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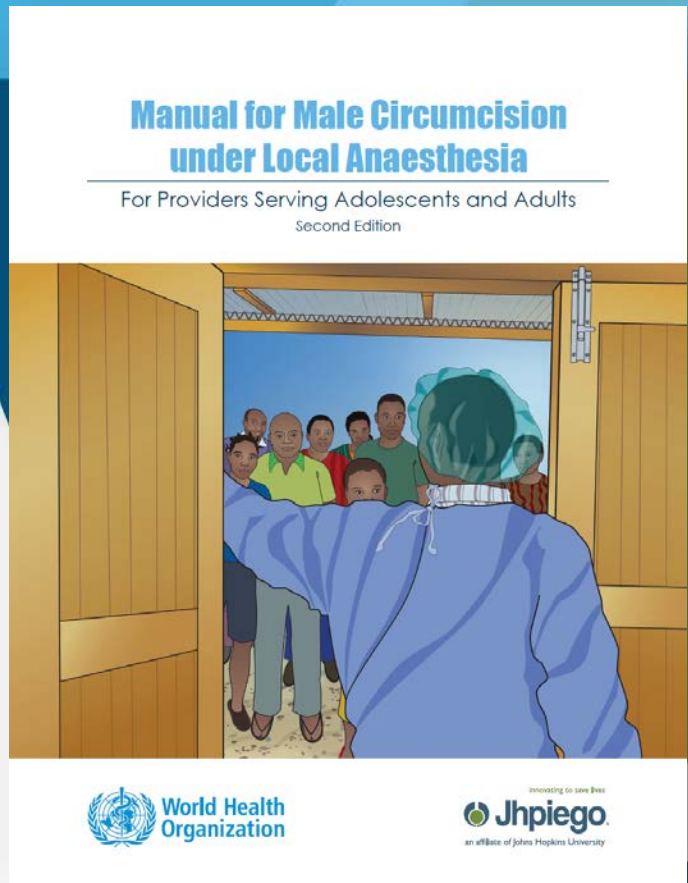
Manual for MC under Local Anaesthesia: Major changes and implications

WHO Meeting on Implementing the 2017 – 2021 Framework for VMMC for Eastern and Southern Africa Region

27 February 2017
Durban, South Africa



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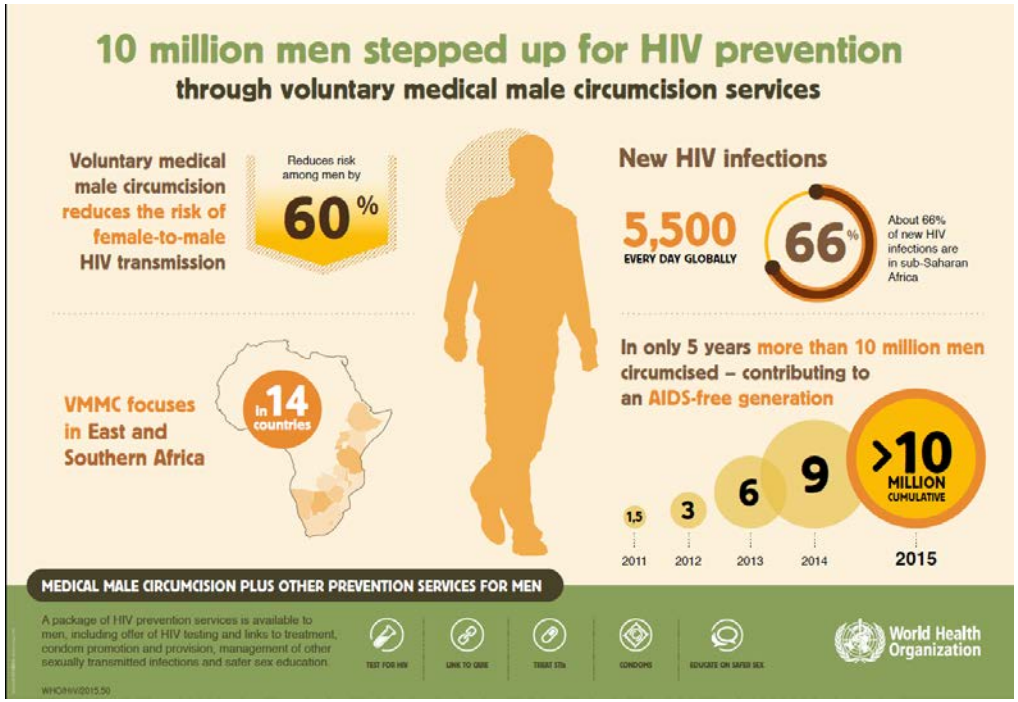
Background



- Original manual launched by WHO in 2009
  - Training
  - Quality Assurance
  - Reference document
- > 5000 VMMC providers trained
- Evident need to review the manual based on field experience

Review & Revision Process

- WHO and Jhpiego convened approximately 40 subject matter experts from the SSA region and agency headquarters, January 2016
- Previewed a new chapter at AIDS 2016 in Durban to alert field of forthcoming update
- Edited content now at WHO for final external review and WHO internal clearance

Overall changes to the manual

- Title: reflects new content
- Safety: top priority as in 2009 manual, but additional information, new emphases & modifications based on programme experience and latest research
- Structural changes: Revised chapter order/titles:
  - First half: foundation/strategy Second half: service delivery
- Practice points based on what works best from experience
- Boxes highlighting most important points in each chapter
- New template forms and tools

Chapters reorganized/renamed

Old Manual (2009)	New Manual (2016)
Chapter One - Benefits and risks of male circumcision	Chapter One - Overview Of Male Circumcision As An **HIV Prevention Strategy**
Chapter Two: Linking male circumcision to other male sexual and reproductive health services	Chapter Two: VMMC Platform to Offer Enhanced Services for **Adolescent and Adult Male Health**
Chapter Three: Educating and counselling clients, and obtaining informed consent	Chapter Three: Facilities, Supplies and **Infrastructure** for VMMC Programmes
Chapter Four: Facilities and supplies, screening patients and preparations for surgery	Chapter Four: Record Keeping, Reporting and **Quality Assurance**
Chapter Five: Surgical procedures for adults and adolescents	Chapter Five: Infection Prevention in VMMC
~~Chapter Six: Circumcision of Infants and Children~~	Chapter Six: Educating and Counselling Clients, and Obtaining Informed Consent
Chapter Seven: Postoperative care and management of complications	Chapter Seven: **Pre-Procedure Screening** of Clients and Preparations for the MC Procedure
Chapter Eight: Prevention of infection	Chapter Eight: **Surgical Skills** Required For Safe Circumcision
Chapter Nine: Managing a circumcision service	Chapter Nine: **Circumcision Methods** for Adolescent and Adult Males
	Chapter Ten: Postoperative Care and Management of Intraoperative and Postoperative Adverse Event

➔Practice points on diathermy

Errors in diathermy surgical technique can lead to serious complications. Therefore, it is important to be aware of common errors and to understand how to avoid them; it is also important not to use diathermy in situations where it is contraindicated.

- Do not use diathermy when the penis size is small because there is a risk of a burn at the base of the penis which can lead to loss of the entire penis. This precaution applies mainly to younger adolescents and to many boys aged 10–14 years, because of their less mature physical development.
- Diathermy is best used on small vessels. If the vessel lumen is large enough to be seen, then the vessel should be picked up accurately and ligated, because diathermy on such large vessels results in less secure haemostasis.
- Apply the diathermy accurately and with precision, taking the minimum amount of tissue in the forceps. Use a dissecting forceps to catch the bleeder accurately, and then touch the diathermy probe onto the forceps. Some diathermy machines come with disposable diathermy forceps, in which case the bleeding point is picked up directly with the diathermy forceps.
- Avoid prolonged application of the current. If bleeding has not stopped after an application of 1–2 seconds, then it is not going to respond. Apply a pressure swab and either reposition the diathermy forceps, taking more care with accuracy (i.e. taking a minimal amount of tissue), or stop the bleeding with sutures or ligation.
- Avoid creating large black burns, because extensive damage to tissue predisposes the wound to infection and delayed healing.
- Avoid diathermy at the frenulum because of the risk of a burn through the urethral wall, which can lead to a urethral fistula.
- Avoid diathermy at the skin edges, because burnt skin predisposes the wound to infection and delayed healing.
- Use diathermy only after special training in the technique.
- Although most adverse events related to diathermy are caused by errors in technique, some are caused by faulty machine connection. The provider using diathermy needs to be skilled in proper surgical technique and in ensuring that the machine is properly set up in terms of connections and settings.

DRAFT

Box 8.2. Choice of suture material and needle

The ideal suture size is a compromise between ensuring adequate tensile strength and minimising the amount of foreign material introduced into the body.

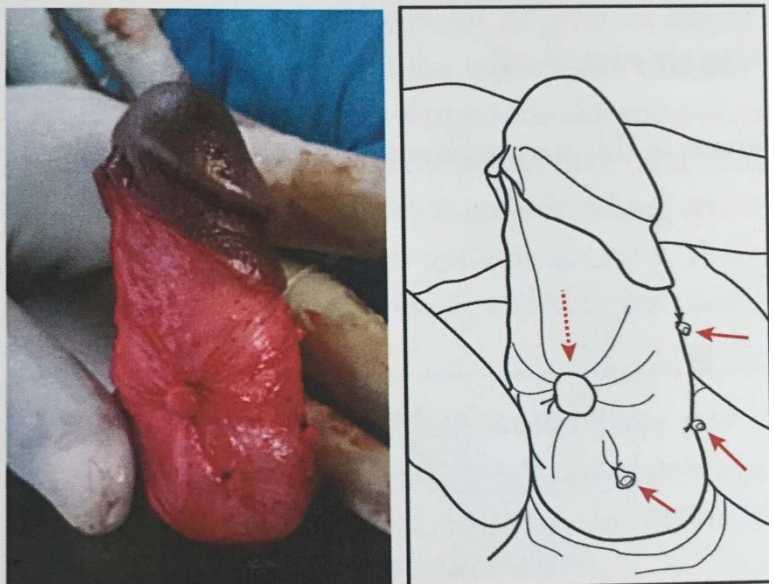
- If large suture sizes have been used to tie the blood vessels they produce a more unsightly scar, and can lead to small, persistent lumps.
- A fast-absorbing suture material should be used, such as polyglactin 910, which has been treated for a more rapid breakdown (Vicryl Rapide™), or chromic catgut (although this is becoming less available).
- Standard polyglactin sutures (i.e. not fast absorbing ones) are listed as standard supplies by the United Nations Population Fund (UNFPA) and the United Nations Children's Fund (UNICEF) *(1)*. Polyglactin sutures should be undyed to prevent tattoo marking of the skin. The size should be 3/0 or 4/0.
- Infection resisting suture material (such as triclosan coated sutures) are being advocated for all types of surgery by WHO.

The suture may be mounted on a taper-cut reverse cutting needle, 3/8 of the circle. The taper-cut needle passes more easily through the skin; however, it also easily tears the skin on the inner aspect at the corona. When dealing with younger adolescents with soft skin, a round-bodied needle is often sufficient.

Key messages

- The provider and any assistant undertaking circumcision must always be aware of the sterile operating field. They should also adhere to standard precautions and principles to ensure infection prevention and control.
- Proper handling of tissue is critical to achieving a good outcome of the circumcision procedure. Handle the tissue gently, because handling it too firmly may crush the tissue and delay healing, increasing the risk of infection and worsening the scarring.
- Handle sharps in a way that helps avoid needle-stick (sharps) injury. Sharps include needles, scalpel blades, disposable diathermy points and any other sharp instruments.
- Minimizing blood loss is part of good surgical technique and safe medical practice. It reduces the risk of complications and the need for interventions that bring additional risks. Minimizing blood loss also helps to reduce the risk of contaminating the sterile field.
- Bleeding can be stopped by coagulation using diathermy. Safe diathermy requires the provider to understand and apply knowledge of the machine's electrical connections and power settings, and of safe diathermy surgical technique.
- Even if diathermy is available, providers who undertake male circumcision should be skilled at stopping bleeding without diathermy. Surgical techniques for reducing blood loss are compression, temporary occlusion of blood vessels, and tying and underrunning.
- The goal of suturing (placing surgical stitches) is to achieve apposition without tension but with correct skin orientation. Too much tension in any type of skin suture increases the likelihood of cutting through the skin, resulting in wound disruption. Basic suturing techniques include simple interrupted sutures and mattress sutures (i.e. the vertical mattress suture and the horizontal mattress suture).

Fig. 8.7. Haemostatic ligature that has gathe



Chapter 1 – Overview of MC as a HIV prevention strategy

- Targeted to actual users & settings
- Sequence of services (client flow) clarified
- More emphasis on informed consent (and assent, for minors)
- New, updated research findings e.g. long-term protection (beyond RCT data)
- Introduction to VMMC devices
- Information about tetanus prevention
- Emergency management at site level

Chapter 2 – VMMC platform to offer enhanced services for adolescent and adult male health

- Health services barriers for adult and adolescent males (overcoming barriers and tips to attract clients)
- Respectful care, privacy and confidentiality
- More information on facilitating referrals
- Importance of linkages with other needed services
- Targeted information to adolescents and their special considerations
- Detailed content on gender and sexuality shifted to appendices

Chapter 3 – Facilities, Supplies and Infrastructure for VMMC Programmes

- Focus on certain aspects of facility based on experience
  - Procedure room specifications
  - Updated list of required supplies and equipment

- Updated emergency equipment information from PEPFAR/COSECSA lists

Chapter 4 – Record Keeping, Reporting and Quality Assurance

- Record keeping placed in context of bigger picture of M&E, quality assurance
- Stress on importance of reporting Aes
- Added standards from WHO quality assurance toolkit
- Added WHO programme indicators
- Facility-level guidance on M&E activities

Chapter 5 – Infection Prevention in VMMC

- Content made more specific to VMMC
- Injection safety recommendations (CDC/WHO)
- Options for dealing with disposable VMMC kits
- Additional information on PEP added as an appendix

Chapter 6 – Educating and Counselling Clients, and Obtaining Informed Consent

- Group education and counselling content more clearly distinguished
- HIV testing at every encounter
- Stress on “partial protection” from VMMC
- More emphasis on informed consent (and assent, for minors)
- Relevant information on tetanus and vaccination during counseling
- Summarized information about devices (for clients choosing devices)

Chapter 7 – Pre-Procedure Screening of Clients and Preparations for the MC Procedure

- Screening for tetanus immunization, haemophilia and other contraindications
- Added material on surface and internal anatomy - more relevant to VMMC
- Pictures of contra-indicating abnormalities
- Screening for device circumcision
- Timing of informed consent and documentation in relation to screening
- WHO surgical safety checklist modified for VMMC in preoperative preparations

Chapter 8 – Surgical Skills Required for Safe Circumcision

- Tips and recommendations based on field experience
- Common mistakes by providers via practice points e.g., maintaining the sterile operating field, tissue handling, knot tying, haemostasis
- Revised on information about use of diathermy in VMMC

Chapter 9 – Circumcision Methods for Adolescent and Adult Males

- Description of WHO prequalified VMMC devices:
  - Elastic collar compression & collar clamp
  - Step-by-step device instructions **not** included (consult manufacturer *Instructions for Use*)

- Roles and responsibilities of the "provider doing the procedure" more clearly identified

- Updated step-by-step and pictures/diagrams for the two common surgical procedures (forceps-guided and dorsal slit); sleeve resection steps maintained

Chapter 10 – Postoperative Care and Management of Intraoperative and Postoperative Adverse Events

- Extensive revision to describe AEs and their management (include device-related)
- Information and emphasis on post-procedure care, especially wound care instructions and importance of follow-up
- Recognition and management (of selected AEs) or referral, and emergency referral
- Reference to the COSECSA/PSI Adverse Event Action Guide

Job Aid: Skin Preparation for All VMMC Methods

Job aid summarizing essential skin preparation responsibilities for clients and providers to reduce the risk of infection following VMMC, including tetanus. **Available March/April**

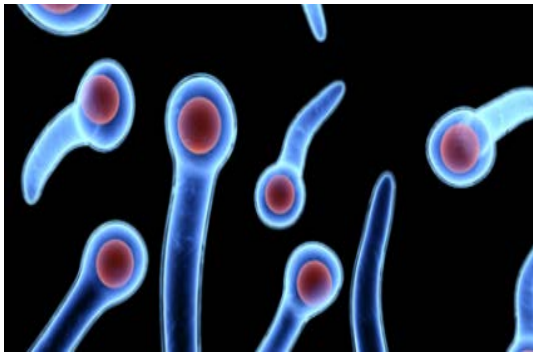
- Client instructions: client should thoroughly wash the entire genital area with soap and clean water ***prior to coming for VMMC***

- Provider instructions highlights:
  - Hand hygiene and maintaining sterile field once skin preparation has begun
  - The client's skin may be prepared for the procedure using an aqueous-based antiseptic solution (povidone-iodine or Chlorhexidine gluconate)
  - Antiseptic application should be repeated three times
  - Allow antiseptic to dry completely (2+ minutes)

Client Brochure: Tetanus and VMMC

Brochure explaining the clients how to reduce the tetanus risk following VMMC

Available now



Key messages

Whether you receive VMMC or not, you are at risk of getting tetanus […] if you have not received a full series of tetanus vaccinations"

"Applying ointments, home remedies or traditional medicines, […] to any wound, including the circumcision wound, increases your risk of tetanus"

"If you are going for VMMC, take your vaccination records with you"