MINISTRY OF HEALTH

Training Guide and Skill Stations:

Kenya **Early Infant Male Circumcision Trainer's** Handbook

ATTRIBUTION OF SUPPORT

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Disclaimer

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The Ministry of Health through the National AIDS and STI Control Program (NASCOP) is pleased to publish and disseminate the trainning guide and skills station:The Kenya Early Infant Male Circumcision trainers handbook.

This Handbook was adapted from the World Health Organization (WHO) Manual for EIMC under local anesthesia,Clinical manual on Early Infant Male Circumcision (EIMC), Kenya and updated using the most recent experiences and evidence from Kenya and other sub saharan countries.

We would like to acknowledge Jhpiego for their invaluable input and expertise in the development of the core guides and tools for EIMC in Kenya. Furthermore, we would like to thank CDC and WHO, for their support and technical guidance throughout the compilation of these guidelines; the EIMC technical working group (TWG) and all the officials at the National and County levels of the ministry of health for the input they provided in finalizing this EIMC trainers handbook, training tools and other job aids for EIMC in Kenya.

I call upon all the service providers in public and private health sector and partners working in VMMC-EIMC programs in Kenya to familiaze themselves with the contents of this handbook and use it in implementing their program activities.

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Head of the National AIDS &
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TABLE OF CONTENTS

OVERVIEW

A. INTRODUCTION

The Kenya Early Infant Male Circumcision (EIMC) Training programme consists of theory and skills sessions in the first 2 days, followed by three to seven days of practical learning and performing EIMC procedure monitored by a qualified Master Trainer or trainer of trainers (TOT) in EIMC. Each participant is required to achieve 80% overall mark in the assessment of the theoretical component, and the Master Trainer will assess proficiency in performing the EIMC procedure before the participant can qualify and pass the course. Each participant must perform a minimum of 10 EIMC procedures. However, if the Master Trainer is dissatisfied with the participant's competence then additional procedures will be prescribed. This may need to be done after the initial first week of training. Availability of clients for practical will also determine the duration of the training.

Proposed sessions to be covered over the ten days of training				
DAY-1	**DAY-2**	**DAY-3**	**DAY-4**	**DAY-5-10**
• Welcome and orientation • Pre-Course Assessment • Chapter 1 to 5	• Chapter 6 to 11 • Instructor demonstration of procedure on model	• Skills station, Instructor demonstration of the procedure	• EIMC surgery • Mid-course Assessment	• EIMC surgery

The training course is designed and conducted per 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 trainer must clearly demonstrate the skill or activity so that participants 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 participant sees others perform the procedure and acquires a mental picture of the required steps. Once the mental image is acquired, the participant attempts to perform the procedure, usually with supervision. Next, the participant 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.

COMPETENCY-BASED TRAINING

Competency-based training (CBT) is distinctly different from traditional educational processes. Competency-based training is learning by doing. Moreover, CBT requires that the clinical trainer 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 first must 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.

HUMANISTIC TRAINING TECHNIQUES

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.

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

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

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

B. COMPONENTS OF EIMC TRAINING PACKAGE

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

- A participant's workbook containing pre-course assessments, a detailed course outline, a series of practice exercises to guide the participant through the self-study portions of the course, and learning guides which break down the skills or activities into their essential steps
- A trainer's handbook, which includes answer keys, the course outline, and competency-based assessment tools
- Training aids, such as anatomical models and videos

The reference manual recommended for use in this course is *Clinical manual on Early Infant Male Circumcision (under Local anesthesia) Kenya* which contains information on the basics of male circumcision, basic counselling skills, and the recommended standard EIMC procedures.

C. USING THE TRAINING PACKAGE

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

All of the training activities in which the participant, trainer and supervisor are involved relate to one or more of these components:

- Transfer and assessment of the essential knowledge related to EIMC. This knowledge is found in the reference manual and is reinforced through various practice exercises, and by interaction with the trainer.
- 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 trainer while the participant demonstrates that s/he can competently provide counselling, pre-operative screening, use of devices for circumcision and post-operative 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 plays / simulations and using models to achieve an acceptable level of competence and confidence.
- Next, learning progresses to work with clients consisting of skill demonstrations, modelled by the trainer, and the participant practicing with coaching from the trainer and eventually demonstrating that she or he can competently perform the skill.
- Attitude transfer through practice exercises and behaviour modelling by the trainer 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 participant and trainer. The participant must be willing to read, study, attend virtual classes, complete assignments and work independently while staying on a schedule, in order to complete training in a reasonable period of time. The participant also must be willing to observe the trainer and ask questions. The trainer must be willing to take the necessary time to mentor, teach and work closely with the participant, in addition to providing quality services, throughout the course.

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

- Clinical Manual on EIMC under Local Anesthesia in Kenya. Participants course Workbooks, Trainer's Handbook and videos.

- Other resources and materials that can be used for your own reference are:
  - The Quality Assurance and Facility Assessment Tools for EIMC in Kenya
  - www.malecircumcision.org
  - Other references as necessary

D. COURSE DESIGN

This training course is designed for clinical service providers (doctors/physicians, clinical officers and nursing officers) to perform the EIMC procedure as a primary provider. Training emphasizes doing, not just knowing, and uses competency-based evaluation of performance.

- At the beginning of the course, participants are oriented to the program and their knowledge and basic skills are assessed using a Pre-course Questionnaire and skill assessment.
- Participants' are responsible for much of their theoretical learning, although the trainer will facilitate this portion of the training with presentations, guided practical sessions, videos and other teaching aids.
- Progress in knowledge-based learning is measured during the course, through completion of the practical sessions.
- Interaction with the trainer focuses on clarifying their individual learning, and on acquiring skills and attitudes necessary for quality services through simulations, demonstrations and coached practice in all the essential aspects of providing EIMC services.
- Progress in learning procedures using the Mogen Clamp is documented using appropriate checklists.
- Successful completion of the course is based on mastery of both the knowledge and skill components.

E. EVALUATION

This course is designed to produce individuals qualified to use the Mogen Clamp for EIMC procedures and services. Qualification is a statement by the training organization that the participant has met the requirements of the course in knowledge and skills.

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

- Knowledge—Knowledge transfer as measured by a score of 80% or more on all the exercises for each chapter.
- Skills—Satisfactory performance of a minimum of ten recommended procedures during a simulated practice session with anatomic models and clients

COURSE SYLLABUS

A. MAIN GOAL

To prepare participants to acquire the knowledge, skills and attitudes needed to provide EIMC services in Kenya.

B. COURSE GOALS

- To foster a positive attitude towards EIMC in Kenya
- To provide participants with knowledge and skills needed to provide education and counselling services
- To provide the participants with the knowledge and skills needed to establish quality assurance measures for EIMC at health facilities

C. PARTICIPANT LEARNING OBJECTIVES

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

- Describe EIMC and its benefits and risks
- Educate and counsel parents and/or guardians about EIMC
- Effectively screen male infants for circumcision
- Demonstrate competency in performing EIMC with the Mogen Clamp
- Provide postoperative care follow up and identify and manage adverse events resulting from circumcision and to refer appropriately
- Ensure infection prevention and control measures are practiced in the health care setting
- Monitor and evaluate EIMC services

D. TRAINING/LEARNING METHODS

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

E. TRAINING MATERIALS

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

- Clinical Manual on EIMC under Local Anesthesia
- The Quality Assurance and Facility Assessment Tools for EIMC (EIMC) in Kenya
- A Participant's Workbook
- A Trainer's Handbook
- Anatomic models
- EIMC procedure video

F. PARTICIPANT SELECTION CRITERIA

Participants for this course should be Medical officers, Nurses and Registered clinical officers who will act as either primary or secondary providers of EIMC within their facilities, and who preferably are working at maternal, new-born and child health clinics or at Adolescent and adult VMMC clinics.

G. METHODS OF EVALUATION

- Pre-course questionnaire
- Chapter exercises and skill stations
- Mid-course questionnaire
- Assessment of EIMC procedures conducted on patients with the Mogen Clamp

PRE-COURSE EVALUATION FORM

Please select the most appropriate answer, and **CIRCLE** your choice.

1. **Where is EIMC being performed in the world?**

   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 so little benefit from male circumcision; it is difficult to prove it helps prevent HIV

3. **Routine, clinic based, infant male circumcision 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

4. **Which criteria should be met before infant male circumcision is considered?**

   a. No family history of bleeding disorders

   b. Normal physical exam

   c. Completely normal, intact prepuce

   d. All of the above

5. **What is the total maximum anesthetic agent volume that is drawn up into the syringe and used for a dorsal penile nerve block for an infant (the entire dose after dilution) that is to be injected in two locations?**

a. 1 ml, 2% lidocaine WITHOUT epinephrine/adrenaline

b. 10 ml, 1% lidocaine WITH epinephrine/adrenaline

c. 10 ml, 2% lidocaine WITHOUT epinephrine/adrenaline

d. 1 ml, 1% lidocaine WITH epinephrine/adrenaline

6. 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

7. 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.

8. 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. Visualize and palpate the ridge at the widest part of the glans.

c. Estimate based on the length of the penis and the location of the corona

d. It does not matter where the incision is made.

9. If the pen mark cannot be properly aligned to the mogen clamp blade 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.

10. 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.

11. Which of the following is a complication of the Mogen clamp that may occur more often if adhesions are not properly removed?

a. Retained parts

b. Distal tip penile amputation

c. Mismatching parts

d. Urinary retention

12. What should you do if an insufficient amount of foreskin was removed during the procedure?

a. Draw another mark and perform the procedure again.

b. Use scissors to remove any extra foreskin.

c. Do not reattempt the procedure, reassure the family, follow the child, and if necessary at an older age consider a revision.

d. Obtain immediate specialty consultation for further excision.

13. Following a Mogen procedure, what must the provider do to help minimize the risk of adhesions and a trapped penis?

a. Deliver the glans by pushing the foreskin down around the base of the corona.

b. Nothing

c. Instruct the family to apply steroid cream so that no scar forms.

d. Instruct the family to wash the area frequently to keep it moist.

14. What is the purpose of dressing the wound?

a. Protect the wound from infection

b. Minimize bleeding

c. Minimize edema

d. All of the above

15. What is the most effective, least expensive, least complicated and most readily available means to stop post circumcision bleeding?

a. Epinephrine solution

b. Silver nitrate

c. Simple controlled direct pressure

d. Suture

16. **Regardless of the device used, why is it important to instruct the caregivers to gently retract the foreskin?**

    a. This will ensure the wound does not contract above the glans and prevent a trapped penis

    b. This will help to prevent adhesions from forming between the surgical wound and wounds on the glans that occur where adhesions were removed

    c. This will help prevent adhesions from forming between the remaining foreskin tissue and the glans

    d. All of the above

17. **What is the best way to differentiate pus (evidence of infection) from normal wound healing?**

    a. Pus is malodorous

    b. Pus is easily removed

    c. An infection associated with pus is unlikely to develop in the first 48 hours following circumcision

    d. All of the above

18. **Which of the following is a concern following EIMC and should prompt care givers to seek immediate medical attention?**

    a. Fever

    b. No urine output for more than 6 hours

    c. Infant is inconsolable or lethargic

    d. All of the above

19. **What is the single most important method of infection prevention for both clients and Health workers?**

    a. Wearing sterile gloves

    b. Wearing face mask

    c. Using sterile gown

    d. Hand washing

CHAPTER COMPONENTS & EXCERCISES

The section is to be used together, and refers to the Chapters, in the Guidelines for EIMC (EIMC) in Kenya.

CHAPTER 1: INTRODUCTION TO EIMC

LEARNING OBJECTIVES

1. Describe why male circumcision is performed.
2. Describe the 3-large randomized controlled trials that convincingly showed that male circumcision helps to prevent female to male heterosexual transmission of HIV.
3. List benefits and risks associated with EIMC.

DESCRIPTION: These questions will review basic information on EIMC which you will find in Chapter 1 of the Guidelines for EIMC in Kenya. It also will help you look at the implications of this information for programs and impact in your area.

Answer the following questions before you read the chapter.

a. How would you define EIMC?

   Surgical removal of foreskin, fold of skin covering the head of the penis of a new-born aged 1-60 days. The foreskin is freed from the head of the penis and is surgically excised.

b. What are the most common reasons for performing EIMC?
   i. Medical
   ii. Cultural
   iii. religious

c. List at least two indications and two contraindications for male circumcision

   See below

d. What are the potential benefits of EIMC?

   See below

e. What are the risks involved in EIMC?

   See below

Now Read Chapter 1

Now that you have read the chapter, would you change your answers to the same questions? If so, describe how you would answer them differently now:

1. **How would you define EIMC?**

   Surgical removal of foreskin, fold of skin covering the glans penis of a new born aged 1-60 days

2. **What are the risks involved in EIMC?**

   a. Bleeding
   b. Pain
   c. Infection
   d. Injury to penis
   e. Swelling
   f. Meatitis
   g. Meatal stenosis
   h. Reaction to anaesthesia

3. **What are the potential benefits of EIMC?**

   Reduced risk of:

   a. HIV
   b. Urinary tract infections
   c. Ulcerative Sexually Transmitted infections
   d. Cancer of the penis
   e. Cancer of the cervix in female partners
   f. Prevents: balanitis, posthitis
   g. Treats; Phimosis
   h. Improved penile hygiene

4. **Describe, in brief, the evidence that supports the conclusion that male circumcision reduces the risk of HIV acquisition.**

   Randomized clinical studies conducted in Africa (Kenya, Uganda, and South Africa) showed that uncircumcised men were likely to acquire HIV than the circumcised men Observation studies showed that low prevalence of male circumcision in a country correlated with a prevalence of HIV (low circumcision prevalence <20%: HIV prevalence: Swaziland 33.4%, Zimbabwe 20% High circumcision prevalence > 80% HIV prevalence: Benin 1.8%, Kenya 6.1% source UNAIDS 2006)

5. **What are some of the reason why infants are circumcised in general?**

    a. Religious

    b. Cultural

    c. Medical purposes

6. **In the three randomized, controlled clinical trials of 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. 20-40%

    b. 50-60%

    c. 70-80%

    d. >80%

7. **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/answers – 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

    f. All the above

8. **What are the advantages of performing male circumcision in early infancy over adolescence and adults?**

    a. The procedure is easier when done in infancy with the aid of devices as the penis is less developed and skin is thinner and less vascular.

    b. Healing is faster as the wound is not disrupted by erections

    c. Suturing is often not necessary

    d. Complications are very minimal when the procedure is done by well-trained health workers.

    e. Male circumcision in infancy ensures that the wound will be healed before sexual activity begins.

CHAPTER 2: OVERVIEW OF FACILITY AND EQUIPMENT REQUIREMENTS

LEARNING OBJECTIVES

1. To describe the supplies and resources needed for EIMC services.

DESCRIPTION: this chapter addressed the supplies and resources needed to start and/or sustain EIMC programs. Please respond to the questions briefly after exploring the situation in your facility:_

1. Who is responsible for adequate supplies and resource management in your facility?
2. What is your role in assuring supplies and equipment's are appropriate for early infant circumcision?
3. After reviewing the list of supplies in the early infant circumcision manual do you think your facility can make the supplies available for services?

CHAPTER 3: LINKAGES TO CARE AND COUNSELLING

LEARNING OBJECTIVES

1. To explain the role of group education and individual counselling in EIMC.
2. To Identify opportunities for educating parents and guardians about EIMC.
3. To describe the key components of educating and counselling parents and guardians on EIMC.
4. To demonstrate counselling skills needed to counsel parents or guardians about EIMC.
5. To describe the process of linkage of EIMC to other reproductive health services

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

Case Study:

Baby John is a 3-week-old male neonate. John's mother heard the news about free EIMC services in the health centre and that is why they are here. John was delivered at home. John's father is a small-scale business man and is NOT in favour of 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 3 years ago, at a hospital after an operation. You have however managed to get the family together for a counselling session.

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

   a. Issues of consent: since John is a minor, he cannot consent for his operation.
   b. Misperceptions of the father about medical circumcision

2. **Recap the 9 basic counseling skills required by a counsellor as summarized in the manual.**

    a. Active listening
    b. Empathizing
    c. Questioning
    d. Focusing
    e. Affirming
    f. Probing
    g. Clarifying
    h. Correcting misperceptions
    i. Summarizing

3. **Which of these counseling skills would you apply in this case? Justify each of them.**

    a. Correcting misperceptions: because the father thinks that medical male circumcision might end up in death because of his experience in past
    b. Probing: need to know the circumstances that brought about his neighbour's death so that you can CLARIFY the misperception.

CHAPTER 4: SCREENING FOR EIMC

LEARNING OBJECTIVES

1. To describe the importance of a thorough history taking and physical examination in EIMC.
2. To describe EIMC eligibility criteria
3. To describe when male circumcision does not have to be performed in early infancy and why referral to specialty care may be the most appropriate course of action.

DESCRIPTION: Review chapter 4 and provide brief answers the question below

1. **What are the FIVE eligibility criteria for routine EIMC?**

    a. Healthy babies (normal physical examination and an intact penis of completely normal appearance)
    b. Full term (gestation more than 37 weeks) if baby is the immediate post-partum
    c. Weighs more than 2500g
    d. Normal physical examination
    e. Intact penis of normal appearance

2. Please mark **TRUE** or **FALSE**

	CONDITION	THIS IS A CONTRAINDICATION FOR INFANT CIRCUMCISION	
		TRUE (√)	FALSE (√)
1	Megalourethra with deficiency of corpus spongiosum	True	
2	WEIGHT 2.6 kg		False
3	Absence of Ventral Foreskin	True	
4	Hypospadia	True	
5	Penile Torsion	True	
6	Is first born for the family		False
7	Bilateral hydrocele	True	
8	Bleeding disorder	True	
9	One parent is Asthmatic		False
10	Penoscrotal webbing	True	
11	Fever	True	
12	Undescended testicles	True	
13	Micropenis	True	

CHAPTER 5: OVERVIEW OF ANESTHESIA AND PAIN MANAGEMENT

LEARNING OBJECTIVES

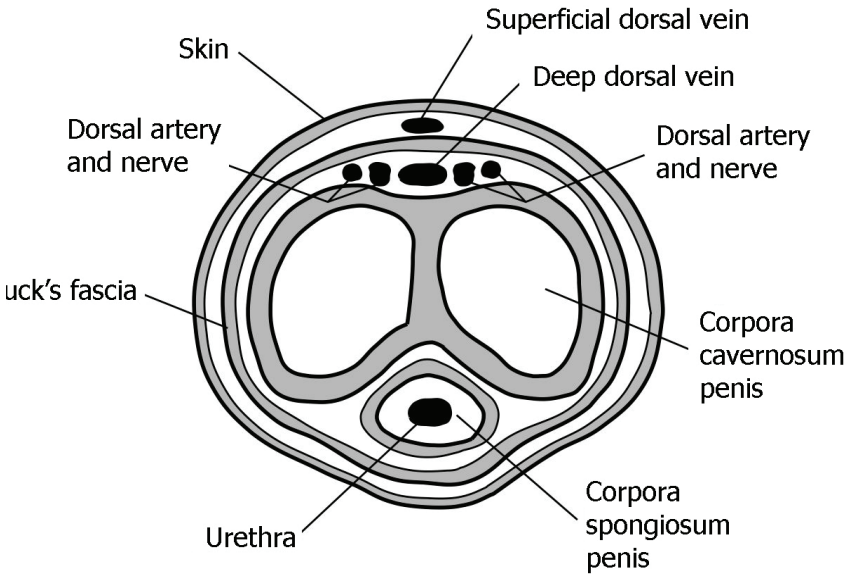
1. To explain why local anesthesia is recommended in EIMC.
2. To describe the standard anaesthetic solution and dose used for a dorsal penile nerve block for an infant.
3. To describe the location of important landmarks and technique used for administering a dorsal penile nerve block.

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

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

ANESTHESIA FOR INFANT CIRCUMCISION		
	Advantage (write two)	Disadvantage (write two)
General Anesthesia	1. Painless procedure 2. No need to restrain the baby	1. High risk of complications 2. over/under dose, 3. aspiration…feeding restrictions
Local: Dorsal Penile Nerve Block (DPNB) only	1. Painless procedure 2. Less injection given to the client	1. Bleeding 2 Bruising 3. Inadequate analgesia. 4. Small hematomas 5. Lignocaine toxicity
Local: Ring Block only	1. Minimal risk of complications 2. Painless procedure	1. Takes longer 2. Requires more needle pricks 3. possible distortion of penile anatomy
Local: EMLA Cream Only	1. Easy to administer 2. Safe in recommended doses	1. Potential Risk of methaemoglobinaemia 2. Has hassles as the Health care worker must apply it for a long time prior to the procedure 3. Transient local skin reactions
Combination of any of the Local anesthesia	1. The procedure is pain free 2. It works longer and effectively	1. toxicities 2. see above
NO Anesthesia	1. No overdose 2. No toxicities	1. The procedure is painful 2. choking, gagging, and vomiting

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



CHAPTER 6: PROCEDURE PREPARATION

LEARNING OBJECTIVES

1. To describe the steps required to prepare for the EIMC procedure.
2. To describe the steps required to prepare the infant for the EIMC procedure.
3. To describe the importance of, how, and where marking of preputial skin to be removed should be made.
4. To describe the importance of removing adhesions between the foreskin and the glans and how this can be accomplished.
5. To explain what complications can occur while making the dorsal slit and how this complication can be avoided.

DESCRIPTION: Please review chapter 6 and answer the following questions.

1. List steps that should be completed before starting an EIMC procedure:

a. Check instruments
b. Provide information to the family/care givers
c. Obtain informed consent
d. Thoroughly wash hands
e. Screen baby
f. Strap the baby on to the restraint board (above knee)

2. List four key steps required to prepare the prepuce for circumcision:

a. Administer the most appropriate anesthesia (0.5mls of 2% lignocaine and water for injection through a dorsal penile nerve block) at 2 and 10 o'clock
b. Mark the foreskin at the level of the corona.
c. Remove adhesions.
d. Dilate foreskin opening or if necessary create a dorsal slit

3. Describe why it is important to mark and where the mark should be made and how the correct location of this mark can be confirmed.

a. Errors made in removing excessive or insufficient amounts of foreskin can be prevented by marking the incision site at the corona.
b. In most infant this position is prominent and can be visualized, in others it is not, therefore it should be palpated for.

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

a. In infancy and early adolescence, the foreskin in adherent to the glans, therefore if it's not freed from the glans, the glans might be pulled along with the foreskin into

the clamp, subsequently injuring it.

b. Apply haemostats at three and nine o'clock position of the foreskin, apply traction on the foreskin.

c. Introduce a probe/hemostat between the glans and the foreskin, taking care to avoid the urethral meatus by tenting the foreskin with the tip of the probe/hemostat

d. The probe/hemostat should be moved up and down around the entire circumference of the penis.

e. The foreskin should be completely free to a level well below the surgical mark at the corona

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

   Tenting the foreskin with the tip of the scissors

CHAPTER 7: SURGICAL TECHNIQUE

LEARNING OBJECTIVES

1. To describe how the glans of the penis can be injured when using a Mogen Clamp.
2. To explain why the Mogen Clamp was chosen for use in Kenya.
3. To describe how EIMC is performed using the Mogen clamp.
4. To describe the complications that can occur with the Mogen Clamp and how they can be avoided.

DESCRIPTION: Please review chapter 7 on the recommended surgical technique for EIMC in Kenya and answer the following question.

1. **Describe how the tip of the penis can be amputated while using a Mogen clamp.**

   If the foreskin is not completely freed from the glans, the glans might be dragged on as the operator is introducing the foreskin into the slit of the Mogen clamp.

2. **Why was the Mogen Clamp chosen as the device to be used in the Scale-Up of EIMC in South Africa?**

   As it was the only WHO pre-qualified EIMC device that has been accessed and piloted in Kenya.

3. **Why is it important to check the gap distance of a Mogen clamp?**

   Mogen clamps with a slit/gap (aperture) distance of 2.5mm are designed for infants, devices with a gap distance of more than 2.5mm have been associated with frequent penile amputations in infants

4. **What is the purpose of the dorsal haemostat when performing a circumcision using the Mogen clamp?**

The dorsal haemostat acts as a guide when the operator is introducing the foreskin into the slit/gap of the clamp/device

5. **What precautions can be used to ensure the glans of the penis does not get amputated when using a Mogen Clamp?**

   a. Using a clamp/device with slit/gap size of 2.5mm only

   b. Releasing all the adhesions between the glans and the foreskin

   c. Checking for the glans before activating the clamp/device

6. **After removing the Mogen Clamp, why is it necessary to liberate the glans?**

   To ensure that the skin heals below the corona, to prevent a trapped penis

CHAPTER 8: POST-OPERATIVE CARE

LEARNING OBJECTIVES

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

DESCRIPTION: Please review chapter 8 on post-operative care for EIMC and answer the following questions._

1. **List three benefits of applying a circumcision dressing.**

   a. Help prevent infection by keeping the wound protected

   b. Help reduce bleeding

   c. Help reduce edema

2. **When should a circumcision dressing be removed?**

   Change petroleum jelly impregnated gauze every time the baby passes urine within the first 24 hours

3. **Can a circumcision dressing be removed earlier?**

   Yes

4. **Why would someone want to remove a circumcision dressing earlier than 24/48 hours?**

   If it is adjudged to restrict blood flow and urine through the penis

5. **Read each characteristic below pertaining to a yellowish discharge, the appearance of the infant's penis and general condition of the infant and circle the most likely diagnosis:**

Characteristic	Diagnosis	
Difficult to remove	Normal wound healing	Infection
Easy to remove	Normal wound healing	Infection
Malodorous	Normal wound healing	Infection
No odor	Normal wound healing	Infection
At 48 hours is looking worse	Normal wound healing	Infection
At 48 hours is looking better	Normal wound healing	Infection
Fever	Normal wound healing	Possible infection

6. **After an infant male circumcision procedure, there can be multiple wounds, 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?**

   a. Frequent application of Vaseline
   b. Mechanical reduction
   c. Wound dressing

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

   At Every diaper change and until the wound heals

8. **What precautions should be reviewed following infant male circumcision (list 6):**

   a. Fever
   b. Poor feeding
   c. Lethargy
   d. Decreased number of wet diapers or no urination
   e. Inconsolableness
   f. After 48 hours the wound starts looking worse
   g. Bleeding that cannot be controlled with direct pressure
   h. Child does not wake up for feeds in accordance to the usual pattern.

CHAPTER 9: POST-OPERATIVE COMPLICATIONS

LEARNING OBJECTIVES

1. To describe what steps should be taken to address bleeding following EIMC.
2. To describe what should occur if too little or too much foreskin is removed.
3. To describe what should occur if part of the penis is injured during the procedure.
4. To describe what should occur if adhesions appear between the foreskin and the glans and discuss causes of a penis appearing trapped following male circumcision.
5. To describe how to manage infections that may occur after EIMC

DESCRIPTION: Please review chapter 9 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.**

   5 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?**

   Most injuries can be repaired without significant long terms consequences; however these injuries have to be addressed early

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?**

   a. Ensuring that the healing wound stays beneath the level of the corona
   b. Application of topical steroids

7. **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, that occur after the wound has completely healed, do not require any immediate intervention and can be managed expectantly, why?**

   Because they spontaneously resolve during adolescence under the influence of androgens

CHAPTER 10: STANDARD PRECAUTIONS AND INSTRUMENT PROCESSING

LEARNING OBJECTIVES

1. To describe the components of recommended infection prevention and control practices in health care setting where EIMC is performed.
2. To demonstrate the use of standard precautions for EIMC procedures.
3. To explain the steps of instrument processing.
4. To describe waste management for EIMC.
5. To describe the management of accidental exposure to blood and body fluids in a clinical set up for clients and providers.

DESCRIPTION: Review chapter 10. Complete the exercises below:

1. In the space provided, write true or false for each statement.

	True/False
• The risk of acquiring HBV after being stuck with a needle used for a patient who is HBV-positive is higher than the risk of acquiring HCV or HIV from a needle-stick injury.	True
• The risk of acquiring HIV after being stuck with a needle used for a patient who is HIV-positive is more than 60%.	False
• 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.	False
• The antiseptic of choice for use in male circumcision is tincture of iodine.	False
• Before placing a disposable (single-use) needle and syringe in a puncture-proof container or box, you should first carefully recap the needle.	False
• 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.	True
• 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.	False
• All puncture-proof sharps containers must be more than ¾ full before finally being disposed of.	False
• It is absolutely not necessary to secure dumping pits or disposal sites as long as decontamination procedures are strictly followed.	False

• Cardboard boxes can safely be used for storage of sterile items.	False
• Placing waste in plastic or galvanized metal containers with tightly fitting covers is recommended in waste management.	True
• Color-coding to differentiate receptacles for infectious and non-infectious waste is often a waste of scarce resources.	False

2. These questions will review basic information on post-exposure prophylaxis.

a. 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.

i. What is your risk of acquiring HIV? 0.3% that is 3 in 1000 pricks

ii. In addition to testing for HIV, what else should you test for? Hepatitis B and C

iii. When should you start taking PEP if it is indicated? Within 72 hours of exposure

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

i. What is the appropriate first aid?

- Wash the area with soapy water
- Allow to bleed freely
- Dress the wound

ii. Should she take PEP; why or why not?

- **Why:** if she is tests negative and the source test positive or is unknown
- **Why not:** If she tests positive or if she and the source test negative.

CHAPTER 11: EIMC SERVICE DELIVERY AND PROGRAMME MANAGEMENT

The section is to be used together, and refers to the Chapters, in the Guidelines for Early Infant Male Circumcision (EIMC) in Kenya and the Quality Assurance and Facility Assessment Tools for Early Infant Male Circumcision (EIMC) in Kenya.

LEARNING OBJECTIVES

1. To describe the monitoring and evaluation of programs for EIMC services.
2. To explain the importance of indicators for the EIMC program.
3. To demonstrate data collection and reporting of the EIMC program.
4. To demonstrate how to complete client folders

DESCRIPTION: Read Chapter 11 in the Guidelines for Early Infant Male Circumcision (EIMC) in Kenya, as well as the Quality Assurance and Facility Assessment Tools for Early Infant Male Circumcision (EIMC) in Kenya.

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

- Minor theatre register
- EIMC counselling and testing register OR HIV counselling and testing register
- Last month/quarter EIMC service delivery report OR monthly neonatal care report
- OR (If EIMC or neonatal care services are not available in your facility)
- Any other service delivery register

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

SKILL STATIONS

A. SKILL STATION 1: COUNSELING AND CONSENTING

At this skill station, there will be a laminated copy of the sample information sheet for EIMC and the sample consent form for EIMC. During this skill station, each student will use these tools to provide counseling to a fellow student about the risks and benefits of EIMC and go through the consent process. Each student will be observed by an instructor or fellow student during practice and two patient encounters.

COUNSELLING CHECKLIST

Skill component	Instructor/Student Signature		
	Practice	Patient #1	Patient #2
General explanation of male circumcision			
Use easy to understand language and check understanding.			
Encourage the patient to ask questions and voice concerns, and listen to what he has to say. Demonstrate empathy.			
3. Benefits			
Custom			
Cleanliness			
Prevention of paraphymosis			
Decreased risk of urinary tract infections			
Decreased risk of HIV infection			
Decreased risk of other STDs			
Decreased risk of cancer of the penis			
Decreased risk of cervical cancer in partners			
Avoid the need for circumcision later in life			
Risks			
Lack of informed consent			
Pain			
Surgical risk (bleeding, infection, injury)			
Expense			
Sexual satisfaction			
Ask the parents/guardians for any questions they might have on Infant Circumcision provide additional information as needed.			
Tell parents/guardians where to go for the services that they require.			
Thank for their attention.			

Consent checklist

Skill component	Instructor/Student Signature		
	Practice	Patient #1	Patient #2
Review name			
Review procedure			
Review alternatives (no circumcision vs. delayed)			
Review anesthesia			
Ask if there are any questions about the procedure			
Ask if there are any questions about the risks and benefits			
Review what needs to be done before the procedure			
Ask several questions to insure understanding			

B. SKILL STATION 2: SCREENING EXAM, MAKING THE PEN MARK, AND DORSAL PENILE NERVE BLOCK (DPNB).

At this skill station, there will be:

1. EIMC training model
2. Syringes, Lignocaine bottle, and alcohol swabs

Each student will be required to look at a series of pictures and correctly determine if circumcision would be appropriate. Using these pictures 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 student during practice and two patient encounters.

Skill component	Instructor/Student Signature		
	Practice	Patient #1	Patient #2
Identify urologic abnormalities			
Hypospadias			
Penile scrotal web			
Hydrocele			
Torsion			
Concealed penis			
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			

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			

C. SKILL STATION 3: WOUND DRESSING AND POST-EIMC BLEEDING

At this skill station, there will be:

1. Sample wound dressing poster
2. Sample post-operative bleeding protocol
3. Xeroform gauze packets
4. Gauze 4 x 4 pads
5. Petrolatum
6. EIMC training model
7. 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 student will be observed by an instructor or fellow learner during practice and two patient encounters.

Skill component	Instructor/Student Signature		
	Practice	Patient #1	Patient #2
Wound dressing			
Identify purpose (bleeding, edema, infection)			
Demonstrate how to prepare 4x4 gauze			
Demonstrate correct application			
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?			
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 5 min			
Remove dressing, inspect for injury			
Consider bleeding disorder			
Apply dressing			
Direct pressure over dressing 10 min.			
Consider specialty consultation			
Maintain direct pressure			

D. SKILL STATION 4: MANAGING COMPLICATIONS

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

Skill component	Instructor/Student Signature		
	Practice	Patient #1	Patient #2
Degloving			
Removal of an insufficient amount of tissue			
Penile laceration			
Penile amputation			
Trapped penis, early			
Trapped penis, late			
Adhesions early			
Adhesions late			
Skin bridge			
Normal wound healing [Mogen Clamp]			

E. SKILL STATION 5: POSTOPERATIVE CARE AND PRECAUTIONS

At this skill station there will be:

1. Sample Post-Operative Information Sheet
2. Baby wipes to demonstrate how to apply pressure

Each student will practice providing post-operative care instructions and precautions. Each student will be observed by an instructor or fellow student during practice and two patient encounters.

Skill component	Instructor/Student Signature		
	Practice	Patient #1	Patient #2
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			
Can't retract early?			
Can't 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 mo, not all the glans can be seen?			
Postoperative precautions			
Persistent bleeding			
Fever			
Lethargy			
Poor feeding			
Inconsolable			
No void for more than 6 hours			
Any other concerns			
Pus and how you can tell			
When should the wound look the worst			
When does infection occur?			

F. SKILL STATION 6: SUTURING

At this skill station there will be:

1. Suture training kit
2. Overview of suturing and wound closure

Each student will practice suturing techniques.

Skill component	Instructor/Student Signature
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	

G. SKILL STATION 7: SURGICAL SKILL

At this skill station there will be:

1. Surgical procedure training kit, one for each team of two students
2. Sample checklist for the EIMC procedure

Each student will demonstrate:

Skill component	Instructor/Student Signature		
Procedure preparation	Practice	Case #1	Case #2
Check instruments			
Check consent and baby identification			
Clean/wash hands			
Screen patient to ensure still good candidate			
Patient preparation			
Inspect glans and determine device and size			
Prepare anesthesia			
Position patient			
Antiseptic			
Apply sterile gloves			
Inspect Mogen Clamp			
Drape			
Prepuce preparation			
Pen mark (penis should be dry)			
Anesthesia			
Grasp foreskin			
Remove adhesions			
Dilate foreskin or create dorsal slit			
Mogen Clamp Device			
Demonstrate proper use of the Mogen Clamp			

ANNEX: LIST OF REVIEWERS

LIST OF EXTERNAL REVIEWERS

Dr.Christine Kisia	WHO
Catey Laube	Jhpiego US Office
Dr.Stephanie Davis	CDC - Atlanta

PARTICIPANTS AT THE VALIDATION WORKSHOP

Ambrose Juma	NASCOP
Dr.Odoyo June	CDC - Kenya
Dr. Nandi Owuor	Jhpiego
Fred Adera	Technical Expert
Elizabeth Otieno	UCSF - FACES
Rodgers Kongina	Technical Expert
Diner Pinya	MOH - Homabay County
Naboth Otieno	University of Maryland, Baltimore
Rashid Asman	WRP
Jacinta Badia	IRDO
John Anyango	MOH - Siaya County
Eliza Owino	MOH - Migori County
Dr. Iscah Amoth	MOH - Homabay County
Dr. Festus Kigen	MOH - Busia County
Alice Bett	MOH - Kericho County
Milton Koyier	TSU - NASCOP
Silas Achar	Communication Technical Expert
Dr. Dixon Mchana	MOH - Pathologist,Kakamega County
Zilper Imbuye	MOH - Siaya County
Dr. Carol Ngunu-Gituathi	MOH - Nairobi
Constance were	MOH - Busia

Amos Kemei	MOH - Kericho
Dr. Duncan Odera	PATH
Betha Ochomo	NRHS
Pamela Olilo	JOOTRH
Mark Riogoita	MOH - West Pokot
Dr. Kennedy Serem	TSU - NASCOP
Wycliffe George Omondi	CHS
Godfrey Owino	ICAP - Kenya
Japheth Terer	MOH - Kisumu
Dennis Mboya	UCSF - FACES
Daniel Oneya	MOH - Migori
Fidel Asol	University of Maryland, Baltimore - TIMIZA Project
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NASCOP
National AIDS and STI Control Program

PEPFAR

VOLUNTARY MEDICAL MALE CIRCUMCISION
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