Make The Cut

Using soccer to increase uptake of voluntary medical male circumcision

Grassroot Soccer
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Background

Grassroot Soccer

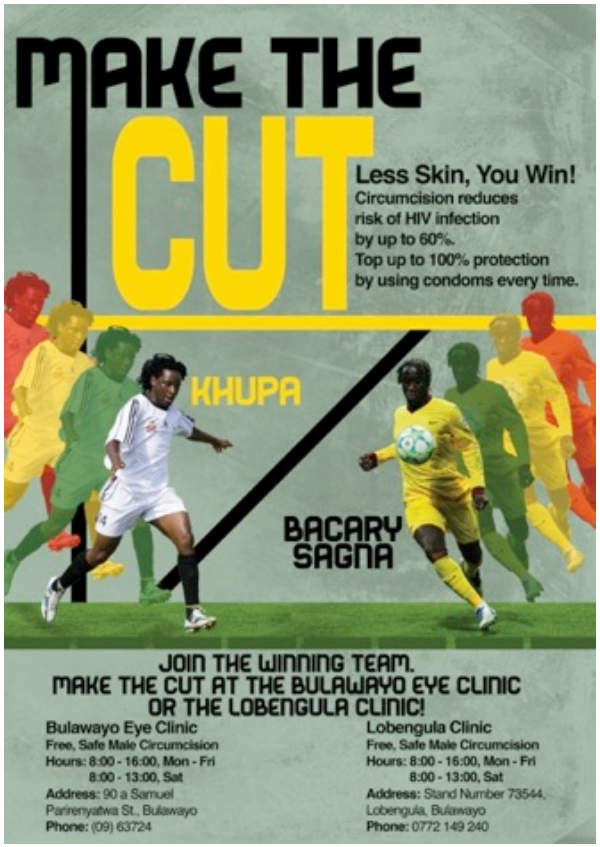
- Grassroot Soccer uses the power of soccer to connect young people with the mentors, information and health services they need to thrive.
- Single sex and mixed sex programming
- Diverse set of funders and partners

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*

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

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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

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Primary Trial Results (uptake of VMMC)

	Intervention (n=565)		Control (n=661)		Comparing groups*		
Outcome	**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*

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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

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Scale & Sustainability
‘Make The Cut’ as an integral component of comprehensive VMMC initiatives

2017

SCALE-UP

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

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

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Partners

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

	Intervention (n=552)		Control (n=640)		Odds Ratio*		
Age	**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

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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**

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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

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