INTEGRATE
Catalyzing Integrated Sustainable Subnational Biomedical Prevention in Zimbabwe

Managing pain along the continuum of care for delivering Shang Ring device **method for VMMC services among younger adolescents in Zimbabwe**

Authors

Authors: Nehemiah Nhando[1], Owen Mugurungi[2], Sinokuthemba Xaba[2], Karin Hatzold[3], Brian Maponga[1], Tungamirai Mhuka[1], Hendrick Chigiji[1] , Staci Leuschner[4], Noah Taruberekera[1]

[1] Populations Solutions for Health, Zimbabwe, [2] Ministry of Health and Child Care, Zimbabwe, [3] Population Services International, Cape Town, South Africa, [4] Population Services International, Harare, Zimbabwe.

Background

Fear of pain remains a barrier for voluntary medical male circumcision (VMMC) uptake. Qualitative data suggests that mobilizer information and provider counseling around pain may be inadequate due to concerns about discouraging the client from taking up services.

Zimbabwe conducted "The Ring" campaign to promote PrePex device male circumcision between 2014 and 2016, promising a rapid post-service return to work and school and less pain related to the procedure, with no injectable anesthesia being required, a much shorter procedure time, and no stitches. Zimbabwe's INTEGRATE program is testing the safety, acceptability, cost and cost effectiveness of Shang Ring device method services among adolescents 13-16 years at 71 sites across nine districts.

Materials and Methods

Between June 2022 and January 2023, 1,600 males aged 13-16 years were recruited into the study. Data on perceived pain experienced by the study participants during application of the device and foreskin removal, while wearing the device for 7 days, during removal of the device and during the wound healing period was collected through interviewer-administered client satisfaction surveys. Participants measured their pain using a Likert scale.

Results

All 1,600 participants received topical anesthesia 30 minutes before the operation. None of the participants required additional injectable anesthesia. Of the 1,600 clients interviewed, 734 (46%) experienced pain while wearing the device, with 587 (80%) experiencing at most grade 4 pain, 557 (76%) experiencing pain in the first two days. Pain feedback prompted a shift in paracetamol dosing from 500mg three times daily to up to 1g four times daily. At device removal, 803 (50%) experienced some pain, with 699 (87%) experiencing at most grade 4 pain. 415 (26%) of clients wished they had received more information about pain prior to the procedure.

Conclusions

Topical anaesthetic cream provides sufficient anaesthesia for the SR procedure. Pain experienced post procedure is manageable with oral analgesia provided prophylactically. A shift to flexible higher dosing of paracetamol might be required for satisfactory pain control. Providers and counsellors need to be better prepared to counsel clients on how to manage post-procedure pain.

BILL & MELINDA GATES foundation psi Population Solutions for Health