

Community Collaborative Youth-Focused HIV/AIDS Prevention in South Africa and Trinidad: Preliminary Findings

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Background South Africa and Trinidad and Tobago are disproportionately impacted by high rates of HIV/AIDS among adolescents. **Objective** The article describes the HIV crises in these countries; outlines a community participatory research framework to adapt and deliver family-based prevention; and presents preliminary data from intervention pilots in each setting. **Methods** Adapted interventions were piloted with $N = 140$ families in South Africa and $N=16$ families in Trinidad and Tobago to refine recruitment and retention efforts and to assess the adapted interventions' impact on family and risk-related constructs. **Results** Both settings reported promising results including high recruitment and retention and favourable pre to post changes in parent/youth frequency and comfort in talking about sensitive subjects, HIV transmission knowledge and attitudes about persons with HIV/AIDS. **Conclusion** International HIV-prevention alliances are increasing. Such alliances are challenged by trust issues, power-differentials and ideological differences. Recommendations are provided on how some challenges can be overcome.

Key words adolescent HIV/AIDS; community collaboration; international HIV/AIDS prevention; South Africa; Trinidad and Tobago.

Sub-Saharan Africa is the epicenter of the human immunodeficiency virus and acquired immune disease syndrome (HIV/AIDS) with an estimated 25 million infected people (UN, AIDS, and WHO, 2004). The much smaller Caribbean region is second only to sub-Saharan Africa in adult HIV/AIDS cases (around 500,000; Camera, Lee, Gatwood, Wagner, Cazal-Gamelsy, & Boisson, 2003). Without effective vaccine and interventions to curtail the virus's spread in these two regions, many additional persons will become infected. Accordingly, the regions' leaders have prioritized prevention especially among adolescents and young adults (UN, AIDS, and WHO, 2002).

Not surprisingly, African and Caribbean HIV-prevention specialists have allied with individuals and

institutions in the international community to design and deliver programs for their populations (UN, AIDS, and WHO, 2002; 2004). Although international coalitions are growing in these regions, there is a dearth of documented approaches, guidelines, and strategies for building successful partnerships (World Bank, 2000). This article presents one approach to building international partnerships to assist developing nations with their HIV/AIDS concerns. Specifically, prevention researchers at the University of Illinois at Chicago introduced the Collaborative HIV/AIDS Prevention and Adolescent Mental Health Project (CHAMP) to community-based agencies and stakeholders in South Africa and Trinidad and Tobago (T&T). This article describes the HIV/AIDS youth crises in these two nations and how United States and local collaborators worked together to adapt the

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family-based HIV prevention program CHAMP to the local contexts. In addition, we present preliminary data on CHAMP's potential utility in youth HIV/AIDS risk reduction in each setting and discuss lessons and challenges in maintaining these international prevention partnerships.

Youth HIV/AIDS Problems in South Africa and T&T

South African and T&T adolescents, particularly females, are disproportionately infected with HIV/AIDS (Dorrington, Bradshaw, & Butler, 2002). Recent epidemiological data in South Africa suggest a modest decline in adolescent HIV/AIDS cases (from 15.5 to 14.8% between 2001 and 2002), but overall rates are still of grave concern (Barnett & Whiteside, 2002). In addition, female adolescents are approximately four times more likely than males to become infected with the virus (Dorrington, Bradshaw, & Budlander, 2002). Similarly, in the twin-island Caribbean nation of T&T, adolescents and young adults make up most of the new HIV/AIDS cases (Camera, B. et al., 2003), and as in South Africa, girls seem most vulnerable. Teenage girls in T&T are three to seven times more likely than boys to become HIV-infected (Camera et al., 2003; Voisin & Dillon-Remy, 2001).

These two countries share many psychosocial factors that account for the rapid spread of HIV/AIDS among teenagers and especially girls. Early sexual debut, low condom use, and sex with multiple partners heighten adolescents' vulnerability to the virus (Eaton, Flisher, & Aaro, 2003; PAHO and Ministry of Health, 1998; UNICEF, UNAIDS, and WHO, 2002). In addition, strong patriarchal cultures associated with histories of colonialism in T&T and apartheid in South Africa influence the social subordination of women and permissiveness for males to have multiple sexual partners (LeClerc-Madlala, 1997; Petersen, Bhana, & McKay, in press; Varga, 1997; Voisin and Dillon-Remy, 2001).

Youth-Focused Prevention

In South Africa and T&T, governmental and nongovernmental organizations target youth in and out of schools with HIV/AIDS information. Most of the programs are information and awareness campaigns aimed at increasing awareness of HIV/AIDS transmission and prevention (World Bank, 2000). Although there are recommendations in both settings for interventions that strengthen parents/caregivers' capacities to help their youth to adopt HIV-preventive behaviors (e.g., delayed sexual initiation and safer-sex practices), few programs or interventions involve youth *along with* parents/caregivers

in prevention activities (Caribbean Task Force on AIDS, 2000; Dorrington, Bradshaw, & Budlander, 2002; Eaton, Flisher, & Aaro, 2003). This is the overarching goal of CHAMP.

CHAMP Overview

In 1994, CHAMP was launched as a researcher–community partnership to address increasing rates of adolescent HIV/AIDS exposure in urban minority neighborhoods in Chicago. Over several years, researchers and community members (i.e., residents, school and agency staff) designed and delivered several family HIV/AIDS interventions (McKay & Paikoff, in press) in selected neighborhoods. CHAMP's family interventions are developmentally grounded, targeting youth before and during the puberty transition. The interventions include education and skill-building activities to strengthen family-level characteristics that relate to sexual risk taking, such as parental monitoring, discipline effectiveness, conflict resolution, support, and parent/caregiver and youth frequency and comfort in communication about sensitive topics. The interventions also target youth social problem-solving abilities, such as recognition of risk and refusal and assertiveness in handling sexual peer pressure. Preliminary analyses of CHAMP preadolescent data suggest that the program strengthens parental decision-making, increases parent and youth comfort in communication regarding sensitive topics, and increases parental HIV/AIDS knowledge. Preadolescent youth who participated in CHAMP also reported greater resistance to peer pressure and less involvement in sexual risk situations than youth who did not receive the intervention (McBride et al., in press; McKay et al., 2004).

CHAMP collaborators have utilized a community participatory framework in designing and delivering interventions (Baptiste et al., 2005; Madison, McKay, Paikoff, & Bell, 2000). This framework includes four core aspects: (a) linking collaborators from outside and within a setting to design a program; (b) creating a stakeholder advisory group to oversee program activities; (c) designing programs that integrate scholarly and indigenous knowledge and perspectives relevant to a setting to shape prevention messages and activities; and (d) using credible messengers, such as those already connected to a setting, to implement interventions in their own neighborhoods. We believe that partnerships mobilized around these four core aspects facilitate “real world” efficacy tests of interventions; increase participants' engagement in research; and increase the potential for sustained initiatives in a setting once research aspects are concluded (Baptiste et al., in press).

We drew on CHAMP's successes in forging US partnerships to build alliances in South Africa and T&T to support local HIV/AIDS prevention efforts. Although barriers to transporting, adapting, and delivering CHAMP have differed across the two settings, addressing barriers through CHAMP's community participatory principles has been essentially the same (Voisin, Baptiste, Martinez, & Henderson, in press). In what follows, we describe how CHAMP community participatory framework operated in South Africa and T&T and, specifically, how collaborators adapted the US-based CHAMP family intervention to address local HIV/AIDS concerns.

Exporting CHAMP to South Africa and T&T Linking US and Local Collaborators

In 2000, US researchers approached researchers at two premier South African facilities, the Human Sciences Research Council and the University of KwaZulu-Natal, to pilot CHAMP in the black South African townships of KwaZulu-Natal, which have been ravished by HIV/AIDS. At the same time, a community agency in T&T, the Family Planning Association of Trinidad and Tobago (FPATT), also approached researchers to adapt and pilot CHAMP for the islands' adolescents. In each location, US and local collaborators successfully secured funding from the National Institutes of Mental Health (NIMH) to conduct a large-scale, longitudinal intervention trial in South Africa and a smaller adaptation study in T&T.

Developing Community Advisory Boards

Community advisory boards were assembled in South Africa and T&T to oversee cultural adaptation of the CHAMP intervention for each setting. In South Africa, researchers first introduced CHAMP to traditional (tribal leaders by lineage) and political leaders in the targeted neighborhoods. These leaders formed a steering committee to ensure that the project was in the communities' interests and selected families to participate in an ethnographic study and intervention pilot. At a later stage an official community advisory board was developed to oversee the second stage of the research, a randomized efficacy test of the intervention. In T&T, the local agency invited parents and individuals working in HIV/AIDS prevention activities or youth-centered fields to join agency staff to form an advisory board before adaptation activities.

Tailoring CHAMP Interventions to Local Settings

Different strategies were used to retool the CHAMP family intervention for each setting. South African collaborators

began with an ethnographic study including focus groups and in-depth individual interviews with youth and parents to understand youth HIV/AIDS risks (Paruk, Petersen, Bhana, Bell, & McKay, 2005). This study illuminated families' roles in lowering risky behavior among youth and also suggested additional aspects to include in an intervention to match the setting. For example, sessions on bereavement and stigma were added to address high levels of loss and discrimination experienced by families. A session on rights and responsibilities of parents and youth was also included to acknowledge the significant disempowerment parents and caregivers reported in raising youth.

Further, given low literacy levels among parents and cultural taboos about discussing sexuality, South African collaborators incorporated principles of participatory adult education (Freire, 1970). Sessions were redesigned as an open-ended, cartoon-based story line running throughout the program. Families reflected on their own experience to close each narrative, using the characters in the narrative as a springboard. Once the above changes were incorporated, researchers asked key informants, such as health care workers, social workers, and teachers, to review the adapted version. In addition, adult caregivers and youth participated in pilots of each session and gave feedback that informed the final intervention version titled *The CHAMP-AmaQhawe Family Project*. Bhana, Petersen, Mason, Mahintsho, Bell, and McKay (2004) describe adaptation procedures and the intervention overview.

In T&T, the CHAMP family intervention was revised to fit the local setting over four phases. First, the board formed focus groups to review the program, curriculum, and materials, and to make initial revisions. Second, the board recruited facilitators to pilot the intervention with families. Facilitators reviewed and role played each session, and their feedback led to a second revision. Finally, early adolescents and parent/caregivers participated in a pilot of the intervention and gave feedback that informed another revision. Researchers collated and disseminated suggested revisions to members of the advisory board for additional review. This yielded the final edition titled *CHAMP for Families*. Voisin et al. (in press) provide an intervention overview and description of adaptation procedures.

Using Credible Messengers

CHAMP community participatory principles emphasize the use of "credible messengers," such as respected residents of a targeted setting to deliver the intervention. These individuals are expected to enhance participants'

receptivity to prevention messages. South African collaborators selected parent/caregivers who participated in redesigning intervention sessions to serve as facilitators in the program pilot. Likewise, T&T nationals who were involved in HIV/AIDS education, youth outreach, or family education were recruited to facilitate pilot groups. In both settings, facilitators were extensively trained to conduct the interventions and to collect data.

Preliminary Findings from South Africa and T&T Pilots

Pilot Design

The pilot studies in South Africa and T&T were designed to achieve research aims relevant to each setting. South African collaborators piloted the *CHAMP-Amaqhawwe Family Project* with a convenience sample of 140 families using a pre- and posttest research design composed of intervention ($n = 72$) and comparison ($n = 68$) groups. The study aimed to refine recruitment and retention strategies as well as evaluate the proximal impact of the intervention on adapted measures of family-level and risk-related constructs.

The T&T research team conducted a much smaller pilot study of the *CHAMP for Families* intervention with 32 early adolescents and their parents using a simple one-group (family-education intervention) pre- to posttest research design. This pilot aimed to refine recruitment and retention strategies and assess the intervention's feasibility, tolerability, and acceptability. To ensure that interventions were delivered as planned in both settings, collaborators utilized (a) standardized intervention manuals and assessment procedures; (b) extensive preintervention training; and (c) direct or videotaped observations to assess facilitators' delivery styles and data collection skills.

Participants

In South Africa, notices were sent home with children aged 9–12 years attending participating schools in each of three sites in KwaZulu-Natal, a province on the eastern seaboard of South Africa. The first site was Cato Manor, an urban shack settlement on the outskirts of Durban. The other two sites were Embo and Molweni, both semi-rural areas, approximately 40 km outside Durban. All three sites are inhabited mainly by Zulu-speaking members of the Nguni tribe. Families were invited to attend an informational meeting and were deemed eligible if at least one adult caregiver and preadolescent child aged 9–12 were able to attend the 13-week intervention.

Seventy-two families were assigned to the intervention group and 68 families served as comparisons and

completed two research interviews. No significant differences in levels of education, the period living in the area, the number of people living in a household, the frequency with which the head of the household sleeps at home, the number of people employed in a household, and the number of household members who received a pension or other social welfare grants emerged between the intervention and comparison groups at baseline.

In T&T, staff visited second-form classrooms (equivalent to US sixth and seventh grades) in two schools and distributed permission forms ($N = 150$) for youth to take home to parents. Parents who signed forms indicating interest ($N = 117$) were invited to attend an informational meeting held at their respective schools. Those who attended ($n = 75$) received additional information about the pilot study, and a random sample of 16 families (eight from each school) was selected to participate. Families were eligible if they had an 11- to 13-year old enrolled in one of two selected public schools situated in high HIV/AIDS seroprevalent counties in Trinidad. Parents were adult caregivers, at least 19 years old, living with their children and fulfilling parenting responsibilities toward the targeted youth. Total participants numbered 32 (16 targeted youth with 16 parents or caregivers).

Measures

South African and T&T research teams independently selected measures from the original CHAMP assessment battery for their respective pilot studies. Both locations included measures of *AIDS Transmission Knowledge* and *Frequency and Comfort with Parent-child Discussions* (Paikoff et al., 1995), but these measures varied across the two settings based on adaptation procedures. The measures of *Social Support Networks* and *Stigma* were unique to the South African study, and measures of *Parental Monitoring* and *Condom Self-Efficacy* were included only in T&T.

Face validity of the scales was determined through consultative processes with local collaborators at both sites. In South Africa, researchers consulted experts familiar with the language and cultural patterns of Zulu-speaking individuals. Measures were translated into Zulu and independently back-translated to English by individuals who spoke Zulu as their first language (Geisinger, 1994; Parry, 1996). T&T is monolingual (English), but a similar consultative process with local collaborators was used to capture dialect distinctions and colloquialisms. In South Africa, because of literacy concerns, trained facilitators administered paper-pencil measures to parents and youth in the second and last

sessions of the 13-session program. In T&T, reading literacy is quite high and paper/pencil measures were self-administered during sessions 2 and 11 of the 12-session CHAMP for Families program.

Measures used at Both Sites

Attendance

Facilitators in both settings kept attendance records for each family by session number, date, and individuals attending (e.g., mother, father, targeted child, brother).

Demographics

In both studies, demographics such as family characteristics, age, and socioeconomic status were assessed using adapted versions of the *CHAMP Demographic Questionnaire* (Paikoff et al., 1995).

AIDS Transmission Knowledge

Knowledge of AIDS transmission was assessed by modifications to the *AIDS Knowledge and Awareness Scale* (Paikoff et al., 1995). In South Africa, this measure included seven items with three responses assessing participants' knowledge of whether a particular activity (e.g., sharing needles or syringes with an infected person) is safe. The Cronbach alpha for pretest items in South Africa was .75 for parents and .65 for youth. The T&T *AIDS Transmission Knowledge* measure was an 18-item checklist including items such as "Can you get HIV/AIDS from being bitten by a mosquito?" Respondents coded each item as "true" or "false" and the percent correct score was used as an index of confident and accurate knowledge of HIV/AIDS transmission.

Frequency and Comfort in Parent–Child Discussions

Frequency and comfort in parent–child discussions on sensitive topics was assessed with a modified version of the *Discussions in the Family* measure (Paikoff et al., 1995). In South Africa, this measure was composed of seven items each with two parts. First, parent and youth rated the frequency of discussing sensitive topics (e.g., alcohol, drugs, HIV/AIDS, sex). Responses were coded on a 4-point scale ranging from "we talk about this a lot" to "we never talk about this." Second, parents and youth rated their comfort level in discussing these topics. Responses ranged from "very uncomfortable" to "very comfortable." In T&T, frequency and comfort in parent–child discussions on sensitive topics was also assessed on a similar 7-item scale. In both settings, frequency and comfort were scored separately with higher scores on both parent and youth measures indicating increased frequency and comfort in discussions at home. For South Africa, the Cronbach alpha for all pretest

items was .76 for parents and .88 for youth. For T&T, the Cronbach alpha was .85 for parents and .78 for youth.

Measures Used Only in South Africa

Social Network Support

This measure was completed by parents who listed the three most important individuals in their lives and rated how often they received help from them, such as supervising children and helping with household chores. Our previous pilot of this measure indicated little variance past the second individual and that respondents quickly lose interest in answering repeated questions about other individuals. Therefore, the first person listed was deemed most likely to provide social support. Items were reversed coded and scored on a 5-point scale of "always" to "never." The mean of all items was computed with lower scores indicating greater social network support. Cronbach alpha for parent pretest items was .77.

Stigma

Parents and youth completed an 8-item scale measuring attitudes toward others who are HIV/AIDS infected (e.g., "I would be willing for my child to play with my neighbor's child if I knew my neighbor had AIDS"). The scale included a 4-point response format (strongly agree to strongly disagree), with higher scores indicating greater stigma. The Cronbach alpha for parents was .85 and .88 for youth.

Measures Used Only in T&T

Condom Self-Efficacy

The *Condom self-efficacy* (Paikoff et al., 1995) scale has 21 items assessing parent and youth confidence in securing and using condoms during sexual activity. The measure included items such as, "how confident are you about using a condom every time you have sex?" or "If someone liked you and wanted to have sex with you, would you use a condom?" Responses are scored on a 5-point scale ranging from "not sure at all" to "very sure." Cronbach's alpha was .78 and .95 for youth and parents, respectively.

Parental Monitoring

Caregivers and youth completed a 13-item scale assessing the level of parental awareness of youths' whereabouts, friends, and activities (e.g., "After school child is expected to be at a certain place by a certain time"). Responses were coded on a 4-point scale ranging from "always true" to "always false." Higher scores indicate greater parental supervision and monitoring. Cronbach's alpha for youth was .81 and .72 for parents.

Data Analyses

Univariate analyses were used to describe the samples from both studies. In the South African study, multivariate repeated measures of analysis of variance (ANOVA) (Generalized Linear Models) were used to assess significant pre- and posttest differences between the intervention and comparison groups on measures listed above. The maximum number of parents with complete pre- and posttest data was 131 and 132 for youth.

For the T&T study, bivariate analyses were used to compare mean change from pretest to posttest. We examined statistically significant change using paired samples *t* tests for each scale item to determine which aspect of the construct was potentially affected by the intervention. Participants who did not complete both pre- and posttests were excluded from paired sample *t* tests. Thus, the maximum numbers of parents with complete pre- and postdata was 13, and the maximum number of youth with pre- and postintervention data was 12. As statistical significance is difficult to achieve with such a small sample size, we also explored the direction of change from pre- to posttest and whether overall scales had face validity for participants.

Results

Attendance

Attendance and retention in both studies were consistently high. South African attendance averaged 93% over 39 sessions (i.e., 3 groups \times 13 sessions), and T&T recorded 91% attendance over 24 sessions (i.e., 2 groups \times 12 sessions). All families originally selected were retained in both studies.

Demographics

Tables I and II summarize the demographic characteristics for the South African and T&T samples. In South Africa, parents were mostly mothers living in extended family units. Roughly half of the parents had some high school education and at least one individual in each family was employed. Almost all of the families spoke the Zulu dialect (95%) at home and belonged to an organized church or group of Christian faith. Relatively equal numbers of boys and girls participated in the study and averaged about 10 years. Most children lived with adult caregivers (e.g., mother, grandparent, or adult sibling), but 27% of youth lived with only one caregiver. A small number of youth (5%) lived with a sibling caregiver.

In T&T, the parents were mostly biological mothers with a mean age of 43.1 years. More than two thirds of parents were married and worked outside the home. Youth were mostly female ($n = 12$), with a mean age of 12.5 years.

Table I. Sample Characteristics of Collaborative HIV/AIDS Prevention and Adolescent Mental Health Project (CHAMP)-Amaqhawe Families in South Africa

Parent/caregivers	N = 140
Mean age	35 years
Level of education	
No education	5%
Primary	28%
Secondary	67%
Employment	
Semi- and unskilled work	54%
Religion	
Christian	92%
Other/no religion	8%
Primary language	
Zulu	95%
Xhosa	5%
Children living	
With adult caregivers	93%
Receiving government assistance	34%
Youth	N = 142
Mean age	10 years
Boys	49.3%
Girls	50.7%

Table II. Sample Characteristics of Collaborative HIV/AIDS Prevention and Adolescent Mental Health Project (CHAMP) for families in Trinidad and Tobago (T&T)

Parents/caregivers	N = 16
Mean age	43.1
Married	71.4%
Education beyond high school	28.6%
Working outside the home	64%
Religion	
Catholic	33%
Islam	25%
Protestant-evangelical	33%
Indigenous	8%
Receiving government assistance	14.3%
Youth	N = 16
Mean age	12.5 years
Boys	87.5%
Girls	12.5%

The sample was religiously diverse, reflecting most major religious persuasions in the general population.

Pre- to Postintervention Change AIDS Transmission Knowledge

In South Africa, a significant difference was found between intervention parents ($M = 0.59$, $SD = 0.22$ and $M = 0.62$, $SD = 0.24$) and comparison group parents

($M = 0.51$, $SD = 0.23$ and $M = 0.53$, $SD = 0.25$) in *AIDS Transmission Knowledge*. Intervention parents showed significantly greater pre- to posttest gains in knowledge than comparison group, $F(1, 164) = 7.07$, $p \leq .009$. For youth, no significant differences were noted.

There were also significant pre- to post-test changes in parents and youths' knowledge and awareness of HIV/AIDS in the T&T study. On average, youths and parents' answers showed a pre- to posttest increase of 27 and 8%, respectively, in accurate knowledge of transmission. These differences were statistically significant on a paired samples' t test ($p \leq .001$, $p \leq .04$).

Frequency and Comfort in Parent–Child Discussions

For the South African study, parents and youth in the intervention group reported increased frequency in talking to one another about sensitive issues. Intervention group parents ($M = 2.12$, $SD = 0.68$; $M = 1.87$, $SD = 0.52$) were more improved than comparison group parents ($M = 2.25$, $SD = 0.61$; $M = 2.07$, $SD = 0.65$), $F(1, 157) = 9.74$, $p \leq .002$. Similar improvements were found among intervention group youth ($M = 2.79$, $SD = 0.99$; $M = 2.31$, $SD = 0.94$) versus comparisons ($M = 3.06$, $SD = 0.90$; $M = 2.86$, $SD = 0.96$), $F(1, 125) = 13.32$, $p \leq .001$. As an example, parent-reported discussions about puberty increased in frequency from 55 to 69% in the intervention group compared with 48 to 44% in the comparison group. Discussions about sex, which was ranked as most difficult to talk about, improved from 55 to 73% in the intervention group compared with 51 to 55% in the comparison group.

Similar to increased frequency of discussions at posttest, parents in the intervention expressed greater comfort in talking about these issues ($M = 1.92$, $SD = 1.00$; $M = 1.49$, $SD = 0.73$) compared to parents in the comparison group ($M = 1.79$, $SD = 0.78$; $M = 1.65$, $SD = 0.64$), $F(1, 142) = 7.33$, $p \leq .008$. Youth in the intervention also reported greater comfort in talking about sensitive issues with their parents ($M = 2.91$, $SD = 1.40$; $M = 2.34$, $SD = 1.22$) compared with comparison youth ($M = 3.54$, $SD = 1.43$; $M = 3.37$, $SD = 1.39$), $F(1, 80) = 5.72$, $p \leq .02$.

In the T&T study, youth at pretest indicated that they talked about most topics with their parents between “once in a while” and “often” and that they were “somewhat comfortable” to “comfortable” in most discussions. Youth also rated discussions about having sex as being “somewhat uncomfortable” to “somewhat comfortable.” Thus, there was somewhat less variability in the pretest data for T&T, limiting the extent of change that might occur because of the intervention. Pre- to posttest changes in frequency of discussion were statistically significant for two items: an increased fre-

quency of discussions about HIV/AIDS ($p \leq .02$) and a decreased frequency of discussions about gangs ($p \leq .02$). No observed changes in comfort level of these discussions were observed. Parents' pretest responses were similar to youths', in that frequency of discussion was reported to be somewhere between “once in a while” and “often.” Parents generally reported being “very comfortable” with these discussions. Parents reported a statistically significant change in the frequency of discussions about gangs ($p \leq .01$) with their comfort level regarding those discussions ($p \leq .05$). In both cases, the discussions were contrary to expectations. Both the frequency and comfort decreased.

Social Network Support

In South Africa, no significant differences were noted between the intervention and comparison group parents on social network support at posttest.

Stigma

In South Africa, significant differences were observed between the intervention and comparison groups on attitudes toward HIV/AIDS-infected persons posttest. The intervention group parents reported more positive attitudes toward people with AIDS ($M = 1.36$, $SD = 0.51$; $M = 1.18$, $SD = 0.40$) than the comparison group ($M = 1.55$, $SD = 0.74$; $M = 1.47$, $SD = 0.78$), $F(1, 164) = 4.13$, $p \leq .04$. Intervention youth also reported more positive attitudes ($M = 2.50$, $SD = 0.93$; $M = 2.02$, $SD = 0.85$) compared to comparison youth ($M = 2.74$, $SD = 0.93$; $M = 2.84$, $SD = 0.9$), $F(1, 132) = 4.42$, $p \leq .04$ at posttest. Table III summarizes the significant comparisons in the South African study.

Condom Self-Efficacy

In the T&T study, youth reported increased confidence on 9 of the 21 items at posttest with regard to acquiring and using condoms. Parents also reported greater confidence on 14 of 17 items at posttest. The mostly female youth sample reported statistically significant posttest increases in correctly putting on a condom ($p \leq .02$), using a condom ($p \leq .02$), enjoying the experience ($p \leq .02$), and going to a clinic to obtain condoms ($p \leq .001$). Parents also reported a statistically significant increase in using a condom and enjoying the experience ($p \leq .002$).

Parental Monitoring

In the T&T study, at baseline parents perceived themselves as highly monitoring youth and no statistically significant changes in the level of monitoring occurred from pretest to posttest. Youth pretest responses also suggested a high level of parental monitoring, but at posttest, youth

Table III. Intervention Effects for Collaborative HIV/AIDS Prevention and Adolescent Mental Health Project (CHAMP)-AmaQhawe in South Africa

AIDS transmission knowledge	Pretest mean	SD	Posttest mean	SD	F ratio	p value
Parent proximal variables (N = 140)						
Intervention group	0.51	0.22	0.62	0.24	F(1, 164)=7.07	.009*
Comparison group	0.51	0.23	0.53	0.25		
Stigma						
Intervention group	1.36	0.51	1.18	0.40	F(1, 164)=4.13	.04**
Comparison group	1.55	0.74	1.47	0.78		
Talking about difficult issues						
Intervention group	2.12	0.68	1.87	0.52	F(1, 157)=9.74	.002*
Comparison group	2.25	0.61	2.07	0.65		
Comfort talking about difficult issues						
Intervention group	1.92	1.00	1.49	0.73	F(1, 142)=7.33	.008*
Comparison group	1.79	0.78	1.65	0.64		
Youth proximal variables (N = 142)						
Intervention group	2.04	0.38	2.05	0.46	F(1, 131)=0.73	.39
Comparison group	2.07	0.30	2.13	0.41		
Stigma						
Intervention group	2.50	0.93	2.02	0.85	F(1, 132)=4.42	.04**
Comparison group	2.74	0.93	2.84	0.91		
Talking about difficult issues						
Intervention group	2.79	0.99	2.31	0.94	F(1, 125)=13.32	.001*
Comparison group	3.06	0.90	2.86	0.96		
Comfort talking about difficult issues						
Intervention group	2.91	1.40	2.34	1.22	F(1, 80)=5.72	.02**
Comparison group	3.54	1.43	3.37	1.39		

* = $\leq .01$ ** = $\leq .05$

reported an increase in parents' expectations that they be at a certain place at a particular time ($p \leq .02$) and knowing their parents are monitoring them when at a friend's house ($p \leq .04$). Contrary to expectations, youth also reported a decrease in parental monitoring of television watching ($p \leq .03$); knowing their best friends ($p \leq .03$); being in bed at a certain time on school nights ($p \leq .04$); going out after school without asking parents ($p \leq .02$); knowing in advance of adult supervision during activities ($p \leq .05$); talking to their friends' parents before spending the night with them ($p \leq .02$); and going places without telling parents ($p \leq .04$).

Implications for Future Work in South Africa and T&T

The results of the *CHAMP-Amaqahawe Family Project* in South Africa and the *CHAMP for Families* in T&T are promising. In both settings, families responded well to recruitment efforts and once recruited more than 90% of participants completed our interventions. Recruitment and retention are typically one of the most difficult barriers to family-based HIV prevention programs (Prado et al., in press), but these pilot studies suggest that families in South Africa and T&T can be successfully

recruited—boding well for future large-scale randomized intervention trials in both countries.

There were obvious limitations in each study's design that affected our interpretation of findings related to intervention impact. Despite this, we view the pre- to postintervention changes among parents and youth in both South Africa and T&T as promising. Specifically, South African parents displayed improved knowledge of HIV/AIDS transmission. This was not the case among youth whose HIV transmission knowledge may have been already high after exposure to various HIV/AIDS awareness programs. Parents, who are less literate than youth, may have been less impacted by existing public health messages, and thus, were more responsive to the direct efforts of the *CHAMP-Amaqahawe Family Project*. South African parents and youth also reported more frequent and comfortable discussions with one another about sensitive subjects such as puberty and sex. Intervention parents reported less stigmatizing attitudes about persons with HIV/AIDS than parents who did not receive the intervention. These findings are important given ethnographic data on parents' feelings of disempowerment in talking with their children about sex and high levels of stigma surrounding HIV/AIDS.

Findings in T&T were less promising and may be an artifact of the simple design and small sample size. Both parents and youth reported significant improvements in HIV/AIDS knowledge and awareness, and this is a basic building block and necessary condition to decreasing HIV/AIDS risk exposure. At home parent-child discussions of sensitive issues such as HIV/AIDS and having sex also appeared to move in a positive direction, which is promising, given that many youth indicate difficulty talking with parents about these sensitive issues (Family Planning of Trinidad and Tobago, 2000). Moreover, for individual items related to condom self-efficacy, our predominantly female adolescent sample reported increased readiness to secure condoms at clinics and properly use them. This is critical for curbing the epidemic given the disproportionate numbers of young females in T&T that contract the virus (Camera et al., 2003). The mixed and somewhat contradictory findings on parental monitoring are disappointing but also useful information. We speculate that some items on our measure may not have been correctly interpreted by participants or that aspects of the parental monitoring module in the curriculum or instrument need to be retooled before our randomized trial.

Lessons Learned and Recommendations

Notwithstanding our successes in South Africa and T&T, we experienced many conventional tensions described by Pokorny et al. (2004) related to managing collaborative ventures. We consider the lessons described below to be of particular importance to forging and maintaining international partnerships.

Trust-Building Among Collaborators

The postcolonial and postapartheid climates of T&T and South Africa have compromised local collaborators receptivity to outside programs. Against this backdrop, building trust was an ongoing issue. Pokorny et al. (2004) recommend establishing trust by using cultural translators familiar with the cultural norms in both the donor and host cultures, and this strategy worked to our advantage. The respect generated through these partnerships allowed participants in T&T and South Africa to voice their doubts about the program's potential, despite US researchers' strong convictions otherwise. The result was a more nuanced program and likely more effective participation on the part of collaborators.

Egalitarianism

In principle, a partnership suggests egalitarianism, with two or more entities holding equal power, influence,

and control over the operation. In reality, however, egalitarianism is difficult to operationalize when one partner, for example US researchers, is initiator, donor, and exporter, assuming final responsibility for such critical aspects as fiscal management and institutional review processes. US researchers were often the ones making tough decisions about allocating resources in accordance with principles practiced within university systems and federal funding agencies. These institutional guidelines affect flexibility in budgets and timelines. Local partners did not have direct relationships with these institutions and have not always deemed US researchers' decisions to be in their best interests. US researchers attempted to concede some power inherent in their lead role by articulating the following issues: respecting the local partners' rights and responsibilities to question aspects of their actions; being explicit about institutional constraints; and yielding ground in areas not constrained by external guidelines and expectations. Similar power differentials (e.g., openness about revenues and expenditures) played out in local contexts between researchers and agency leaders and advisory board members involved in our initiatives.

Science Versus Service

Managing ideological tensions is crucial to forging and maintaining successful international collaborations, and one common tension is balancing science and service objectives in the face of pressing and imminent youth problems such as rampant youth HIV/AIDS risks. US researchers have sometimes focused first on the need for the initiative to produce scientific knowledge and advance theory and only second on providing benefits to the lives of youth. This approach is slower and more deliberative and at times at odds with local collaborators' urgency in delivering the programs to address prevention needs. From the outset of an initiative, we suggest that researchers engage community stakeholders in open dialogue on the rationale for scientific evaluation of an intervention. Researchers must not approach this as a given. Further, researchers should also be transparent about targets and timelines for information dissemination and plans for a scale-up of an intervention for broader outreach. This discussion is crucial for building community trust in intervention research and for ensuring that both community and researcher values and agendas are acknowledged.

Human Subject Protections

International research collaborations raise unique issues in enforcing human subject protections in developing

countries. For example, the principal investigators of our South African and Caribbean initiatives work at US institutions. They follow the Institutional Review Board (IRB) guidelines for human subject protections. This can be problematic for participants thousands of miles away. In T&T, IRB approvals were delayed for several months as the board members familiarized themselves with the local research context. The involvement of local ethics review committees in overseeing human subject protections is critical. But, in some settings these committees may not be available or well-coordinated. We note this to alert international collaborators working in developing regions to investigate the availability of local ethics review committees early in an initiative and to secure necessary research approvals from all sources.

Mutuality

Usually, exporting a program from a more developed to less developed setting is framed as a one-way flow of resources. This is reflected in our discussions of transferring knowledge and expertise from “US researchers” to “local collaborators” and in conceptualizing US partners as “donors” and local partners as “recipients.” Yet resources also flow in the other direction, from local collaborators to US researchers, and this should be reflected in our discussions. To illustrate, CHAMP researchers in the United States have benefited from participating in these international partnerships, including refining a community participatory disease prevention and health promotion model; refining methods that embed culture and context in programs; and delineating logistical and pragmatic aspects of program export. Such knowledge will uniquely influence US researchers’ work in building preventive initiatives, especially within US urban minority communities.

Conclusion

HIV/AIDS is a worldwide problem and with increasing globalization, the social and economic toll experienced by severely impacted regions, such as sub-Saharan African and the Caribbean, can reverberate to other regions and nations. Thus, curtailing the spread of HIV/AIDS abroad is not only a humanitarian endeavor, it is also one way regions and countries can protect their populations at home.

There is a critical need for partnerships to transfer and adapt empirically tested HIV-prevention strategies from developed to developing regions most severely impacted by HIV/AIDS. Though important, such cross-national collaborations are challenged by many factors such as issues of trust; power-differentials inherent in partnerships; and ideological differences related to pursuit

of science and service. As illustrated in this article, such challenges can be overcome. We hope that the insights detailed here will ultimately help to increase HIV-prevention alliances elsewhere in the world.

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