A sport-based intervention to increase uptake of voluntary medical male circumcision among adult male football players: results from a cluster-randomised trial in Bulawayo, Zimbabwe

**METHODS**

A cluster-randomised trial was conducted with soccer teams as the trial clusters. There were two intervention arms, so the effect on uptake among men who received the intervention from professional soccer players as facilitators (Intervention Pros group) with uptake among men who received the intervention from other non-celebrity facilitators (Intervention Non-Pros group) could be compared.

Eighty-five local soccer teams were identified, 64 teams agreed to participate and were randomised to one of the three trial arms, and 47 teams actually participated in the study. Teams in the control group participated in the baseline survey but did not receive the MTC intervention until after VMMC clinic data collection was finished. In all, 735 men aged 18-25 years (median age 24 years) enrolled in the study and 670 completed a baseline questionnaire. Seventeen teams dropped out after randomization and before participants consented to be entered in the Intervention Pros group, 7 in the Intervention Non-Pros group, and 4 in the Control group. The primary reason for this was a delay in ethics clearance that caused the trial to start two weeks later than anticipated. The trial had a narrow time window in November and December to complete baseline data collection and conduct interventions before the Christmas/New Year holiday break.

**RESULTS**

Table 1 presents a sub-group analysis of uptake by age group and study group. While it was not possible to statistically test for effect modification due to low uptake numbers in the control group, there was a strong suggestion of differences in MTC’s effectiveness by age. In the intervention group, five 18-20 year-olds (9.1% of those reporting being uncircumcised), two 20-24 year-olds (1.6% of those reporting being uncircumcised), eight 25-29 year-olds (11.3% of those reporting being uncircumcised), and one 30+ year-old (1.5% of those reporting being uncircumcised) took up VMMC. In the control group, one 20-24 year-old (1.5% of those reporting being uncircumcised) took up VMMC and no participants aged 18-20, 25-29 or 30+ participants took up VMMC. While it was not possible to statistically test for effect modification due to low uptake numbers in the control group, there was weak statistical evidence that uptake in the intervention group varied by age group (p=0.084).

**DISCUSSION**

Overall, the findings are promising in suggesting MTC’s strong relative effect and modest absolute effect in increasing VMMC uptake among adult male soccer players in Bulawayo. Since no other VMMC demand creation trials have yet reported results to our knowledge, we cannot effectively compare MTC with other interventions delivered with adult men. The low baseline circumcision prevalence and very low uptake during the course of the trial corroborate Zimbabwe’s lack of progress to date in mobilizing adult men to take up VMMC and further underscore the need for effective demand creation with this population. Although the confidence intervals around the estimate of the ORs comparing VMMC uptake among the two intervention arms were wide, the results hint that there may not be a substantial difference between the two intervention groups, suggesting that the facilitator’s celebrity status may not be an important factor in determining MTC’s effectiveness. Of the 16 intervention participants who took up VMMC, 7 (43.8%) were from the Pros group and 9 (56.2%) were from the Non-Pros group (OR=0.58, 95% CI=0.11-3.02). This suggests not restricting facilitators to professional soccer players will make the intervention easier and more affordable to scale up.

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