



Factors influencing the uptake of Safe Male Circumcision among Makerere undergraduate students, Kampala - Uganda

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Background

Safe male circumcision (SMC) is currently recognized as a preventive strategy in reducing the risk of HIV; however, the prevalence of circumcised men in Uganda is still quite low at 26%. This study aimed to determine the uptake of SMC and associated factors among Makerere University undergraduate students, in Kampala Uganda.

Methods

We conducted a cross-sectional study in which we selected 602 participants with the multistage probability sampling strategy. Pretested semi-structured questionnaires and focus group discussions were used to collect data. Quantitative data were analyzed with Stata 12, where the prevalence ratio and *p*-values were calculated. Possible interactions and confounding variables were assessed with the Poisson regression model while qualitative data was analyzed with content analysis.

Results

The overall uptake of SMC among male undergraduates was 58.3% (95% CI: 54.37 – 62.24). The perceived benefits of SMC uptake included hygiene (86.5%, *n* = 521), reduced risk of HIV transmission (4.5%, *n* = 26) and reduced risk of penile cancer (45.7%, *n* = 275) while, the perceived barrier was pain (10.1%, *n* = 61).

Table 1: Uptake of Safe Male Circumcision among Makerere University male undergraduate students, Kampala, 2016			
Variable	Circumcised (N=602)	Uptake (%)	95%, CI
Safe male circumcision Overall uptake	351	58.3	54.37 – 62.24
Current age of participants			
21-25	328	54.5	50.51 – 58.46
≥26	23	3.8	2.3– 5.4
Age at Circumcision			
≥14 years	99	16.4	13.48 – 19.41
15- 24	252	41.9	37.91 – 45.80
Religion			
Non-Circumcising religions	326	53.9	50.00 – 57.97
Circumcising religion	25	4.2	2.55 – 5.75
Tribes			
Non – Circumcising tribes	322	53.3	49.34 – 57.31
Circumcising tribes	29	4.8	3.11 – 6.53

Table 2: Perceived benefits and barriers to SMC Uptake among Makerere University male undergraduates, Kampala, 2016

Variable	Number n (%)
Benefits	
Hygiene	521 (86.5)
Reduced risk of HIV transmission	26(4.5)
Increased sexual pleasure	120(22.2)
Reduced risk of penile cancer	275 (45.7)
Barriers	
Pain	61 (10.1)
Long time of healing (4-6wks)	46 (7.6)

* The reasons were assessed using multiple choice questions. Subsequent qualitative research findings from the FGDs showed similar benefits and barriers to SMC uptake.

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Table 3: Multivariate analysis for factors associated with SMC uptake among Makerere University male undergraduate students, Kampala, 2016

Variable	PR	95%,CI	P - Value
Safety of SMC procedure	1.13	1.03 – 1.25	0.012
Yes	1.00		
No			
Health workers attitude			
Friendly Health workers	0.78	0.74 – 0.83	<0.001
Rude Health workers	0.87	0.57 – 1.31	0.497
Neither friendly nor rude	1.00		

* The overall test for health workers attitude was <0.001

Factors associated with SMC uptake included: safety of SMC procedure (PR = 1.13, 95% CI: 1.03 – 1.25) and friendly health workers (PR = 0.78, 95% CI: 0.74 – 0.83). The general perception was that SMC recipient's first sexual partner post-procedure would not be his girlfriend.

Conclusions

The overall reported SMC success rate among participants was high. Safety of SMC services and friendly health workers were important factors among male students. There is a need for continuous sensitization campaigns and communication strategies to address beliefs about SMC, some related misconceptions, and barriers so as to increase its uptake.