Monitoring Adverse Events in a New Mature Male Circumcision Client Cohort in Namibia

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Background

Jhpiego and the Namibian Ministry of Health and Social Services launched voluntary medical male circumcision (VMMC) services at Swakopmund State Hospital in Erongo Region, Namibia, in May 2016.

All clients served through August 31, 2016, were aged 15 years and older, and more than 89% were aged 20 and above, in contrast to VMMC clients across East and Southern Africa, the majority of whom have been between 10 and 19 years of age.

A 2012 meta-analysis of 10 studies assessing safety of VMMC across six African countries found post-operative adverse event (AE) rates ranging between 0.7% and 37.4%, with an overall pooled proportion of 2.3%.

Methods

As part of routine service delivery, after receiving the full VMMC service package, clients were advised to return for follow-up at Days 2, 7, and as indicated thereafter.

Jhpiego abstracted clinical follow-up data from client records for males receiving VMMC services between May 13 and August 31, 2016, and calculated the follow-up and AE rates. AEs were then characterized by type and grade.

Results

1,718 males received VMMC from May 13 to August 31, 2016, of whom 1,716 returned (99.9%) for at least one follow-up visit within 14 days.

Of males who returned for at least one follow-up visit, 87 (5.1%) experienced at least one mild (91, 1.1%), moderate (46, 3.8%), or severe (3, 0.2%) AE.

54% of post-operative AEs were wound dehiscence, and of those, 25.3% presented on Days 5–7 post-op, 52.9% on Days 8–14, and 21.8% on Day 15 or later.

Conclusions

Observed AE rates exceeded the pooled rate in the 2012 meta-analysis.

Further investigation is needed to isolate the cause(s) of high rates of AEs in general and wound dehiscence in particular.

In September 2016, Jhpiego instituted enhanced counseling on the importance of post-operative abstinence until wound healing is complete, and observed an immediate reduction in the number of overall AEs, most notably a reduction in wound disruption in clients 15+ days post-op.

While we cannot attribute causation, a hypothesis for investigation is that many AEs observed in the first several months of VMMC services were the result of early resumption of sexual activity (intercourse and masturbation). Alternative hypotheses are that surgical, suturing, or dressing technique improved at the same time that enhanced counseling was introduced, although the program did not institute refresher training or other changes to clinical practice in the time period when AE rates decreased.

VMMC programs may be underestimating AE rates and should consider an extended follow-up schedule to avoid missing late-onset AEs.

Mature client cohorts like the males served in Namibia may benefit from enhanced counseling on the risks of early resumption of sexual activity, but this recommendation bears further exploration and empirical study.

References
