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Introduction

Background:

- Self-reported male circumcision (MC) status is commonly used to estimate MC prevalence, although its accuracy varies depending on the extent of misreporting.
- Despite this limitation, self-reported MC status remains essential because it is the most feasible method of collecting MC status data in community surveys.
- Agreement between self-reported and physically verified MC status was assessed among adult men during a household survey in non-circumcising communities within the Nyanza region of Kenya.

Objective:

To determine the accuracy of self-reported MC status among adult men and gauge its usefulness in estimating community MC prevalence.

Methods

- From May 2014 to June 2015, a household survey was conducted among 5,656 consenting men aged 25-39 years.
- Self-reported MC status for each participant was recorded during a face-to-face interview
- MC status was also physically verified for participants who consented to genital examination
- Physically verified MC status was reported as fully circumcised if foreskin absent, partially circumcised if the foreskin was past coronal sulcus but covered less than half of the glans, or uncircumcised the foreskin covered half or more of the glans.
- The sensitivity and specificity of self-reported MC status were calculated using physically verified MC status as the gold standard.

Study area

Figure 1 Counties where the survey was conducted are highlighted yellow



The survey was conducted in Siaya, Kisumu, Migori and Homabay counties in 11 sub counties where 45 locations were selected as study clusters and 209 villages randomly selected for enumeration to identify and mark households where eligible men aged 25-39 years resided.

The data were pooled for analysis and did not account for the study design.

Results

- 5,639 (58.3%) of 9,679 eligible men enumerated chose to participate in the survey and were enrolled
- MC coverage estimates based on self-report and on genital examination were 50.6% and 51.6%, respectively.
- 1,407 (25.0%) of those enrolled declined genital examination.
- Higher education and being unemployed were associated with significantly higher likelihood of consenting to genital examination (P<0.001 for both)

Results cont.

Table 1 Self-reported versus physically verified MC status (n = 4,232)

Factor	Self-Reported Status	
	Circumcised n (%)	Uncircumcised n (%)
N	2197	2035
Findings on Visual inspection of the penis (in a flaccid state)		
Fully Circumcised	2176 (99.0)	9 (0.4)
Partially Circumcised	19 (0.9)	119 (5.8)
Uncircumcised	2 (0.1)	1907 (93.7)

- Substantial match between self-reported and physically verified circumcision status for both uncircumcised and circumcised participants, K= 0.9858 (95% CI, 0.9807-0.9909), p<0.001.
 - 99.0% of those who self-reported a circumcised status were physically verified to be circumcised
 - 93.7% of those who self-reported a uncircumcised status were physically verified to be uncircumcised
- 86.2% (119/138) of those who were confirmed as partially circumcised perceived themselves as uncircumcised

Conclusions

In this setting, there was minimal misreporting of circumcision status, therefore MC coverage estimates derived from self reports should be deemed reliable and applicable for planning. MC programs should periodically assess accuracy of self-reported MC status to validate its usefulness in estimating community MC coverage and to detect any changes in the extent of misreporting.