

Circumcision Saturday: A Case Study from Swaziland



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The Context for Male Circumcision in Swaziland

Swaziland is a small landlocked country in Southern Africa with a population of 1.1 million people. Swazis have a largely homogenous cultural heritage, sharing one tribal ancestry and one common language. This has led to a strong emphasis on Swazi culture in all segments of public and private life.

Swaziland is considered a middle-income country with a per capita income of \$1,660 (U.S) in 2004. Despite this, 69% of the population is living on less than \$22 (U.S) per month.¹ Swaziland is located approximately 400 kilometers from Johannesburg where many Swazi men have historically gone to find employment in the mining industry.

Circumcision and HIV Prevention

The preliminary evidence from a randomized controlled study of the relationship between HIV transmission rates and male circumcision (MC) status received significant public attention in the Southern African region since the “Orange Farm” study was carried out between July 2002 and February 2004.² The study was conducted in the semi-urban community of Orange Farm close to the city of Johannesburg. It analyzed the female to male HIV transmission rate in circumcised men compared to uncircumcised men. It documented a 60-61% protective effect (intention-to-treat analysis, unadjusted and adjusted analyses, respectively), and a 76% protective effect (as-treated analysis) against HIV infection among circumcised men.³ Because it took place among a population that shares many similarities with Swazis, the Orange Farm study initiated a growing public interest in male circumcision in Swaziland. This interest increased with the publishing of two similar MC studies out of Rakai, Uganda and Kisumu, Kenya. The Ugandan study concluded that circumcised men had a 51% reduction in the risk of becoming infected (intention-to-treat analysis) with HIV⁴, and the Kenyan study found the risk reduction to be 53%, although excluding men from the

¹ Whiteside et al. 2006. Presentation on the Socio-economic Impact of HIV on Swaziland. Mbabane, Swaziland, July.

² Harrison R. 2006. Circumcision makes a comeback in AIDS-hit Swaziland. Reuters; February 26th.

³ Auvert B, Taljaard D, Legarde E, Sobngwi-Tambekou J, Sitta R, Puren A. Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: the ANRS 1265 Trial. *PLoS Med* 2005; 2: e298.

⁴ Gray RH, Kigozi G, Serwadda D, et al. Male circumcision for HIV prevention in men in Rakai, Uganda: a randomized trial. *Lancet* 2007; 369: 657-66.

analysis subsequently found to be seropositive at enrollment increased the protective effect to 60%.⁵

HIV in Swaziland

The first case of HIV infection in Swaziland was diagnosed in 1986. The first antenatal clinic (ANC) sentinel survey was conducted in Swaziland in 1992 and found a 3.9% HIV prevalence rate among pregnant women. HIV was declared a national disaster by King Mswati III in 1999, and by 2004 the ANC prevalence had reached 42.6%, the highest in the world.



This map of Swaziland shows the two circumscription event sites circled in green.

The HIV epidemic in Swaziland, as in the rest of Southern Africa, is driven by heterosexual activity; 90% of cases of HIV transmission in the region are through vaginal intercourse.⁶ Because of this primary source of transmission, MC has the potential to have a tremendous impact on HIV transmission levels, thereby affecting a large portion of the Swazi population.

Circumcision in Swaziland

Currently, circumcision prevalence in Swaziland is around 14% according to self reporting of men interviewed in Swaziland's Manzini District.⁷ Swazis currently do not circumcise in the cultural context, although circumcision was once a coming of age ritual until the mid-1800s. Although incidence of circumcision among Swazis remains low⁸, interest in elective male circumcision is gaining. In

⁵ Bailey RC, Moses S, Parker CD, et al. Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial. *Lancet* 2007; 369: 643-56.

⁶ Bailey RC, Plummer FA and Moses S. Male circumcision and HIV prevention: current knowledge and future research directions. *Lancet Infectious Diseases* 2001; 1: 223-31.

⁷ Tsela, S., & Halperin, D. T. 2006. Knowledge, attitudes and practices regarding male circumcision in the Manzini (central) region of Swaziland. In *The XVI international AIDS conference*. Toronto, Canada.

⁸ Halperin D, Bailey R. Male circumcision and HIV infection: 10 years and counting. *Lancet* 1999; 354: 1813-15.

light of the randomized controlled studies in Kenya and Uganda, it appears that low circumcision rates compounded by the widespread practice in Swaziland of maintaining multiple concurrent sexual partnerships⁹ have helped fuel Swaziland's world-leading current HIV ANC prevalence of 39.2%.¹⁰ These numbers have, in turn, intensified demand for local circumcision services. In December 2006, Mbabane Government Hospital, Swaziland's main referral hospital located in the capital city of Mbabane, had a nine-month-long waiting list for men wishing to undergo circumcision.¹¹ Currently, Mbabane Government Hospital performs six procedures each Friday and is booked for six months. The cost of the procedure is E25 (Emalangeni, \$1 U.S. = E7). The Mbabane Clinic, a private hospital, performs approximately 40 circumcisions per month. Before the Orange Farm study, the Clinic was performing one procedure per month on average.

In addition, a private clinic operated by the Family Life Association of Swaziland (FLAS) began offering male circumcision in January 2006. This was done with support from a grant from USAID. The grant ended in October 2006 but FLAS continues to offer MC at a cost of E300 per procedure. As of 4 May, 2007, FLAS performed a total of 432 procedures, and is performing an average of 15 MC procedures per month.¹²

Social Marketing and MC Acceptability

As has been observed in many other uncircumcised populations in Southern Africa, there is a high level of acceptability of MC in Swaziland.¹³ The local host of a health-related radio show was quoted in the 5th October, 2006 issue of one of the country's daily newspapers, *The Swazi Observer*, as saying, "Everyone wants to have [circumcision] done. Not one person has called to say it's un-Swazi." The reference shows that local radio had previously addressed the issue on several occasions. Circumcision has also been publicly supported by a high-profile parliamentarian when he was quoted as saying, "All male children should be circumcised. To show my seriousness, I have taken all my sons for circumcision."¹⁴

⁹ Whiteside A, Hickey A, Ngcobo N, and Tomlinson J. What is driving the HIV epidemic in Swaziland and what can we do about it? National Emergency Response Council on HIV and AIDS; April 2003: 19.

¹⁰ ANC sentinel survey released December 1st, 2006.

¹¹ Groeneveld A. 2007 MC at Mbabane Government Hospital. Personal communication. April 20th 2007.

¹² Simelane, D. 2007 Interview at FLAS, Manzini, Swaziland. Personal communication. May 4th 2007.

¹³ Bailey RC, Plummer FA and Moses S., 2001.

¹⁴ Timberg, 2005. In Swaziland, Science Revives an Old Rite; Circumcision Makes a Comeback to Fight AIDS. Washington Post, 26 December.

An unpublished study looking at MC acceptability among Swazi men found that 71% said they would have their male child circumcised and 54% of uncircumcised men said they would get circumcision now. When asked if “they would like to get circumcised if circumcision was found to reduce the spread of HIV”, 87% said they would.¹⁵ Currently no information is available on female acceptability of MC in Swaziland. However, a study in the culturally similar South African province of KwaZulu Natal found that 68% of women favored circumcision for their partners and 73% said they would have their sons circumcised.¹⁶

The Initial Government Response

By the end of 2005, the results of the Orange Farm Study together with local media coverage sparked an increased interest in and demand for male circumcision in Swaziland. While FLAS began providing male circumcisions at its private clinic, interested men seeking the procedure from a public hospital were simply added to the growing waiting list. Government hospitals did not have the human resources to scale-up the availability of MC since few doctors were trained in the procedure.

To address this, the Ministry of Health, in collaboration with USAID and FLAS, organized a two-day symposium on MC in January 2006.

Objectives: The target audience was the Swazi medical establishment. Private as well as public doctors were invited to a series of lectures on “MC Under Local Anesthesia” on the first day. The second day, a Saturday, was set aside for the doctors to observe and participate in the circumcision procedure. Sixty medical professionals, more than half of whom were doctors, attended the symposium. The high attendance showed the profound interest in obtaining knowledge of and skills in a new procedure.

Strategy: Men interested in receiving circumcision at the symposium were recruited through advertisements in the country’s two national daily newspapers. The event confirmed that popular interest in MC was quite high as some 120 interested men and

¹⁵ Tsela and Halperin 2006.

¹⁶ Scott BE, Weiss HA, Viljoen JI. 2005. The acceptability of male circumcision as an HIV intervention among a rural Zulu population, KwaZulu-Natal, South Africa. *AIDS Care*, 17(3), 304–313.



Pictured here is Dr. Adam Groeneveld, head of urology at Mbabane Government Hospital, performing a circumcision at Circumcision Saturday. A standardized circumcision procedure was one of the main outcomes of Swaziland's Circumcision Saturday events.

boys turned up for the procedure. Unfortunately, nearly 70 had to be turned away without receiving the operation. Parental consent was obtained for boys under 18 years old, the health sector's consenting age for an operation.

Outcomes: The procedures were performed at the Mbabane Clinic in three operating rooms on five operating tables. Disposable materials and instruments were provided by Mbabane Government Hospital. A total of 52 circumcisions were performed under the instruction and supervision of two experts in the field: Dr. Adam Groeneveld, chief urologist at Mbabane Government Hospital and Dr. Kasonde Bowa, chief urologist at the University Teaching Hospital in Lusaka, Zambia. Before being released, men received a postoperative check and were encouraged to return after three days.

A total of 15 doctors received hands on experience with the standard MC procedure. All procedures were free of charge.

The event was not costed as all materials and instruments were donated by Mbabane Government Hospital.

While the event was successful in its objective of training additional doctors in the MC procedure, several areas for improvement were noted, namely the need for organized patient flow and strict administration with standardized paperwork and forms. The event established that preoperative information and counseling of clients is necessary. It was discovered that clients under the age of 15 years had difficulty lying still for the local anesthetic injection and the operation itself. Two patients, a 12-year-old and a 14-year-old, needed to be given general anesthesia with gas in addition to local anesthesia for this reason.

Swaziland's MC Task Force

Based on the increasing interest in MC in the country and the success of the first MC Symposium, the Ministry of Health established Swaziland's Male Circumcision Task Force on 10 March, 2006. The Deputy Director of Health Services was appointed as head of the Task Force and membership was comprised of a wide representation of the public and private sectors of medicine, the Ministry of Health, and international development organizations such as WHO, UNICEF, and UNAIDS. The Task Force was assigned with preparing the country and its medical establishment to meet the expected rise in popular demand for circumcision by offering expertly performed, safe and inexpensive circumcisions with a minimum of complications.

Upon its establishment, the Task Force instituted several guidelines for MC scale-up in Swaziland. The first was to ensure standardization of the MC procedure. All procedures and trainings would use one standardized procedure. Only through strict standardization would the country be equipped to accurately evaluate the impact of MC on the epidemic. The Task Force also decided to focus MC efforts on two groups: men 15 to 30 years of age and neonatals. Circumcising those in the 15 to 30 year-old-category would have the most immediate impact on the epidemic and focusing on neonatals would make the need to circumcise adults obsolete in less than 20 years.

The Second Circumcision Event

Building on the lessons learned at the first circumcision symposium, the Task Force organized a second circumcision event on Sunday, 2 July, 2006.

The objectives of this MC event were to train additional doctors and improve upon patient logistics, including patient flow, administration and preoperative counseling.

Strategy: Three government doctors who attended the first circumcision event and who regularly performed circumcisions at Mbabane Government Hospital were recruited to participate in the second MC event. Two additional doctors practicing at Mbabane Government hospital were trained at the event.

Patients were once again recruited via advertisements in the daily national newspapers. These announcements specifically called for interested men between the ages of 15 and

30 years. On the day of the event, men began lining up outside the hospital at 5:30 a.m. Many more men arrived for the procedure than could be operated on by the doctors. More than 60 men were turned away.

Outcomes: Two operating rooms at Mbabane Government Hospital were used for the procedure and 30 circumcisions were performed. Each patient was charged a nominal hospital entrance fee of E25.

Patient flow was perfected, with one doctor in charge of the intake and preoperative exam and a second doctor in charge of postoperative management and discharge. A newly developed set of forms was tested. In this set, a new consent form contained the message that circumcision does not provide immunity against HIV infection and that the “ABC” measures (abstain, be faithful, condomize), even after circumcision, remained of utmost importance in preventing infection. The instrument set and disposable materials, once again donated by Mbabane Government Hospital, were carefully evaluated and trimmed down to minimal but practical size and content. The same was done with a stand-by emergency tray.

A system for postoperative follow-up was organized so patients returned to the hospital and were checked on postoperative days three, seven and 21. The follow-up checks were purely surgical and included assessments of the suture line and general healing.

Finally, the event established that a surgically experienced doctor could learn the recommended surgical and anesthetic procedures for MC by assisting on two cases and operating under supervision on at least three.

The Third Circumcision Event

After two successful circumcision events, it had become clear to the Task Force that this format should become the standard to test various aspects of the circumcision procedure in preparation for a national MC scale-up. The two circumcision events created a pool of doctors trained and experienced in Swaziland’s standard MC procedure. The events also optimized the anesthesia; the composition of the instrument set, disposable materials and emergency tray; and perfected patient flow and use of

hospital facilities. These weekend events caught on with the public and many medical practitioners. The events have even taken on a popular name, “Circumcision Saturdays” (despite one MC event taking place on a Sunday). In early 2007, the MC Task Force felt the time was right for a third Circumcision Saturday.

Building upon the experiences of the previous two MC events, this Circumcision Saturday was scheduled for Saturday, 27 January, 2007 and moved forward with two primary objectives.



Mankayane Government Hospital is located approximately 50 km south of Mbabane. Mankayane serves Swazis living in the rural western regions of the country.

Objectives: The first objective was to calculate, as accurately as possible, a per procedure cost for MC. By recording all costs for materials, instruments and time, as well as the number of procedures performed at the event, the country could establish a baseline cost for a single procedure. The Ministry of Health, as well as private medical institutions or non-governmental organizations, could then use this information to begin scale up of MC in Swaziland.

The second objective of the event was to further standardize the MC procedure. In addition to using the standard surgical procedure, the event sought to establish a minimum package of MC services that included risk-reduction counseling and voluntary

counseling and testing (VCT) for HIV. The reason for this additional measure was to try to compensate for men's potential adoption of riskier sexual activity after undergoing the procedure. The risk-reduction counseling would emphasize the "ABC" measures and the importance of knowing one's status.

Strategy: While previous MC events took place in Mbabane, this Circumcision Saturday was purposely held outside the capital to cater to a more rural audience. Mankayane Hospital is located in Mankayane, approximately 50 kilometers south of Mbabane. The hospital was built two years previous yet remained extremely underutilized. It had ample space to cater to the Circumcision Saturday event and its patients.

The target group for this third circumcision event was men between the ages of 18 to 30 years. Again, priority was given to this sexually active demographic because it would have the most direct impact on the HIV epidemic. The age limit was increased to 18 years so that no parental consent was needed for any of the patients.

Rather than a mass media campaign similar to the previous events, a localized, grassroots marketing effort was undertaken to recruit clients. In this way, the campaign would not draw numbers of patients beyond the capacity of the medical team. Flyers announcing the event (example marketing flyer attached as Annex 1) were posted at Mankayane Hospital and its surrounding referral clinics. Flyers were also posted at shops, businesses, government agencies, restaurants and other frequently visited places in Mankayane town. Flyers were faxed to local police stations around Mankayane, as well as to the University of Swaziland campus located 25 miles from Mankayane.

The flyers explained that candidates for circumcision were required to attend a counseling session before they were eligible for the free MC procedure. The counseling sessions were held the Saturday prior to the procedures as well as the day of the procedures. Priority was given to men who attended the first counseling session.

Men were asked to pre-register for the event by calling a dedicated phone number posted on the flyer. The phone, a mobile cell phone, was manned by a member of the project team 24 hours a day, seven days a week for two weeks prior to the first

counseling session. The advantage of pre-registration by phone was that it allowed the project team to track the level of interest in the event and from where that interest was coming.

All men received counseling in a large group prior to the procedure. First, the risk-reduction counseling session was conducted by Population Services International (PSI), a non-governmental organization based in the United States with offices throughout Swaziland. Then, a nurse from FLAS with clinical and educational experience in MC gave an MC orientation session to all participants. Private individual counseling was available after the group sessions to men who wanted to attend.

Both the risk-reduction counseling and the MC orientation focused on the message that although circumcision reduces the risk of infection, it would not provide 100% immunity against HIV transmission. Participants were expressly informed that even after circumcision, the “ABC” measures would remain the most important means of protection against HIV. During the group counseling, men were encouraged to know their HIV status and were introduced to the availability of Voluntary Counseling and Testing (VCT). All participants were provided with an information leaflet on MC and HIV transmission made available by FLAS, a brochure on the benefits and risks of MC written by the Gilgal Society, and a leaflet on VCT provided by PSI.

After the group counseling, VCT was available in private sessions to those participants who were interested. This was provided by PSI. While offered to all participants, VCT and, in particular, HIV testing was not mandatory.

While counseling was provided in several rooms in one hospital wing, the actual surgical services were delivered in the emergency services area. Three operating tables were arranged within one reasonably small room (about 9 meters by 9 meters). A second room measuring 3 meters by 9 meters held one operating table. Each of the four operating tables was manned by a surgeon trained and experienced in the standard MC procedure. Both rooms were multi-purpose and not surgical theatres. Two additional doctors were charged with pre- and postoperative management. The preoperative doctor received the patients, filled in preoperative assessment forms and conducted physical exams. This preoperative procedure included asking the patient's reasons for

undergoing MC. The doctor ensured that each patient read and signed a consent form for the procedure. At this point, the doctor reiterated that circumcision does not make one immune against HIV. For this event, all forms were available in both English and siSwati. Five nurses assisted the procedures. Each nurse was experienced in MC and had assisted in previous procedures. All of the nurses were compensated for their time. One nurse was stationed at each operating table and one nurse rotated and autoclaved the instruments.

Privacy within the room was moderate. The operating tables were separated from one another by curtains on movable metal stands, and conversation between surgical teams was audible throughout the room. Nevertheless, as with the counseling, men did not object, camaraderie was evident, and the men occasionally conversed with one another during the procedure.

It should be noted that doctors were not trained during this Circumcision Saturday. Unlike the previous two MC events, training was not a focal point, rather the event used already-trained staff and concentrated on calculating a per procedure cost and incorporating risk-reduction counseling and VCT into the minimum package of MC.

Following the MC procedure a patient rested in the recovery area for 15 to 30 minutes, occasionally longer. The postoperative doctor assessed each patient before he was allowed to leave the hospital. Before being discharged, each patient was given a postoperative instruction form in both English and SiSwati. The importance of postoperative checkup visits (three days, seven days and 21 days at Mankayane Hospital) was explained during the postoperative assessment of each patient. The importance of using condoms was re-emphasized and each patient was given condoms prior to leaving. All patient forms are attached as Annex 2.

A short survey was conducted with a convenience sample of 23 (approximately half) of the participants in a one-on-one interview. This interview took place after the counseling session but before the procedure. Survey questions are attached as Annex 3. Results are on file with WHO.

All procedures were free of charge.

Results: A total of 40 men were circumcised at the third Circumcision Saturday. The procedures took between 20 and 50 minutes each, not including the pre- and postoperative exams, and recovery period. Including these times, the entire medical process was approximately 90 minutes in duration. In approximately seven working hours, each surgeon was able to complete an average of 10 procedures.

Two mild complications arose from the 40 procedures. Each instance required the man to go back to the operating table for an additional suture.

Each of the three postoperative checkups was conducted by one of the operating surgeons from Circumcision Saturday. This gave the operating doctors the opportunity to follow up on their own patients.

Of the 40 men who underwent the procedure, 33 reported for the first postoperative visit (three days after the procedure). This means that more than 80% of the men came back for the first postoperative checkup. This percentage was in line with the medical team's expectations. One mild complication was observed at the first follow-up – a small haematoma that did not require further attention.

The second postoperative checkup (seven days after the procedure) was attended by eight patients, or 20% of men who underwent the procedure. This decline in attendance was expected, as experience has shown that fewer patients report to each subsequent checkup. No complications were observed at the second postoperative visit.

No data is available for the third postoperative checkup (21 days after the procedure) as the doctor was forced to cancel unexpectedly and did not reschedule. The third follow-up visit was not rescheduled because the Mankayane Hospital staff reported that no circumcision patients arrived for the checkup.

Approximately one quarter of the men who underwent counseling in both sessions chose to take advantage of the VCT services. Two-thirds of men who pre-registered by phone ultimately attended one of the counseling sessions and underwent MC.

Costing: The total cost for the Circumcision Saturday pilot on 27 January was E23,077. This budget was used to perform 40 circumcisions, making the per procedure cost approximately E577 or \$82 (U.S.). The cost breakdown for the event is attached as Annex 4. The National Emergency Response Council on HIV and AIDS (NERCHA) funded this Circumcision Saturday pilot project.

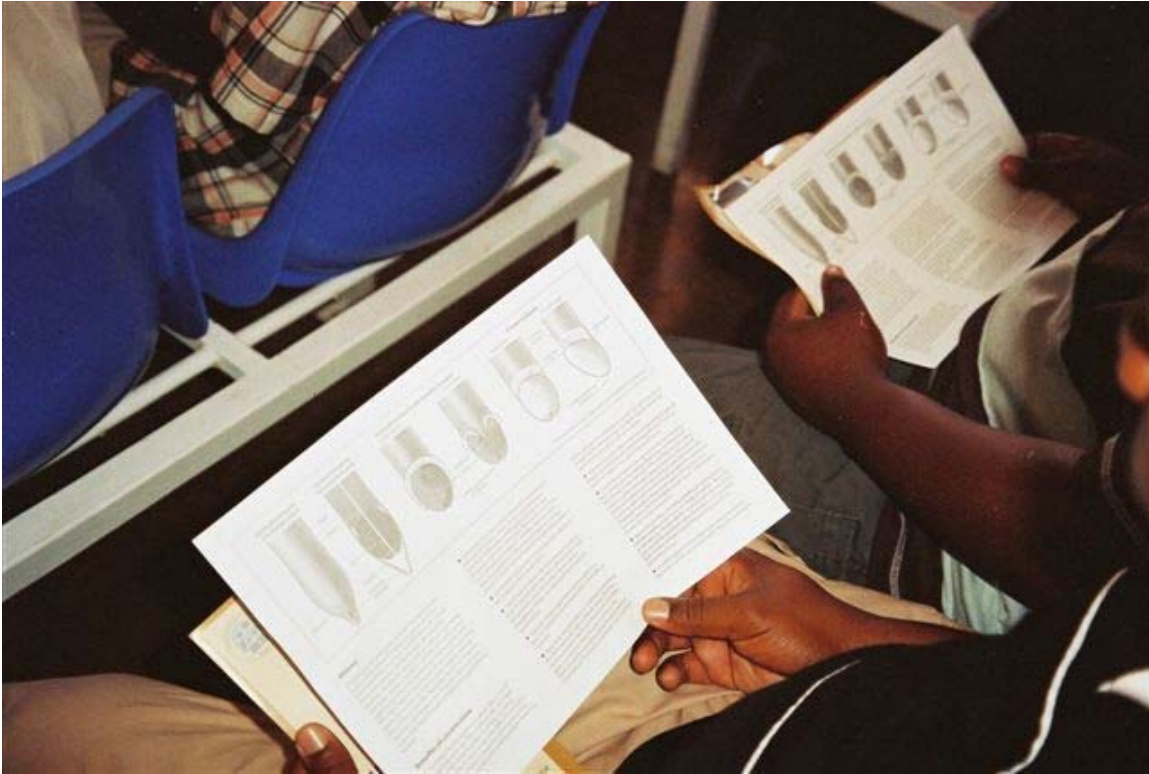
Improving Upon Circumcision Saturday

The Circumcision Saturday pilot was a success in that it achieved each of its objectives: calculating a per procedure cost for MC and working risk-reduction counseling and VCT into the standardized MC procedure for the country. The pilot was also extremely beneficial in that it provided lessons to learn from and suggestions for the way forward.

A wrap-up session was held immediately after the procedures were completed to allow the project management team, the medical team, several volunteers, and observers from national and international aid agencies to critique the event and lend suggestions and comments for improvement. The session also considered comments given from patients themselves.

Areas for Improvement

Patient wait time: Patients underwent the procedure based on a first-come, first-served basis. Those men who attended the first counseling session were operated on beginning at 9 a.m. while newcomers went through counseling. Unfortunately, this resulted in some men waiting nearly eight hours to undergo the procedure. Patient wait time could be improved for future events by registering men in blocks of time or setting specific appointment times.



Circumcision Saturday at Mankayane Hospital provided an opportunity for patients to interact and discuss male sexual health issues. Pictured above are participants reading MC literature at the event.

Patient interaction: While many patients waited several hours between the counseling session and the procedure, the wait time provided an opportunity for many to interact, discuss the procedure, the reasons they came, and other reproductive health issues. An unexpected level of camaraderie and support was observed. This could perhaps be taken advantage of for future scale-up in terms of behavior change communication or even outreach. Many patients commented that they would be interested in doing outreach for MC in their own communities or places of work. Short trainings could be held while patients waited for the procedure.

Patient counseling: While MC orientation counseling, risk-reduction counseling and VCT proceeded satisfactorily and were integral to the Circumcision Saturday, they presented a challenge in terms of time.

Group risk-reduction counseling has been found to be less effective than one-on-one counseling, when the time a patient spends in counseling is compared against changes

in behavior.¹⁷ However, the latter is comparatively time consuming when large numbers of individuals require counseling and may be difficult to complete on the same day as the procedure, unless sufficient counseling resources are available and donated to the project. While no formal research has been conducted in this area, it was assumed that recognition and retention of messages received immediately before an operation may be hindered. To alleviate some of these challenges, the Task Force is considering separating the counseling sessions from the circumcision event. For example, at the time of the procedure, patients could present a certificate proving that they had attended risk-reduction and MC orientation counseling at a qualified, approved counseling centre. The counseling centre would also be required to offer the opportunity for VCT. The certificate would allow the medical team to know with confidence that the man received sufficient counseling. Without a counseling certificate, a man would not be offered a free circumcision.

Facility Assessment: A more in-depth facility assessment would improve future Circumcision Saturdays. While Mankayane Hospital had ample space for the medical team, several aspects of the facility, such as lighting and adjustable operating tables, were not properly assessed and presented minor difficulties to the medical team. Several factors should be assessed in any facility that may host a Circumcision Saturday:

- Lighting
- Ventilation
- Access to water
- Operating tables (for height, locking wheels, etc)
- Operating room size
- Screens for privacy
- Patient flow
- Availability of rooms for private counseling
- Accessibility to the public
- Clean environment
- Available area for supplies

¹⁷ Branson BM et al. Group counseling to prevent sexually transmitted disease and HIV: A randomized controlled trial. *Sexually Transmitted Diseases* 1998; 25(10): 553-560.

Instrument/Materials Assessment: A competent nursing staff is critical to the success of Circumcision Saturday. Increased interaction with the surgical team's nursing staff would be beneficial in future Circumcision Saturdays. The nursing team, which met together for the first time the morning of Circumcision Saturday, was not involved in preparations. Yet, the nurses could have assessed all available instruments and disposables and suggested changes or substitutions before the day of the procedures. In addition, instruments could have been packed and autoclaved in advance, saving time on the day of the operations.

Nursing Staff: The nurses who assisted in each of the three Circumcision Saturdays were selected because they had previous experience assisting on MC procedures. As a result, no nurses were trained in any of the MC events. However, nurses could be trained in future Circumcision Saturdays.

STI medication: During the pilot, one potential patient could not undergo the procedure because of an active STI. Swaziland's standard MC procedure excludes men with an active STI. However, the MC event should provide for the sexual health needs of all participating men, whether that is through circumcision or treatment. Unfortunately, Mankayane Hospital did not have the treatment medication on hand to give to this patient. The hospital or clinic hosting the Circumcision Saturday should have STI treatment on hand to give to men who may require it so they can be cured and operated on at a later date.

"Task-shifting:" One doctor performed preoperative assessments and one postoperative assessments. The participating men were quite healthy so in the future a nurse could perform the preoperative assessments and perhaps even the postoperative assessments. The men did not seem to have any gender sensitivity issues, as those counseled by women or operated on by a female doctor made no complaints. Hence it would appear that men would not object to preoperative or postoperative assessment by a nurse.

Swaziland has not assessed whether medical care personnel other than doctors can, or should, deliver circumcision services.

Adaptability to Other Countries

The Circumcision Saturday model has worked well for Swaziland, allowing the country to develop a standardized MC procedure, train doctors on that procedure, and continually refine the process. As a result, with each Circumcision Saturday Swaziland is steadily working toward scaling up the availability and accessibility of safe, inexpensive and expertly performed circumcision.

Swaziland, however, is a unique country in Southern Africa. It boasts one culture and one common language. It has high levels of MC acceptability and little connection with MC in a cultural context. It has a high literacy rate of 81% among males and 78% among females,¹⁸ and is small, both in size and population. The nation's campaigns on HIV prevention have also led to greater awareness of HIV throughout the country. These factors all combine to make MC scale-up feasible in Swaziland. However, despite possible differences, other countries can certainly tailor the Circumcision Saturday model to assist in preparing for their own scaling up of MC.

Several initial steps must be taken before hosting a Circumcision Saturday event. A coordinating body for Circumcision Saturday is necessary. Whether it is the Ministry of Health, a multi-sector MC Task Force such as the one in Swaziland, or a recognized group of medical professionals, there must be an authoritative body that can give legitimacy to the Circumcision Saturday event, as well as provide oversight and ensure safety.

Technical capacity is perhaps the most important aspect to consider before embarking on a Circumcision Saturday. Without trained staff to perform procedures, Circumcision Saturdays would not be possible. There are approximately 100 doctors in Swaziland, most of whom are not trained surgeons. While the country is currently training only doctors with surgical experience to perform circumcisions, the MC procedure is such that medical assistants or nurses can be trained to perform the operation. Swaziland's MC Task Force has also discussed the possibility of bringing in foreign doctors to assist with

¹⁸ UNESCO Institute for Statistics (United Nations Educational, Scientific and Cultural Organization). 2003. Correspondence on adult and youth literacy rates. January. Montreal.

capacity. Circumcision Saturdays can be developed to introduce foreign doctors to the standard MC procedure in the host country so they can then perform procedures in that country. Foreign doctors would receive information regarding the country's MC procedures before arrival so that they are able to perform the procedure exactly according to the country's standards. Upon arrival, these doctors could assist in creating immediate access to MC and help reduce long waiting lists for the procedure. These "catch-up teams" could be stationed at one central government hospital or facility or could move to different regions of the country to create greater access in other areas.

Considerations must also be made for potential patients. Education and acceptability levels of MC in the country will determine the type of marketing and recruiting of patients. Local, grassroots marketing may be possible if there is a high level of MC knowledge and its role in HIV prevention. If not, large-scale mass media campaigns that address the basics of MC as well as the details of a Circumcision Saturday might be required. MC must also be considered in a cultural context. If MC is performed as part of a "rite of passage" or other cultural ceremony, patient recruitment and education will be extremely different. The minimum and maximum age limits of patients must also be considered. Consenting age and the nature of the HIV epidemic in a country will help determine the targeted age group. In addition, younger teens may simply be too fearful or immature to "lie still" for the procedure. As demonstrated in the first circumcision event, a 12-year-old and 14-year-old boy could not undergo the procedure without general anesthesia.

An assessment of the country's medical establishments should also be made, i.e., where they are located and their capabilities, both in terms of facilities and staff. Circumcision Saturdays are designed to mimic conditions that may be present in a national rollout of MC. These events are intended to test facility, staff and resource capacity on site under conditions of high volume. They can occur at any hospital, and at many other health care facilities with sufficient resources, although some materials may need to be supplied. While Swaziland hosted its own Circumcision Saturdays at central points in or near the capital, other countries can assess regional options designed to be accessible to those in more remote areas.

The nature of Circumcision Saturday is that it is flexible. Elements can be refined or changed. With planning and experience, site-specific adjustments can be made so that each facility can maximize the number of procedures while maintaining national standards. Just a few of the factors the model can be used for are:

- Training;
- To establish a standard procedure, instrument set and disposables set;
- To investigate per procedure costs;
- To investigate the number of procedures performed in a defined time period or by a certain number of circumcisers.

It can evaluate:

- The medical facility;
- Patient flow;
- Risk-reduction counseling and VCT services;
- Patient level of MC knowledge;
- Reasons for men's interest in the procedure;
- Men's motivations, their mode of transport, or how their partners feel about the procedure via simple questionnaires.

The ultimate goal of Circumcision Saturday in any country is to establish standards and guidelines for the country to effectively scale up safe and inexpensive MC procedures to all men who desire them. MC allows men to become active participants in their own sexual reproductive health. It provides a platform for an expanded package of services for men, which could include HIV education, contraception, sexual functioning, substance abuse, relationship counseling and others. This point of entry engages men and could even be a vehicle for the creation of men's clubs.

Circumcision Saturday presents a unique and adaptable model for all countries to reach out to men, educate them on issues of sexual reproductive health and arm them with another tool to fight HIV and AIDS.

Annex 1: Marketing Flyer

Free Adult Circumcision

Mankayane Hospital is offering the opportunity for men between the ages of 18 and 30 years old to learn more about the benefits of male circumcision and possibly undergo the circumcision procedure free of charge. Space is limited.

Interested men **must attend a counseling session** at Mankayane Hospital before the procedure and pre-register by calling 648-2373.

Session One

Saturday, 20th or 27th January 2007

Mankayane Hospital Conference Room

8:00 a.m.

Free of Charge

The purpose of these sessions are to provide information on the benefits of male circumcision and answer any questions on safer sex practices for circumcised males. Voluntary counseling and testing (VCT) will also be available (not mandatory).

Men interested in undergoing a free circumcision procedure must attend one of these counseling sessions to register for the procedure on Saturday, 27th January at Mankayane Hospital.

Session Two

Saturday, 27th January 2007

Mankayane Hospital Out Patient Treatment Room (Casualty Entrance)

8:00 a.m.

Free of Charge

On this day there will be medical staff dedicated to performing circumcisions. This procedure will only be made available to those who register by phone and attend a counseling session. Priority given to those who attend the 20th Jan. counseling session.

INTERESTED MEN MUST PRE-REGISTER BY CALLING:

648-2373

Annex 2: Patient Forms

***NOTE: All patient forms were provided to patients in English and siSwati.
Only the English versions are included here.***

Mankayane Hospital

**Male Circumcision
Consent Form for Adults**

- I, the undersigned, wish to have a circumcision performed on myself.
- I know and accept that no surgical procedure can be guaranteed 100% successful and that there is a small chance of complications.
- Although circumcision reduces the rate of HIV transmission, I am aware that it will not make me immune to the virus.
- I have applied for this procedure of my own free will. I can change my mind and refuse the procedure and no medical, health or other services or benefits will be withheld from me as a result.

Client's name

Date

Client's signature or thumbprint

Mankayane Hospital

Male Circumcision Patient Evaluation Form and Procedure Report

Date

Name

If patient is younger than

18 years:

Address

Name of parent/guardian

Telephone number

Address

Age

Telephone number

Reason for MC (just ask the question, don't show the patient these options)

Cultural/religious Better Hygiene Phimosis Paraphimosis Balanitis

Warts

To help prevent cancer of the penis To help prevent cancer of the cervix

To help prevent transmission of STI/HIV

(Mis)conceptions expressed by the patient: better sex, longer sex, easier use of condoms,
cure for AIDS

History of previous diseases

Asthma Diabetes mellitus Bleeding tendency Fits/convulsions/epilepsy

Allergies AIDS

Present medication:

Physical examination

General impression: Blood pressure Pulse

Genital hygiene: Good Medium Poor

Prepuce: Completely free of glans Partially adhered Completely adhered

Phimosis Paraphimosis Balanitis Hypospadias Epispadias

Urethral discharge Genital ulcer disease Genital warts Inguinal nodes

Specify:

Date of procedure.....

Practitioner:

Assistant:

Type of circumcision performed: Sleeve Dorsal slit Amputation

Anaesthesia: Ring block Ring Block with dorsal penile nerve block GA

Duration of the procedure:

Postoperative medication:

Complications:

Mankayane Hospital

Male Circumcision Postoperative Instructions

Pain

After the anaesthesia has worn off you will feel some pain due to cutting of the skin. This is quite normal and you may take 2 Panadol tablets 3 or 4 times per day.

Dressing

The surgical dressing is supposed to remain in place for 48 hours. If it comes off earlier, do not worry. The penis is quite safe inside clean, tight underwear. Make the penis point upward, it should not hang down.

Bathing

After the dressing has come off you should wash the penis gently with water and soap on a soft cloth twice daily.

Activity

After the operation you should rest a lot and take no physical exercise or have sex for at least three weeks. Avoid erections if you can, until the wound has healed. Sexual intercourse must wait until the wound is completely covered with skin. If you cannot avoid sex before that time, make sure you use a condom.

Erections

Erections may occur soon after the operation. Empty your bladder often, particularly before going to bed, to minimize the erections. Specific medicine for this purpose is not advised.

Bleeding

Some bloodstain in the dressing or in the underwear is normal. If there is active bleeding, you may come to the Casualty Department of Mankayane Hospital for treatment.

Follow-up

For your own benefit you need to come to the clinic or the Casualty Department for follow-up on day 2 and day 7 after the operation and after 3 weeks. Please bring the Follow-Up form.

Mankayane Hospital

Male Circumcision Follow-Up and Adverse Events

Date of operation
Place of operation

Name of patient
Name of practitioner

Pre Discharge Evaluation

Patient checked by

Pain medication given _____Panadol _____Other

Findings
no abnormalities detected
abnormal

Nature of problem

Treatment

Referral to

First postoperative visit -- 3 Days After Procedure

Date

Patient checked by

Findings
no abnormalities detected
abnormal

Nature of problem

Treatment

Referral to

Second postoperative visit – 7 Days After Procedure

Date

Patient checked by

Findings
no abnormalities detected
abnormal

Nature of problem

Treatment

Referral to

Third postoperative visit – 21 Days After Procedure

Date

Patient checked by

Findings
no abnormalities detected
abnormal

Nature of problem

Treatment

Referral to

Annex 3: Participant Survey Questions

Circumcision Saturday Participant Survey

Age: _____

Are you married? Yes No

Do you have a regular partner? Yes No

What have you heard about male circumcision?

Do you know anyone who has been circumcised? If yes, what does he, or they, say about it? (probe, if needed, for change in numbers of sexual partners, sexual behaviour).

1. Following are some reasons men might wish to be circumcised (read all for each question).

A big reason (all men) (5)

Most men (4)

Maybe half of all men (3)

Fewer than ½ of all men (2)

Not a reason (no men) (1)

Hygiene. That is, the penis can be kept cleaner: _____

Because sex will be more pleasurable, more fun: _____

Because men will be more attractive to women: _____

Because of medical conditions, such as not being able to pull the foreskin back: _____

Because men think they will get more sex partners: _____

Because men will feel they are protected from STDs: _____

Because men will feel they are protected from HIV: _____

Because men will feel they do not have to use a condom: _____

Other: _____: _____

2. Do you think that men are likely to change their sexual behaviour after circumcision? By this, I mean having more partners, not using a condom, things like that?

A likely reason (all men) (5)

Most men (4)

Maybe half of all men (3)
Fewer than ½ of all men (2)
Not likely (no men) (1)

3. What is the biggest single concern, or fear, that you have about being circumcised?

4. What is the biggest, single hope, or expectation that you have from being circumcised?

5. Let me ask you a few questions about HIV, but I won't ask you if you are HIV positive.

Do you know your HIV status? Yes No

Were you tested here for HIV? Yes No

How could we improve the numbers of men getting tested for HIV as part of Circumcision Saturday?

6. How do you think we could improve our Circumcision Saturday? Can you give us some suggestions?

Annex 4: Cost Breakdown

**27 January
Circumcision Saturday**

Circumcision Saturday 27 January 2007 Materials and Costs List

Item Description	Number Per Unit	Cost Per Unit	Units Purchased	Total Cost
Instrument Set:				
Gallipot	1	8.05	15	120.75
Sponge holding forceps, 18 cm	1	69.75	15	1,046.25
Bistouri (scalpel blade holder) #4	1	14.80	15	222.00
Small straight mosquito artery forceps	1	13.40	30	402.00
Small curved mosquito artery forceps	1	13.40	30	402.00
Forceps N/H mayo hager 14-16 cm	1	19.50	15	292.50
Adson fine non toothed dissecting forceps	1	16.00	15	240.00
Surgical scissors/BL ST	1	15.40	15	231.00
Mayo scissors	1	24.60	15	369.00
Dressing tray and lid	1	123.75	5	618.75
			Sub-Total	3,944.25
Consumables:				
Stretch pants medium	25	123.49	1	123.49
Stretch pants large	25	128.15	1	128.15
Face masks	50	34.75	2	69.50
Betadine Surgical Scrub 1L	1	105.78	3	317.34
Paracetamol 500mg tablets ¹	20	2.49	50	124.50
Gauze swabs of 100x100 cm 8 ply	100	18.00	11	198.00
Abdominal swabs	25	136.80	2	273.60
Sterile drapes of 60 x 60 cm	1	3.85	50	192.50
Scalpel blades #22	100	35.30	1	35.30
Sterile surgical gloves 7.5 size	50	254.80	4	1,019.20
Sterile surgical gloves 6.5 size	50	259.60	2	519.20
Unsterilized gloves	100	26.65	2	53.30
Plastic shoe covers	50	17.15	1	17.15
10 ml syringes	100	79.45	1	79.45
Needles 18 gauge	100	19.85	1	19.85
Needles 22 gauge	100	19.30	1	19.30
15 cc of 1% lignocaine	20	9.75	50	487.50
4/0 chromic catgut sutures	12	202.00	10	2,020.00
Surgical caps	100	6.40	1	6.40
Jelonet 100mmx100mm	36	26.55	2	53.10
Dermaplast N/Wov TP 25mm/9m	1	10.25	6	61.50
Alcohol swabs	200	80.00	1	80.00
Cidex OPA 5L	1	653.90	1	653.90
Saline 1L	1	9.60	6	57.60
Aseptobags	1000	414.20	1	414.20
G-cide 1L	1	58.90	5	294.50

Linen Savers 6-ply	200	227.45	1	227.45
			Sub-Total	7,545.98
Emergency Tray:				
Solu Cortef 100 mg/ 2ml	1	27.34	3	82.02
Adrenaline 1mg/ml	10	15.50	1	15.50
Atropine 1mg/ml	10	18.90	1	18.90
Diazepam 10ml/2ml	10	23.00	1	23.00
Jelco radiopaque 18 gauge	1	12.20	5	61.00
Solution administration set	1	25.00	3	75.00
Sodium Chloride 0.9% 1L	1	9.60	3	28.80
Velcro tourniquets	1	10.65	3	31.95
			Sub-Total	336.17
Personnel: ²				
Doctor Day Rate	1	1,000.00	6	6,000.00
Nurse Day Rate	1	750.00	5	3,750.00
MC Orientation Nurse Day Rate	1	300.00	1	300.00
			Sub-Total	10,050.00
Miscellaneous:				
Lunch for Staff/Patients	1	8.34	60	500.40
Petrol	1	250.00	2	500.00
Airtime for cell phone	1	200.00	1	200.00
			Sub-Total	1,200.40
			Total:	23,076.80

¹ May reconsider stronger pain management medication

² All medical personnel costs were deeply discounted for pilot. If project becomes consistent, rates may increase