

Acceptability of no-flip ShangRing male circumcision in a WHO mandated population for HIV prevention

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Abstract

Background

The World Health Organization's (WHO) mandate to reduce HIV transmission in sub-Saharan Africa has prompted the creation of a transmission preventative strategy. The scale up of male circumcision (MC) services, through the use of MC devices, has been suggested as a method to lower HIV incidence on a population-level. The ShangRing (SR) MC device is the only WHO pre-qualified device in use for HIV prevention in the region. We aimed to determine the acceptability of the no-flip SR technique among Kenyan males.

Methods

Males aged 10-54 years were enrolled in a study of no-flip SR circumcision in Kenya. The procedure involved the insertion of the inner ring of the device under the foreskin, followed by secure clamping of the outer ring for hemostatic occlusion; the foreskin distal to the device was then excised. On the last follow up visit, participants were surveyed regarding the aspects they liked about the procedure and their responses were recorded. Responses to multiple aspects for each participant were allowed.

Results

Of the 574 participants who had a successful no-flip SR circumcision, 529 (92.2%) had documented responses to the survey. Of these, 525 (99.2%) participants liked at least one aspect of the procedure vs. only four individuals (0.8%) who did not like anything ($p < 0.0001$). Improved hygiene following no-flip SR circumcision was the most liked aspect ($n=230$, 43.5%). Less pain than expected and satisfaction with cosmetic appearance of the healed penis had equivalent responses ($n=201$, 37.9%). Those were followed by the lack of any required stitches ($n=193$, 36.5%) and circumcision was quick ($n=178$, 33.6%). When given the opportunity to note other aspects liked, responses were obtained from 50 participants (9.5%), with fast healing being the most common.

Conclusion

No-flip SR circumcision is an acceptable procedure among men and boys in sub-Saharan Africa as a method of HIV transmission reduction. Widespread acceptability of this device reinforces its ideal use for the WHO mission.

Introduction

- The WHO's mandate to reduce HIV transmission in sub-Saharan Africa has prompted the creation of a preventative strategy through the scale-up of device-assisted male circumcision services.
- The ShangRing (SR) is the only WHO-prequalified male circumcision device currently in use in sub-Saharan Africa for HIV prevention.
- We aimed to determine the acceptability of the no-flip SR technique among Kenyan males.

Study Methods and Design

- Males aged 10-54 years were enrolled at two sites in Kenya.
- Participants underwent no-flip ShangRing circumcision by trained health care providers.
- On the last follow-up visit, participants were surveyed regarding the aspects they liked about the procedure.

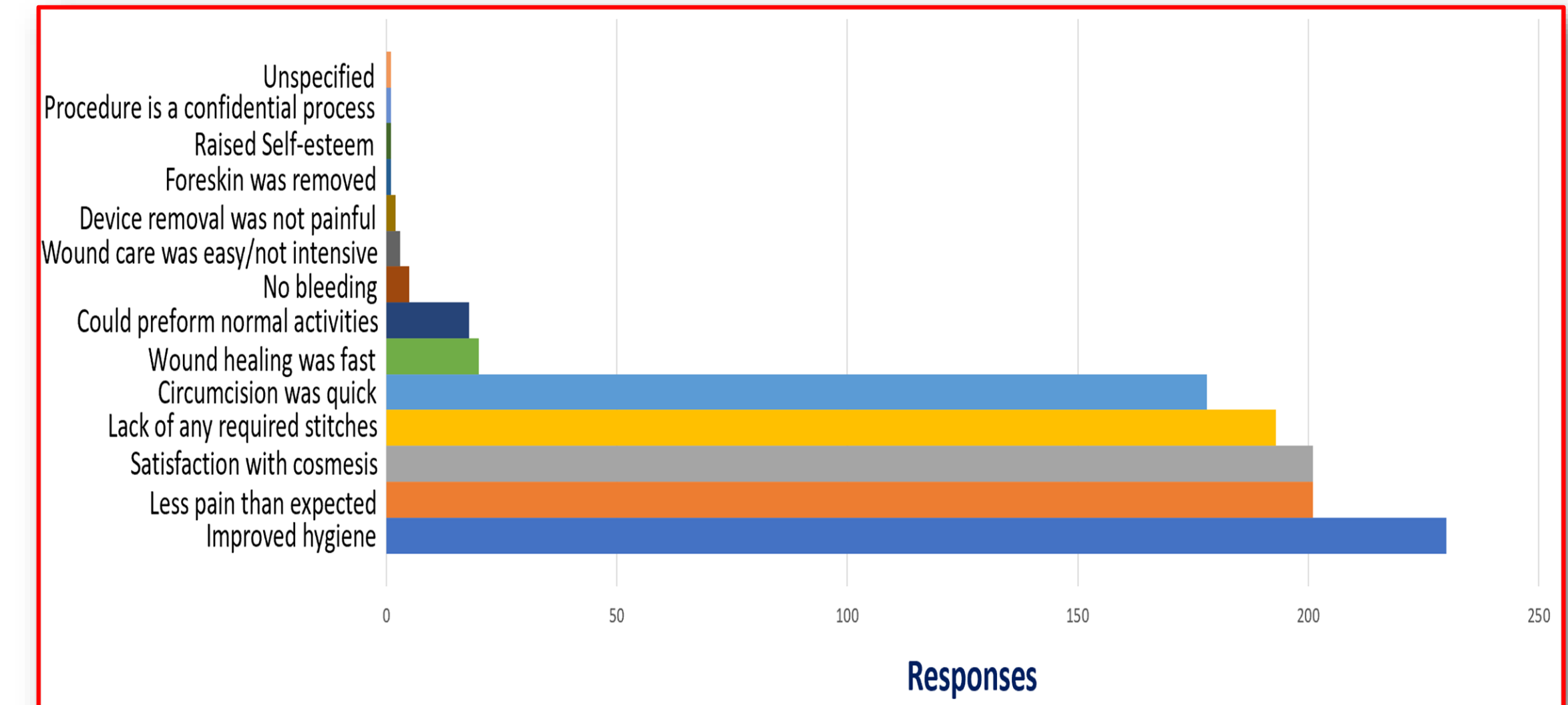
Results

Aspects liked about the procedure	n (%)
At least one	525 (99.2)
Nothing	4 (0.8)
Improved hygiene	230 (43.5)
Less pain than expected	201 (37.9)
Satisfaction with cosmesis	201 (37.9)
Lack of any required stitches	193 (36.5)
Circumcision was quick	178 (33.6)
Other*	50 (9.5)
Wound healing was fast	20 (3.8)
Could perform normal activities/work after the procedure while the ShangRing was in place	18 (3.4)
No bleeding	5 (0.9)
Wound care was easy/not intensive	3 (0.6)
Device removal was not painful	2 (0.4)
Foreskin was removed	1 (0.2)
Raised self-esteem	1 (0.2)
Procedure is a confidential process	1 (0.2)
Unspecified	1 (0.2)

Difference between those who liked at least on aspect vs. those who did not like anything is significant ($p < 0.0001$)

*2 participants noted that they liked 2 other aspects

Results



- 100% (574/574) of participants **successfully underwent no-flip ShangRing circumcision**.
- 92.2% (529/574) had documented responses to the survey.
- 99.2% (525/529) of participants **liked at least one aspect** of the procedure vs. 0.8% (4/529) who did not like anything ($p < 0.0001$).
- Improved hygiene** following no-flip ShangRing circumcision was the most liked aspect ($n=230$, 43.5%).
- Less pain than expected** and **satisfaction with the cosmetic appearance** of the healed penis were the second most common responses ($n=201$, 37.9%).
- 193 (36.5%, 193/529) responded to **lack of stitches** and 178 (33.6%, 178/529) to **circumcision was quick**.
- 50 (9.5%, 50/529) participants indicated **other** aspects they liked, with **fast wound healing** being the most common.

Conclusion

- No-flip ShangRing circumcision is an acceptable procedure for HIV prevention among men and boys in sub-Saharan Africa.
- Widespread acceptability of no-flip ShangRing circumcision reinforces its ideal use for the WHO mission.