



Early Infant Male Circumcision under Local Anaesthesia

Facilitators Guide



This report was made possible by the generous support of the American people through the United States Agency for International Development (USAID), under the terms of the Leader with Associates Cooperative Agreement GHS-A-00-08-00002-00. The contents are the responsibility of the Maternal and Child Health Integrated Program (MCHIP) and do not necessarily reflect the views of USAID or the United States Government.

The Maternal and Child Health Integrated Program (MCHIP) is the USAID Bureau for Global Health's flagship maternal, neonatal and child health (MNCH) program. MCHIP supports programming in maternal, newborn and child health, immunization, family planning, malaria, nutrition, and HIV/AIDS, and strongly encourages opportunities for integration. Cross-cutting technical areas include water, sanitation, hygiene, urban health and health systems strengthening.

Table of Contents

COURSE OVERVIEW	1
Course Learning Objectives	1
Course Design	1
Methods of Evaluation	1
ADULT LEARNING BACKGROUND.....	2
A New Approach to Training.....	2
Mastery Learning.....	2
Key Features of Effective Clinical Training	3
Behaviour Modelling	3
Competency-Based Training.....	3
Humanistic Training Techniques	4
COMPONENTS OF THE EIMC TRAINING PACKAGE	5
Using the Early Infant Male Circumcision under Local Anaesthesia Learning Package.....	5
The Individualized Learning Package.....	6
INTRODUCTION TO THE EIMC LEARNING PACKAGE.....	7
Course Design	7
Evaluation	7
Course Syllabus.....	9
Course Description	9
Course Goals.....	9
Learner’s Learning Objectives	9
Training/Learning Methods.....	9
Training Materials	9
Learner Selection Criteria.....	10
Methods of Evaluation.....	10
Course Duration.....	10
Course Outline.....	11
PRE-COURSE/MID-COURSE KNOWLEDGE ASSESSMENT FOR THE EIMC TRAINING COURSE.....	15
WORKBOOK FOR EARLY INFANT MALE CIRCUMCISION TRAINING COURSE.....	20
Chapter 1: Introduction.....	20
Chapter 2: Supplies and Resources.....	23
Chapter 3: Education and Counseling	24
Chapter 4: Screening Infants for Circumcision.....	25
Chapter 5: Anaesthesia	26
Chapter 6: Procedure Preparation	28
Chapter 7: Surgical Devices.....	29
Chapter 8: Surgical Procedures.....	30
Chapter 9: Postoperative Care	31
Chapter 10: Adverse Events	33
Chapter 11: Infection Prevention	35

Chapter 12: Monitoring and Evaluation.....	37
Chapter 13: Service Delivery Model.....	38
ANNEX 1. SKILL STATION 1: COUNSELING AND CONSENTING.....	39
ANNEX 2. SKILL STATION 2: SCREENING EXAM, MAKING THE PEN MARK, AND ADMINISTERING A DORSAL PENILE NERVE BLOCK (DPNB)	41
ANNEX 3. SKILL STATION 3: WOUND DRESSING AND POST-CIRCUMCISION BLEEDING	42
ANNEX 4. SKILL STATION 4: MANAGING COMPLICATIONS	44
ANNEX 5. SKILL STATION 5: POSTOPERATIVE CARE AND COMPLICATIONS	45
ANNEX 6. SKILL STATION 6: SUTURING.....	46
ANNEX 7. SKILL STATION 7: SURGICAL PROCEDURES FOR EIMC.....	47
COURSE EVALUATION	48

Course Overview

This course is designed to prepare learners with the knowledge, skills, and attitudes needed to provide early infant male circumcision (EIMC) services. It is designed to be flexible in order to accommodate a number of different situations found in programs scaling up EIMC services.

COURSE LEARNING OBJECTIVES

- Describe EIMC and its benefits and risks
- Educate and counsel parents and guardians about EIMC
- Screen male infants for circumcision
- Demonstrate competency in one of three male infant circumcision devices
- Provide postoperative care follow-up and identify and manage adverse events resulting from circumcision
- Prevent infection in the health care setting
- Monitor and evaluate an EIMC service

COURSE DESIGN

The course is designed to be a combination of independent and group activities:

Independent study:

- Manual for EIMC
- Workbook for EIMC

Training course:

- General review of independent study
- Pre/midcourse evaluation
- Workbook review
- Skill stations
- Clinical practice demonstration and coaching

METHODS OF EVALUATION

Knowledge will be assessed using competency-based knowledge exams. Learners are expected to answer 80% of the questions correctly.

Skill will be measured using competency-based skill assessment checklists. Learners are expected to perform all the skills involved in EIMC. Each step needs to be performed correctly and in the proper sequence.

Adult Learning Background

A NEW APPROACH TO TRAINING

This *Early Infant Male Circumcision under Local Anaesthesia* training course will be conducted in a way that is very different from traditional training courses. First of all, it is based on the assumption that people participate in training courses because they:

- Are **interested** in the topic
- Wish to **improve** their knowledge or skills, and thus their job performance
- Desire to be **actively involved** in course activities

The training approach used in this course is highly interactive and participatory.

MASTERY LEARNING

The **mastery learning** approach to clinical training assumes that all learners can master (learn) the required knowledge, attitudes, and skills provided that sufficient time is allowed and appropriate training methods are used. The goal of mastery learning is that 100% of those being trained will “master” the knowledge and skills on which the training is based.



While some learners are able to acquire knowledge or a new skill immediately, others may require additional time or alternative learning methods before they are able to demonstrate mastery. Not only do people vary in their abilities to absorb new material, but also individuals learn best in different ways—through written, spoken, or visual means. Mastery learning takes these differences into account and uses a variety of teaching and training methods.

The mastery learning approach also enables the learner to have a self-directed learning experience. This is achieved by having the clinical trainer serve as a facilitator and by changing the concept of testing and how test results are used. In courses that use traditional testing methods, the trainer administers pre- and post-tests to document an increase in a learner’s knowledge, often without regard to whether job performance is improved.

By contrast, the philosophy underlying the mastery learning approach is one of continual assessment of learner learning. With this approach, it is essential that the clinical facilitator regularly inform learners of their progress in learning new information and skills, and **not** allow this to remain the facilitator’s secret.

With the mastery learning approach, assessment of learning is:

Competency-based, which means assessment is keyed to the course objectives and emphasizes acquiring the essential knowledge, attitudinal concepts, and skills needed to perform a job, not simply acquiring knowledge.

Dynamic, because it enables clinical Facilitators to provide learners with continual feedback on how successful they are in meeting the course objectives and, when appropriate, to adapt the course to meet learning needs.

Less stressful, because from the outset, learners, both individually and as a group, know what they are expected to learn and where to find the information, and have ample opportunity for discussion with the clinical facilitator.

KEY FEATURES OF EFFECTIVE CLINICAL TRAINING

Effective clinical training is designed and conducted according to **adult learning principles**—learning is participatory, relevant, and practical—and:

- Uses behaviour modelling
- Is competency-based
- Incorporates humanistic training techniques

BEHAVIOUR MODELLING

Social learning theory states that when conditions are ideal, a person learns most rapidly and effectively from watching someone perform (model) a skill or activity. For modelling to be successful, the facilitator must clearly demonstrate the skill or activity so that learners have a clear picture of the performance expected of them.

Learning to perform a skill takes place in three stages. In the first stage, **skill acquisition**, the learner sees others perform the procedure and acquires a mental picture of the required steps. Once the mental image is acquired, the learner attempts to perform the procedure, usually with supervision. In the second stage, the learner practices until **skill competency** is achieved and the individual feels **confident** performing the procedure. The final stage, **skill proficiency**, only occurs with repeated practice over time.

Skill Acquisition	Knows the steps and their sequence (if applicable) to perform the required skill or activity but needs assistance
Skill Competency	Knows the steps and their sequence (if applicable) and can perform the required skill or activity
Skill Proficiency	Knows the steps and their sequence (if applicable) and efficiently performs the required skill or activity

COMPETENCY-BASED TRAINING

Competency-based training (CBT) is distinctly different from traditional educational processes. CBT is learning by **doing**. Moreover, CBT requires that the clinical facilitator facilitate and encourage learning rather than serve in the more traditional role of instructor or lecturer. Competency in the new skill or activity is assessed objectively by evaluating overall performance.

For CBT to occur, the clinical skill or activity to be taught must first be broken down into its essential steps. Each step is then analysed to determine the most efficient and safe way to perform and learn it. Information for each skill performed by clinicians appears in the *Early Infant Male Circumcision under Local Anaesthesia* reference manual.

An essential component of CBT is **coaching**, which uses positive feedback, active listening, questioning, and problem-solving skills to encourage a positive learning climate. To use coaching, the clinical facilitator should first explain the skill or activity and then demonstrate it. Once the procedure has been demonstrated and discussed, the facilitator/coach then observes

and interacts with the learner to provide guidance in learning the skill or activity, monitors progress, and helps the learner overcome problems.

The coaching process ensures that the learner receives **feedback** regarding performance:

- **Before practice**—the clinical facilitator and learner should meet briefly before each practice session to review the skill/activity, including the steps/tasks that will be emphasized during the session.
- **During practice**—the clinical facilitator observes, coaches, and provides feedback as the learner performs the steps/tasks outlined in the learning guide.
- **After practice**—a feedback session should take place immediately after practice. Using the learning guide, the clinical facilitator discusses the strengths of the learner’s performance and also offers specific suggestions for improvement.

HUMANISTIC TRAINING TECHNIQUES

The use of humane (humanistic) techniques also contributes to better clinical training. A major component of humanistic training is the use of anatomic models, which closely simulate the human body, and other learning aids such as videotapes. The effective use of models facilitates learning, shortens training time, and minimizes risks to clients. For example, by using anatomic models initially, learners more easily reach the performance levels of skill competency and beginning skill proficiency before they begin working in the clinic setting with clients.

Before a learner attempts a clinical procedure with a client, two learning activities should occur:

- The facilitator should demonstrate the required skills and client interactions several times using an anatomic model and appropriate audio-visual aids
- While being supervised, the learner should practice the required skills and client interactions using actual instruments on an anatomic model in a simulated setting that is as similar as possible to the real situation.

Only when skill competency and some degree of skill proficiency have been demonstrated with models should learners have their first contact with clients.

Components of the EIMC Training Package

This training course is built around use of the following components:

- Reference material contained in the **Early Infant Male Circumcision manual**
- A **learner's workbook** containing course assessments, a detailed course outline, a series of practice exercises to guide the learner through the self-study portions of the course, and learning guides that break down the skills or activities into their essential steps
- A **facilitator's notebook**, which includes answer keys, the course outline, and competency-based assessment tools
- **Well-designed training aids**, such as job aids and checklists, anatomical models, computer-assisted/based learning (e.g., CEVL)

The reference manual recommended for use in this course is the *Manual for Early Infant Male Circumcision under Local Anaesthesia*, which contains information on the basics of male circumcision, basic counseling skills, and the recommended standard EIMC devices and procedures.

USING THE EARLY INFANT MALE CIRCUMCISION UNDER LOCAL ANAESTHESIA LEARNING PACKAGE

As the learner moves through a series of activities (e.g., reading information, observing the facilitator, completing practice exercises, practicing clinical skills using role plays and anatomic models, working with parent/guardians and infants), there are corresponding activities for the facilitator. The focus, however, is always on the learner.

Essential to this course are three basic components. All of the training activities in which the learner, facilitator, and supervisor are involved relate to one or more of these components:

- **Transfer and assessment of the essential knowledge** related to EIMC. This material is found in the reference manual, *Manual for Early Infant Male Circumcision under Local Anaesthesia*, and is reinforced through various practice exercises, virtual classes, and by interaction with the facilitator.
- **Transfer and assessment of counselling and clinical skills** using role plays and anatomic models and in clinical situations with parents and guardians. The skill demonstrations are provided by the facilitator. The learner will demonstrate that she/he can competently provide counselling, pre-operative screening, use of devices for circumcision, and postoperative and follow-up care, management of complications, and link to other infant and child health care services.

Demonstration and practice is first conducted through role play simulations using models to achieve an acceptable level of competence and confidence through the simulation.

Once the learner is ready to work with clients, the facilitator will demonstrate the skill and the learner will practice it with coaching from the facilitator, eventually demonstrating that she/he can competently perform the skill.

- **Transfer of attitudes through practice exercises and behaviour modelling** by the facilitator and interaction with the parents/guardians.

The course is designed to be flexible, and the schedule can vary according to the specific situation and program needs. Key to the success of this individualized, self-paced program is the motivation of the learner and facilitator. In order to complete training in a reasonable period of time, the learner must be willing to read, study, attend virtual classes, complete assignments, and work independently while staying on schedule. The learner also must be willing to observe the facilitator and ask questions. The facilitator must be willing to take the necessary time to mentor, teach, and work closely with the learner, in addition to providing quality services, throughout the course.

THE INDIVIDUALIZED LEARNING PACKAGE

This training course is built around use of the following elements:

- Reference manual, and facilitators and learners course workbooks
- Videos
- Other resources and materials:
 - www.malecircumcision.org
 - Other references as necessary

This individualized training approach for EIMC stresses the importance of the cost-effective use of resources, application of relevant educational technologies, and the use of humane teaching techniques. The latter encompasses the use of anatomic models and simulations to minimize client risk and facilitate learning. Detailed (step-by-step) counselling and clinical skills learning guides have been developed to help learners learn and measure their own progress. Finally, a competency-based knowledge questionnaire and skills checklists are provided to assist the facilitator and supervisor in objectively evaluating a learner's performance.

Facilitators are encouraged to conduct training activities in a highly interactive fashion, asking questions and involving the learner as much as possible.

Because this is an individualized course, it is critical that the learner and facilitator thoroughly read their respective guides before the learner begins this program. It is also essential that the administrator understands the time required for the facilitator and the learner to carry out their respective activities and supports the learner to enable him/her to complete the course in a timely manner.

Introduction to the EIMC Learning Package

COURSE DESIGN

This training course is designed for clinical service providers (physicians, nurses, nurse-midwives, clinical officers). The course builds on each learner's knowledge and experience and takes advantage of the individual's motivation to accomplish the learning tasks in the minimum amount of time. Training emphasizes **doing**, not just knowing, and uses **competency-based evaluation** of performance.

This training course differs from traditional courses in several ways:

- At the beginning of the course, learners are oriented to the program and their knowledge and basic skills are assessed using a pre-course questionnaire and skill assessment to determine their individual learning needs and help develop an individual learning plan so they can focus on their own needs. Depending on feasibility, orientation packages are delivered to learners.
- Learners are responsible for learning much of the essential EIMC material. In the individualized “self-study” portion of the course, they are guided through the acquisition of knowledge and initial attitudes in a flexible manner, following a suggested course outline and series of practice exercises.
- Progress in mastering the essential EIMC material is measured during the course through completion of the practice exercise, and assessed using a **standardized written assessment** (Midcourse Questionnaire).
- Interaction with the facilitator focuses on clarifying the learner's individual learning and on acquiring skills and attitudes necessary for providing quality services. This is accomplished through simulations, demonstrations, and coaching in all the essential aspects of providing EIMC services.
- Progress in learning recommended procedures using devices is documented using appropriate **checklists**.
- Facilitators use competency-based **skills checklists** to assess each learner's performance and document his/her achievement of skill competency.
- Successful completion of the course is based on **mastery of both the knowledge and skill components**.

EVALUATION

This course is designed to produce individuals who are qualified to use the recommended procedures when providing EIMC services. Qualification is a statement by the training organization that the learner has met the knowledge and skills requirements of the course. Qualification does **not** imply certification/licensure. Personnel can be certified only by an authorized organization or agency in her/his country.

Qualification is based on the learner's achievement in two areas:

- Knowledge—knowledge transfer as measured by a score exceeding the criterion-referenced pass score established for the Midcourse Questionnaire
- Skills—satisfactory performance of recommended procedures either during a simulated practice session with anatomic models or with clients

Responsibility for the learners becoming qualified is shared by the learner and the facilitator.

The evaluation methods used in the course are described below:

Midcourse Questionnaire. This knowledge assessment will be given when all didactic subject areas have been presented. A score exceeding the criterion-referenced pass score established for the questionnaire demonstrates mastery of the essential material presented in the reference manual. A pass score of 80%, based on a criterion-referenced validation procedure involving subject matter analysis of each test question, has been established for the EIMC Midcourse Questionnaire. For those scoring less than 80% on their first attempt, the facilitator should review the results with the learner individually and provide guidance on using the reference manual to learn the required information. Learners scoring less than 80% can take the Midcourse Questionnaire again at any time during the remainder of the course.

Early Infant Male Circumcision under Local Anaesthesia Key Skills Checklists. These checklists will be used to evaluate each learner as she/he demonstrates essential evaluation and management procedures in the simulated clinical setting or with clients. In determining whether the learner is qualified, a clinical facilitator will observe the key skills used during the practice. The learner must be rated “satisfactory” in each skill or activity to be evaluated as qualified.

Within three to six months of qualification, it is recommended that graduates be observed and evaluated working in their institution by a course facilitator or their supervisor using the same checklists. This end-of-course evaluation is important for several reasons. First, it not only gives the graduate direct feedback on her/his performance, but also provides the opportunity to discuss any start-up problems or constraints to service delivery. Second, and equally important, it provides the training centre/organization, via the facilitator, key information on the adequacy of the training and its appropriateness to local conditions. Without this type of feedback, training can easily become routine, stagnant, and irrelevant to service delivery needs.

To adequately support newly trained providers, supervisors should have the requisite knowledge and skills to provide supportive supervision for EIMC services. The supervisor should continually evaluate the learner’s performance and stay in contact with the Facilitators by giving appropriate feedback. The learner’s co-workers and others need to be supportive of the learner’s accomplishments.

COURSE SYLLABUS

Course Description

This course is designed to assist learners to acquire the knowledge, skills, and attitudes needed to provide EIMC services. The course is designed to be flexible in order to accommodate a number of different situations found in programs scaling up EIMC services.

Course Goals

- To foster a positive attitude towards EIMC
- To provide learners with knowledge and skills needed to provide education and counselling services
- To provide the learners with the knowledge and skills needed to establish or improve infection prevention practices and monitoring and evaluation at health facilities

Learner's Learning Objectives

By the end of this training course, learners will be able to:

- Describe EIMC and its benefits and risks
- Educate and counsel parents and guardians about EIMC
- Effectively screen male infants for circumcision
- Demonstrate competency in one of three devices for male infant circumcision
- Provide postoperative care follow-up and identify and manage adverse events resulting from circumcision
- Prevent infection in the health care setting
- Monitor and evaluate an EIMC service

Training/Learning Methods

- Guided, individualized learning
- Case studies
- Role play
- Video
- Simulation
- Demonstration
- Coaching
- Guided practice activities

Training Materials

This training course is built around use of the following elements:

- The reference manual, *Early Infant Male Circumcision under Local Anaesthesia*
- Learner's workbook
- Trainer's notebook

- Anatomic models
- EIMC picture atlas

Learner Selection Criteria

Learners for this course should be *clinicians* who are, by national policy, allowed to conduct EIMC (midwives, doctors, clinical officers, nurses) and preferably are working at maternal, newborn, and child health clinics or at different levels of health care delivery, as appropriate. Such clinicians should be currently providing or intending to provide EIMC services.

Methods of Evaluation

- Pre-course/mid-course knowledge assessment
- Pre-course/mid-course skills assessment
- Learning guides and checklists
- End of course evaluation

Course Duration

There are two main components of the course, an individualized self-study component, and a hands-on clinical component.

The estimated time required for a learner to complete the self-study portion of the course is two to four weeks, which can be done in a concentrated fashion or spread out over time to minimize disruption on the learner's other duties.

If face-to-face sessions are preferred over the individual self-study learning sessions, the course runs for five to six days.

Depending on the number of learners in the clinical portion and the case load at the training site, as well as the learner's ability to master the required skills and attitudes, the duration may need to be modified.

COURSE OUTLINE

Chapter 1: Introduction

1. Understand that male circumcision is performed in many parts of the world for various reasons and at various ages.
2. Understand that three large, randomized controlled trials have convincingly shown that male circumcision helps to prevent female-to-male heterosexual transmission of HIV.
3. Understand and be able to explain why programs that promote male circumcision in early infancy are likely to have lower morbidity rates and lower cost than programs targeting adolescence and men.
4. Understand why male circumcision is not recommended in preterm infants (less than 37 completed weeks gestational age), low birth weight infants (particularly those that weigh less 2,500 grams), and any infant with a medical contraindication.
5. Able to describe and discuss the benefits and risks associated with EIMC.

Chapter 2: Supplies and resources

1. Describe the supplies and resources needed for EIMC service either as a stand-alone service or integrated into maternal and child health services.

Chapter 3: Education and counseling

1. Explain the role of group education and individual counseling in EIMC.
2. Identify opportunities for educating parents and guardians about EIMC.
3. Describe the key content for educating parents and guardians.
4. Demonstrate counseling parents and clients about risks and benefits of EIMC.
5. Demonstrate listening and answering questions and concerns parents and guardians have about EIMC.

Chapter 4: Screening infants for circumcision

1. Able to identify various congenital abnormalities including: hydrocele, penile torsion, concealed penis, megalourethra, penoscrotal web, epispadias, and hypospadias.
2. Understand the importance of a thorough history and physical exam.
3. Understand that male circumcision should only be performed on infants with an intact, completely normal appearing penis and scrotum.
4. Understand that male circumcision does not have to be performed in early infancy and delaying the procedure with referral to specialty care may be the most appropriate course of action.
5. Understand the importance of being willing to abandon the procedure.

Chapter 5: Anaesthesia for EIMC

1. Explain why and under what circumstances the injection of local anaesthesia should not be used.
2. Describe why sedation should not be used for routine EIMC.
3. Describe the standard anaesthetic solution and dose used for a dorsal penile nerve block for an infant.

4. Describe the location of the dorsal arteries, veins, and nerves of the penis.
5. Describe the landmarks and technique used for administering a dorsal penile nerve block.

Chapter 6: Procedure preparation

1. Describe the steps required to prepare for the procedure.
2. Describe the steps required to prepare the prepuce.
3. Describe the importance of making a pen mark and how and where it should be made.
4. Describe the importance of removing adhesions between the foreskin and the glans and how this can be accomplished.
5. Explain what complications can occur while making the dorsal slit and how this complication can be avoided.

Chapter 7: Surgical devices

1. Describe how the tip of the penis can be amputated using a Mogen™ clamp.
2. Explain how mismatching Gomco™ parts can lead to penile laceration.
3. Explain how the Plastibell™ can lead to urinary obstruction and necrosis of the glans.
4. Explain why selecting the correctly sized Plastibell is important.
5. Understand that each of the three devices has advantages and disadvantages and no device has been proven to be superior.

Chapter 8: Surgical procedures

1. Describe how male circumcision is performed using the Mogen clamp.
2. Describe how male circumcision is performed using the Gomco clamp.
3. Describe how male circumcision is performed using the Plastibell.
4. Explain the difference between a tourniquet device and a clamping and cutting device.
5. Describe the complications that can occur with each device and how they can be avoided.

Chapter 9: Postoperative care

1. Describe how applying an appropriate wound dressing can protect the wound from infection, help control bleeding, and reduce edema.
2. Describe how a dressing should be applied following EIMC and when and how it should be removed.
3. Explain and discuss precautions that should be reviewed with care givers following EIMC.
4. Describe the difference between normal wound healing and pus or an infection.
5. Explain how using Vaseline gauze is thought to help prevent adhesions and prevent the wound from sticking to the diaper.

Chapter 10: Adverse events

1. Describe what steps should be taken to address bleeding following EIMC.
2. Describe what could occur if too little or too much foreskin is removed.
3. Describe what could occur if part of the penis is injured during the procedure.

4. Describe what could occur if an infant presents with a retained Plastibell ring and evidence of glandular edema, regardless of when the procedure was performed.
5. Describe what could occur if adhesions appear between the foreskin and the glans and discuss causes of a penis appearing trapped following male circumcision.

Chapter 11: Infection prevention

6. Describe the components of recommended infection prevention and control practices in health care setting where EIMC is performed.
7. Demonstrate the use of standard precaution for EIMC procedures.
8. Explain the steps of instrument processing.
9. Describe waste management for EIMC.
10. Describe the management of accidental exposure to blood and body fluids in a clinical set-up for clients and providers.

Chapter 12: Monitoring and evaluation

1. Describe the monitoring and evaluation of programs such as EIMC.
2. Explain the importance of indicators for EIMC program.
3. Demonstrate data collection and reporting of EIMC program.

Chapter 13: Service delivery models

1. Describe the approach for EIMC service delivery in resource-limited settings.
2. Explain factors that need to be considered to design an EIMC service delivery model in a given country.

MODEL CLASSROOM SCHEDULE EARLY INFANT MALE CIRCUMCISION

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6
<p align="center">AM</p> <p>Welcome and orientation</p> <p>General review of self-study program</p> <p>Midcourse</p> <p>Questionnaire (review exercises from chapters 1-5)</p> <p>Review exercises from chapters 6-9</p>	<p align="center">AM</p> <p>General skills stations:</p> <p>Skill Station 1: Counseling & consent</p> <p>Skill Station 2: Screening exam, marking the corona & dorsal penile nerve block (DPNB)</p> <p>Skill Station 3: Wound dressing & post-EIMC bleeding</p>	<p align="center">AM</p> <p>EIMC surgery—teaching service (goal: 5-10 cases)</p>	<p align="center">AM</p> <p>EIMC surgery—teaching service (goal: 5-10 cases)</p>	<p align="center">AM</p> <p>EIMC surgery—teaching service (goal: 5-10 cases)</p>	<p align="center">AM</p> <p>EIMC surgery—teaching service (goal: 5-10 cases)</p>
<p align="center">PM</p> <p>Review exercises from chapters 10-13</p> <p>Facilitator demonstration of procedure on model</p> <p>Dismissed/individual instruction</p>	<p align="center">PM</p> <p>Skill Station 4: Managing complications</p> <p>Skill Station 5: Postoperative care & precautions</p> <p>Skill Station 6: Suturing</p> <p>Surgical skill station:</p> <p>Skill Station 7: The surgical procedure (putting it all together)</p> <p>Dismissed/individual instruction</p>	<p align="center">PM</p> <p>EIMC surgery—teaching service (goal: 5-10 cases)</p>	<p align="center">PM</p> <p>EIMC surgery—teaching service (goal: 5-10 cases)</p>	<p align="center">PM</p> <p>EIMC surgery—teaching service (goal: 5-10 cases)</p>	<p align="center">PM</p> <p>Review clinical experiences</p> <p>Review plan for providing continued EIMC services</p> <p>Complete course evaluation</p> <p>Closing</p>

Pre-Course/Mid-Course Knowledge Assessment for the EIMC Training Course

Please select the most appropriate answer.

Chapter 1: Introduction

1. Where in the world is early infant male circumcision (EIMC) being performed?
 - a. In the United States only
 - b. Only among people of Jewish and Muslim faiths
 - c. In many parts of the world and in many different cultures for many different reasons**
 - d. In western countries for cosmetic reasons only
2. Male circumcision has been shown to reduce female-to-male transmission of HIV. What has led the World Health Organization to make this conclusion?
 - a. There is no scientific proof that this is true
 - b. Evidence from animal models
 - c. Three large randomized controlled trials enrolling over 10,000 men**
 - d. There is little benefit from male circumcision; it is difficult to prove it helps prevent HIV
3. At what age is male circumcision associated with the fewest complications and the least expense?
 - a. Adulthood (> 20 years of age)
 - b. Adolescence (13 to 19 years of age)
 - c. Childhood (1 to 12 years of age)
 - d. Early infancy (birth to 60 days of age)**

Chapter 4: Screening

4. Routine, clinic-based EIMC is not recommended in which of the following cases?
 - a. Preterm (< 37 weeks gestational age)
 - b. Low birth weight (< 2,500 grams)
 - c. Acute life-threatening illness
 - d. All of the above**
5. Which criteria should be met before EIMC is considered?
 - a. No family history of bleeding disorders
 - b. Normal physical exam
 - c. Completely normal, intact prepuce
 - d. All of the above**

Chapter 5: Anaesthesia

6. What is the standard anaesthetic agent and dose that is drawn up into the syringe and used for a dorsal penile nerve block for an infant (the entire dose that is to be injected in two locations)
 - a. 1 ml, 10% lidocaine WITHOUT epinephrine/adrenaline
 - b. 10 ml, 1% lidocaine WITH epinephrine/adrenaline
 - c. 1 ml, 1% lidocaine WITHOUT epinephrine/adrenaline**
 - d. 1 ml, 1% lidocaine WITH epinephrine/adrenaline
7. Prior to injecting lidocaine for a dorsal penile nerve block what precaution should be taken?
 - a. Aspirate to ensure the needle is not in a vessel
 - b. Ensure the lidocaine does not contain epinephrine/adrenaline
 - c. Ensure the lidocaine bottle, needle, and syringe are sterile
 - d. All of the above**
8. Which is true pertaining to conscious sedation and EIMC?
 - a. It should always be used to help alleviate pain and discomfort
 - b. It should never be used for routine, elective EIMC**
 - c. There are no serious complications that can occur when administered to infants
 - d. Conscious sedation is routine and can be provided anywhere

Chapter 6: Procedure preparation

9. The surgical pen mark should be made at the level of the corona. What is the best way to determine where to make the mark?
 - a. Measure down 1.5 cm from the tip of the penis
 - b. Inspect and palpate the ridge at the widest part of the glans**
 - c. Estimate based on the length of the penis
 - d. It does not matter where the incision is made
10. Regardless of the device used, if the pen mark cannot be properly aligned during the procedure, the next step should be?
 - a. Stop and reassess the situation to determine why the pen mark cannot be aligned and if necessary abandon the procedure**
 - b. Disregard the pen mark and complete the procedure anyway
 - c. Use excessive force on the tissue until the pen mark is aligned
 - d. Remove what foreskin you can and hope it is enough
11. If adhesions between the prepuce and the glans are not adequately removed the following can occur?
 - a. The glans can get inadvertently pulled into the clamp along with the foreskin and get injured
 - b. The adhesions can prevent the foreskin tissue from being properly aligned in the device
 - c. Adhesions that cannot be removed may represent an underlying urologic abnormality that would necessitate abandoning the case
 - d. All of the above**

12. While making a dorsal slit, one blade of the scissors can inadvertently be placed into the urethra and cut the glans. How can this be avoided?
- Stretch the foreskin instead of using scissors to make a dorsal slit
 - Adequately remove any adhesions so that the foreskin is free and clear
 - Before cutting with the scissors, ensure the blade is tenting the foreskin and visible just beneath the foreskin tissue
 - All of the above**

Chapter 7: Surgical devices

13. Which of the following is a complication of the Mogen clamp that may occur more often if adhesions are not properly removed?
- Retained parts
 - Distal tip penile amputation**
 - Mismatching parts
 - Urinary retention
14. Which of the following is a complication of the Gomco clamp?
- Penile laceration from mismatching device parts**
 - Retained parts
 - Urinary retention
 - Increased risk of adhesions
15. Which of the following is a complication of the Plastibell that may commonly occur if the wrong size is used?
- Urinary obstruction
 - Necrosis of the tip of the penis
 - Bladder rupture
 - All of the above**

Chapter 8: Surgical procedures

16. What should you do if an insufficient amount of foreskin was removed during the procedure?
- Draw another mark and perform the procedure again
 - Use scissors to remove any extra foreskin
 - Do not reattempt the procedure, reassure the family, follow the child, and if necessary at an older age consider a revision**
 - Obtain immediate specialty consultation for further excision
17. What precautions should be taken to ensure Gomco parts are not mismatched?
- Two different sized clamps should never be placed on the sterile field at one time
 - The parts should be assembled before each case to ensure they match and have not been damaged
 - Ensure that all the parts of one clamp are always processed together and never separated
 - All of the above**
18. Following a Plastibell procedure, bleeding appears to be coming from inside the ring. What action should be taken?
- A cotton tip applicator can be used to try and control the bleeding, but if not effective, the ring should be removed and pressure applied to the area that is bleeding**
 - The ring should never be removed immediately and another tourniquet should be applied hoping the bleeding is coming from the skin edge
 - No action is required; the bleeding will eventually stop on its own
 - There should never be bleeding from inside the ring

19. Following a Mogen procedure, what must the provider do to help minimize the risk of adhesions and a trapped penis?
- Deliver the glans by pushing the foreskin down around the base of the corona**
 - Nothing, this complication is associated with the Plastibell
 - Instruct the family to apply steroid cream so that no scar forms
 - Instruct the family to wash the area frequently to keep it moist

Chapter 9: Postoperative care

20. What is the purpose of dressing the wound?
- Protect the wound from infection
 - Minimize bleeding
 - Minimize edema
 - All of the above**
21. What is the most effective, least expensive, least complicated, and most readily available means to stop post-circumcision bleeding?
- Epinephrine solution
 - Silver nitrate
 - Simple direct pressure and patience**
 - Suture
22. Regardless of the device used, why is it important to instruct the caregivers to gently retract the foreskin?
- This will ensure the wound does not contract above the glans and prevent a trapped penis
 - This will help to prevent adhesions from forming between the surgical wound and wounds on the glans that occur where adhesions were removed
 - This will help prevent adhesions from forming between the remaining foreskin tissue and the glans
 - All of the above**

Chapter 10: Adverse events

23. What is the best way to differentiate pus (evidence of infection) from normal wound healing?
- Pus is malodorous
 - Pus is easily removed
 - An infection associated with pus is unlikely to develop in the first 48 hours following circumcision
 - All of the above**
24. What should occur when an infant presents with glandular edema that has resulted in a retained Plastibell?
- Reassure the parents that the plastic ring will fall off in time
 - Prescribe antibiotics to reduce the swelling so that the ring will fall off on its own
 - See the baby in seven days to ensure the ring has fallen off on its own
 - This is a medical emergency and without delay arrange for the plastic ring to be safely removed**

25. Which of the following is a concern following EIMC and should prompt care givers to seek immediate medical attention?
- Fever
 - No urine output for more than 12 hours
 - Infant is inconsolable or lethargic
 - All of the above**

Chapter 11: Infection prevention

26. What is the single most important infection prevention measure in health care provision, including for EIMC?
- Use of appropriate antiseptics
 - A functional sterilization unit
 - Hand hygiene**
 - Use of personal protective equipment

Chapter 12: Monitoring and evaluation

27. Which of the following is CORRECT about monitoring and evaluation for EIMC programs?
- Monitoring is to be done by the national office that oversees EIMC every six months
 - Monitoring represents a routine and regular check of variables or data to assess if the program is on the right track**
 - Evaluation should be the first step of the EIMC program
 - Monitoring and evaluation are the responsibilities of agencies that are funding EIMC programs

Workbook for Early Infant Male Circumcision Training Course

CHAPTER 1: INTRODUCTION

Activity I

Description: This section will review basic information on early infant male circumcision (EIMC) found in Chapter 1 of the *Manual for Early Infant Male Circumcision under Local Anaesthesia*. It also will help you look at the implications of this information for programs and impact in your area.

Answer Question 1 **before** you read the chapter. Then, read Chapter 1 and answer the remaining questions about this training topic. Refer to the chapter, as well as your clinic records and colleagues, as necessary.

Before you read Chapter 1

Questions:

1. Before you start this course, what do you know about EIMC:
 - a. How would you define EIMC?

 - b. What are the risks involved in EIMC?

 - c. What are the potential benefits of EIMC?

 - d. What are the most common reasons for performing EIMC?

Now read Chapter 1 then answer the questions below.

Questions:

2. Now that you have read the chapter, would you change your answers to the questions above? If so, describe how you would answer them differently now:
 - a. How would you define EIMC?

 - b. What are the risks involved in EIMC?

 - c. What are the potential benefits of EIMC?

- d. What are the most common reasons for performing EIMC?
3. Describe, in brief, the evidence that supports the conclusion that male circumcision reduces the risk of HIV acquisition.
 4. What are some of the reason why infants are circumcised?
 5. What are some other potential health benefits of EIMC?
 6. What are two possible biological explanations why male circumcision may reduce the chances of acquiring HIV infection?
 - a.
 - b.
 7. In the three randomized controlled clinical trials of medical male circumcision conducted in Africa, what was the approximate percentage of risk reduction for HIV acquisition associated with male circumcision? (circle the best answer)
 - a. 25–30%
 - b. 50–60%
 - c. 70–80%
 - d. >90%
 8. In order to prevent HIV, when do you think the best age(s) would be for boys or men to be circumcised? (circle the best answer(s)—there can be more than one answer)
 - a. In first few months from birth
 - b. Before becoming sexually active
 - c. In early adulthood
 - d. After marriage
 - e. At any age

Why did you choose the answer(s) you did?

9. What are the most important differences between ADULT medical male circumcision and EARLY INFANT male circumcision?

Activity II

Description: Investigate what the level of understanding, myths, and misconceptions are about EIMC in your facility and community. Interview about five people—other health care workers, clients, or community members—to learn what they know and think about EIMC. Use the interview guide on the following page.

After you finish interviewing your community, answer the following questions:

Questions:

1. In your opinion what is the general level of understanding about what male circumcision is?
 - a. Very poor
 - b. Average
 - c. Pretty good

This is a subjective assessment, but encourage learners to explain why they think the understanding is what they felt it is.

2. What are some of the common myths, misunderstandings, or misconceptions about EIMC?

List all myths and misunderstandings and misconceptions listed by learners and discuss with them which ones should be addressed.

CHAPTER 2: SUPPLIES AND RESOURCES

Description: This chapter addressed the supplies and resources needed to start and sustain EIMC programs. Please respond to the questions briefly after exploring the situation in your facility:

Questions:

1. In your facility, whose responsibility is it to make sure supplies and resources are available for services?

Ask learners to explain the structure of their facility's management

2. What is your role in assuring supplies and equipment are appropriate for EIMC?

Help learners understand that they are part of a team and their collaboration in ensuring supplies and equipment are as per the list in shown in Annex 1, page 109 of the EIMC manual.

3. After reviewing the list of supplies in the EIMC manual, do you think your facility can make those supplies available for EIMC services?

Encourage learners, based on their experience, to discuss possible challenges and how to address those challenges.

CHAPTER 3: EDUCATION AND COUNSELING

Description: Read through the case study below and answer the questions. Refer to the chapter, as well as your clinic records and colleagues, as necessary.

Case Study:

Baby John is a three-week old male neonate. John's mother heard about free infant male circumcision services in your health centre and has brought him to the facility. John was delivered at home. John's father is a small-scale business man and is NOT in favour of the circumcision at a hospital or clinic. He prefers for his son to go for traditional circumcision because he remembers how two of his adult neighbours died three years ago at a hospital after an operation. You have, however, managed to get the family together for a counseling session.

1. What challenges are you likely to encounter during the counseling session?

Please refer to the EIMC manual, pages 13–15

2. Recap the nine basic counseling skills required by a counsellor as summarized in the manual.
 1. Listening
 2. Respecting parents' or guardians' needs and values
 3. Providing information
 4. Answering questions
 5. Allowing parents or guardians to make their own informed decision
 6. Asking parents or guardians questions
 7. Helping parents or guardians to understand their children's HIV test results when necessary
 8. Helping parents or guardians obtain other services for their children or themselves
 9. Correcting misconceptions
3. Which of these counseling skills would you apply in this case? Justify each of them.

All skills are required, but allow learners to discuss why and refer them to the EIMC manual, pages 12–15

CHAPTER 4: SCREENING INFANTS FOR CIRCUMCISION

Description: Review Chapter 4 in the training manual and complete the review below.

Questions:

1. What are the FIVE eligibility criteria for routine EIMC?
 1. Health
 2. Full term
 3. Weight >2.5 Kg
 4. Normal physical examination finding
 5. Intact penis and scrotum of completely normal appearance

- 2: Please mark TRUE or FALSE

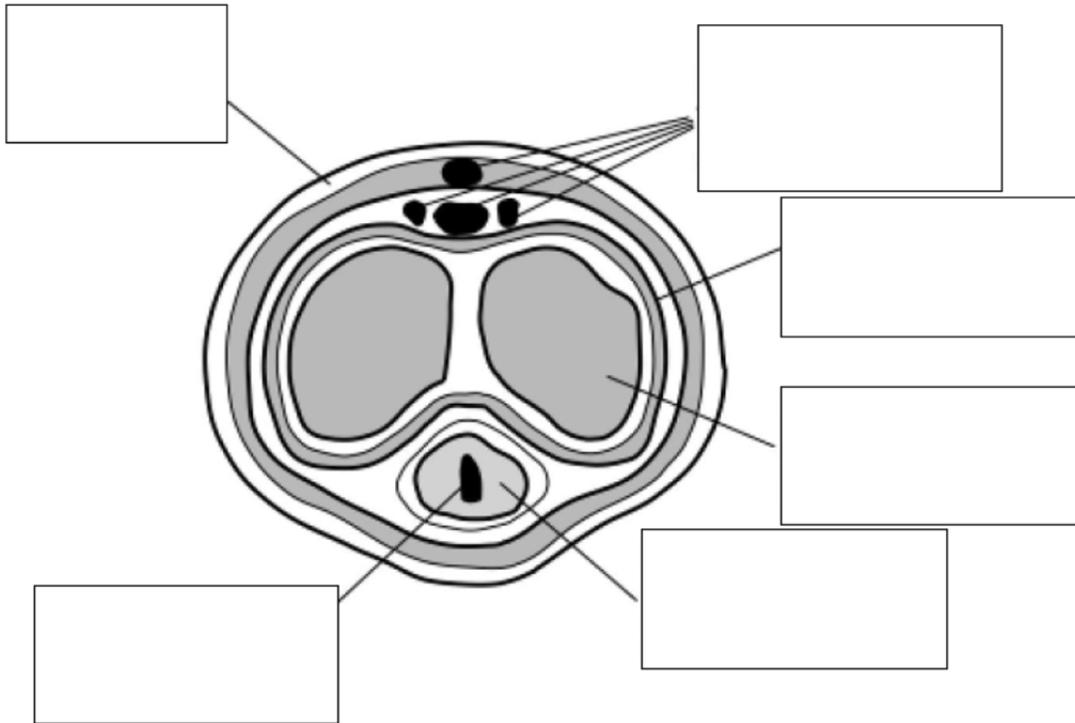
	Condition	This is a Contraindication for Early Infant Male Circumcision	
		True (✓)	False (✓)
1	Megalourethra with deficiency of corpus spongiosum	✓	
2	Weight 2.6 Kg		✓
3	Absence of ventral foreskin	✓	
4	Hypospadias	✓	
5	Penile torsion	✓	
6	Is first born for the family		✓
7	Bilateral hydrocele	✓	
8	Bleeding disorder	✓	
9	One parent is asthmatic		✓
10	Penoscrotal webbing	✓	

CHAPTER 5: ANAESTHESIA

Description: Please review Chapter 5 on the use of anaesthesia for EIMC and answer the following questions.

Activity

1: Identify the different structures in this cross-sectional view of the shaft of the penis. (Write in the boxes shown)



2. Please complete the advantage and disadvantage of the following during EIMC:

Anaesthesia for Early Infant Male Circumcision		
	Advantage (write two)	Disadvantage (write two)
General anaesthesia	1. Provides comfort to the providers	1. Risk of death 2. Costly
Local: Dorsal penile nerve block (DPNB) only	1. A lower rate of complications 2. Injection is at the base of the penis so no distortion of penile anatomy	1. Bleeding 2. Bruising and inadequate analgesia
Local: Ring block only	1. Equally effective as DPNB 2. Safe	1. Takes longer 2. More needle sticks
Local: (Eutectic Mixture of Local Anaesthetics) EMLA cream only	1. No needle injection 2. If used correctly is safe	1. Needs care and if not care is taken, risk of complication such as methaemoglobinaemia 2. Needs to be applied 60 minutes before the procedure
Combination of any of the local anaesthesia	1. Provides maximum pain control 2. Reduces injection related anxiety if EMLA is applied at site of injection	1. Costly 2. Longer duration
NO anaesthesia	1. Cheaper	1. Expose neonates to severe pain 2. Requires a highly experiences provider

CHAPTER 6: PROCEDURE PREPARATION

Description: Please review Chapter 6 and answer the following questions.

1. List five things/steps that should be completed before starting an EIMC procedure (see Annex 6 for assistance):
 1. Check instruments
 2. Provide information to the family/care givers
 3. Obtain informed consent
 4. Wash hands
 5. Screen patient

2. List four key steps required to prepare the prepuce for circumcision (see Annex 6 for assistance):
 1. Mark the foreskin at the level of the corona
 2. Administer the most appropriate anaesthesia
 3. Remove adhesions
 4. Dilate foreskin opening or create dorsal slit

3. Describe why it is important to make a surgical pen mark?

To avoid cutting too much foreskin or too little foreskin

4. Describe where the surgical pen mark should be made and how the correct location of this mark can be confirmed.

Surgical marking is done at the level of the corona (EIMC manual, page 32)

5. Describe why it is important to remove the adhesions between the foreskin and the glans. Describe how this can be accomplished.

Removing adhesions frees the foreskin from the glans and minimizes chance of injuring the glans. Using a plastic probe, a gentle sliding movement will release adhesions. Sometimes application of lubrication (surgilube) to a blunt probe will also help to facilitate release of adhesion (EIMC manual, page 35).

6. What precautions can be taken to ensure the urethra is not injured when making the dorsal slit?

This can be achieved by tenting the foreskin up with the tip of the scissors before cutting (EIMC manual, page 40)

CHAPTER 7: SURGICAL DEVICES

Description: Please review Chapter 7 on the different devices for EIMC and answer the following questions.

1. Match the complication with the technique:

<u>_B_</u>	Mogen	A	Retained parts and urine retention
<u>_A_</u>	Plastibell	B	Distal tip amputation
<u>_C_</u>	Gomco	C	Mismatching parts resulting in penile laceration

2. Describe how the tip of the penis can be amputated while using a device.

Glans may be pulled into the slit of the device and crushed or partially severed (EIMC manual, page 42).

3. Describe how a retained Plastibell can lead to serious complications.

The retained ring may cause oedema to build in the glans and can disrupt blood and urine flow, resulting in glandular necrosis and complete urinary obstruction (EIMC manual, page 47).

4. List some precautions that can be taken to help avoid complications associated with a retained Plastibell ring.

1. Use the correct size Plastibell;
2. Ensure patient has access to follow up
3. Review precautions with care givers and ensure they understand what to look for (EIMC manual, page 47)

5. Describe how the parts of the Gomco clamp can become mismatched and how this can result in an injury to the penis.

Because of many parts and multiple manufacturers there is a risk of non-matching parts being used during the procedure. If a small bell is inadvertently used with a larger baseplate, the device can still be assembled but it will neither crush the foreskin nor protect the glans, resulting in penile laceration and haemorrhage. (EIMC manual, page 45)

CHAPTER 8: SURGICAL PROCEDURES

Description: Please review Chapter 8 and answer the following questions.
(For answers please review the table in the EIMC manual, page 49)

1. Explain the difference between a **clamping** (*Gomco*) and **cutting device** (*Mogen*) and a **tourniquet device** (*Plastibell*).
2. Why is it important to check the gap distance of a Mogen clamp?
3. What is the purpose of the dorsal hemostat when performing a circumcision using the Mogen clamp?
4. What precautions can be used to ensure the tip of the penis does not get amputated when using a Mogen clamp?
5. After removing the Mogen clamp, why is it necessary to liberate the glans?
6. Describe a simple way to gauge the size (diameter) of the penis.
7. Describe two techniques to widen the opening in the foreskin enough so that a shield may be placed to protect the glans (*Plastibell*, *Gomco*).
8. Describe some precautions a provider can take to ensure they do not mismatch *Gomco* parts.
9. Describe why electric current should never be used to excise the skin using a *Gomco* or *Mogen*.
10. Following a *Plastibell* procedure, bleeding is noted at the skin edge, how should this be addressed?
11. On postoperative day 2 following a *Plastibell* procedure, an infant is brought to the hospital by the family because of poor feeding. An exam shows the tip of the penis is swollen and bulging out through the *Plastibell* ring. The provider decides to leave the ring in place out of fear it is too early to remove.

What is wrong with this decision?

What should the provider do?

CHAPTER 9: POSTOPERATIVE CARE

Description: Please review Chapter 9 on postoperative care for EIMC and answer the following questions.

- List three benefits of applying a circumcision dressing.

1. Help prevent infection by keeping the wound protected
2. Help reduce bleeding
3. Help reduce edema

- When should a circumcision dressing be removed?

24 to 48 hours postoperative

- Can a circumcision dressing be removed earlier? Why would someone want to remove a circumcision dressing earlier than 24 hours?

If there is pain and inability to pass urine

- An infant is brought to the clinic by his family 16 hours after a Gomco circumcision because he has not urinated since the procedure. The provider decides to leave the dressing in place, because it has only been 16 hours since the procedure and suggests follow up in the morning.

What is wrong with this decision?

The reason for not passing urine should be investigated before the dressing is applied again.

What should the provider do?

Provider should check if the urethra is severed or blocked and resolve that before applying the dressing.

- Read each characteristic below and circle the most likely diagnosis:

Characteristic	Diagnosis	
Dressing difficult to remove	Normal wound healing	Pus/Infection
Dressing easy to remove	Normal wound healing	Pus/Infection
Dressing/wound is malodorous	Normal wound healing	Pus/Infection
No odour	Normal wound healing	Pus/Infection
At 48 hours wound is looking worse	Normal wound healing	Pus/Infection
At 48 hours wound is looking better	Normal wound healing	Pus/Infection
Fever	Normal wound healing	Possible infection

6. After an EIMC there can be multiple wounds along the skin edge and areas on the glans where adhesions were removed. If these wounds are not separated they can heal together causing complications. What precautions can be taken to ensure these wounds heal independently?
 1. **Frequent application of Vaseline gauze,**
 2. **Mechanical reduction,**
 3. **Wound dressing**

7. How often should petrolatum be applied following male circumcision and for how long?

Every diaper change and until the wound heals

8. What conditions should be watched for following EIMC (list 6):
 1. **Fever**
 2. **Poor feeding**
 3. **Lethargy**
 4. **Decreased number of wet diapers or no urination**
 5. **After 48 hours the wound starts looking worse**
 6. **Bleeding that cannot be controlled with direct pressure**

CHAPTER 10: ADVERSE EVENTS

Description: Please review Chapter 10 and answer the following questions.

1. What is the most effective and least expensive way to stop post-circumcision bleeding?

Direct pressure

2. How long should direct pressure be applied before consider other options?

Five minutes, minimum

3. If profuse bleeding is noted at many locations following 10 minutes of direct pressure, what should you do?

Obtain immediate specialty consultation for the possibility of a bleeding disorder while maintaining direct pressure on the wound

4. If a suture is used to control bleeding near the frenulum on the ventral aspect of the penis, what important structure can be injured if the needle is placed to deep?

Urethra

5. If an injury occurs during circumcision, why is it important to obtain immediate specialty consultation?

Avoid further complication as a result of delayed care.

6. Following EIMC, regardless of how much foreskin is removed, there is a possibility that the wound can contract above the glans causing it to appear trapped behind the scar of the circumcision. How can this be prevented?

Gentle retraction of the penile skin at each nappy/diaper change to ensure that no adhesions develop on to the glans or corona.

7. Following circumcision, adhesions can occur early, in the first 7 days, or can occur late, after 7 days. How do early adhesions differ from late adhesions?

Late adhesions are firm and difficult to release, early adhesions are soft. Early adhesions are typically managed by attempting to reduce the foreskin so the entire glans can be visualized, ensuring separation between the skin edge and any other area of wound healing. Late adhesions, which occur after the wound has completely healed, do not require any immediate intervention and can be managed.

8. In the event of uncontrolled bleeding, can the Plastibell be immediately removed? If the bleeding cannot be controlled, why should the Plastibell be removed?

If not removed, the bleeding may be trapped in the ring and cause pressure on the penis shaft and urethra and worsen the condition.

9. Following a Plastibell circumcision, the tip of the penis is bulging through the ring. What should you do? Can the ring be removed at any time or must removal be delayed to ensure tissue necrosis and hemostasis?

The ring can be removed anytime and should be removed immediately regardless of the timing of male circumcision if there is any concern the plastic ring is causing edema that could be obstructing urine output and preventing the ring from separating normally.

CHAPTER 11: INFECTION PREVENTION

Description: Review Chapter 11 about infection prevention and use of standard precaution at all times in a clinic set up. Complete the exercises below:

Questions: In the space provided, print a capital **T** if the statement is **true** or a capital **F** if the statement is **False**.

	True/False
1. The risk of acquiring hepatitis B (HBV) after being stuck with a needle used for a patient who is HBV-positive is higher than the risk of acquiring hepatitis C (HCV) or HIV from a needle-stick injury.	T
2. The risk of acquiring HIV after being stuck with a needle used for a patient who is HIV-positive is more than 60%.	F
3. If tap water is contaminated, hand washing with plain soap will effectively remove soil and debris and reduce the number of transient microorganism on hands.	F
4. The antiseptic of choice for use in EIMC is tincture of iodine.	F
5. Before placing a disposable (single-use) needle and syringe in a puncture-proof container or box, you should first carefully recap the needle.	F
6. Decontamination of surgical instruments by soaking in 0.5% chlorine solution for 10 minutes prior to cleaning kills or inactivates most microorganisms, including HBV, HCV, and HIV.	T
7. Washing surgical instruments with detergent and clean water until visibly clean and then thoroughly rinsing them is not necessary if the instruments have been decontaminated by soaking in 0.5% chlorine solution.	F
8. All puncture-proof sharps containers must be more than $\frac{3}{4}$ full before finally being disposed of.	T
9. It is absolutely not necessary to secure dumping pits or disposal sites as long as decontamination procedures are strictly followed.	F
10. Cardboard boxes can safely be used for storage of sterile items.	F
11. Placing waste in plastic or galvanized metal containers with tightly fitting covers is recommended in waste management.	T
12. Colour-coding to differentiate receptacles for infectious and non-infectious waste is often a waste of scarce resources.	F

This set of questions will review basic information on post-exposure prophylaxis (PEP).

Please refer to EIMC manual, page 98 for answers

Questions:

1. You are working in the maternal and child health unit (maternity) in your facility. While drawing blood from a guardian for an HIV test, you accidentally stick yourself with the 18-gauge needle.

What is your risk of acquiring HIV?

In addition to testing for HIV, what else should you test for?

When should you start taking PEP if it is indicated?

2. The nurse working with you in the EIMC unit injures herself with a lancet used for a finger-stick on an HIV-exposed neonate seeking circumcision services.

What is the appropriate first aid?

Should she take PEP; why or why not?

When should both of you be tested for HIV?

CHAPTER 12: MONITORING AND EVALUATION

Description: This questionnaire will review basic information on managing male circumcision for HIV prevention, which you will find in Chapter 12 of the reference manual. It also will help you look at the implications of this information for programmes and impact in your area.

Activity

Review one of the following facility registers, and respond to the questions below. (Annex 8 and 13 of the training manual)

- Register for EIMC or the neonatal care register
- EIMC counseling and testing register or the HIV counseling and testing register
- Last month/quarter EIMC service delivery report or the monthly neonatal care report

Or, if EIMC service is not available in your facility, any other service delivery register

Questions:

1. Analyse the quality of the data collected on each form using principles for collecting “good data” described in the reference manual.
2. Completeness
3. Clarity
4. Consistency
5. Relevance/Importance
6. List the gaps you observed in recording and reporting.
7. What can be done to improve the quality of data collected in your facility?
8. Does your facility have a target for the services that you register?
9. If the facility has set targets, are the data being used for decision-making and planning?

CHAPTER 13: SERVICE DELIVERY MODEL

Description: Review Chapter 13 of the training manual and respond to the questions following the case study below.

Case study

The medical officer (MO) in charge of your facility sent out a letter of invitation to your department, maternity, asking for one midwife to attend EIMC training. The MO also attached a checklist for you to complete before sending the midwife for the training. Generally, she wants to be sure that the EIMC program is implemented as soon as the midwife returns from the training. Therefore, the MO is interested to know how you are going establish the service in this hospital without affecting the existing maternal, newborn, and child health service provision. Please respond to the questions from the MO below.

- 1: Where and when is the EIMC provided after the training? Explain the rational for your suggestion?
- 2: What supplies do you need to establish the service? And how are the supplies going to be managed, including procurement and storage
- 3: How is the community notified about the service?
- 4: How is the monitoring of the service tracked/assessed?
- 5: Who is in charge of the new program?
- 6: How is quality of service monitored and improved?

Annex 1. Skill Station 1: Counseling and consenting

At this skill station there will be:

1. Laminated copy of Annex 3 (Sample information sheet for EIMC)
2. Laminated copy of Annex 4 (Sample consent for EIMC)
3. EIMC training atlas

During this skill station each learner will use these tools to provide counseling to a fellow learner about the risks and benefits of EIMC, and go through the consent process. Each learner will be observed by a facilitator or fellow learner during practice and two patient encounters.

Counseling checklist:

Skill Component	Facilitator/Learner Signature		
	Practice	Patient #1	Patient #2
1. General explanation of early infant male circumcision			
Use easy-to-understand language and check for understanding.			
Encourage the parents/guardians to ask questions and voice concerns, and listen to what they have to say. Demonstrate empathy.			
2. Benefits			
Custom			
Cleanliness			
Prevention of paraphimosis			
Decreased risk of urinary tract infections			
Decreased risk of HIV infection			
Decreased risk of other sexually transmitted diseases			
Decreased risk of cancer of the penis			
Decreased risk of cervical cancer in partners			
Avoid the need for circumcision later in life			
3. Risks			
Lack of informed consent			
Pain			
Surgical risk (bleeding, infection, injury)			
Expense			
Sexual satisfaction			
4. Ask the parents/guardians for any questions they might have on EIMC; provide additional information as needed			
5. Tell parents/guardians where to go for the services that they require			
6. Thank parents/guardians for their attention			

Consent checklist:

Skill Component	Facilitator/Learner Signature		
	Practice	Patient #1	Patient #2
1. Review name			
2. Review procedure			
3. Review alternatives (no circumcision vs. delayed)			
4. Review anaesthesia			
5. Ask if there are any questions about the procedure			
6. Ask if there are any questions about the risks and benefits			
7. Review what needs to be done before the procedure			
8. Ask several questions to insure understanding			

Annex 2. Skill Station 2: Screening exam, making the pen mark, and administering a dorsal penile nerve block (DPNB)

At this skill station there will be:

1. EIMC training atlas (urologic abnormalities, penis anatomy, and DPNB anatomy)
2. EIMC training model
3. Syringes, lidocaine bottle, and alcohol swabs

Each learner will be required to look at a series of pictures in the training atlas and correctly determine if circumcision would be appropriate. Using the training atlas along with the EIMC training model, each learner will identify important landmarks and describe how to make the pen mark and administer a DPNB. Each learner will be observed by an instructor or fellow learner during practice and two patient encounters.

Skill Component	Facilitator/Learner Signature		
	Practice	Patient #1	Patient #2
1. Identify urologic abnormalities			
Hypospadias			
Penile scrotal web			
Hydrocele			
Torsion			
Concealed penis			
2. Surgical pen mark			
Identify corona (atlas/patient)			
Explain why mark is made at the corona			
Explain how to find corona if not visible			
Explain why skin must be dry			
Explain why surgical field must be clean			
3. Dorsal penile nerve block (DPNB)			
Identify important landmarks (atlas/patient)			
Prepare lidocaine (simulate/real)			
Demonstrate technique (simulate/real)			
Explain reason for aspirating before injecting			
Explain why epinephrine is not used			

Annex 3. Skill Station 3: Wound dressing and post-circumcision bleeding

At this skill station there will be:

1. Annex 8: Sample wound dressing poster (laminated)
2. Annex 9: Sample postoperative bleeding protocol (laminated)
3. EIMC training atlas
4. Xeroform gauze packets
5. Gauze 4x4 pads
6. Petrolatum
7. EIMC training model
8. Baby wipes to clean hands

Each learner will be required to prepare and apply an EIMC dressing and describe the appropriate steps to control post-circumcision bleeding. Each learner will be observed by an instructor or fellow learner during practice and two patient encounters.

Skill Component	Facilitator/Learner Signature		
	Practice	Patient #1	Patient #2
1. Wound dressing			
Identify purpose (bleeding, edema, infection)			
Demonstrate how to prepare 4x4 gauze			
Demonstrate correct application of gauze			
Describe precautions that should be reviewed			
Describe appropriate time for removal			
Describe method to remove dressing			
Can a dressing be removed anytime?			
Can a dressing be replaced anytime?			
Infant has not voided, what do you do?			
2. Post-circumcision bleeding			
What family history is important?			
What should the clamp time be?			
Identify the best way to control bleeding			
Describe steps to control bleeding			
Inspect for injury			
Apply pressure			
Apply dressing			
Direct pressure over dressing for 5 min			
Remove dressing, re-inspect for injury			
Consider bleeding disorder			
Apply dressing			
Direct pressure over dressing for 10 min			
Consider specialty consultation			
Maintain direct pressure			
Bleeding from inside ring of Plastibell?			
Bleeding from skin edge after Plastibell?			
Can the Plastibell be removed immediately?			

Annex 4. Skill Station 4: Managing complications

At this skill station there will be:

1. EIMC training atlas

Each learner will be shown pictures of complications and asked how they should be managed.

Skill Component	Facilitator/Learner Signature		
	Practice	Patient #1	Patient #2
1. Degloving			
2. Removal of an insufficient amount of tissue			
3. Penile laceration			
4. Penile amputation			
5. Trapped penis, early			
6. Trapped penis, late			
7. Adhesions early			
8. Adhesions late			
9. Retained Plastibell			
10. Skin bridge			
11. Plastibell with infection			
12. Plastibell normal wound healing			
13. Gomco normal wound healing			
14. Mogen normal wound healing			

Annex 5. Skill Station 5: Postoperative care and complications

At this skill station there will be:

1. Annex 7: Sample infant postoperative information sheet (laminated)
2. Baby wipes to demonstrate how to apply pressure
3. EIMC training atlas

Each learner will practice providing postoperative care instructions and precautions. Each learner will be observed by an instructor or fellow learner during practice and two patient encounters.

Skill Component	Facilitator/Learner Signature		
	Practice	Patient #1	Patient #2
1. Postoperative care			
Describe how to remove the dressing			
Dressing falls off, what should you do?			
Bleeding after diaper change			
Stool covers dressing			
How to retract foreskin, traction at base			
How to retract foreskin, wiping off glans			
Retraction, why and for how long			
Cannot retract early?			
Cannot retract late?			
Why do we use petrolatum and for how long?			
Adhesions that involve the surgical wound			
Adhesions that occur late			
Use baby wipe, show how to control bleeding			
Use fist to describe trapped penis			
At 6 months, not all the glans can be seen?			
2. Postoperative complications			
Persistent bleeding			
Fever			
Lethargy			
Poor feeding			
Inconsolable			
No void for more than 12 hours			
Any other concerns			
Pus and how you can tell			
When should the wound look the worst?			
When does infection occur?			
Retained Plastibell			

Annex 6. Skill Station 6: Suturing

At this skill station there will be:

1. Suture training kit
2. Annex 13: Overview of suturing and wound closure (laminated)
3. EIMC training atlas

Each learner will practice suturing techniques.

Skill Component	Facilitator/Learner Signature
1. Suturing	
Describe when sutures should be used	
Describe the location of the urethra	
Demonstrate a simple interrupted suture	
Describe how to close a circumcision wound	

Annex 7. Skill Station 7: Surgical procedures for EIMC

At this skill station there will be:

1. Surgical procedure training kit, one for each team of two learners
2. Annex 1: Sample checklist for EIMC procedure, one for each team or two learners
3. EIMC training atlas

Each learner will be observed by an instructor.

Skill Component	Facilitator/Learner Signature		
	Practice	Patient#1	Patient #2
1. Procedure preparation			
Check instruments			
Check consent and baby identification			
Clean/wash hands			
Screen patient to ensure still good candidate			
2. Patient preparation			
Inspect glans and determine device and size			
Prepare anaesthesia			
Position patient			
Antiseptic			
Apply sterile gloves			
Inspect device			
Drape			
3. Prepuce preparation			
Pen mark (penis should be dry)			
Anaesthesia			
Grasp foreskin			
Remove adhesions			
Dilate foreskin or create dorsal slit			
4. Device			
Demonstrate proper use of the device			

Course Evaluation

1. Please complete the following by ticking the appropriate column.

Please Rate the Quality of the Following:	Poor	Fair	Good	Very Good	Excellent
Overall Content of Course					
Facilitations Methods					
Learner's Manual					
Presentation of Material by Facilitators					
Learner/Group Activities					
Facilitation of Activities by Facilitators					

2. Think about what you already knew about EIMC and what you learned during this training about EIMC. Then, on a scale of 1 to 5, evaluate your knowledge in each of the following areas related to HIV Testing and Counselling BEFORE and AFTER this training. Tick the appropriate box.

1= No knowledge or skills 3=Some knowledge or skills 5=A lot of knowledge or skills

Before the Training					Self-Assessment of Your Knowledge and Skills Related To:	After the Taining				
1	2	3	4	5		1	2	3	4	5
					Importance of Counselling and Education of Parents					
					Basic information about HIV and AIDS					
					HIV Transmission					
					Basic counselling skills					
					Screening of infants before circumcision					
					Use of anaesthesia for EIMC					
					EIMC Procedures using different devices					
					Post-operative care and management					

3. To what extent do you feel prepared to perform the following tasks related to EIMC

	Not at all Prepared	Somewhat Prepared	Well Prepared
Introduce EIMC and counsel parents			
Infant screening			
Provision of local anaesthesia			
Preparation for surgical procedure including instruments identification			
Circumcision using the device of choice/training			
Referring client for further management			
Post operation management			
If you do NOT feel prepared to perform the tasks above, please explain:			

4. What topics related to EIMC would you like more information on, if any?

5. If you were given the task of redesigning this course, what would you change?

6. Please share any other comments that would help up to strengthen this course.