpartum haemorrhage occurs, Module 2 begins with a detailed explanation of the physiology and management of the third stage of labour. In addition to classroom lectures, the module uses group work, case studies, a learning game and an optional tutorial, as well as clinical teaching. After learning what postpartum haemorrhage is, how it occurs, what factors contribute to it and how it can be identified, students are taught the skills required to prevent and to manage postpartum haemorrhage if it does occur.

All the skills covered in this module are necessary if midwifery personnel are to be effective in giving prompt and appropriate care to women with postpartum haemorrhage. Nevertheless, it may be that in some countries midwives are not legally authorized to perform all the skills included in the module. In this case the module will need to be adapted to conform to local regulations on medical and midwifery practice.

On completion of Module 2, students should be able to:

- understand the anatomy and physiology related to the third stage of labour;
- understand the causes of postpartum haemorrhage;
- distinguish types of postpartum haemorrhage;

- describe action and effectiveness of the drugs used in the third stage of labour;
- assess and monitor the woman's condition and accurately record details;
- demonstrate the clinical skills necessary for preventing and for treating postpartum haemorrhage;
- arrange for referral and transfer of a woman who requires treatment that is not available at the place of delivery;
- evaluate the process and outcome of care of women with postpartum haemorrhage on the basis of case studies.

### **Module 3: Obstructed Labour**

Module 3 begins with a review of the anatomy and physiology relevant to the management of obstructed labour. On the basis of this, the module explains what makes obstructed labour more likely to occur, what happens in obstructed labour, and how signs of obstructed labour can be identified. In this module, group work, clinical teaching, drama, case studies and an optional quiz and tutorial are used in addition to lectures.

The module puts special emphasis on the use of the partograph in monitoring labour. Practical exercises are provided so that students can become familiar with the partograph. Clinical teaching is used to help students identify risk factors and develop the skills required for prevention and for appropriate action if obstructed labour occurs.

On completion of Module 3, students should be able to:

- explain how the fetus normally passes through the pelvis and how obstructed labour may occur;
- palpate the abdomen, monitor the descent of the fetal head, and assess pelvic capacity;
- describe the risk factors and causes of obstructed labour;
- use the partograph to identify labour that is prolonged or obstructed;
- initiate treatment for obstructed labour;
- decide on priorities for action when treating obstructed labour;
- identify criteria for referral of a woman who requires treatment that is not available at the place where she first seeks help;
- evaluate the process and outcome of care of women with obstructed labour on the basis of case studies.

### **Module 4: Puerperal Sepsis**

The aim in Module 4 is to help students acquire the basic knowledge and skills to prevent and treat puerperal sepsis.

Once again, a range of teaching methods is used. The first session includes a visit to a community or to a health facility, so this will have to be planned by the tutor in advance. The tutor will also need to explain carefully how to play a game which is intended to help students learn what puerperal sepsis is, how it can be identified and how it can be differentiated from other diseases. The module also uses group work, a student seminar on HIV and AIDS, a workshop, tutorials, and case studies, in addition to lectures.

Clinical teaching is required for the development of the skills necessary to treat a woman with puerperal sepsis. Some of these skills are covered in other modules in the series, but the full set of skills needed to treat puerperal sepsis is included here so that the module can be used independently if necessary.

On completion of Module 4, students should be able to:

- understand how puerperal sepsis develops and how it can be prevented;
- minimize the spread of infection in a maternity unit;
- recognize puerperal sepsis and establish a differential diagnosis;
- demonstrate the clinical skills required to treat puerperal sepsis;
- write and use a standard care plan for a woman with puerperal sepsis;
- evaluate the process and outcome of care of women with puerperal sepsis on the basis of case studies.
- recognize AIDS or HIV-related infections and describe the midwife's role in caring for women and their families affected by the virus;

## Module 5: Eclampsia

Module 5 helps students to understand what eclampsia is and how it can be avoided, identified and managed. In addition to lectures, the module requires group work, case studies, tutorials, a workshop, and clinical teaching. A learning game is included to help students recognize eclampsia and pre-eclampsia.

On completion of Module 5, students should be able to:

- explain what eclampsia is and recognize when it is likely to occur;
- describe the stages of an eclamptic fit and the dangers to mother and fetus;
- describe other conditions which may cause fits;
- describe the action and effectiveness of the drugs used in controlling fits and blood pressure;
- demonstrate the clinical skills required to provide treatment for eclampsia;

- write and use a standard care plan for a woman with eclampsia;
- evaluate the process and outcome of care of women with eclampsia on the basis of case studies.

It is estimated that each of the four technical modules will take a minimum of 10 days. This is calculated on the basis of 24 students per tutor. The time will vary according to the level of knowledge of the students, the extent to which basic anatomy and physiology need to be reviewed, the amount of skilled help available for teaching and supervising in clinical practice, the distance to the community, and the transport available for community visits.

## PLANNING FOLLOW-UP ACTIVITIES

Students who complete this training course will obtain a foundation of knowledge and skills on which to build their future practice. Comprehensive midwifery practice relies on experience as well as knowledge and it is this experience that the students will gain as they put what they have learned into practice when they return to their home communities.

It is precisely when they put their knowledge and skills into practice that the midwives will come across situations that do not seem to match the situations they have studied. They may have to deal with women who have a combination of complications that only serve to compound their difficulties. Experiences such as these will raise new questions in the midwives' minds. There will be further issues they will want to discuss with more experienced practitioners or with colleagues in other communities.

A follow-up meeting, perhaps six months after the end of the course, will be important to enable the students to share experiences, report on successes, review progress, and discuss problems related to practice.

Other follow-up meetings may also be appropriate, perhaps after a year, and even again after two years. Because of the complexities involved, safe motherhood cannot be achieved overnight. But, because we can see quite clearly what needs to be done, safe motherhood can certainly be achieved over time. As the students of this course become effective practitioners, making motherhood safer for the women in their communities, they will become increasingly able to show other health care providers how safe motherhood really works.