

Monitoring and Evaluating the Scale-up of Male Circumcision in Kenya

The Male Circumcision Monitoring and Evaluation Study (MCMES) assessed the implementation of voluntary medical male circumcision (VMMC) for HIV prevention in the Nyanza region of Kenya. Conducted from 2008 to 2010, the study examined the safety of the male circumcision procedures performed, the acceptability and acceptance of VMMC, and when men resumed sexual activity after becoming circumcised.

Kenya's national VMMC program began in Nyanza because the region has the country's highest rates of HIV infection and the lowest prevalence of male circumcision. By the end of 2010, more than 230,000 men and boys had been circumcised in Nyanza.

MCMES was the first study to assess clinical outcomes in a large, multisite VMMC program in a resource-limited setting. It also provided some of the first data outside of a clinical trial on how long it takes to heal after male circumcision in such settings.

Study Design

Amy Herman-Roloff and colleagues from the University of Illinois at Chicago, Impact Research and Development Organization and the Nyanza Reproductive Health Society conducted the study with support from the Male Circumcision Consortium. They followed VMMC clients 12 years or older at 16 sites in Kisumu East, Kisumu West and Nyando districts to determine whether the men and boys experienced any complications during the procedure or in the following 45 days.

Follow-up consisted of collecting routine clinical data and conducting interviews with 3,705 men at the sites after the surgery, and then active surveillance of a random subsample of the VMMC clients. Active surveillance included in-depth interviews with 1,449 men in their homes, as well as genital examinations to assess wound healing, 28 to 45 days after the procedure. Because early resumption of sex could facilitate



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- **More experienced providers perform faster and safer male circumcision procedures.**
- **Data on wound healing in this study support the recommended 42-day period of sexual abstinence after male circumcision.**
- **Almost one-third of men resumed sex less than 42 days after circumcision, and only 45 percent of those men reported consistent condom use.**

HIV acquisition or transmission through an open unhealed wound, the researchers assessed resumption of sexual activity by analyzing data collected from participants in the home-based interviews who were 18 years and older.

Researchers also conducted 12 focus group discussions involving 121 men ages 18 to 40 years who were not circumcised and had no plans to become circumcised.



The Male Circumcision Consortium worked with the Government of Kenya and other partners — including the US President's Emergency Plan for AIDS Relief (PEPFAR), which supports service delivery — to prevent HIV and save lives by expanding access to safe and voluntary male circumcision services. FHI 360 received a grant from the Bill & Melinda Gates Foundation to collaborate on the consortium with EngenderHealth and the University of Illinois at Chicago, working with the Nyanza Reproductive Health Society.

Results

The rate of complications after the surgery was higher among the men in the active surveillance group (7.5 percent) than it was among men followed only in the clinic system (2.1 percent). The two systems detected different types of complications, suggesting that the types identified only through active surveillance may be undetectable at the one-week follow-up visit.

Safety improved as providers gained experience. Experienced providers recorded a mean complication rate of 0.7 percent in the clinic system and 4.3 percent in the active system — rates equivalent to those observed during the randomized controlled trial of VMMC in Kisumu.

Provider efficiency improved as providers gained experience. A provider's first 20 procedures were performed in a mean time of 24 minutes; those who had performed 200 procedures completed them in a mean time of 15.5 minutes.

With sufficient experience, nurses can perform the procedure as safely as clinical officers and medical doctors. Among providers who had performed at least 100 male circumcisions, there was no significant difference in complication rates between nurses and clinicians.

About 95 percent of the study participants had healed by the 42nd day — a finding that supports the recommendation of a six-week period of sexual abstinence after VMMC.

More than 30 percent of the men reported they had resumed sexual activity during the recommended 42-day abstinence period. Having a wife or live-in partner was the factor most associated with early resumption of sex.

Forty-five percent of the study participants who had resumed sex early reported consistent condom use. One in ten men who resumed sex before 42 days had not yet used any condoms post-circumcision.

Time away from work was the most important barrier to VMMC acceptability, particularly among men working in the informal sector and older men.

Participants reported confusion about the duration of the abstinence period, as well as the length of time they might be required to be away from work and the time required for complete healing.

References

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RECOMMENDATIONS

- Ensuring that providers have ample experience (at least 100 procedures) before performing unsupervised circumcisions would enhance safety and efficiency.
- Providing mechanisms for more client-provider interaction, such as adding a follow-up visit or sending text-message reminders, could improve detection of complications that develop after the first week and help clients follow the recommendation on post-circumcision abstinence.
- Innovative strategies are needed to encourage men who seek VMMC services and who are already involved in a sexual partnership to abstain from sexual activity during the post-VMMC healing time.
- Women are a critical audience for messages about the importance of post-circumcision sexual abstinence.
- Efforts to encourage couples to receive counseling together should be reenergized.
- Mass-communication campaigns should be implemented to raise awareness of the risks of premature resumption of sex after VMMC for men and women.