





BY SUSAN GREEN

# FIELD OF DREAMS

*Alumnus Tommy Clark—a passionate soccer fan himself—uses the game’s international appeal to combat the spread of HIV.*

**TWO TEAMS TAKE THE FIELD TO FACE FAMILIAR FOES: DRUGS. ALCOHOL. UNPROTECTED SEX. OLDER PARTNERS.** *Their goal is to dribble a soccer ball between cones without bumping into them. One bump and it's off to the sidelines to do 10 push-ups. A second bump and the entire team has to do push-ups. A third bump, and everyone is doing push-ups. At the game's conclusion, the teams and their coach gather to talk about the risks the cones represent.*

The game, called Risk Field, is one of many activities designed by the international nonprofit organization Grassroot Soccer. Its goal is to teach adolescents in southern Africa about the consequences of their actions and how being HIV-positive affects not only their lives, but also the lives of their families and their communities.

Tommy Clark (D'92, Med'01), the founder of Grassroot Soccer (GRS), knows that passion for soccer runs deep

in Africa. He spent his high school years in Bulawayo, Zimbabwe, playing soccer, and he saw the admiration and respect people had for both the game and the players. Clark's life is rooted in soccer. His father, Bobby Clark, played on the national team in Scotland and went on to coach professional teams in both Scotland and Zimbabwe. The Clarks left Zimbabwe for Hanover, N.H., when Bobby became a coach at Dartmouth. Tommy later attended Dartmouth and played on the soccer team while there. After graduating from Dartmouth, Clark returned to Bulawayo to play on the local professional team and to teach English. But the Zimbabwe of Clark's youth had changed. AIDS was rampant and taking a devastating toll on the population.

Zimbabwe is one of the hardest hit countries in terms of HIV prevalence. The numbers are stark: By 1997, the peak of the HIV/AIDS epidemic, 27 percent of Zimbabwe's population was HIV-positive, the highest rate of HIV in sub-Saharan Africa, according to UNAIDS. And the infection rate remained above 25 percent for the next several years before gradually declining. Sexual activity among adolescents in southern Africa, both then and now, is on par with adolescents in Denmark and Sweden, which have some of the lowest prevalence rates of HIV in the world—in Denmark in 2003, the rate of infection was less than one percent. But due to a variety of factors, including older sexual partners, which correlates with dangerous gender norms fueled by poverty and inequality, overlapping sexual partners, and the fact that the HIV strain in southern Africa is highly infectious, the region has much higher infection rates.

Yet despite the prevalence of HIV/AIDS, nobody talked about how it spread or how it could be prevented, Clark says. Puzzled and deeply affected by this, he began thinking about how to change the stigma surrounding the disease. Without breaking down the stigma of HIV, there would be little chance for lasting change.

Even while attending medical school at Dartmouth, Clark couldn't forget his experience in Zimbabwe. During

Courtesy of Grassroot Soccer



Grassroot Soccer trains soccer players and coaches to teach adolescents about activities that can raise the risk of acquiring HIV.



Jasyn Howes

Tommy Clark has been playing soccer all his life, and given the popularity of soccer in Africa, it seemed to him like a natural fit to use the game to raise awareness of HIV.

his residency he developed a role-playing HIV/AIDS education program based on behaviorist Albert Bandura's social learning theory, which says that behavior doesn't change on its own but rather within the context of a community.

In Zimbabwe, soccer players are heroes. Capitalizing on their status within the community to open a discussion about the effects of HIV and the importance of regular testing seemed to be a natural fit. Clark thought soccer would be the perfect hook to encourage young people to adopt healthy behaviors—and the game's metaphors would resonate with teenagers, making talking about HIV less scary.

### BRIDGING THE GAP

From its humble beginning in Zimbabwe more than 10 years ago, GRS has grown into an international force that mobilizes the global soccer community to help stem the spread of HIV. Local professional soccer players, coaches, and other young role models from the community are trained as HIV educators and coaches to deliver GRS's school-based curriculum, which emphasizes gender equity, youth development, and free, voluntary HIV testing. Graduates of the program are trained as peer educators and coaches. In turn, they become advocates for change in their communities.

"When we started, people were uncomfortable talking about sexual issues," Clark recalls. "And since HIV is a

sexually transmitted disease for the most part, it was an uncomfortable topic of conversation. People are still not completely comfortable talking about it. It is difficult for a parent to have that conversation with a child. But GRS helps to bridge that gap."

Methembe Ndlovu (D'97), a GRS cofounder and the managing director of GRS Zimbabwe, is based in Bulawayo. He's also a former captain of the Zimbabwe national soccer team, and he still coaches and manages a team he started, the Bantu Rovers. All of the players are GRS educators.

"Soccer players have a lot of power—they have a lot of local influence, but the game itself is very influential," Ndlovu says. "We feel fortunate that we are in a position to support the kids here and to be a place where they have positive role models and encouragement to manage their lives."

Coaches and educators work with a class for a few hours each week for 10 weeks. The delivery method is always consistent, with GRS coaches implementing HIV education and life skills lessons through the language of soccer, but programs vary according to age group and gender needs. Skillz Core targets 11-to-14-year-olds and focuses on basic HIV prevention and behavior change. Generation Skillz targets adolescents aged 14 to 19 and encourages discussions about gender-based violence, the dangers of multiple concurrent sexual partners, and cross-generational sex.

# FIELD OF DREAMS



Courtesy of Grassroot Soccer

Grassroot Soccer encourages participants in soccer tournaments to get tested for HIV, and it uses its educational programs to fight the stigma associated with HIV testing in some communities.



Courtesy of Grassroot Soccer

During school holidays, GRS also hosts camps where kids have an opportunity to participate in soccer training interspersed with life skills development and HIV-prevention activities. Upon completing a program, students graduate in a public ceremony, either during halftime of a semiprofessional or professional soccer game, or in a community event—often a large soccer tournament.

While these school-based interventions have been and are still successful, GRS programming is moving beyond giving adolescents the information they need about HIV testing to helping them learn the skills they need to transform that information into behavior. “It’s one thing to say to somebody that it’s important for them to get tested,” Ndlovu says. “It’s another to say it’s important for you to get tested and we are willing to help you through this. We will continue to support you when you get tested again the following year.”

Providing direct access to health services has also helped to educate and involve local communities, too. Bringing the testing services to the community through

different events, such as voluntary counseling and testing tournaments, has made a big impact on not only the spread of HIV, but on lowering the rates of new diagnoses. For example, in Zambia, 65 percent of Grassroot Soccer graduates get tested for HIV, more than four times the national average. Testing is critical. It allows those who are HIV-positive to live longer and more productive lives and reduces their chance of passing the infection to others by 96 percent.

“Tournaments are a big deal,” Ndlovu says. “Can you imagine an entire field of people playing competitive soccer, often with professional players or national team players, surrounded by tents with testing services?” All of the program’s participants are asked to bring their parents, siblings, friends, and neighbors to a tournament where they have easy access to GRS partners who provide free HIV testing—everyone has access to these services. To date, GRS has facilitated HIV testing for over 73,000 people.

Soccer is an integral part of getting people enthused to attend GRS events and activities. People are excited to meet soccer celebrities who are international role models. In some instances, players go door to door in the community informing people that they will be playing in a game on Saturday, encouraging them to bring their family and to take advantage of the free counseling and testing services.

“Once the families are there, we then have an opportunity to help them access other health services in a comfortable and friendly way and to support them,” Ndlovu says. “It’s a different environment from going with their parents to a clinic to get tested.”

## GENDER RISKS

In Africa, teenage girls are particularly vulnerable to HIV infection. They are five times more likely than teenage boys to contract HIV. Socially, men are accepted as decision-makers and as the dominant partner in relationships. This imbalance of power puts girls at a disadvantage and at risk.

“Cross-generational sex, where older men are having sexual relations with younger women and passing HIV on to another generation, is a big risk factor for girls,” Ndlovu says. “We can’t ignore it.”

Noting the lack of positive role models for girls, and the very few opportunities for them to play soccer—less than one percent of those registered to play in official soccer leagues in South Africa are girls—GRS created an intervention just for them. Under the guidance of young female coaches, the program, called Skillz Street, challenges gender norms, empowers young women to avoid risky behavior, and promotes better reproductive health and access to services. Messages are reinforced by free play soccer with self-generated rules and team discussion both before and after a match.

Working with boys to effect a cultural and social shift away from the imbalance of power is also part of the initiative. Boys and girls are encouraged to challenge together the cultural norms for gender and gender-based violence, and to address the difficulties facing teenagers and young adults in South Africa.

### CULTURE CHANGE

Although these topics are freely discussed within the program and cultural norms are beginning to change, there are difficulties in implementing practices that stem the spread of HIV—particularly voluntary male circumcision, which reduces a man’s chance of contracting HIV by 60 percent, Clark notes. But the percentage of men choosing circumcision is small.

“So here you have something that’s a huge problem, with a clear solution, but it’s not being acted upon,” Clark says. “People are trying to figure out why this is, and we’re quite happy to be at the forefront of trying to figure why people are reluctant to take that next step.”

In late 2012, in partnership with the Bill and Melinda Gates Foundation and the Doris Duke Foundation, GRS began a randomized controlled trial to investigate the uptake of medical male circumcision services following an educational intervention. “Our program had a nine-fold

*In Zambia, 65 percent of Grassroot Soccer graduates get tested for HIV, more than four times the national average.*

increase in uptake,” Clark says. “And we are now repeating the study to see if we can increase the uptake even more.”

GRS is currently involved with three other randomized controlled trials. Two are in collaboration with the London School of Hygiene and Tropical Medicine—one on the long-term impact of the GRS program on risky behavior and gender norms in South Africa, and one on medical male circumcision in Zimbabwe. The other is in collaboration with the University of Zambia to study adherence to medication. The organization is also evaluating methods for implementing a national adoption of voluntary male circumcision based on current research results.

“Within a country like South Africa there a lot of different tribes, and there are a lot of sites where we can’t talk about male circumcision with the coaches or with the



In recent years, Grassroot Soccer has expanded its mission to include research on the effectiveness of educational interventions, incorporating its findings into subsequent campaigns.

Jasyn Howes

# FIELD OF DREAMS

Courtesy of Grassroot Soccer



Youth in Africa play a game designed to teach them about HIV, all while keeping them engaged.

health workers because it is such a taboo,” Clark explains. “But then there are other places where it’s not a taboo at all. In Zimbabwe, the level of circumcision is very low and the prevalence of HIV is very high, yet there’s no taboo against it. Some of our data show that people know where to go and what to do, they know that male circumcision is beneficial and they intend to get circumcised, so all of these things are in place, they just don’t actually do it.”

The same is true for HIV testing and treatment. In Zambia, for example, only 16 percent of young people will take an HIV test, so only a small percent of the population is getting the test. Of the people who are tested, only a small group shows up to get their result. Of the people who do get their result, only 30 percent stay on treatment for a year. Essentially, there are very few people on treatment who need to be on treatment, which means there are a lot of people with HIV who aren’t being treated and could potentially spread HIV to others.

## PROGRAM PARTNERS

Steadfast in its commitment to eradicate the spread of HIV and to use soccer as a means for social change, GRS partnered with the Peace Corps in 2011 to extend its reach.

“The scale of the problem is so large,” Clark says. “But as a Peace Corps partner we’ve developed GRS programs for the most remote and underserved regions in the world.”

Peace Corps interventions are developed and field-tested to meet the needs of volunteers and their communities. GRS provides ongoing support guaranteeing that the programs are successfully implemented.

In Senegal, for example, local Peace Corps missions are bringing GRS trainers to teach Peace Corps volunteers how to conduct three programs: HIV prevention, empowering girls, and malaria education. The goal is to make sure that the program is sustainable. If the Peace Corps volunteers teach their local counterpart, then the local person can continue teaching the kids when the volunteer leaves, Clark says.

This means that health-care partners worldwide have the means to implement a GRS program suitable for their village or town. Peace Corps volunteers may still need to get funding from their local Peace Corps mission, but GRS supplies a full program kit—soccer ball included.

“This has been really exciting for us because it’s a way to get our work out to audiences in other countries where we can’t run GRS programs,” Clark adds. “Peace Corps workers are motivated and the volunteers are always looking for ways to connect with people in their town and this usually works.”

Peace Corps volunteers and community members in numerous countries have become GRS coaches, reaching more than 20,000 young people living in rural areas where scant health information is available and life skills programs are nonexistent.

## A MEASURABLE DIFFERENCE

Zimbabwe is a different place today because of GRS’s contribution to HIV prevention. The stigma around discussing HIV is diminished and the population is healthier with a significantly lower percentage of people who are HIV-positive—down to 14 percent from 27 percent in 1997—along with a sharp decline in new cases.

“Our approach is youth-friendly, fun, and engaging,” Clark says. “But now, we have these hard outcomes that are extremely measurable and we can use them to measure the impact of our programs. We have evidentiary data from our research—I look at male circumcision and uptake of testing as both measures of stigma. If stigma and fear are too high, people won’t do those procedures. In Zambia, 65 percent of the kids in our program will take an HIV test, as opposed to 16 percent otherwise. That is a very significant change in testing and in attitude. The goal is that these become normal things for people to do.”

In Zambia, GRS coaches and educators say that when they walk around, the organization is so well known that those who went through this program when they were 15 and are now in their twenties still shout out “Kilos”—which is used as a form of praise in the program—to each other in greeting.



Jasyn Howes

Even Tommy Clark has been surprised by all that Grassroot Soccer has accomplished since its humble start in Zimbabwe.

*"I don't think I expected to do what we've done. In many ways we've accomplished much more."*

Grassroot Soccer has been selected by FIFA to manage and run a Football for Hope Centre recently built in Luveve Township in rural Bulawayo, Zimbabwe—one of only 20 centers being built by FIFA in Africa. The center provides a home base enabling GRS to reach more youth and community members through testing tournaments, holiday camps, and other programs that complement existing school-based programs.

Although Clark readily acknowledges GRS's success, he remains modest about the organization's accomplishments, and his enthusiasm for the hard work hasn't waned.

"I don't think I expected to do what we've done—in many ways we've accomplished much more," Clark says. "To date, we've raised more than \$40 million and we've reached nearly 700,000 children in 28 countries."

From its earliest days, when Clark and his three soccer-playing friends traveled to Zimbabwe to launch a pilot

program to engage professional male and female African soccer players to be HIV educators, the organization has drawn on Clark's experiences in soccer and in medicine to eradicate HIV/AIDS. While remaining true to its soccer roots, Clark says, the programming will continue to increase its focus on biomedical research to move GRS's mission forward.

"The organization has stayed flexible and nimble and as the research has evolved we have responded to it with a changing curriculum. In the last several years everything has completely changed with the advent of medical male circumcision," Clark says. "We have also contributed to the research and have taken a lead role. And for me that has been very exciting."

---

SUSAN GREEN IS SENIOR WRITER FOR *DARTMOUTH MEDICINE*.