

Grassroot Soccer is changing the course of AIDS by using the power of soccer to reduce stigma, increase education, and empower young people to adopt healthy behaviors to prevent HIV in Southern Africa and across the world. Through soccer-based activities and discussions, young people gain a comprehensive knowledge of HIV and AIDS and have the opportunity to practice the skills necessary for sustainable behavior change.

Young people in Southern Africa are disproportionately affected by HIV, but they are also the greatest force for change. Grassroot Soccer's programs focus on building basic life skills that help youth adopt healthy behaviors and live risk-free.

## **EXECUTIVE SUMMARY**

Since Grassroot Soccer's founding in 2002, research has been integral to our organizational growth and development. Our dedication to research has shaped curriculum development, monitoring & evaluation processes, and organizational strategy, while enabling Grassroot Soccer (GRS) to become a leader in the fields of HIV prevention and Sport for Development.

We define research as 'the systematic investigation into program delivery and impact.' Our aims in conducting research are to: gain a deeper understanding of the complex issues we seek to address, inform our organizational development, establish credibility for our efforts, and contribute more broadly to existing evidence on sport-based HIV prevention.

This report is a compilation of summaries of our completed research activities to date. In collaboration with a variety of research institutions and funders, GRS has participated in 27 research studies since 2005 in over 20 countries, ranging from South Africa to the Dominican Republic. GRS has conducted the largest schoolbased randomized controlled trial (RCT) evaluating a sport-based HIV prevention program, called the GOAL Trial. For the report, GRS's research has been organized in accordance with our Impact Model (Figure 1). We start by presenting research assessing psychosocial changes among participants, and then follow by presenting research assessing behavioral changes among participants. The final sections of the report present research on GRS's unique approach to program delivery through partnerships and the use of mobile technology. We hope the report will provide a richer understanding of how and why GRS conducts research in its efforts to build healthy, HIV-free communities worldwide.

Jeff DeCelles

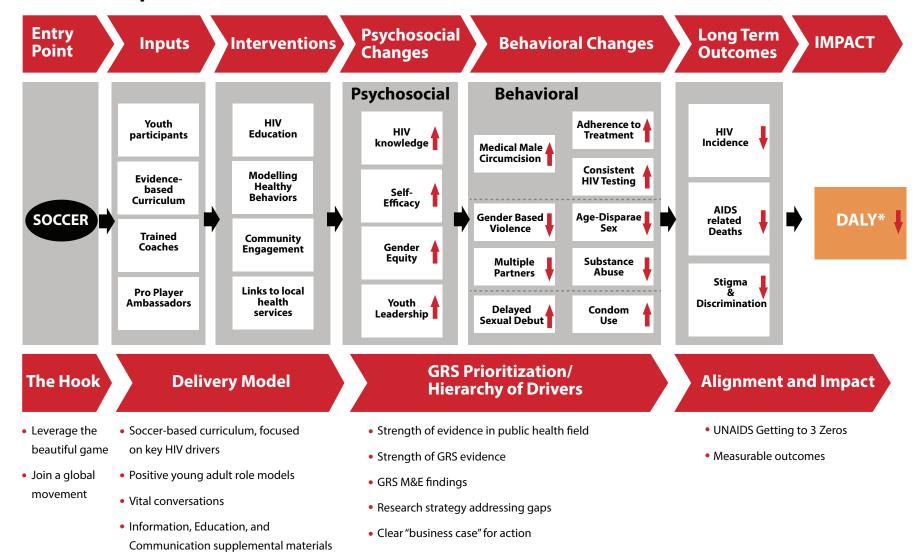
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# **GRS Impact Model**

Providing clear linkages between organizational-wide activity and ultimate impact



<sup>\*</sup> A "Disability Adjusted Life Year" is a commonly accepted measure of overall disease burden, expressed as the number of years lost due to ill-health, disability or early death





'11 for Health,' a Football-Based Health **Education Program for Children: A Two-Cohort Study in Mauritius and Zimbabwe** 

British Journal of Sports Medicine (2011)

Overview: A prospective two-cohort study evaluating the effectiveness of Federation Internationale de Football Association Medical Assessment and Research Center's 11-week '11 for Health' football-based health education program for children, designed in partnership with Grassroot Soccer.

Methods: Questionnaires administered to 389 in-school children in Mauritius (ages 12-15) and 395 out-of-school children in Zimbabwe (ages 10-14) immediately before and after intervention delivery.

#### Key findings:

- Findings suggest it is possible to achieve significant increases in children's knowledge for all health messages by implementing the '11 for Health' program in a school-based setting in collaboration with a national Football Association and in out-of-school setting in collaboration with a non-governmental organization.
- Data collected show increases in health knowledge in both Zimbabwe and Mauritius, with few significant differences in outcomes for boys and girls in both countries.

'Football for Health,' a Football-Based Health-**Promotion Program for Children in South Africa: A Parallel Cohort Study** 

British Journal of Sports Medicine (2010)

Overview: A prospective cohort study designed to develop, implement, and assess an 11-week interactive, football-based health education program called 'Football for Health,' created in partnership with Grassroot Soccer.

Methods: Questionnaires administered to 370 children from two schools in the Khayelitsha township, South Africa, immediately before, immediately after, and three months postintervention delivery.

#### Key findings:

- Findings suggest it is possible to implement a football-based health-education program for children in Africa, with each session of the curriculum focused on a specific health risk factor (e.g. HIV/AIDS, malaria, substance abuse, etc.)
- Data collected show significant increases in health knowledge among study participants and high acceptability of the program.

Partners: Carried out in partnership with the Centre for Sports Medicine (University of Nottingham, United Kingdom), FIFA Medical Assessment and Research Centre (Switzerland), and the University of Cape Town (South Africa).

#### Long-term Behavioral Impact of a Soccer-Themed, **School-Based HIV Prevention Program in Zimbabwe** and Botswana

International AIDS Conference (2010)

Overview: A long-term retrospective study (two-five years) investigating differences in HIVrelated knowledge, attitudes, communication, perceived norms, and behaviors between GRS graduates and non-graduates in Zimbabwe and Botswana.

Methods: Questionnaires administered to 553 participants, 260 of which had graduated from the GRS program two-five years pre-survey and 293 of which had not participated (serving as a comparison group).

#### Key findings:

- Findings suggest that knowledge and communication gains from youth-targeted programs may diminish over time, while effects on sexual behavior appear to vary across countries.
- Data collected show encouraging evidence of reduced number of sexual partners, though differences between graduates and non-graduates in knowledge, communication, or sexual debut were not statistically significant.

Partners: Funding provided by the Mulago Foundation.

**Evaluating a Sports-Based Adolescent-Targeted HIV Prevention Program in Haitian Migrant Communities in the Dominican Republic** 

International AIDS Conference (2008)

Overview: A study evaluating Futbol Para la Vida (FPV), a youth-targeted HIV prevention program based on the Grassroot Soccer model, to determine its effectiveness in a vulnerable Caribbean context.

Methods: Structured interviews conducted with 140 adolescents (ages 10-20) immediately before and after one-week FPV programs in six communities; 93 follow-up interviews conducted with these adolescents four months following graduation.

#### Key findings:

- Findings suggest that the GRS model could be effectively incorporated into larger-scale prevention efforts in Latin America and the Caribbean.
- Data collected show significant improvements in HIV-related knowledge, attitudes, and communication in the intervention group (approximately 80% improvement from pre to post), compared with no significant differences found in the control group.

Partners: Carried out in partnership with Futbol Para La Vida (Dominican Republic); funding provided by the Kaminsky Family Fund, through Dartmouth College's Dean of Faculty Office and by the John Sloan Dickey Center for International Understanding.

"I shared with my classmates about my aunt and her disease. Leven cried. But my classmates supported me. I told them that we must fight this horrible disease...As citizens of Botswana, it is important that we teach our friends."

> SKILLZ participant, Botswana

"Results from this study demonstrated that it was possible to implement an education programme for children containing valuable health messages linked to football and to achieve significant improvements in knowledge about a number of health issues; importantly, the knowledge gained was retained beyond the end of the programme."

British Journal of Sports Medicine 2010

#### **Grassroot Soccer and Diffusion of HIV Knowledge: Do** Participants Talk to Others about HIV and AIDS?

Internal Publication (2006)

Overview: A study conducted with students ages 12-13 in Botswana, investigating whether Grassroot Soccer participants discuss information learned during interventions with their peers.

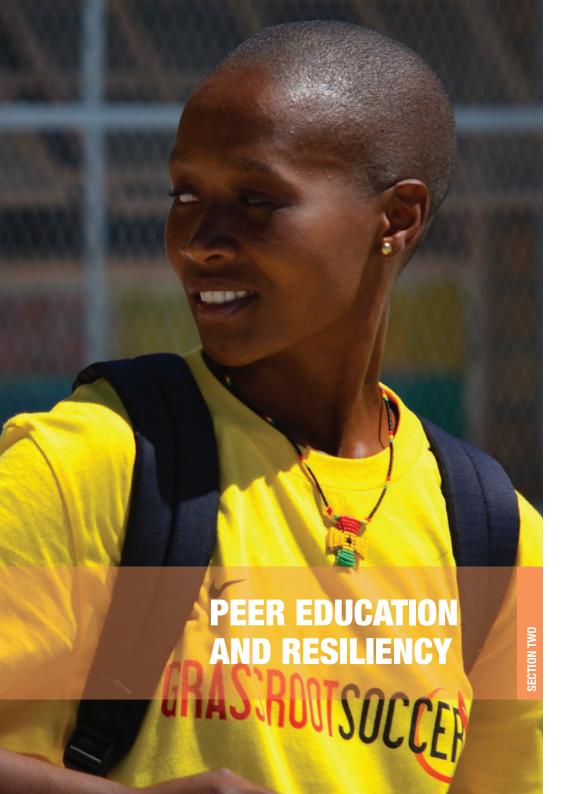
Methods: Questionnaires administered to 342 participants across three schools at end-line of program delivery.

#### Key findings:

- Findings suggest that GRS participants do talk about HIV and AIDS with others, particularly family and friends.
- Data collected show that over 90% of participants reported having educated at least one other person about HIV and AIDS and each student on average shared knowledge with 5.7 other people.

"Grassroot Soccer Coaches have taught me that engaging in sexual activities at an early age will make it harder for me to reach my goals, will put me at a high risk of getting HIV, and will put me at a high risk of getting pregnant."

-SKILLZ participant, South Africa



#### **Resiliency Pilot Program Evaluation** (Zambia & South Africa)

New Directions for Youth Development (2007)

Overview: A study on Grassroot Soccer's Resiliency Pilot Program to explore whether resiliency can be taught to 10-18 year old boys and girls using a sport-based model in Southern Africa.

Methods: Pre-questionnaires administered to 520 pilot program participants across Zambia and Zimbabwe; 274 post-questionnaires administered; 29 in-depth interviews conducted with participants; 29 informal discussions hosted with trainers; feedback forms completed by 20 trainers.

#### Key findings:

- Findings suggest a direct benefit to students from participating in the GRS Resiliency Program, pertaining to the identification and articulation of key resiliency themes in their lives.
- Data collected show observed changes in decision-making, problem-solving, identifying a trustworthy adult, knowing one's own strengths, and setting goals.

Partners: Funding provided by USAID through CARE.

An Adolescent-targeted HIV Prevention Project Using African Professional Soccer Players as Role Models and Educators in Bulawayo, Zimbabwe

AIDS and Behavior (2006)

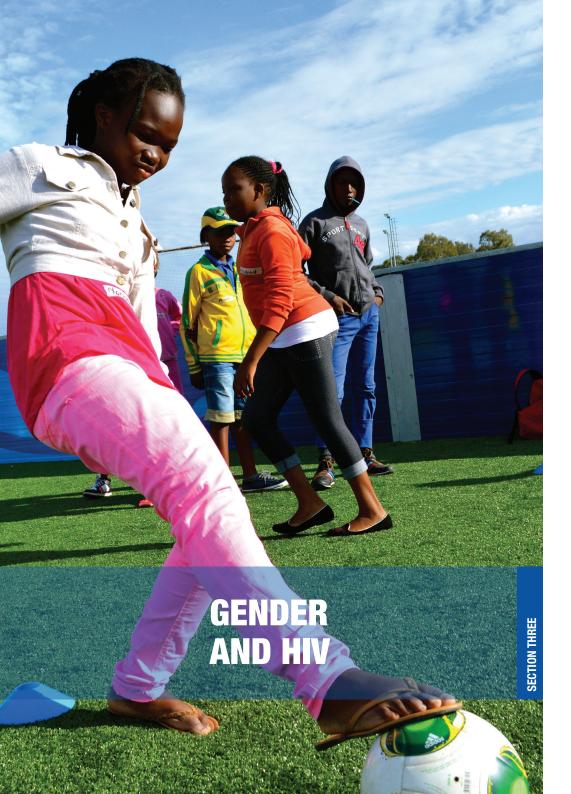
Overview: A quasi-experimental study evaluating the effectiveness of Grassroot Soccer's pilot sport-based program delivered to 12-14 year-old Zimbabwean school children by local professional soccer players.

Methods: Questionnaires administered to 304 participants across four schools at baseline, end-line, and five months post-program delivery; three focus group discussions conducted prior to the intervention to assist in curriculum development; two discussions hosted after the intervention for evaluation and feedback.

#### Key findings:

- Findings suggest that using Zimbabwean professional soccer players, local heroes, as HIV educators was innovative, feasible, affordable, and culturally appropriate.
- Data collected show improvements in HIV-related knowledge and attitudes immediately post intervention, with effects generally sustained at five months.

Partners: Funding provided by the Bill & Melinda Gates Foundation.



**Using Soccer to Build Confidence and Increase HCT Uptake Among At-Risk Girls: A Mixed-Methods Study** of an HIV Prevention Program in South Africa

Sport in Society: Cultures, Commerce, Media, Politics (2015)

Overview: A mixed-methods assessment to explore the effects of SKILLZ Street on female participants' self-confidence, HIV-related knowledge, and HIV counseling and testing (HCT) uptake.

Methods: Questionnaires administered to 304 participants across four schools at baseline, end-line, and five months post- program delivery; three focus group discussions conducted prior to the intervention to assist in curriculum development; two discussions hosted after the intervention for evaluation and feedback.

#### Key findings:

- Findings suggest that SKILLZ Street (SS) helps at-risk girls access HCT and HIV-related knowledge while promoting self-confidence. Results show that 68.5% of SS participants were tested for HIV at GRS-hosted HCT events.
- Discussions suggest participants: valued the coach-participant relationship; improved their self-confidence, HIV-related knowledge, communication, and perceptions of soccer as a male-only sport; and increased awareness of the importance of testing.

Partners: Funding provided by the Elton John AIDS Foundation (EJAF), MAC AIDS Fund and USAID.

**Knowledge, Attitudes, and Experiences of Violence Among Adolescent Girls: A Baseline Assessment in the Soweto Township of South Africa**"

International AIDS Society Conference (2015)

Overview: A baseline assessment to better understand the practices, attitudes, knowledge, and experiences of girls related to gender, intimate relationships, and violence in Soweto, Gauteng.

Methods: Baseline questionnaires administered to 200 female adolescent learners.

#### Key findings:

- Baseline data highlighted the critical need for a girls-targeted violence prevention intervention that integrates linkages to support services, family and schools.
- Results show 42% of participants reported experiencing intimate partner violence (IPV) and 63% reported experiencing non-partner violence in the last 12 months.
- Findings indicate that older survey respondents reported lower gender-equitable attitudes, self-efficacy and HIV-related knowledge, and higher justification of a boyfriend's violent behavior than younger survey respondents.

Partners: Funding provided by the United Nations Trust Fund (UNTF) to End Violence against Women.

#### Soccer-Based Intervention to Reduce Drug Use and **Address Perceptions of Gender and Sexuality among Adolescent Males in Alexandra, South Africa**

Internal Report (2015)

Overview: A study was conducted to assess the effectiveness of Champion's League, a soccer based intervention aiming to decrease substance abuse and perpetration of gender based violence (GBV) among adolescent males ages 15-20.

Methods: Pre-and post-questionnaires administered to 23 adolescent male learners; monitoring of drug test participation and results among participants; observations of program delivery.

#### Key findings:

- Findings provide encouraging evidence that a soccer based program can effectively promote pro-social behavior among adolescent males.
- Questionnaire data show a 10% increase in desirable responses on self reported perpetration of GBV.
- Drug test results demonstrate an increase in willingness to test (from 59% to 80% of participants opting to test) and a decrease in positive test results (from 29% to 0% of participants testing positive).

Partners: Funding provided by Imago Dei Fund.

Measuring the Role of Soccer in a Sport-Based **HIV Prevention Intervention among South African Adolescent Girls: Development and Psychometric Evaluation of the Perceived Soccer Benefits (PSB) Scale** 

Women Deliver's Girl Power in Play Symposium (2015)

Overview: In collaboration with the International Center for Research on Women (ICRW), GRS developed and tested a 14-item psychometric Perceived Soccer Benefits (PSB) scale to evaluate the role soccer plays in a sport-based HIV prevention intervention for adolescent girls.

Methods: Baseline questionnaires containing the PSB scale administered to 200 female leaners in four schools in Soweto, Gauteng using a four-point Likert Scale.

#### Key findings:

- Baseline findings provided promising evidence that the PSB scale may be a reliable tool to investigate the assumption that sport effectively achieves social change; scale reliability was found to be significant (Cronbach alpha=0.702).
- 20% of participants reported low PSB, 53% reported moderate PSB and 27% reported high PSB; younger participants (11-13 years) showed higher PSB than older participants (14+ years).
- High PSB was associated with high self-esteem, gender-equitable beliefs and self-efficacy.

Partners: Carried out in partnership with ICRW; funded by the UNTF to End Violence against Women.

"Grassroot Soccer's work is a refreshing and highly promising effort that can help turn the tide against HIV. Soccer is like a universal language...Grassroot Soccer thus reaches large numbers of young people with HIV education, and bases its programs on the best available evidence."

> Helen Epstein, Author, The Invisible Cure

"Some other girls don't see females playing soccer. But, in my community, when they saw me, they think about themselves, 'Oh, this is a person playing soccer, so why can't I play also'."

Female SKILLZ Coach, South Africa

**Linking At-Risk South African Girls to Sexual Violence** and Reproductive Health Services: A Mixed-Methods **Assessment of a Soccer-Based HIV-Prevention Program** and Pilot SMS Campaign

International AIDS Conference (2014)

Overview: A program assessment aiming to explore the effects of SKILLZ Street and pilot SMS campaign on girls' knowledge of local health services, perceptions of gender norms and relationships, and self-efficacy to avoid risky sexual behavior.

Methods: Questionnaires administered to 289 grade six and seven learners on mobile phones using Open Data Kit (ODK) software; eight focus group discussions and four in-depth interviews with participants, Coaches, parents, teachers, and a health-care worker.

#### Key findings:

- Findings show generally positive effects of the SKILLZ Street program, particularly on participants' self-efficacy, knowledge, communication, interaction with the Coach Tumi SMS service, and school attendance and performance.
- Quantitative data collected show statistically significant improvements (38%) in knowledge of rape support service locations and improvement in gender-equitable beliefs.

Partners: Funding provided by the BMGF.

"I feel proud about myself and walk tall in the community as a role model, a friend, and a brother to everybody that I have worked with."

-SKILLZ Coach, South Africa

#### Reported Sexual Behavior, Alcohol Use, and Intimate-Partner Violence among Grade 9 Students in Peri-Urban **Cape Town and Port Elizabeth Communities**

International Society for Sexually Transmitted Research Conference (2013)

Overview: Baseline findings from a 24-month cluster-randomized trial assessing the impact of Grassroot Soccer's Generation SKILLZ program on HIV-related knowledge, attitudes, and selfreported behaviors of South African high school students in Cape Town and Port Elizabeth.

Methods: Baseline questionnaires administered to 4,485 Grade Nine learners across 46 secondary schools (23 intervention and 23 control) on mobile phones before intervention delivery.

#### Key findings:

- Findings demonstrate high numbers of sexual partners, high prevalence of partner violence, and high prevalence of harmful alcohol, reinforcing the urgent need for effective interventions aiming to change these risky and unhealthy behaviors.
- Data collected show that nearly one in three males reported numerous partners in the last year, more than one in six reported having ever perpetrated rape, and nearly one in four screened positive for harmful alcohol use.

Partners: Carried out in partnership with the LSHTM and the Wits Reproductive Health & HIV Institute (WRHI) as part of the GOAL Trial, jointly funded by Comic Relief and the MAC AIDS Fund.

#### Mixed-Methods Evaluation of a Soccer-Based HIV **Prevention Intervention among Adolescents in South** Africa Townships

International AIDS Conference (2012)

Overview: A study exploring the effect of Grassroot Soccer's SKILLZ Street program on at-risk South African girls' self-confidence, HIV-related knowledge, and HIV Counseling and Testing (HCT) uptake.

Methods: Pre- and post-questionnaires administered to 456 participants; seven focus group discussions hosted with participants and Coaches.

#### Key findings:

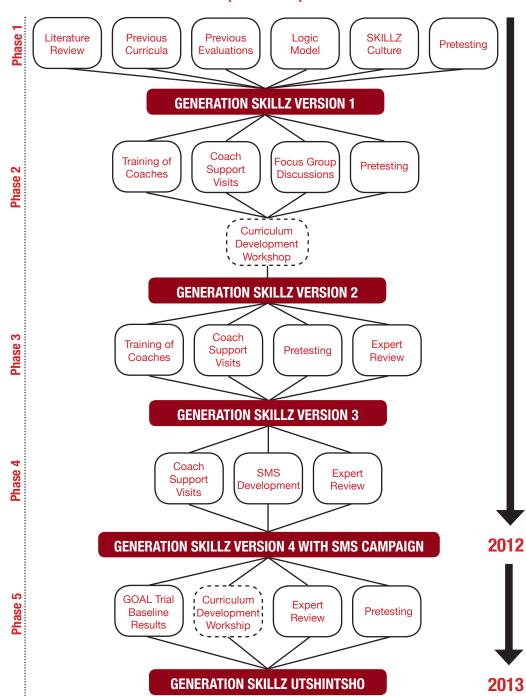
- Findings suggest SKILLZ Street has a positive effect on girls' reported attitudes and facilitates access to and uptake of HCT; future programs should carefully select testing partners, integrate sexual and reproductive health and rights (SRHR) components, and continue to utilize fair play soccer.
- Data collected show statistically significant pre- and post- improvement in HIV-related attitudes and self-efficacy; of 1,599 graduates of the program, 970 (61%) tested for HIV.

Partners: Funding provided by the EJAF, MAC AIDS Fund, Nike and USAID.

"Grassroot Soccer is restoring dignity and building self-esteem of young girls living in a challenging environment, transforming them into actors for the HIV prevention revolution."

> Michel Sidibé, **UNAIDS** Executive Director

#### **Generation SKILLZ Curriculum Development Process** (2010-2013)



**Generation SKILLZ: Development and Delivery of a Sports-Based HIV Prevention Intervention for South African High School Learners** 

South Africa Department of Basic Education Conference (2012)

Overview: A presentation of the curriculum development process for Grassroot Soccer's Generation SKILLZ program, including preliminary findings of program data collected between October 2010 and December 2011 in South Africa.

Methods: The curriculum development process included a review of the literature, pre-testing, training and observation, an intensive Curriculum Development Workshop, focus group discussions, review by experts in the fields of gender, youth and HIV education, and analysis of 612 pre- and post-questionnaires.

#### Key findings:

- Findings suggest that the Generation SKILLZ intervention presents an innovative, relevant, and engaging approach to HIV prevention education, supporting the launch of a randomized controlled trial (the GOAL Trial). The research and development process offers a rigorous method for developing an evidence-based curriculum (see "Generation SKILLZ Curriculum Development Process").
- Data collected show very strong evidence of change on 19 of 20 pre- and postquestionnaire items, with the strongest increases in knowledge of the risks of older partners, alcohol and acute infection, and the protective benefits of medical male circumcision.

Partners: Funding for the Generation SKILLZ intervention provided by the MAC AIDS Fund, Comic Relief and USAID, through PEPFAR's New Partners Initiative; GRS worked with implementing partner Mpilonhle in Mtubatuba, KZN (South Africa).

#### **GOAL Trial: Pilot Results of a Sport-Based HIV-Prevention** Intervention to Inform a Cluster-Randomized Trial in South African Schools

International AIDS Conference (2012)

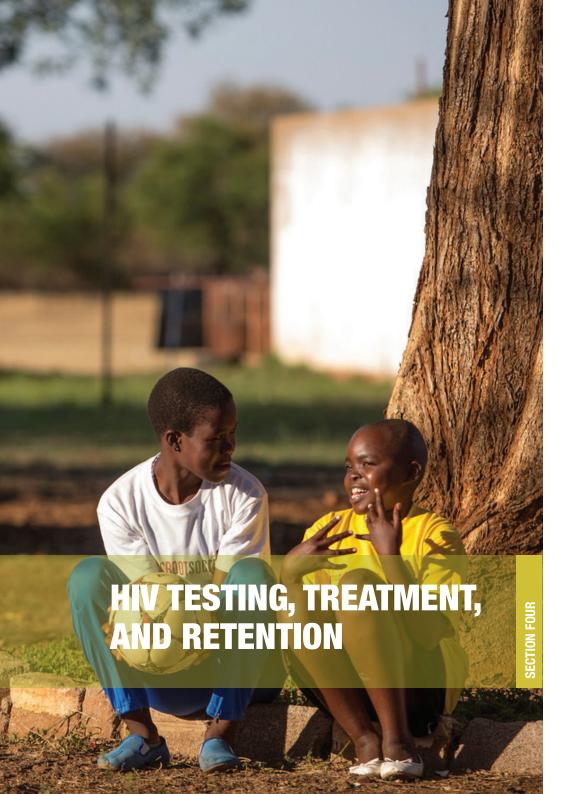
Overview: A pilot study of Grassroot Soccer's Generation SKILLZ program to inform GRS' GOAL Trial, a cluster-randomized trial in Cape Town and Port Elizabeth.

Methods: Questionnaires administered to 612 participants immediately before and after Generation SKILLZ pilot interventions.

#### Key findings:

- Findings provide encouraging evidence that Generation SKILLZ produces a short-term positive effect on participants' knowledge, attitudes and communication related to HIV; a randomized trial is needed to establish whether Generation SKILLZ effectively reduces sexual risk behavior and HIV and STI incidence.
- Data collected show very strong evidence of positive effects on knowledge and reported attitudes (17% improvement).

Partners: Funding for the Generation SKILLZ intervention provided by the MAC AIDS Fund, Comic Relief, and USAID, through PEPFAR's New Partners Initiative; GRS worked with implementing partner Mpilonhle in Mtubatuba, KZN (South Africa).



**Promoting Parental Engagement to Increase HCT Consent Rates for Adolescent Girls: A Mixed-Methods Pilot Study in the Alexandra Township** 

South Africa AIDS Conference (2015)

Overview: A mixed-methods Bridging the Gap (BtG) pilot study to evaluate the effects of Home Visits on parental consent rates and HIV Counseling and Testing (HCT) uptake among GRS participants in Alexandra, Gauteng.

Methods: Monitoring data were collected regarding participant attendance, Home Visit progress, and HCT uptake at GRS-hosted HCT events; seven interviews were conducted with parents/ guardians; 23 evaluation forms were administered to measure coach preparedness for Home Visits.

#### Key findings:

- Findings suggest Home Visits can effectively engage parents/guardians and promote HCT among adolescents. 93% of parents/guardians that were visited at least once gave HCT consent (n=565) and 47% of participants received HCT (n=425) at GRS-hosted HCT events.
- Interviews suggest high acceptability for Home Visits among parents, as the the majority shared that the Home Visit influenced them to give HCT consent; perceived barriers to Home Visits included lack of availability and incorrect contact information.
- Future research on the BtG project should focus on how to overcome logistical barriers to Home Visits and the effectiveness of linkasge to care among youth living with HIV.

Partners: Funding provided by Comic Relief, Anglo American and USAID.

**Process Evaluation of a Sport-Based Voluntary Medical Male Circumcision (VMMC) Demand Creation** Intervention in Bulawayo, Zimbabwe

International AIDS Society Conference (2015)

Overview: A process evaluation on GRS's two brief and scalable VMMC-promotion interventions for Zimbabwean males, Make the Cut (MTC) and Make the Cut + (MTC+). The study investigated perceptions of program impact, intervention components and program delivery; participants' understanding of intervention content; and factors related to VMMC uptake.

Methods: 17 in-depth interviews and two focus group discussions were conducted with Coaches and 29 in-depth interviews were conducted with circumcised (n=13) and uncircumcised participants (n=16).

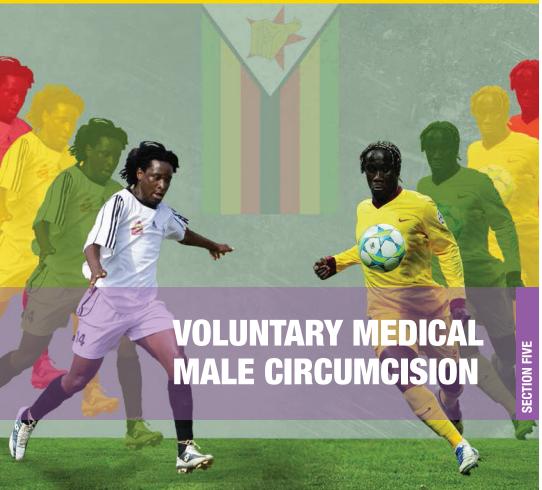
#### Key findings:

- Qualitative data demonstrate both MTC and MTC+ as acceptable and as offering an effective approach towards increasing VMMC uptake among males in Zimbabwe.
- Findings highlight the coach-participant relationship as a key factor in increasing participants' motivation to undergo VMMC, especially among younger participants involved in MTC+. Findings highlight the Coach's Story activity and coach accompaniment to the clinic as valuable and meaningful among participants.
- Incentives were viewed favorably, but due to the removal of incentives mid-MCUTS II trial, it could not be assessed whether they were instrumental to VMMC uptake.

Partners: Carried out in partnership with the LSHTM; PSI Zimbabwe; and the NUST; funding provided by 3ie, the BMGF and the Doris Duke Charitable Foundation.

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A sport-based intervention to increase uptake of voluntary medical male circumcision among adolescent male students: results from the MCUTS2 cluster-randomised trial in Bulawayo, Zimbabwe

HIV Research 4 Prevention Conference (2014)

Overview: Results from GRS's MCUTS2 trial, a cluster-randomised trial assessing the effectiveness of GRS's Make the Cut + (MTC+) intervention on voluntary medical male circumcision (VMMC) uptake over three to six months among adolescent male students in Zimbabwe.

Methods: 26 secondary schools (n=1226 participants) randomised to control and intervention groups; VMMC uptake measured over four months by cross-linking clinic registers with trial consent forms.

#### Key findings:

- MTC appears to have a noteworthy relative effect on VMMC uptake. Results show a roughly nine-fold increase in VMMC uptake in the intervention group: 4.8% uptake among men ages 18-25 (16 of 332 participants), compared with 0.5% uptake among control participants (one of 190 participants).
- Results show a roughly 2.5-fold increase in VMMC uptake in the intervention group: 12.2% uptake among uncircumcised participants, compared to 4.6% among control participants (OR=2.65, 95% CI=1,19,5.86, p=0.017).
- The number of participants who would need to be exposed to the demand creation intervention to yield one additional VMMC client was 22.7 (or 13.2 reporting not already being circumcised). This translated to approximately USD 49 per additional VMMC client.

Partners: Carried out in partnership with the London School of Hygiene & Tropical Medicine (LSHTM); Population Services International (PSI) Zimbabwe; and the National University of Sciences and Technology (NUST); funding provided by 3ie as part of its Thematic Window 3. and Technology (Zimbabwe). Funding provided by the Bill & Melinda Gates Foundation and the Doris Duke Charitable Foundation.

"I managed to convince about four guys that I know to make the cut [by getting circumcised at the clinic]."

-Make the Cut Coach, Zimbabwe

A Sport-Based Intervention to Increase Uptake of Voluntary Medical Male Circumcision among Adult Male Footballers in Zimbabwe: Mixed-Methods Results from a Cluster-Randomized Trial

International AIDS Conference (2014)

Overview: Results from GRS's MCUTS trial, a cluster-randomised trial assessing the effectiveness of GRS's Make the Cut (MTC) intervention on voluntary medical male circumcision (VMMC) uptake over three to six months among Zimbabwean men.

Methods: 47 football teams (n=736 participants) randomised to control and intervention groups; VMMC uptake measured over four and a half months by cross-linking clinic registers with trial consent forms.

#### Key findings:

- MTC appears to have a noteworthy relative effect on VMMC uptake among Zimbabwean men ages 18-50. Results show a roughly 10-fold increase in VMMC uptake in the intervention group: 4.8% uptake among uncircumcised participants, compared to 0.5% among control participants (OR=9.81, 95%CI=0.93,103.2, p=0.06).
- Findings suggest MTC's acceptability was higher among younger men participating in the MCUTS trial. Results show 5.1% uptake among intervention participants compared to 0.7% uptake among control participants ages 18-29 years-old and 1.1% uptake among intervention participants compared to 0.0% uptake among control participants ages 30 years or over.

Partners: Carried out in partnership with the LSHTM; PSI Zimbabwe; and the NUST; funding provided by the BMGF and the Doris Duke Charitable Foundation.

## A Sport-Based Intervention to Increase Linkage to Care

International AIDS Conference (2012)

Overview: A study of GRS's Bridging the Gap (BtG) continuum of care model, justifying an approach centered on facilitating access to HIV testing, increasing enrollment into treatment and care, and reducing loss to follow-up.

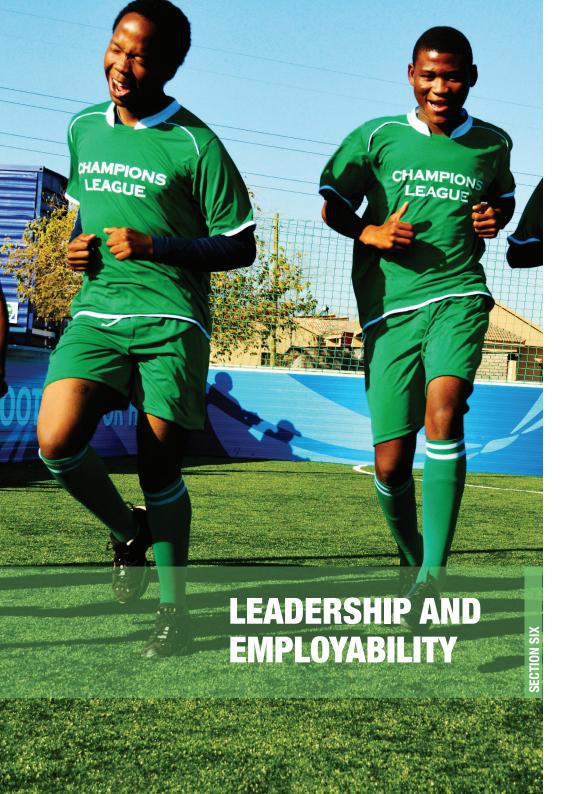
Methods: Program data collected from 11,000 youth between June 2010 and November 2011 in Lusaka, Zambia on number of individuals tested, demography of those tested, enrollment into treatment and care, eligibility and adherence, and loss to follow-up after six months.

#### Key findings:

- Findings suggest that the BtG model offers an effective model for increasing access to HIV testing, while increasing enrollment into treatment and care and reducing loss to follow-up.
- Data collected show that 62% of youth participating in Grassroot Soccer Zambia programs tested for HIV (6,859 of 11,000); of those 40 testing positive, 40.9% were successfully enrolled into care and 11.1% were lost to follow-up after six months.
- Data collected on the BtG program makes the case that immediate, on-site referrals to care and treatment following a positive HIV diagnosis improves clinic enrollment, adherence to treatment, and six-month follow-up.

"The Coaches explained to me what goes on [during the VMMC procedure] and the fear that I had disappeared. The stories about the pain...were not true. The way they told us about circumcision was encouraging and I thought I should try it."

Make the Cut Participant, Zimbabwe



Sport, HIV Prevention and Youth Empowerment: A **Longitudinal Study of the GRS Coach Development Program in South Africa** 

South Africa AIDS Conference (2015)

Overview: A longitudinal mixed-methods study at five GRS South Africa sites to evaluate GRS's two-year Coach Development program on employability, leadership skills, financial literacy, HIV-related knowledge and stigma, sexual behavior, substance abuse and gender-equitable norms among Coaches ages 18 to 26 years.

Methods: Baseline, midline and endline questionnaires administered to 131 Coaches over a twoyear period; three focus group discussions and six in-depth interviews conducted with Coaches.

#### Key findings:

- Findings provide encouraging evidence that GRS's structured work and learnership program offers an innovative and evidence-based approach to address HIV and youth employment in South Africa. 73% of Coaches accessed further employment, education and/or training (EET) after exiting the Coach Development program, and results were even more promising among female Coaches with 78% accessing EET.
- Data collected show significant improvements on employability skills, financial literacy, communication, computer skills, community leadership, HIV knowledge and selfreported HIV testing; however, self-reported sexual behaviors and alcohol consumption showed mixed results.

Partners: Funding provided by USAID and Barclays Spaces for Sports.

"It was a norm on Friday and Saturday to go with friends to the taverns and binge on alcohol. But during Champions League we had something to keep us busy, and that also kept us from wayward activities."

-Champions League participant, South Africa

#### **Experience of Participation in an Economic** Empowerment Project among Young Female Football Club Women Deliver's Girl Power Players in South Africa: an Exploratory Qualitative Study

in Play Symposium (2015)

Overview: A qualitative study to explore the short-term effects of participation in Ragball International's economic empowerment pilot project on saving habits and goal setting among RV United Girls Soccer Club players in Khayelitsha, South Africa.

Methods: Five in-depth interviews and one focus group discussion conducted with RV United players.

#### Key findings:

- Findings suggest high acceptability of the pilot project, especially the creativity involved in the Ragball-making process, among players; the observed sustainability of the project may be attributed to the RV United Girls Soccer Club's strong culture of hard work and respect, which players identified and helped build.
- Qualitative data demonstrates improvements in players' saving habits, budgeting and goal setting.

Partners: Funding provided by Manchester City Foundation and Ragball International.

#### **HIV Prevention with Young Men Using Soccer and Vocational Training: A Feasibility Study**

South Africa AIDS Conference (2013)

Overview: A feasibility study exploring the impact of a GRS's six-month program, Champions League, on the promotion of healthy living and pro-social behaviors (including negative drug test results, attendance and punctuality, and sportsmanship) among 18 to 25 year-old unemployed men in Khayelitsha, South Africa.

Methods: Questionnaires administered to 276 participants (142 at baseline and 134 participants six-months post), separated into intervention and control groups, immediately before and after the intervention; 35 in-depth interviews conducted with participants, Coaches, and family members of participants; four focus group discussions conducted with participants and Coaches.

#### Key findings:

- Findings provide encouraging evidence that young South African men between 18 and 25 are willing to participate in a research project and test for drugs and alcohol.
- Data collected show an increase in willingness to test for drugs and a decrease in percentage that test positive for drugs during program implementation (from 33% positive to a low of 21%); differences between control and intervention groups were observed in violence towards women, crime, and drug usage.

Partners: Carried out in partnership with Stellenbosch University (South Africa) and the University of California, Los Angeles (United States); funded by the National Institute on Drug Abuse (United States).

"In addition to the professional skills I have learned, the intangible things I took away were so valuable. Coach Development and Grassroot Soccer made me believe I can be a game changer in my that I can be a game changer in

SKILLZ Coach.



## The Road to National Adoption: a Case Study of Grassroot Soccer's Sport for Life Partnership Program in Ethiopia

Manuscript in Development (2015)

Overview: In 2004, GRS was contracted to develop a curriculum and training model for a sport-based HIV prevention program for youth: Sport For Life (SFL). Since its conception, SFL underwent a massive scale-up across Ethiopia, culminating in Ethiopian Ministry of Education's national adoption of SFL in 2008 for primary school curriculum and in 2014 for secondary school curriculum. A case study to explore the quality and reach of SFL programming among youth, and the perceived causal pathway for the successful scale-up and national adoption of SFL.

Methods: Participant attendance data were collected from 2004-2014; pre/post questionnaires administered to 275 SFL participants; three focus group discussions conducted with SFL trainers, SFL-trained teachers and SFL students; three key-informant interviews conducted with staff at Ethiopian partner organizations.

#### Key findings:

- Findings suggest GRS's partnership on SFL helped lead to a national scale-up and governmental adoption of SFL; from 2004-2014, 701, 705 Ethiopian students participated in SFL.
- Questionnaire data demonstrated strong evidence of an effect of SFL in improving HIV-related knowledge, attitudes and communication (p<0.05).
- Focus group discussion and interview data highlighted perceived reasons for the SFL scale-up: 1) high acceptability of the sport-based methodology; 2) favorable political environment in Ethiopia; 3) high-quality training and frequent monitoring; 4) partnership-building with local NGOs.

Partners: Carried out in partnership with Partners for Health, FHI 360 and Pact Ethiopia.

"These students are the leaders of the future and now have the tools to overcome peer pressure and to teach others how to prevent HIV and AIDS."

#### **Grassroot Soccer Peace Corps Overview: Peace Corps Volunteer (PCV) Analysis**

Internal Publication (2015)

Overview: In 2011, GRS and Peace Corps formed a global partnership that provides GRS curricula, training and materials to Peace Corps Volunteers (PCVs). In 2015, GRS assessed the effectiveness of the partnership model in reaching high-need communities and promoting health among youth.

Methods: Attendance data were collected; pre-and post-questionnaires were administered to 29,482 youth participants; interviews were conducted with a sample of trained PCVs who successfully implemented GRS programming (n=32).

#### Key findings:

- Findings demonstrate that GRS's partnership with Peace Corps allows GRS to achieve programming scale-up by reaching high-need rural communities across the world; from 2011-2015, 29,482 youth participants from 46 countries were reached, and 1,545 PCVs and 1,608 counterparts were trained in the SKILLZ curriculum.
- Pre/post questionnaire data show positive improvements in HIV- and malaria-related knowledge, attitudes and communication among participants.
- Findings suggest PCVs perceive the following to be determinants of a successful GRS program: 1) well-respected counterparts who are trained teachers or sport Coaches; 2) access to school facilities to conduct in-school implementation; 3) engaging exceptional participants to be peer leaders; 4) collaborating with another PCV; and 4) attending a GRS training.

Partners: Funded and carried out in partnership with Peace Corps.

#### **Pilot Study on Child Abuse Referrals**

Internal Report (2015)

Overview: GRS's partner in Lagos, Nigeria, Youth Empowerment Development Initiative (YEDI), conducted a pilot study to explore youth participants' disclosures of abuse to SKILLZ Coaches and the effectiveness of YEDI's referral system.

Methods: Questionnaires were administered and focus group discussions were conducted with 40 SKILLZ Coaches and five Master Coaches.

#### Key findings:

- Questionnaire data demonstrated that 31.1% of Coaches reported at least one disclosure of child abuse from a SKILLZ participant; 57.1% of these disclosures occurred during the SKILLZ program. Coaches felt that SKILLZ practices may have increased the likelihood of a disclosure due to feelings of trust between participants and Coaches and abuse-related content in specific SKILLZ practices.
- Of those disclosures that took place during the SKILLZ program, 38.5% of disclosures of child abuse were sexual, 23.1% were physical, 7.7% were forced labor, and 30.8% were mental; over 80% of sexual abuse disclosures were described as being between the child and a guardian; 62.5% of participants who disclosed were referred for further help to the child's parents, police, Women's Rights and Health Project or YEDI.
- For all disclosures, 71.4% were lost-to-follow-up, suggesting the need for a formal counseling training for YEDI Coaches and strategic partnerships for child abuse referrals.

Partners: Carried out by YEDI. e Corps.

#### **Evaluation Report of the Free Kick Program**

External evaluation conducted for Peace Corps Ukraine (2015)

Overview: Ukraine's Free Kick program consists of a seven-session educational program, community soccer tournament and voluntary HIV testing services. An external evaluator conducted a mixedmethods study to assess the effects of GRS's Free Kick program on youth beneficiaries reached through GRS's partner, Peace Corps Ukraine.

Methods: Attendance data were collected; pre-and post-questionnaires were administered to 2,111 youth participants; three focus group discussions conducted with community members participating in Free Kick events; 15 in-depth interviews conducted with counterparts, youth leaders, and partner organizations; and structured participant observation at two Free Kick events in 2014.

#### Key findings:

- From May 2013 to July 2014, 2,184 youth participated in Ukraine's Free Kick program; 84.3% of participants were between the ages of 14-18; 20% of participants were juvenile detainees.
- Questionnaire data demonstrated positive inexternal creases in HIV-related knowledge among all participants; positive changes were also observed in HIV-related attitudes and communication, although percent change was lower among juvenile detainees than among all participants.
- Participants showed high acceptability for the GRS sport-based methodology and felt the HIV testing services were easy to access and confidential; after completing the HIV test, the majority reported encouraging their friends and community members to take the test.

#### **Commitment to Practice: A Playbook for Practitioners** in HIV, Youth, and Sport

Mercy Corps (2007)

Overview: A study of two Grassroot Soccer (GRS) partner programs to evaluate the effectiveness of an eight-week HIV prevention intervention in Liberia and Sudan.

Methods: Questionnaires administered to 641 participants (280 in Liberia; 361 in Sudan) immediately before intervention delivery; 670 post-questionnaires administered (310 in Liberia and 360 in Sudan) immediately after intervention delivery.

#### Key findings:

- Findings suggest that the GRS model is replicable, reliable, and suitable in different settings and with different health issues.
- Data collected show that both programs significantly improved HIV-related knowledge and protective attitudes (27% improvement in Liberia and 16% improvement in Sudan).

Partners: Carried out in partnership with Mercy Corps' Yes To Soccer program (Liberia) and Sports for Peace and Life program (Southern Sudan).



Evaluation of Knowledge and Attitudes of School Pupils on Malaria and HIV and AIDS Prevention Through the Grassroot Soccer Initiative in Lagos, Nigeria External Evaluation conducted for GRS partner, Youth Empowerment and Development Initiative (2015)

Overview: An external evaluator conducted a mixed-methods study to assess the effects of GRS's malaria education program on youth beneficiaries reached through GRS's partner, Youth Empowerment and Development Initiative (YEDI) in Lagos, Nigeria.

Methods: 16 primary and junior secondary schools (n=640 participants) randomised to control and intervention groups; 16 focus group discussions conducted with participants and Coaches; six keyinformant interviews were conducted with school teachers.

#### Key findings:

- Improvements in malaria-related knowledge, attitudes and perceptions improved significantly
  among intervention participants; Coaches and participants demonstrated high acceptability of
  the GRS program, although significant in-school implementation challenges were highlighted.
- Results show positive improvements on the following: willingness to promote malaria. prevention to family members (33% increase, p<0.001); knowledge of protection from LLIN use (13% increase, p<0.001), LLIN maintenance (22% increase, p<0.001) and malaria treatment adherence (32% increase, p<0.001).
- Results also show positive improvements in self-reported ownership of LLIN in participant's household (8% increase, p=0.022) and use of LLINs in the household (5% increase, p=0.077).

Partners: Carried out by ARC Adroit Research Concept and YEDI; funded by ExxonMobil.

"I took a decision to educate my family members and members of my community. Right now, self-medication is almost a taboo in my family after I educated them one after the other. I took the message to our local church and I have noticed that everyone is gradually buying into it."



**Pretesting an mHealth Intervention for At-Risk** Adolescent Girls in Soweto, South Africa: Studying the Additive Effects of SMSs on Improving Sexual **Reproductive Health & Rights Outcomes** 

International Conference on Information and Communication Technologies and Development (2013)

Overview: A study exploring the design requirements for Coach Tumi, a supplemental SMS campaign aiming to reinforce key messages from GRS' SKILLZ Street program and to increase participants' uptake of sexual violence and reproductive health services.

Methods: Coach Tumi prototype delivered to 72 female participants and Coaches at a five-day SKILLZ Street holiday program in Soweto, South Africa; all completsmsed a 10-item questionnaire; two focus group discussions conducted with participants and parents.

#### Key findings:

- Findings from delivery of a Coach Tumi prototype suggest that an Unstructured Supplementary Service Data (USSD) line offers a promising means of reaching adolescent girls ages 11-14 with important messages pertaining to sensitive health issues and access of services.
- Data collected justified delivery of the Coach Tumi USSD line during a SKILLZ Street pilot program in September 2013.

Partners: Carried out in partnership with the Praekelt Foundation and Western Cape Labs; funded by the Omidyar Global Fund of the Hawai'i Community Foundation.





Sample sequence of options for participants to select when interacting with the Coach Tumi SMS service.

#### **Acceptability of Data Collection on Mobile Phones Using ODK Software for Self-Administered Sexual Behavior Questionnaires**

International Society for Sexually Transmitted Research Conference (2013)

Overview: A study assessing the acceptability of survey delivery on mobile phones using Open Data Kit (ODK), a free, open-source application for building, collecting, and managing data.

Methods: Questionnaires administered to 4,485 Grade Nine learners in South Africa and 672 male members of adult football teams in Zimbabwe on mobile phones; 10 focus group discussions conducted with participants and survey teams.

#### Key findings:

- Findings suggest that capture of data about sexual behavior on mobile phones using ODK had high acceptability among both South African adolescents and Zimbabwean men.
- Data collected show that participants were comfortable and engaged when using the mobile phones; the phones were reported to provide increased privacy and confidentiality when answering sensitive questions compared to self-administered paper-based sexual behavior surveys.

Partners: Carried out in partnership with the LSHTM, the NUST, and the WRHI; funding provided through the GOAL and MCUTS Trials by the BMGF, MAC AIDS Fund, Comic Relief, and the Doris Duke Charitable Foundation.

## "I was honest with all the questions because I knew no one will read my answers and I would have privacy."

GOAL Trial participant, South Africa

