

Make The Cut

Using soccer to increase uptake of
voluntary medical male circumcision

Grassroot Soccer
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Regional WHO Meeting - VMMC

Durban, South Africa

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Background

Grassroot Soccer

- Grassroot Soccer uses the power of soccer to connect young people with the mentors, information and health services they need to thrive.
- Single sex and mixed sex programming
- Diverse set of funders and partners

Sport-based HIV prevention**

- Systematic review conducted in 2012
- Few studies assessed service uptake
- Three RCTs completed in 2013-2014

Intervention Design

- Short, scalable soccer-based activity
- Behavioural and logistical reinforcement

** Kaufman, Spencer and Ross (2013) in *AIDS and Behavior*

MAKE THE CUT

Less Skin, You Win!
Circumcision reduces risk of HIV infection by up to 60%.
Top up to 100% protection by using condoms every time.

KHUPA

BACARY SAGNA

**JOIN THE WINNING TEAM.
MAKE THE CUT AT THE BULAWAYO EYE CLINIC
OR THE LOBENGULA CLINIC!**

Bulawayo Eye Clinic
Free, Safe Male Circumcision
Hours: 8:00 - 16:00, Mon - Fri
8:00 - 13:00, Sat
Address: 90 a Samuel Panrenyatwa St., Bulawayo
Phone: (09) 63724

Lobengula Clinic
Free, Safe Male Circumcision
Hours: 8:00 - 16:00, Mon - Fri
8:00 - 13:00, Sat
Address: Stand Number 73544, Lobengula, Bulawayo
Phone: 0772 149 240

Original MCUTS Trial (2013)

Results

Cluster-randomized trial of Make The Cut in 2013

- 60-minute session with adult soccer teams (age 18+)
- 736 adult males from 47 soccer teams in Bulawayo, Zimbabwe

9-fold increase in uptake of VMMC ($p=0.06$)*

- 4.2% uptake in intervention group over 3m vs 0.5% in control

Findings suggested that effect varied with age

- No clear trend by age; numbers small



* Kaufman, DeCelles, Bhauti, et al. International AIDS Conference: Melbourne, July 2014.

MCUTS II (2014): Study Design

Secondary schools randomised into two groups in Bulawayo, Zimbabwe

- 26 secondary schools (13 intervention and 13 control)
- Stratified by public vs. private
- Male students aged 14-19 years (n=1226)

Primary outcome: **VMMC uptake over 4 months**

- Clinic register and consent form: matched via first name, last name, DOB, age, address, phone number, next of kin's name
- Random-effects logistic regression, adjusting for school-level clustering

80% power to detect a 3-fold increase in VMMC uptake

- Assuming 2% control group uptake (i.e. 6% vs. 2%), $p < 0.05$

Baseline surveys using **Open Data Kit**

- Self-administered on Android smartphones
- Assessing reported MC prevalence, knowledge, intentions

Findings

- **Strong evidence** of higher VMMC uptake in Intervention Group ($p=0.014$)
 - Approximately **2.5-times higher uptake**
 - Est. Uptake in uncircumcised: **12.2%** (intervention) vs. **4.6%** (control)
 - Consistent results in sensitivity analyses
- **Suggests MTC is effective in increasing VMMC uptake** among adolescent male students
- ~48% of participants **“already circumcised”**
 - Helping reach “late adopters”
- Small incentive appears somewhat motivational, yet difficult to implement and monitor

Primary Trial Results (uptake of VMMC)

Outcome	Intervention (n=565)		Control (n=661)		Comparing groups*		
	n	%	n	%	OR	95% CI	p value
Participants not reporting being already circumcised (non-MC-at-baseline)	304	53.8	371	56.1	1.02	0.72-1.45	0.90
1. VMMC Uptake (all participants)**	41	7.3	19	2.9	2.53	1.21-5.30	0.014
Restricted to non-MC-at-baseline	37	12.2	17	4.6	2.65	1.19-5.86	0.017
2. Definite links	30	5.3	12	1.8	3.05	1.13-8.24	0.028
Restricted to non-MC-at-baseline	27	8.9	11	3.0	3.06	1.15-8.14	0.025
3. Definite or Probable Links	37	6.6	18	2.7	2.47	1.18-5.15	0.016
Restricted to non-MC-at-baseline	33	10.9	16	4.3	2.59	1.23-5.45	0.012
4. Definite, Probable or Possible Links	45	8.0	21	3.2	2.56	1.24-5.26	0.011
Restricted to non-MC-at-baseline	38	12.5	18	4.9	2.61	1.19-5.72	0.016

Absolute effect: Intervention 46.2% to 53.5% circumcised vs. Control 43.9% to 46.7% circumcised

* Via random-effects logistic regression, adjusted for clustering. Analyses are by intention-to-treat.

** Based on probabilistic matching as well as blind review of probable/possible matches

Lessons learned

Uptake among boys 14-19 years

- A short intervention can increase VMMC uptake
- Cost per new person seeking circumcision lower than \$50 within the trial
- Coach-player relationship important
 - Phone calls, transport, coach accompaniment to clinic
- Need for strong communication with partners
- Involvement of girls and women

Scale & Sustainability

'Make The Cut' as an integral component of comprehensive VMMC initiatives

SCALE-UP

- VMMC as part of comprehensive HIV response
- Indirect implementation with Partners
- Direct implementation in GRS Flagship sites

2017

2015/16

Feasibility Study: Swaziland

Swaziland
Males 10-65
Soccer teams

Over 2,500 circumcisions

Feasibility Study: Uganda

Uganda
Boys 14-19
Schools

23% VMMC uptake

2014

Randomized Controlled Trial

Zimbabwe
Boys 14-19
Schools

2.5-fold increase in uptake of VMMC (p=0.01)
• 12.2% uptake in intervention group vs. 4.6% in control
Coach accompaniment important

60-minute session
Phone follow-up
Coach accompaniment

2013

Randomized Controlled Trial

Zimbabwe
Men 18-35
Soccer teams

10-fold increase in uptake of VMMC (p=0.06)
• 4.2% uptake in intervention group vs. 0.5% in control
More effective with younger men

60-minute session
SMS follow-up

2012

Proof of Concept

46 percentage point increase in VMMC knowledge
Zimbabwean professional players, GRS coaches go for VMMC
Formative research, curriculum development

Partners

BILL & MELINDA
GATES *foundation*



uvri
Uganda Virus
Research Institute



UNC
GILLINGS SCHOOL OF
GLOBAL PUBLIC HEALTH



BROWN

ANNEXES

1. Detailed trial results: uptake of VMMC by age
2. Costing & cost effectiveness
3. Recommendations for scaling intervention

VMMC Uptake by Age

Age	Intervention (n=552)		Control (n=640)		Odds Ratio*		
	n/N	%	n/N	%	OR	95% CI	p value
14-15 years	14 / 229	6.1	5 / 246	2.0	3.01	0.94-9.60	0.062
16-17 years	23 / 283	8.1	9 / 341	2.6	3.26	1.48-7.17	0.003
18+ years	4 / 40	10.0	5 / 53	9.4	1.07	0.27-4.26	0.93

- Highest % uptake in 18y+, but few students and no significant intervention effect in this age group
- OR >3 in both 14-15y and 16-17y

* *Via random-effects logistic regression, adjusted for clustering. Analyses are by intention-to-treat.*

Based on probabilistic matching as well as blind review of probable/possible matches

Cost-effectiveness

- **Total costs of intervention = \$1,121.83**
 - Training, materials, airtime, transport, coach stipend
 - Includes 15% overhead
- **Cost per participant = \$1.99**
 - 565 intervention group participants
- **Cost per VMMC in intervention arm = \$27.36**
- **Cost per new VMMC generated = \$48.63**
 - Does not include supply-side costs

Our Vision for Scale

Make The Cut as an integral component of comprehensive VMMC initiatives

- Prime partners and local governments integrate soccer-based demand creation component into overall strategy
- GRS to provide intervention design, technical support and unique access to soccer community
- Link interventions with mass media campaign and events involving international and local pro soccer players
- Programme Structure modeled after previous successful GRS partnership models (e.g. HCP - Sports for Life)
- GRS direct implementation in Bulawayo, Lusaka and Livingstone
- Partners implement in other 14 WHO/UNAIDS priority countries, including Peace Corps