

## NARRATIVE REPORT

1 October 2006 — 30 September 2007

# Horizons

*Global Leadership, Research & Development*  
Responsibilities & Best Practices in HIV/AIDS

Population Council  
International Center for Research on Women  
International HIV/AIDS Alliance  
PATH  
Tulane University  
Family Health International  
Johns Hopkins University



**USAID**  
FROM THE AMERICAN PEOPLE

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through the Office of HIV/AIDS  
United States Agency for International Development (USAID)  
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with the Population Council**



**Narrative Report**  
**October 1, 2006 – September 30, 2007**

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# ***HORIZONS PROGRAM***

## **Narrative Report**

October 1, 2006 – September 30, 2007

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### **I. INTRODUCTION AND BACKGROUND**

#### **A. Summary Program Description**

Through its cooperative agreement<sup>1</sup>, the Horizons Program contributes to the goals of USAID and the Global AIDS Coordinator's Office (OGAC) by developing and conducting operations research (OR) activities in concert with in-country institutions in numerous countries around the world. The main purpose of Horizons' efforts is to strengthen and promote scaling up of HIV prevention and service programs. The Population Council and its partners<sup>2</sup> have worked to carry out Horizons' mandate since mid-1997, spanning a crucial decade in the fight against HIV/AIDS. A one-year no-cost extension to July 30, 2008 was awarded to enable core Horizons staff to complete studies and write reports while continuing to provide useful information to policy-makers and program managers. This report covers the period October 1, 2006 through September 30, 2007.

Horizons' overall objectives are as follows:

- Identify important and timely research issues
- Recommend refinements for existing service and/or care activities
- Propose and test innovative approaches
- Provide evidence to foster scaling up programs

With its focus on the field and use of practical, programmatic operations research, Horizons strives to determine the most effective approach to providing HIV prevention, care and treatment services. With input from a diverse group of Partners, as well as numerous in-country institutions (see listing in Section I.F.), our operations research is carefully designed to assess the impact as well as cost of programs and to increase the efficiency, effectiveness, and quality of HIV/AIDS services while making services more widely available and acceptable to those in need. Findings from Horizons studies and research tools we've developed have been widely utilized to develop policy, guide program strategies, strengthen voluntary counseling and testing, and improve service delivery.

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<sup>1</sup> Cooperative Agreement HRN-A-00-97-00012-00: Global Leadership, Research and Development – Best Practices in HIV/AIDS

<sup>2</sup> International Center for Research on Women, PATH, The International HIV/AIDS Alliance, Tulane University, Family Health International, Johns Hopkins University

## B. Summary of Activities

Horizons has produced impressive research, in terms of both quantity and quality of output, the range of research topics and the impact of study results. Horizons studies directly respond to the President's Emergency Plan for AIDS Relief (PEPFAR) goals of treating 2 million people with antiretroviral therapy, preventing 7 million new infections, and providing care and support to 10 million people affected by HIV/AIDS. Specifically, Horizons contributes to these goals by conducting operations research to:

- Improve the coverage, quality and effectiveness of HIV/AIDS treatment
- Identify comprehensive approaches to HIV/AIDS prevention
- Expand efforts to provide care and support to those infected and affected by HIV/AIDS

Every study is designed to address operational, program, and policy-relevant issues related to HIV/AIDS that affect a large geographic area, build research capacity and interest in research findings, and promote utilization of operations research results to expand and improve program implementation

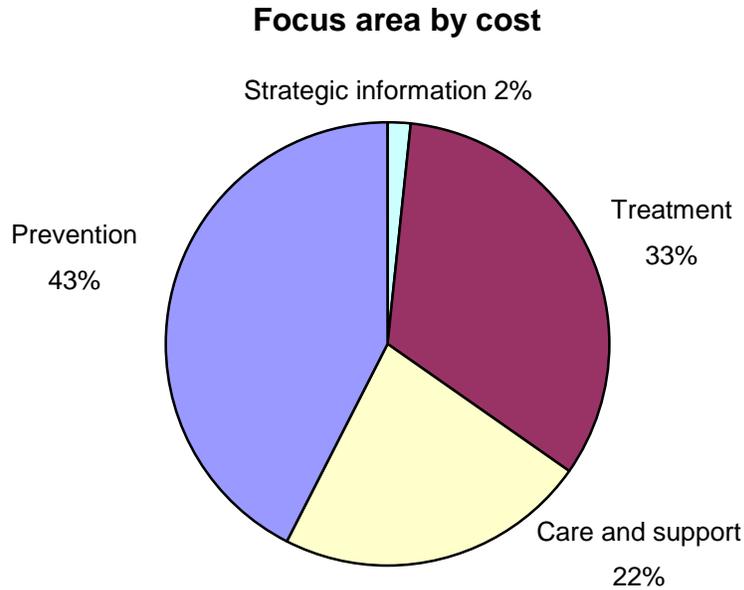
Horizons staff has worked closely with a broad range of local and international research partners and service delivery organizations, developing research capacity while collaborating with 400 groups in 28 countries (see complete listing in Section I.F.). The majority of research activities are carried out in Africa, followed by Asia and Latin America.

To date, Horizons has conducted 150 research-related activities in 28 countries, including 20 global and 7 regional projects, as shown on the following chart.

**Summary of Studies/Activities by Country**  
(8/1997 to present)

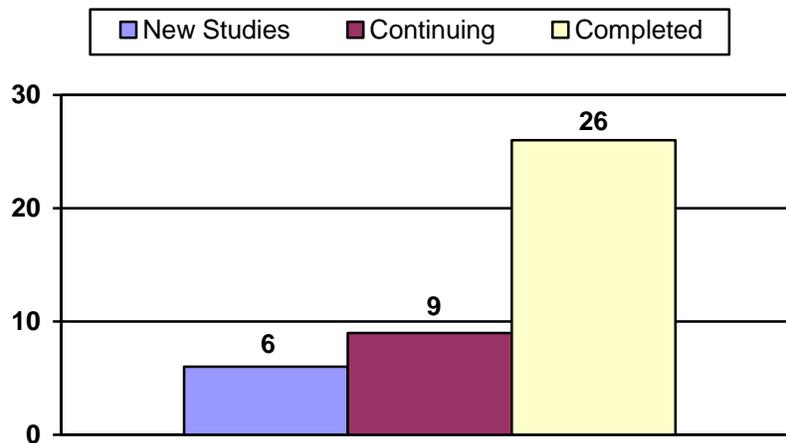
| <b>Country</b>     | <b>Number</b> | <b>Country</b>                | <b>Number</b> |
|--------------------|---------------|-------------------------------|---------------|
| Botswana           | 1             | Rwanda                        | 1             |
| Brazil             | 10            | Senegal                       | 6             |
| Burkina Faso       | 2             | South Africa                  | 22            |
| Cambodia           | 1             | Swaziland                     | 1             |
| Dominican Republic | 1             | Tanzania                      | 4             |
| Ghana              | 1             | Thailand                      | 7             |
| India              | 10            | Uganda                        | 6             |
| Kenya              | 22            | Vietnam                       | 3             |
| Madagascar         | 1             | Zambia                        | 9             |
| Malawi             | 1             | Zimbabwe                      | 7             |
| Mexico             | 1             | Africa Region                 | 5             |
| Nepal              | 2             | Interregional                 | 2             |
| Nicaragua          | 1             | (Brazil, Burkina, Ecuador,    |               |
| Nigeria            | 1             | Ghana, India, Latvia, Zambia) |               |
| Pakistan           | 1             | Global                        | 20            |
| Paraguay           | 1             |                               |               |
|                    |               | <b>TOTAL</b>                  | <b>150</b>    |

The breakdown of 41 Horizons studies during this reporting period based on the cost of carrying out these activities is shown in the following chart.



The following graph shows the number of study activities initiated, continuing and completed during this reporting period (N=41).

**Horizons Studies – October 1, 2006 – September 30, 2007**



In the period covered by this report, Horizons studies continued to focus on areas critical to preventing new HIV infections, expanding access to antiretroviral (ART)

treatment for those in need, and providing care and support to people living with HIV and their affected families and communities. Horizons conducted multiple studies in different geographic locations in order to examine regional differences and look for results with cross-cultural programmatic relevance. These research areas include:

- Testing strategies to increase adherence to highly active antiretroviral treatment, and expanding adult and pediatric ART services (India, Kenya, South Africa, Thailand, and Zambia)
- Examining innovative approaches to comprehensive prevention including promotion of the ABCs, STI control and prevention for people living with HIV, mobile populations, and men who have sex with men (Brazil, Ghana, Kenya, Senegal, and South Africa)
- Testing approaches to mitigate the impact of HIV/AIDS on special population groups such as elderly caregivers, teachers, health care workers, and youth-headed households (Kenya, Rwanda, South Africa, and Zambia)
- Replicating and scaling up successful interventions from the first phase of Horizons in the areas of PMTCT, youth involvement in care and support, and men who have sex with men (Botswana, India, Kenya, Senegal, South Africa, Swaziland, and Zambia)
- Focusing on the role of men and gender norms in the prevention of HIV transmission (Brazil, India, Kenya, Senegal, and Tanzania)
- Reducing stigma as an obstacle to effective diagnosis, treatment, and prevention of HIV/AIDS (Kenya, Tanzania, and Vietnam)

Funds have been provided through country operational plan budgets, specifically from USAID Missions in Kenya, South Africa and Vietnam (see figure in Section III.C.). Horizons staff work closely with each Mission to ensure that studies funded through this mechanism respond not only to the specific country plan and needs but also contribute to a larger global agenda of strengthening HIV programs.

## **C. Horizons Accomplishments**

### **Horizons research gets global attention and has measurable influence**

We promote utilization of study findings through a very active publication and dissemination program. Horizons results are disseminated through in-country meetings at the conclusion of each study, through peer-reviewed articles, Research Summaries, Research Updates, CDs, and final reports. Articles based on Horizons study findings now appear regularly in Global AIDS Link and SAfAIDS.

Horizons publications and study results are highly relevant to decision makers, implementers, and the media. Results of studies in the area of gender as a factor in HIV risk and prevention influenced OGAC to direct more attention and allocate funds to address gender-related issues. An expert meeting held in 2006 identified three gender priority areas: (1) shifting harmful gender norms and perceptions of masculinity, particularly through working with men, (2) confronting gender-based violence, and (3) meeting the health and economic needs of vulnerable girls and women. Horizons'

operations research studies in Brazil and India were highlighted as key examples of successful strategies; results of these studies contributed to the formulation of this OGAC priority.

A Horizons study on the sexual and reproductive health needs of men who have sex with men (MSM) in Kenya contributed to the National AIDS Control Council (NACC) taking the bold step of explicitly including MSM as a 'vulnerable group' in the most recent national HIV/AIDS strategy (*The Kenya National HIV/AIDS Strategic Plan 2005/6-2009/10*). Kenya is developing a National HIV/AIDS Action Plan for Men who have Sex with Men, one of the first in sub-Saharan Africa. An intervention study addressing the sexual and reproductive health needs of MSM in Senegal fostered inclusion of MSM as a target vulnerable group in the 2006-2010 National HIV/AIDS Program Framework, resulting in direct government funding for MSM programs. Service delivery for MSM is now included in requests for assistance from local and international non-governmental organizations.

Horizons tools—both research and intervention—also have global impact. The original 4,000 copy print run of the Horizons publication *Ethical Approaches to Gathering Information from Children and Adolescents in International Settings: Guidelines and Resources* was disseminated in less than ten months. We have since reprinted 3,500 copies. Requests from around the world are received weekly, including requests for multiple copies for wider dissemination. For example, the Director of Graduate Studies of Healthcare Sciences at the University of Wales requested 200 copies to disseminate at talks he gives in the UK on research ethics.

Manuals for facilitating an intervention to encourage more gender equitable norms among young Indian men, developed by Horizons staff and collaborators on the basis of Horizons studies in Brazil and India, have been widely distributed by the Director General of the National AIDS Control Organization of India. The manual has been used to initiate dialogue and as a resource for networks of agencies, groups and individuals who work on issues concerning men and boys.

The Technical Advisory Group of the Interagency Gender Working Group hailed the 24-item Gender-Equitable Men (GEM) Scale developed by Horizons and partners as an important research tool. The scale, which Horizons piloted in Brazil and adapted for the Indian context, was subsequently adapted by other organizations for use in more than ten countries, including Ethiopia, Nepal, Mexico, and the United States. Horizons receives weekly requests for the scale, especially from NGOs who find it easy to use for evaluating their programs.

### **Horizons leads with innovative HIV/AIDS operations research**

Horizons initiated research with direct policy implications on a number of cutting-edge topics as a result of recommendations resulting from expert consultative meetings. Examples include two studies on the topic of food security and HIV that explored the urgent question of how to 'put food on the table' and provide nutritional support beyond the distribution of food and nutrition supplements. In Uganda, Horizons and partners developed and tested strategies to link knowledge and technologies from different sectors (e.g., HIV/AIDS, agriculture, nutrition) in order to improve the ability of vulnerable individuals to consume a sufficient quantity and quality of food to meet their

daily needs. Horizons research in Kenya and Zambia explored the role played by livelihood strategies in the ability to achieve food security to maintain nutritional status among antiretroviral patients.

Another study helped to build the capacity of faith-based organizations to deliver mutual monogamy messages to members of eighteen churches in the Eastern Cape area of South Africa. A curriculum was developed, based on behavior change theory and formative research, covering a wide range of topics, including HIV transmission, gender dynamics, and couple communication. This was used to train church leaders, who then facilitated group workshops and delivered sermons on these topics. A survey administered to evaluate the impact of this found significant behavior change. Lessons learned are being used to replicate the program in other churches in South Africa.

Mothers2mothers (m2m) is a clinic-based peer support program that provides education and psychosocial support to HIV-positive pregnant women and new mothers, helps women access existing PMTCT services, and follows up mothers and infants after delivery. The Horizons Program, working with Health Systems Trust, completed the first evaluation of m2m as it scaled-up services in the KwaZulu-Natal Province of South Africa and documented that participating postpartum women were significantly more likely to report disclosure of HIV status to at least one individual; CD4 testing during pregnancy; Nevirapine receipt for mother and infant; and an exclusive method of infant feeding. Furthermore, they were less likely to report feeling alone in the world, overwhelmed by problems, and hopeless about the future. These results suggest that the m2m model of peer support increases uptake of PMTCT services, contributes to reducing mother-to-child transmission, and improves the mental health and access to HIV care for HIV-positive women. Based on the Horizons study results, the m2m program is being scaled up in several sub-Saharan African countries.

#### **D. Dissemination of Research Findings**

Dissemination of research findings and recommendations continues to be a major area of focus. During the period covered by this report, the Washington-based Horizons Communications, Dissemination, and Utilization team (CDU) produced numerous reports, research summaries, newsletters, and other print materials, including posters used at regional and international conferences. In addition, Horizons-based field staff organized a number of meetings/seminars around specific themes for the benefit of policy-makers, donors, and others who are involved in HIV/AIDS activities. Horizons' dissemination activities reach thousands of individuals via the website, where research findings are available in detailed as well as summary format. A news capsule entitled "On the Horizons" is produced periodically and sent via email to an ever-expanding group list of service providers, policy-makers, and colleagues working in the HIV/AIDS area. These dissemination efforts are a crucial component of our program, reaching out to the widest possible audience, seeking to encourage the use of Horizons research results for maximum impact on prevention, treatment, and care activities.

Reports on research findings are published and widely disseminated in all regions of the world via end-of-project workshops and at numerous national and regional conferences. During this period, Horizons participated in the PEPFAR Implementer's Conference in

Kigali, Rwanda (6 orals and 2 posters) and the American Public Health Association's 135th Annual Meeting and Exposition in Washington, DC (4 orals and 10 posters).

In addition, information from Horizons studies is disseminated via the Population Council's website. Many thousands of views have been registered since we began tabulating those statistics in January 2003.

Horizons produces a research summary for wide distribution on each research activity upon its completion. In addition, depending on the topic and the demand, a longer research report is also prepared. During this period, Horizons produced publications (either a summary, full report, or both) on such key research topics as prevention of mother-to-child transmission, gender norms, care and support, most at risk populations, treatment education, health workers, alcohol and voluntary counseling and testing, youth, food security, and orphans and vulnerable children. Horizons also produced two editions of the newsletter (*Horizons Report*); one on prevention of mother-to-child transmission and another on HIV testing.

Horizons presents major findings via peer-reviewed journal articles. To date, a total of 47 papers have been published in peer-reviewed journals and another seven have been accepted for publication. During the reporting period, papers on Horizons studies have appeared in *AIDS*, *AIDS and Behavior*, *AIDS Care*, *Infant Mental Health Journal*, *Journal of Health Communication*, *Men and Masculinities*, and *Reproductive Health Matters*. Horizons also works with international and regional newsletters, such as *AIDS Link* and *SAfAIDS News*, to publish articles on Horizons studies.

## **E. Information and Highlights from Partner Organizations**

Institutional partners are an integral part of the Horizons Program, essential to the conduct and monitoring of our operations research activities. Each partner plays an important role and brings unique skills that no one partner alone could offer. Together, the partners have developed professional working relationships that benefit from open communication and close collaboration.

Major areas of work and collaboration of Horizons' partners during the past year are discussed below.

### **Family Health International (FHI)**

FHI and Population Council have a history of successful collaboration in the area of economic evaluation of family planning and HIV/AIDS programs and services in many areas of the world. As a Partner in the Horizons Program, FHI staff (Drs. Barbara Janowitz, John Bratt, and Rick Homan) carried out evaluations tailored to specific interventions, including:

- Assessment of intervention costs
- Cost and revenue analyses for sustainability (including willingness-to-pay and household income and expenditure surveys)
- Estimation of the unit cost of services or persons reached
- Cost-effectiveness studies

With FHI input into ongoing studies complete, the partnership ended on March 31, 2007. During this reporting period, the following studies were brought to conclusion:

- Cost-effectiveness of PMTCT Promotion, Kibera, Kenya. FHI submitted a final report on the cost analysis in April 2007. The planned cost-effectiveness analysis could not be performed, due to problems with measurement of effectiveness.
- Straight Talk Campaign Evaluation, Uganda. Rick Homan helped organize program and financial data to enable Straight Talk Foundation to assess the cost of their programs and relative cost-effectiveness of their interventions. Technical assistance was provided both on-site and via email. The final report for this project was submitted in April 2007. Among other findings, it was shown that the use of radio was a more cost-effective means of reaching persons than print media (11 cents vs. 24 cents per year per person reached).
- Food Security in Zambia and Kenya. In consultations with Fiona Samuels of Overseas Development Institute, Rick Homan provided computer codes to facilitate measuring food poverty based on household composition and income streams. These were subsequently used to select samples of clients for further analysis, specifically in the cohort from the Mombasa ARV program.
- HIV Prevention, Testing, Treatment Needs of Truck Drivers, Brazil. FHI helped to assess the cost of approaches to providing HIV/AIDS education to truck drivers in Brazil. The final report was submitted in December 2006. The cost of setting up the program was almost \$30,000. Once established, the cost per client served with VCT services was \$45. While higher than expected, the full cost of the comprehensive program was loaded on the output measure of persons receiving comprehensive VCT services or persons recruited. This cost could be significantly reduced taking into account other services received (e.g. outreach education, free condoms, blood pressure measurement) and other truckers reached.
- OVC Rwanda. FHI provided technical support to Tulane University on an OVC intervention project in Rwanda. Final data for preparing a cost analysis was not received from Tulane prior to expiration of FHI's partnership.
- Introduction of Anti-Retrovirals, Mombasa, Kenya. Results of the cost of introducing an ARV program at Coast General Provincial Hospital in Mombasa, Kenya were disseminated in two venues in October 2005. Rick Homan highlighted the resources, financial and otherwise required to support the introduction of ARVs in a provincial hospital. Data from this study was analyzed, focusing on the economic impact on households of receiving ARVs on households. Briefs for the Mombasa components were completed earlier; the last version on Household Economic Impact will be finalized in October 2007.

### **International Center for Research on Women (ICRW)**

ICRW seconded two staff to Horizons: (1) Research Utilization Director Ellen Weiss is part of the Horizons Management Team. As supervisor of the communications and dissemination team, she is responsible for technical review of all Horizons publications, including research reports, study summaries, synthesis papers, and newsletter articles, and for implementation of strategies to foster utilization of Horizons' research findings.

(2) Tobey Nelson focuses on a number of youth-related studies in South Africa and Uganda.

In addition to routine duties, during this reporting period ICRW staff carried out a number of key activities, such as developing, reviewing, and presenting research proposals; monitoring study progress; participating in consultative meetings; providing technical support to research teams for developing data collection instruments and evaluation plans, analyzing data and writing research reports; and presenting data from Horizons studies at seminars and conferences.

Specific work included:

- AB Life Skills study, South Africa: presented proposal at Population Council's IRB; monitored Phase I (module development and pre-testing); provided technical support to colleagues in South Africa (organizing meetings, designing work plans, redesigned the quantitative instrument).
- Youth Caregivers study, South Africa: developed data collection plan; designed end line data collection instrument; helped monitor end line data collection, began analysis of end line data.
- Straight Talk, Uganda: Conducted data analysis and write up of the Situation Analysis component.

ICRW staff also wrote or contributed to Horizons publications, such as:

- Twice-yearly issues of Horizons newsletter: "Expanding HIV Testing and Counseling" (December 2006) and "Strengthening PMTCT Programs" (June 2007)
- Research summaries and updates, including preparedness of Kenyan health workers to deliver HIV/AIDS services, alcohol counseling and VCT services in Kenya, reaching truckers in Brazil with HIV services, reducing risk behavior among vulnerable populations in India, and reducing stigma in Vietnam hospitals
- Research reports, including: Kenya Girl Guides: "Beacon of Hope" evaluation and "The Impact of Straight Talk: Behavior Change through Mass Media in Uganda."
- Case study review and revision on the Uganda food security study
- Abstracts written for the 3rd South African Conference on HIV/AIDS: "Developing a Curriculum Module Focusing on Abstinence and Faithfulness" and "Utilizing Youth Caregivers to Address Needs of OVC"
- Abstract review of Horizons staff submissions to APHA and Global Health meetings
- Papers co-authored, including one for UNESCO on AIDS treatment education (November 2005) and one for UNAIDS on creating an enabling context for girls and women to prevent HIV infection (September 2007)

### **International HIV/AIDS Alliance**

The AIDS Alliance approach is based on evidence that HIV/AIDS services and activities are particularly effective when carried out by local organizations that are guided and supported by local people. These activities are linked to the Alliance's network of

information, expert technical support and lessons learned on HIV/AIDS at the national, regional and global level. The Alliance is active in more than 40 countries.

The Alliance contributes to Horizons through the involvement of its Secretariat, especially the Research, Evaluation and Learning team, and also country-level staff. After leaving the Alliance in January 2006 to join ODI, Fiona Samuels continued to manage the two major studies listed below, with a percentage of her time funded through the Alliance/Horizons partnership. In addition, she serves as backup on a number of other studies, based in the Alliance secretariat in Brighton.

In particular, the following has been achieved over this period:

- Reducing HIV risk behaviors among key populations by strengthening programs through community involvement, India. Part of a broader Gates-funded initiative in India (Frontiers Prevention Project-FPP), this period saw the completion of a second round of data collection carried out by IHS, the same local research institute that undertook the first round. At a meeting held in Hyderabad in July 2007, the IHS research team, along with Fiona Samuels and Ravi Verma (Horizons/New Delhi) discussed findings, the desired focus and structure for the final report, and timing. The final report, including baseline and end line findings, was reviewed and edited by Fiona and Ravi. Due to delays in completing fieldwork and analysis, the dissemination budget for this study was transferred to the partnership subagreement.

In addition to the chapter on stigma among FSWs and MSM in a book edited by KIT in early 2006, two Research Updates were produced: 1) one was disseminated at a meeting in New Delhi in the spring of 2006; 2) another was prepared on the qualitative/quantitative triangulation work and disseminated during a meeting with key stakeholders from the FPP in November 2006. Findings from the study focusing on MSM will be presented at a satellite session co-hosted by the Alliance and Population Council, at the APCSRH meeting to be held in Hyderabad in October 2007.

- Community Education and Referral: supporting ARV adherence and HIV prevention in Zambia. Following the second round of data collection (July 2006), data analysis was completed. A first analysis workshop was held in late 2006. The report was completed and three dissemination events took place, two in Zambia and one in the UK. The final report is under review; a Research Summary will be produced.

A half-day dissemination event will be held in Brussels in February 2008, targeting EU policy makers. At this event, Horizons (represented by Vaishali Mahendra from Population Council New Delhi) and the Alliance will present results of their collaborative research cited above. Additional research findings of relevance will be presented, such as the study entitled "Reducing HIV Risk Behaviors among Key Populations" that was nested in the FPP/India study as well as wider stigma work done by Horizons.

## **PATH**

PATH has provided leadership and technical support for Horizons behavior change communication (BCC) projects through collaboration in strategic planning and program development, and in the design and development of behavioral and social science research directed at the prevention and mitigation of HIV and AIDS.

Until personnel changes in August 2007, Horizons benefited from two full-time research staff seconded by PATH to Horizons. Dr. Julie Pulerwitz worked with Horizons in the Council's Washington, DC office from September 1999 until August 2007, when she rejoined PATH staff. As Horizons' Director of Research, she was responsible for the overall research portfolio, as well as being either principal or co-investigator on HIV prevention studies in Brazil, Nicaragua, India, Kenya, South Africa and Vietnam. Dr. Karusa Kiragu joined PATH in October, 2001. After relocating to Nairobi later that year, Dr. Kiragu assumed the role of Horizons team leader in Kenya. She became a staff member of Population Council on August 1, 2007.

In addition to her portfolio as Research Director, Dr. Pulerwitz led research to promote equitable gender dynamics among young men and women as an HIV prevention strategy in Brazil and India. She collaborated on a study in Vietnam to evaluate an intervention to reduce HIV-related stigma and discrimination in the healthcare setting. Dr. Pulerwitz and PATH Senior Advisor Dr. Mary Ellsberg provided technical assistance to Leon University and "Puntos de Encuentro" Foundation (Nicaragua), and drafted the final report on the study to evaluate the impact of multi media interventions on stigma, gender norms, and HIV risk among young men and women. During this reporting period, Dr. Pulerwitz submitted or had accepted for publication seven articles and reports and eight presentations at international conferences.

Dr. Kiragu worked on several operations research activities in Kenya and elsewhere in the region. She formulated and supervised a study testing the feasibility of alcohol risk reduction in VCT, and also a study examining the feasibility of HIV self testing among health workers. She completed several reports including an evaluation of the renowned Straight Talk campaign in Uganda, and the Kenya Girl Guides Association peer education program in Kenya. She completed several other studies including an investigation on the psychosocial burden of health care workers, preparedness of Kenyan health workers to diagnostic testing and counseling, and a study examining an HIV workplace program for teachers. She started a study on barriers to pediatric HIV testing and treatment, and is presently working with partners to formulate an appropriate response. During the report period, Dr. Kiragu submitted an article to peer reviewed journals, and was the primary or co-author on 19 presentations, including posters and oral presentations at HIV/AIDS conferences in Nairobi, Toronto, Durban and Washington DC.

## **Johns Hopkins University (JHU)**

Under this partnership subagreement, completed in May 2007, Drs. Michael Sweat and Deanna Kerrigan of the Bloomberg School of Public Health provided valuable technical input to Horizons. Their areas of expertise included HIV voluntary counseling and testing, cost-effectiveness analysis of HIV behavioral interventions, behavioral aspects of HIV prevention of mother to child transmission programs, HIV and violence, structural

and environmental interventions, and the impact of HIV/AIDS treatment on risk behavior.

Collaborative projects included: (1) a systematic review of HIV behavioral preventions, in collaboration with WHO and the National Institute of Mental Health, and (2) data analysis from the sex worker intervention trials previously studied by Horizons.

- Synthesis Project. Evidence of HIV behavioral interventions in developing countries around seven topics was systematically reviewed. After Horizons support ended, funding was secured from the National Institutes of Health.
- Analysis of Dominican Sex Worker Data. The Hopkins team completed an efficacy trial of the 100% condom intervention program conducted in two cities in the Dominican Republic. A final report was submitted and several manuscripts published on study results. Michael Sweat's analysis of the cost-effectiveness of the intervention was published in the Journal, Health Education Research.

During this reporting period, Dr. Clare Barrington conducted secondary analysis of the 100% condom program to explore the question: "Does the positive relationship of time (e.g. the intervention effect) on condom use with all partners in the last month vary based on whether women have a regular partner or no?" Independent variables identified as significantly changing from pre to post-intervention in either city included (1) education, (2) marital status, (3) having a regular partner, (4) number of client dates in last week, and (5) total number of sex partners in past month. The intervention appears to have worked best for women in Santo Domingo without a regular partner. In Puerto Plata, the intervention appears to have worked for both groups, but more so for women with a regular partner.

Another way to articulate these results is: the policy component in Puerto Plata seems to have had an effect on the negative influence of trust on consistent condom use, whereas in Santo Domingo, without the policy component, that did not come to pass. Implications of this finding lend further support to the importance of environmental-structural interventions for HIV prevention in the context of female sex work. A paper for publication is being prepared.

### **Tulane University**

The Tulane University Department of International Health and Development has technical depth and a strong record in the areas of applied research, monitoring and evaluation, and information systems in HIV/AIDS, reproductive and adolescent health. Tulane has developed and implemented operations research studies in the areas of stigma and discrimination and mitigation of the orphan crisis.

Work was completed on the three-year study in Rwanda to assess the effectiveness of a community-based adult mentorship program on the emotional well-being of youth heads of households and other children in Gikongoro. The study was done in collaboration with Rwanda School of Public Health (RSPH) and World Vision. The latter is in the process of expanding the Mentorship program to all fifteen Area Development Program (ADP) communities where they have a presence. The team is also working on writing papers for publication based on this study.

Tulane provided technical assistance on two other studies, AMKENI (Kenya) and Tanzania stigma.

Tulane's partnership subagreement with Population Council expired in July 2007.

### **Population Council**

Population Council has overall responsibility of the management and technical leadership of the Horizons Cooperative Agreement. Naomi Rutenberg, Program Director, and Beverly Ben Salem, Operations Director, along with other members of the management team, provide overall technical, administrative and financial management of Horizons, as well as ensuring good coordination with Partner institutions. Council staff based in DC and field offices take the lead in several key technical areas, including prevention of mother to child transmission (Kenya, Botswana, Swaziland, South Africa), HIV prevention with vulnerable populations (Brazil, Senegal, Kenya, India), pediatric AIDS (South Africa, Kenya), HIV/AIDS medication and adherence to treatment (Thailand, India, Kenya), and orphans and vulnerable children (Zambia, South Africa).

Horizons' Communications, Dissemination, and Utilization team is comprised of three staff members under the leadership of Ellen Weiss. Through their work, Horizons publications are designed and posters printed in-house. To ensure that study findings are widely disseminated, CDU coordinates all domestic and international conference participation. Similarly, CDU manages the list and website, facilitating the dissemination of information to the field.

## F. Other Collaborating Entities

### Global

Academy for Educational Dev.  
Family Health Int'l  
Ford Fdn.  
Health Communication Partnership  
InterAction  
Int'l Ctr. for Research on Women  
Int'l HIV/AIDS Alliance  
Johns Hopkins Univ.  
London School of Health & Tropical  
Medicine  
Management Sciences for Health  
Overseas Dev. Inst.  
Population Services Int'l/AIDSMark  
PATH  
Tulane University  
United States Agency for Int'l Dev.  
World Vision

### Multilateral

Joint UN Prog. on HIV/AIDS  
UN Children's Emergency Fund  
UN Dev. Fund for Women  
UN Educational, Scientific, & Cultural  
Organization  
UN Population Fund  
World Health Organization

### Africa Region

Network of AIDS Researchers in  
East & South Africa  
Project Support Group  
Regional AIDS Training Network  
Southern Africa AIDS Info  
Dissemination Service

### Botswana

Botswana Government & Centres for  
Disease Control & Prevention  
Botswana Nat'l PMTCT Prog.,  
Family Health Division,  
Ministry of Health  
Premiere Personnel

### Brazil

Agência Rodolfo Teófilo  
Ceará Unido Contra as DST  
Centers for Disease Control and  
Prevention  
Centro de Comunicação para o  
Desenvolvimento  
DKT  
Durex  
EADI Customs Administration  
Estudos e Comunicação em  
Sexualidade e Saúde Reprodutiva  
Federal Univ. of Ceará  
Goodyear  
Inst. for Social Dev. Studies  
Instituto NOOS  
Instituto PROMUNDO  
John Snow Brasil  
MacArthur Fdn.  
Ministry of Health: National Program  
of STD and AIDS  
Municipal Program of STD & AIDS of  
Corumbá  
Municipal Secretariats of Health

Oswaldo Cruz Fdn. – FIOCRUZ  
Pathfinder do Brasil  
Programa de Apoio ao Pai  
Programa Integrado de  
Marginalidade  
Reprolatina  
Salud y Género  
Sociedade de Estudos E Pesquisas  
em Drogadiccao  
SSL International  
State of Ceará Secretariat of Health  
State STD and AIDS Program,  
MatoGrosso South  
Summit Foundation  
Univ. of Campinas:  
Centro de Pesquisas em Saúde  
Reprodutiva de Campinas  
Dept. of Clinical Medicine  
Dept. of Obstetrics & Gynecology

### Burkina Faso

Appui Moral Matériel et Intellectuel à  
l'Enfant  
Association African Solidarité  
Association Laafi la Viim  
Association Responsabilité Espoir,  
Vie, Solidarité +  
Global Network of People Living with  
HIV/AIDS  
La Bergerie-Foi, Univers,  
Compassion  
Laboratoire de Santé  
Communautaire  
Ministry of Health:  
Community Health Lab  
Directorate of Family Health  
Mwangaza Action  
Private Community Initiative  
Univ. of Ouagadougou:  
Cellule de Reproduction – Health  
Research Unit  
Unité d'Enseignement et de  
Recherche en Demographie

### Cambodia

Cambodian Researchers for Dev.  
Khemara  
Medecins Sans Frontières  
Ministry of Health  
National AIDS Program

### Dominican Republic

Centro de Orientacion y  
Investigacion Integral  
Centro de Promoción y Solidaridad  
Humana  
Instituto Dermatológico y Cirugía de  
Piel  
STD Control Program

### Ecuador

Fundación Dios, Vida y Esperanza  
Fundación Esperanza  
Fundación Siempre Vida  
Fundación Vivir  
Juan Cesar Garcia Inst.  
Kimirina

### Ghana

Ghana Nat'l Chemical Sellers Assn.  
Ghana Social Marketing Foundation  
Enterprises Limited  
Institute of Statistics, Social and  
Economic Research  
Ministry of Health:  
Family Health Division  
Ghana Health Service  
Health Research Unit  
National AIDS Control Program  
Public Health Division  
Pharmacy Council  
University of Ghana Medical School:  
OB/GYN Dept.  
West Africa Project to Combat AIDS  
and STIs

### India

Administrative College of India  
All India Inst of Medical Sciences  
Asha Karana  
Batra Hospital and Medical  
Research Centre  
Center for Int'l Community Health  
Committed Communities Dev Trust:  
Project CHILD  
Committee for Resource  
Organization for Literacy  
DAUD Center for Rural Dev.  
DAUD Memorial Trust Gorakhpur  
Employees State Insurance  
Corporation  
Freedom Foundation  
Institute of Economic Growth  
Inst. of Health Systems, Hyderabad  
Instituto PROMUNDO  
Int'l Institute for Population Sciences  
Lady Hardinge Medical College  
MacArthur Foundation  
Maharashtra Network for Positive  
People  
MAMTA Health Institute for Mother  
and Child  
Medical and Allied Incorporated  
National AIDS Control Organization:  
Financial Management System  
National Council of Applied  
Economic Research  
National Institute of Public Health  
Northern Railway Hospital, Delhi  
Ruby Hall Clinic & Grant Med  
Foundation, Pune  
Salvation Army Mumbai HIV/AIDS  
Community Development Program  
Sangath Society for Child  
Development Family Guidance  
SHADOWS  
Shanthi Bhavan  
Social Awareness Service Org.  
Society for Development, Research  
and Training  
Society for Service to Urban Poverty  
Society of Friends of Sassoon  
Hospitals  
Socio-Legal Aid Research and  
Training Center

**India, continued**

SSL International  
St. Joseph of Cluny Hospital  
Tata Institute for Social Sciences  
University of Madras  
University of Pune  
Y.R. Gaitonde Centre for AIDS  
Research and Education

**Jamaica**

Ministry of Health

**Kenya**

AMKENI  
Arch Diocese of Nairobi Eastern  
Deanery AIDS Relief Program  
Bamburi Health Centre  
Bomu Mkomani Clinic  
Christian Hospitals Assn. of Kenya  
Ctr. for Disease Control & Prevention  
Coast Provincial General Hospital  
Crystal Hill Ltd.  
Elizabeth Glaser Pediatric AIDS Fdn.  
Engender Health  
Galebitra  
Government of Kenya  
Institute of African Studies  
Int'l Center for Reproductive Health  
International Medical Corporation  
Ishtra  
Kenya AIDS NGOs Consortium  
Kenya Assn. of Prof. Counselors  
Kenya Girl Guides Association  
Kenya Institute of Education  
Kenya Network of Women with AIDS  
Kenya Scouting Association  
Kenyatta National Hospital:  
Adolescent Counseling Clinic  
Kibera Community Self-Help  
Programme  
Likoni Health Centre  
Liverpool VCT and Care  
Magongo Health Centre  
Management Sciences for Health –  
Rational Pharmaceutical  
Management Plus  
Ministry of Education, Science and  
Technology  
Ministry of Health  
National AIDS and STD Control  
Programme  
National AIDS Control Council  
Plan International/Kenya  
Port Reitz District Hospital  
Riruta City Council Clinic  
Steadman Research Services Int'l  
St. Johns Community Center  
Teachers Service Commission  
University of Ghent  
University of Nairobi  
Wazu Dance Troupe

**Latvia**

Ministry of Health  
National AIDS Program

**Madagascar**

Abbott Laboratories  
Fikambanan'ny Vehivavy Mpiakatra  
An Tsambo Antsiranana  
Ministry of Health

**Malawi**

Save the Children US/Malawi

**Mexico**

Mexican Institute of Research on  
Family and Population  
National Institute of Public Health

**Nepal**

Asia Foundation

**Nicaragua**

Puntos de Encuentro  
Nat'l Autonomous Univ. of Nicaragua -  
León: Centro de Investigación de  
Demografía y Salud

**Nigeria**

Association for Reproductive and  
Family Health  
HIV Center/Columbia University

**Paraguay**

Center for Attention, Prevention, and  
Surveillance of boys, girls, and  
adolescents  
Ministry of Public Health & Welfare:  
National STI/HIV/AIDS Program  
Prevention Alto Paraná  
Program to Combat AIDS in Ciudad  
del Este

**Rwanda**

Rwandan School of Public Health  
World Vision/Rwanda

**Senegal**

Africa Consultants International  
African AIDS Research Network  
Alliance Nationale Contre le SIDA  
Center for Ambulatory Care  
Centre Régional "Paul Corréa" de  
Formation sur le MST et la SIDA  
ENDA Santé  
Ministry of Health & Prevention:  
STI/HIV/AIDS Division  
Organisation Panafricaine de Lutte  
contre le SIDA au Senegal  
Programme Nationale de Lutte  
Contre le SIDA  
Senegal Nat'l AIDS Control Council  
Université Cheikh Anta Diop, Institut  
des Sciences de l'Environnement

**South Africa**

Age-in-Action  
AIDS Care Training and Support  
AIDS Work Group  
Alice Hospice  
Baragwaneth Hospital  
Butterworth Local Council of  
Churches HIV/AIDS Ministry  
Carletonville AIDS Action Committee  
Cecilia Makiwane Hospital  
Church Mission Ministries  
Council for Scientific and Industrial  
Research  
Dept. of Education: Mpumalanga  
Department of Health:  
Provincial Health Departments of  
Eastern Cape, Gauteng, KwaZulu

Natal, Limpopo, Mpumalanga, and  
North West  
Mpumalanga Provincial Support  
Association  
National Department of Health  
Department of Social Dev & Welfare  
Development Research Africa  
Dioceses of Rustenberg  
DRA-Development  
Dutch Reformed, Lutheran, and  
Roman Catholic Churches of  
Carletonville  
East London (CM)  
Eastern Cape Provincial Council of  
Churches  
Elizabeth Glaser Pediatric AIDS Fdn.  
ESKOM  
Gold Fields, Ltd.  
Greater Involvement for People with  
AIDS  
Health Systems Trust  
Hope World Wide Program  
Human Services Research Council  
Institut National de la Santé et de la  
Recherche  
Italian Cooperative  
Living in Hope  
London School of Economics  
Maternal, Child & Women's Health  
McCord Hospital  
Medecins Sans Frontieres -  
Lusikisiki, Khayelitsha  
Medical Care Development Int'l  
Medical Research Council of South  
Africa  
Ministry of Health  
Mothusimpilo Intervention Project  
Nat'l Union of Mineworkers  
Nelson Mandela Children's Fund  
Partners Network  
Perinatal Health Research Unit  
Policy & Praxis  
Progressus  
Project Support Assn of South Africa  
Reproductive Health Research Unit  
Right to Care  
Royal Bafokeng Health Centre  
Sakhisiwze  
Save the Children  
South African Institute for Medical  
Research  
South African Council of Churches  
St. Mary's Hospital  
University of Cape Town  
University of Free State  
University of Natal – Durban  
Tapologo HIV/AIDS Programme  
The Mothers' Program  
Tholulwazi  
Umuzi Wabantu Dev. Initiative  
Valley Trust

**Swaziland**

Basic Support for Institutionalizing  
Child Survival  
Central Statistical Office  
Elizabeth Glaser Pediatric AIDS Fdn.  
Linkages Project  
Ministry of Health and Social Welfare  
USAID/Regional HIV/AIDS Program

## **Tanzania**

DATEX  
Kimara Peer Educators and Health Promoters Trust Fund  
Muhimbili Health Information Centre  
Muhimbili University College of Health Sciences  
The Tuelewane Project  
Univ. of Dar es Salaam Drama Dept.

## **Thailand**

American International Assurance  
Chiang Mai University:  
Department of Psychiatry in the Faculty of Medicine  
Research Inst. for Health Sciences  
Lampang Provincial Health Office  
Ministry of Education  
Ministry of Public Health:  
AIDS, TB and STD Bureau  
AIDS Division  
Center for Disease Prevention & Control, Region 10  
Pact  
Population and Community Development Association  
Thailand Business Coalition on AIDS  
The Northern NGOs Coalition on AIDS  
The Upper Northern Thai PLHA Network

## **Uganda**

AIDS Control Program  
AIDS Information Center  
Buganda Kingdom Youth Project Ctr.  
Department for Int'l Development  
Kitovu Hospital Mobile Home Care Programme  
Luwero Catholic Diocese  
Makerere University:  
Department of Sociology  
Institute of Social Research  
Ministry of Health  
Naguru Teenage Information and Health Center  
National Agricultural Research Organisation  
National Community of Women Living with AIDS  
Plan International  
Straight Talk Foundation  
The AIDS Support Organization

## **USA**

Academy for Educational Dev.  
Ctr. for Disease Control & Prevention  
Save the Children  
The Futures Group  
University of Alabama - Birmingham  
Univ. of California, San Francisco:  
Center for AIDS Prevention Studies  
Univ of North Carolina: MEASURE

## **Vietnam**

Haiphong TB & Pulmonary Hospital  
Ho Chi Minh City Labor Union  
Ho Chi Minh City Nat'l University:  
College of Social Sciences and Humanities  
Ho Chi Minh City Standing AIDS Bureau  
Inst. for Social Development Studies  
Quang Ninh TB and Pulmonary Hospital

## **Zambia**

Africa Directions  
Bwafwano Central Board (Mporokoso district)  
CARE International  
Catholic Archdiocese: Lusaka, Ndola, and Mansa  
Catholic Secretariat: Sacred Heart Sisters  
Central Board of Health / Zambia  
Copperbelt Health Education Project  
Development AID from People to People  
District Education Office, Mporokoso  
Family AIDS Caring Trust  
Family Health Trust  
FAPCAS  
Hope Humana  
Human Resource Trust  
Institute for Economic and Social Research  
Japan Int'l Cooperation Association  
Kara Counseling  
Kasama School of Nursing  
Linkages Project  
Luapula District AIDS Task Force  
Luapula Foundation  
Mantumbusa Community Club, Mansa  
Ministry of Education  
Ministry of Health  
Mutiti Community Youth Club  
Mwengu Social Health Research Ctr.  
National AIDS Control Programme  
Nat'l Food & Nutrition Commission  
Ndola Central Hospital  
Ndola District Health Management Team  
Network of Zambian People Living with HIV/AIDS  
Northern Province Health Education Project  
Project Concern International  
Salvation Army Chikankata Mission Hospital  
Society for Women Against AIDS, Mansa

St. Paul's Mission Hospital  
Support to the HIV/AIDS Response in Zambia  
Traditional Health Practitioners Assn. of Zambia  
Tropical Diseases Research Center  
University of Zambia  
University Teaching Hospital:  
Dept. of Obstetrics & Gynaecology  
Dept. of Pediatrics & Child Health  
Youth Forum Zambia  
Zambia Health Education and Communication Trust  
Zambia HIV MTCT Working Group  
Zambia Integrated Health Programme  
Zambia Medical Association

## **Zimbabwe**

Catholic Relief Services/STRIVE  
Concession District Hospital  
Development Alternatives, Inc.  
Hope for a Child in Christ  
Management Systems International  
Ministry of Health: Maternal and Child Health  
Nat'l AIDS Coordination Programme  
Regional Psychosocial Support Initiative for Children Affected by AIDS  
Salvation Army  
Step Forward, Abbott Laboratories Fund  
Target Research Incorporated  
University of Zimbabwe:  
Center for Population Studies Trust  
Dept. of Community Medicine  
Department of Psychology  
Zambuko Trust  
Zimbabwe AIDS Prevention Project  
Zimbabwe Association of Microfinance Institution

## II. PERFORMANCE REVIEW

### A. List of Technical and Analytical Documents and Presentations (October 1, 2006 - September 30, 2007)

#### Publications:

- Baek, Carolyn, Vuyiswa Mathambo, Sibongile Mkhize, Irwin Friedman, Louis Apicella, and Naomi Rutenberg. 2007. "Key findings from an evaluation of the mothers2mothers program in KwaZulu-Natal, South Africa," *Horizons Final Report*. Washington, DC: Population Council.
- Bharat, Shalini and Vaishali Sharma Mahendra. 2007. "Meeting the sexual and reproductive health needs of people living with HIV: Challenges for health care providers," *Reproductive Health Matters* 15(29, suppl 1): 93–112.
- Boris, Neil W., Tonya R. Thurman, Leslie Snider, Erin Spencer, and Lisanne Brown. "Infants and young children living in youth-headed households in Rwanda: Implications of emerging data," *Infant Mental Health Journal* 27(6): 584–602.
- Chinaglia, Magda, Sheri A. Lippman, Julie Pulerwitz, Maeve de Mello, Rick Homan, and Juan Díaz. 2007. "Reaching truckers in Brazil with non-stigmatizing and effective HIV/STI services," *Horizons Final Report*. Washington, DC: Population Council.
- Coon, Katharine, Jessica Ogden, John Odolon, Anthony Obudi-Owor, Charles Otim, James Byakigga, and Peter Sebanja. 2007. "Transcending boundaries to improve the food security of HIV-affected households in rural Uganda: A case study," *Horizons Final Report*. Washington, DC: Population Council.
- Geibel, Scott, Elisabeth M. van der Elst, Nzioki King'ola, Stanley Luchters, Alun Davies, Esther M. Getambu, Norbert Peshu, Susan M. Graham, R. Scott McClelland, and Eduard J. Sanders. 2007. "'Are you on the market?': A capture-recapture enumeration of men who sell sex to men in and around Mombasa, Kenya," *AIDS* 21(10): 1349–1354.
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- Institute for Social Development Studies, Horizons Program, and International Center for Research on Women. 2006. "Reducing HIV-related stigma and discrimination in Vietnamese hospitals [Vietnamese]," *Horizons Research Update*. Washington, DC: Population Council.
- Kaai, Susan, Carolyn Baek, Scott Geibel, Peter Omondi, Benson Ulo, Grace Muthumbi, Carol Nkatha, and Naomi Rutenberg. 2007. "Community-based approaches to prevention of mother-to-child transmission of HIV: Findings from a low-income community in Kenya," *Horizons Final Report*. Washington, DC: Population Council.
- Kerrigan, Deanna, Paulo Telles, Helena Torres, Cheryl Overs, and Christopher Castle. 2007. "Community development and HIV/STI-related vulnerability among female sex workers in Rio de Janeiro, Brazil," *Health Education Research*, published online ahead of print, 14 March.

- Khan, Hena, Alison Lee, and Ellen Weiss (eds.) 2006. "HIV testing," *The Horizons Report, December*. Washington, DC: Population Council.
- Khan, Hena and Ellen Weiss (eds.) 2007. "PMTCT," *The Horizons Report, June*. Washington, DC: Population Council.
- Kiragu, Karusa, Thabale Ngulube, Mutinta Nyumbu, Panganani Njobvu, Peter Eerens, and Chilufya Mwaba. 2007. "Sexual risk-taking and HIV testing among health workers in Zambia," *AIDS and Behavior* 11(1): 131–136.
- Kiragu, Karusa, George Odingo, Milka Juma, Jane Mbugua, Magdalen Waweru, Wamuyu Mahinda, Beatrice Mwaniki, Charity Muturi, Simon Ochieng, Tobey Nelson, and Ann McCauley. 2007. "Beacon of hope: Evaluation of the Kenya Girl Guides Association HIV/AIDS program for school children," *Horizons Final Report*. Washington, DC: Population Council.
- Lippman, Sheri A., Julie Pulerwitz, Magda Chinaglia, Alan Hubbard, Arthur Reingold, and Juan Díaz. 2007. "Mobility and its liminal context: Exploring sexual partnering among truck drivers crossing the Southern Brazilian border," *Social Science and Medicine* 65(12): 2464–2473.
- Mackenzie, Caroline and Karusa Kiragu. 2007. "Should voluntary counseling and testing counselors address alcohol use with clients? Findings from an operations research study in Kenya," *Horizons Research Update*. Nairobi: Population Council.
- Mahendra, Vaishali S., Rupa Mudoi, Archana Oinam, Venkat Pakkela, Avina Sarna, Sucheta Panda, Ashok Rau, L. Birendrajit Singh, and Naomi Rutenberg. 2007. "Continuum of care for HIV-positive women accessing programs to prevent parent-to-child transmission: Findings from India," *Horizons Final Report*. Washington, DC: Population Council.
- Ministry of Health Kenya, Horizons Program, and Centers for Disease Control and Prevention. 2006. "Preparedness for HIV/AIDS service delivery: The 2005 Kenya health workers survey," Nairobi: Ministry of Health Kenya.
- National AIDS and STD Control Programme; Ministry of Health, Kenya; Centers for Disease Control and Prevention; and Horizons/Population Council. 2007. "Preparedness of Kenyan health workers to deliver HIV/AIDS services," *Horizons Research Summary*. Washington, DC: Population Council.
- Padarath, Ashnie, Catherine Searle, and Eka Esu-Williams. 2006. "Understanding barriers to community participation in HIV and AIDS services: Final report," Johannesburg: Population Council.
- Population Council and Health Systems Trust. 2006. "Understanding barriers and challenges to effective community participation in the rollout of HIV/AIDS treatment and care services: Report on research results dissemination meetings," Johannesburg: Population Council.
- Population Council and Health Systems Trust. 2006. "Understanding barriers to community participation in HIV and AIDS services: Summary report," Johannesburg: Population Council.

- Pulerwitz, Julie and Gary Barker. 2007. "Measuring attitudes toward gender norms among young men in Brazil: Development and psychometric evaluation of the GEM scale," *Men and Masculinities* published online ahead of print, 18 May.
- Pulerwitz, Julie, Gary Barker, Márcio Segundo, Marcos Nascimento 2007. "Promovendo normas e comportamentos eqüitativos de gênero entre homens jovens como estratégia de prevenção do HIV/AIDS," *Horizons Final Report*. Washington, DC: Population Council.
- Samuels, Fiona, Perti Pelto, Ravi K. Verma, and C. K. George. 2006. "Social capital and HIV risk behavior among female sex workers and men who have sex with men in Andhra Pradesh: Insights from quantitative and qualitative data," *Horizons Research Update*. Washington, DC: Population Council.
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- Sarna, Avina and Ellen Weiss. 2007. "Current research and good practice in HIV and AIDS treatment education," paper prepared for the HIV and AIDS Treatment Education Technical Consultation, Paris, 22–23 November 2005.
- Sweat, Michael, Deanna Kerrigan, Luis Moreno, Santo Rosario, Bayardo Gomez, Hector Jerez, Ellen Weiss, and Clare Barrington. 2006. "Cost-effectiveness of environmental-structural communication interventions for HIV prevention in the female sex industry in the Dominican Republic," *Journal of Health Communication* 11(Suppl 2): 123–142.
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- Thurman, Tonya R., Lisanne Brown, Linda Richter, Pranitha Maharaj, and Robert Magnani. 2006. "Sexual risk behavior among South African adolescents: Is orphan status a factor?" *AIDS and Behavior* 10(6): 627-635.
- Verma, Ravi K., Vaishali S. Mahendra, Perti J. Pelto, Sarat C. Pradhan, and Vibha Singh. 2006. "Context and dynamics of male-to-male sexual behavior of truckers in India: Findings from a multi-site qualitative research study," *Research Brief*. New Delhi: Population Council.
- Verma, Ravi K., Julie Pulerwitz, Vaishali S. Mahendra, Sujata Khandekar, Gary Barker, P. Fulpagare, and S. K. Singh. 2006. "Challenging and changing gender attitudes among young men in Mumbai, India," *Reproductive Health Matters* 14(28): 135-143.

### **Presentations:**

#### **October 2006**

*What are HIV-positive Women's Fertility Desires and Demand for Family Planning? Insights from PMTCT Programs in Kenya and South Africa*, poster presentation by Carolyn Baek et al. at Linking Reproductive Health, Family Planning and HIV/AIDS in Africa, Addis Ababa, Ethiopia, 9–10 October.

#### November 2006

*Importance of Addressing Women's Own Health During HIV Counseling and Testing as Part of Prevention of Mother-to-child Transmission (PMTCT) Programs in Nairobi, Kenya*, poster presentation by Carolyn Baek et al. at the 134<sup>th</sup> Annual APHA Meeting, Public Health and Human Rights, Boston, MA, 4–8 November.

#### December 2006

*Does the PPTCT program facilitate access to HIV care and SRH services for HIV-positive women?*, oral presentation by Vaishali S Mahendra et al. at the Horizons Dissemination Meeting, New Delhi, India, 5 December.

*Exploring linkages between PPTCT and HIV care and reproductive health services for HIV-positive women and their families – Experiences from diagnostic research*, oral presentation by Vaishali S Mahendra et al. at the National PPTCT Workshop organized by International HIV/AIDS Alliance, New Delhi, India, 13–14 December.

#### January 2007

*Family planning practice among HIV-positive urban poor PMTCT clients in Nairobi*, oral presentation by Susan Kaai et al. at University of Nairobi STDs /AIDS Collaborative Group's annual review meeting, Nairobi, Kenya, 21–26 January.

*Alcohol-related intimate partner violence among VCT clients in Kenya Results of the Kenya Alcohol and VCT Study*, oral presentation by Karusa Kiragu et al. at University of Nairobi STDs /AIDS Collaborative Group's annual review meeting, Nairobi, Kenya, 21–26 January.

*Couple counseling and testing: an assessment of VCT clients in Kenya*, oral presentation by Karusa Kiragu et al. at University of Nairobi STDs /AIDS Collaborative Group's annual review meeting, Nairobi, Kenya, 21–26 January.

*Should VCT counselors address alcohol use among clients? Findings from a baseline study in Kenya*, oral presentation by Caroline Mackenzie et al. at University of Nairobi STDs/AIDS Collaborative Group's annual review meeting, Nairobi, Kenya, 21–26 January.

*HIV risk behaviors of men who sell sex to men in Mombasa, Kenya*, oral presentation by Scott Geibel et al. at the University of Nairobi STD/HIV Collaborative Group 2007 Annual Review Meeting, Nairobi, Kenya, 22 January.

#### March 2007

*From PPTCT to PPTCT Plus: Improving Access to Treatment, Care, and Support for HIV-positive Women and Their Families*, oral presentation by Vaishali S Mahendra et al. at The National Consultation for Universal Access on HIV Prevention, Care, and Treatment for Women and Children, New Delhi, India, 7 March.

*Moving the Mountain: Getting HIV Programmers and Policymakers to Pay Attention to Men Who Have Sex with Men in Kenya*, oral presentation by Scott Geibel et al. at the New York Population Council office, Washington, DC, 12 March.

*Impact of a DAART Intervention on ART Adherence in Mombasa: Results from an 18-month randomized controlled study*, oral presentation by Avina Sarna et al. at USAID, Washington, DC, 13 March.

*Emerging issues surrounding HIV counseling and testing in health facilities*, oral presentation by Karusa Kiragu at a Horizons panel discussion, Expanding and Diversifying HIV Testing and Counseling: Findings from the Field, Washington, DC, 14 March.

#### May 2007

*Key Findings from an Evaluation of mothers2mothers in KwaZulu-Natal, South Africa*, poster presentation by Carolyn Baek et al. at a Technical Symposium, Washington, DC, 11 May.

*Sustaining a Youth HIV/AIDS Caregiving Program in Rural Zambia*, oral presentation by Ellen Weiss et al. at the 34th International Conference on Global Health Partnerships: Working Together for Global Health, Washington, DC, 29 May–1 June.

*Building alliances to promote gender equity and reduce violence and HIV risk among young men in India*, oral presentation by Julie Pulerwitz et al. at the 34th International Conference on Global Health Partnerships: Working Together for Global Health, Washington, DC, 29 May–1 June.

#### June 2007

*Recruitment of injection drug users in two cities in India using respondent-driven sampling for an HIV-related behavioral survey*, oral presentation by Waimar Tun et al. at the Second International Conference on Surveying Health in Complex Situations, Brussels, Belgium, 4–5 June.

*Collecting Data among Vulnerable Youth and Families Affected by HIV and AIDS- Ethical and Methodological Challenges and Responses*, poster presentation by Katie Schenk at the Second International Conference on Surveying Health in Complex Situations, Brussels, Belgium, 4–5 June.

*Development of a Curriculum Module Focusing on Abstinence and Faithfulness Designed to Supplement the Existing Life Orientation HIV/AIDS Education Program*, poster presentation by Toby Nelson et al. at the 3<sup>rd</sup> South Africa AIDS Conference, Durban, South Africa, 6–7 June.

*Utilizing Trained Volunteer Youth Caregivers to Address the Needs of OVC through a School-based Care and Support Program in KZN*, poster presentation by Tobey Nelson et al. at the 3<sup>rd</sup> South Africa AIDS Conference, Durban, South Africa, 6–7 June.

*Impact of a School-based HIV Care and Support Program on OVC Aged 11-15 in KwaZulu Natal, South Africa*, poster presentation by Pinkie Nyamakazi et al. at the 3<sup>rd</sup> South Africa AIDS Conference, Durban, South Africa, 6–7 June.

*Exploring the Accessibility of ART and TB services in Health Facilities in South Africa*, poster presentation by Tonicah Maphanga et al. at the 3<sup>rd</sup> South Africa AIDS Conference, Durban, South Africa, 6–7 June.

*Challenges to Integrating ART and TB Services in Health Facilities in South Africa*, poster presentation by Lewis Ndhlovu et al. at the 3<sup>rd</sup> South Africa AIDS Conference, Durban, South Africa, 6–7 June.

*A Pilot Program to Integrate Mutual Monogamy into FBOs and Church-based HIV Prevention Programs in the Eastern Cape: Challenges and Opportunities*, poster presentation by Waimar Tun et al. at the 3<sup>rd</sup> South Africa AIDS Conference, Durban, South Africa, 6–7 June.

*Partnering with FBOs and Church Leaders to Promote Mutual Monogamy in the Eastern Cape Province*, poster presentation by Nathi Sohaba et al. at the 3<sup>rd</sup> South Africa AIDS Conference, Durban, South Africa, 6–7 June.

*Improving HIV Programs for Men Who Sell Sex to Men in Mombasa, Kenya*, oral presentation by Scott Geibel et al. at the 2007 PEPFAR HIV Implementers' Conference, Scaling Up Through Partnerships, Kigali, Rwanda, 16–19 June.

*Alcohol-Related Intimate Partner Violence Among VCT Clients in Kenya*, oral presentation by Caroline Mackenzie et al. at the 2007 PEPFAR HIV Implementers' Conference, Scaling Up Through Partnerships, Kigali, Rwanda, 16–19 June.

*mothers2mothers—Evaluation Results Show Good Coverage, and Improved PMTCT Outcomes of Postpartum Women who Participated in Program*, poster presentation by Carolyn Baek et al. at the 2007 PEPFAR HIV Implementers' Conference, Scaling Up Through Partnerships, Kigali, Rwanda, 16–19 June.

*A Randomized Controlled Study Evaluating a Directly Administered Antiretroviral Therapy (DAART) Intervention to Promote Adherence to ART in Mombasa, Kenya*, oral presentation by Avina Sarna at the 2007 PEPFAR HIV Implementers' Conference, Scaling Up Through Partnerships, Kigali, Rwanda, 16–19 June.

*Reaching Truckers in Brazil with Non-stigmatizing and Effective HIV/STI Services*, oral presentation by Julie Pulerwitz at the 2007 PEPFAR HIV Implementers' Conference, Scaling Up Through Partnerships, Kigali, Rwanda, 16–19 June.

*Who are the Vulnerable Children? Exploring the Implications of Different Definitions for Determining Program Eligibility*, oral presentation by Katie Schenk et al. at the 2007 PEPFAR HIV Implementers' Conference, Scaling Up Through Partnerships, Kigali, Rwanda, 16–19 June.

*The Impact of "Straight Talk": Behaviour Change Through Mass Media in Uganda*, poster presentation by Cathy Watson et al. at the 2007 PEPFAR HIV Implementers' Conference, Scaling Up Through Partnerships, Kigali, Rwanda, 16–19 June.

*Impact of Mentorship Program on well-being of Youth-headed households in Rwanda*, poster presentation by Lisanne Brown at the 2007 PEPFAR HIV Implementers' Conference, Scaling Up Through Partnerships, Kigali, Rwanda, 16–19 June.

*Promoting Gender Equity to Reduce HIV/STI and Violence Risk among Young Men in India*, oral presentation by Ravi Verma et al. at the 2007 PEPFAR HIV Implementers' Conference, Scaling Up Through Partnerships, Kigali, Rwanda, 16–19 June.

### July 2007

*Factores de riesgo para infección por VIH en trabajadores sexuales y hombres que hacen sexo con hombres en Ciudad del Este, Paraguay, en la triple frontera con Argentina y Brasil (Risk factors for HIV infection in sex workers and men who have sex with men in Ciudad del Este, Paraguay, border city to Argentina and Brazil)*, oral presentation by Waimar Tun et al. at a dissemination meeting for the USAID/Paraguay and Ministry of Health, Asunción, Paraguay.

### August 2007

*Changing Gender Attitude and Reducing Gender Based Violence among Young Men in Rural and Urban India*, oral presentation by Ajay Singh et al. at the 8<sup>th</sup> International Congress on AIDS in Asia and the Pacific (ICAAP), Colombo, Sri Lanka, 20 August

*Impact of a DAART intervention on ART adherence in Mombasa: Results from an 18 month randomized controlled study*, oral presentation by Avina Sarna et al. at the National Dissemination meeting, Nairobi, Kenya, 29 August.

*Sexual risk behaviors of persons receiving ART in Mombasa: Findings from a longitudinal study*, oral presentation by Avina Sarna et al. at the National Dissemination meeting, Nairobi, Kenya, 29 August.

*Kenya Pediatric HIV/AIDS Study*, oral presentation by Karusa Kiragu et al. the National Dissemination meeting, Nairobi, Kenya, 29 August.

*School as a Workplace in Kenya: Evaluation of the Teachers Matter HIV/AIDS Project*, oral presentation by Caroline Mackenzie et al. at the National Dissemination meeting, Nairobi, Kenya, 29 August.

*Integrating Alcohol Risk Reduction Counseling into VCT Services in Kenya: Preliminary Evaluation Results*, oral presentation by Caroline Mackenzie et al. at the National Dissemination meeting, Nairobi, Kenya, 29 August.

*Caring for the Caregivers: Testing a model for a workplace HIV/AIDS program for hospital employees in Zambia*, oral presentation by Karusa Kiragu et al. at the National Dissemination meeting, Nairobi, Kenya, 29 August.

### September 2007

*Alcohol related intimate partner violence among VCT clients in Kenya*, oral presentation by Caroline Mackenzie et al. at the Kenya Association of Professional Counselors 8<sup>th</sup> Counseling Conference, Safari Park Hotel, Nairobi, Kenya, 4–6 September.

*Fertility intentions and family planning needs of HIV-infected women receiving PPTCT services in India—Experiences from an exploratory research*, oral presentation by Vaishali S Mahendra et al. at the Meeting on Scaling-up FP/MNCH Best Practices: Achieving MDG in ANE, Bangkok, Thailand, 7 September.

*Exploring Models of Delivering Anti-Retroviral Therapy and Integration of ART with TB Services in South Africa*, oral presentation by Tonicah Maphanga et al. at the 2<sup>nd</sup> Population Association of Southern Africa, Mafikeng, South Africa, 28 September.

## **B. Articles Based on Horizons Findings Published by, Accepted by, or Submitted to Peer-Reviewed Journals**

### **Published**

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- Brown, Lisanne, Kate Macintyre, and Lea Trujillo**. 2003. "Interventions to reduce HIV/AIDS stigma: what have we learned?," *AIDS Education and Prevention* 15(1): 49–69.
- Busza, Joanna**. 2005. "How does a risk group perceive risk: voices of Vietnamese sex workers in Cambodia," *Journal of Psychology & Human Sexuality* 17(1/2): 65–82.
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- Esu-Williams, Eka, Katie Schenk, Scott Geibel, Joseph Motsepe**, Anderson Zulu, Petronella Bweupe, and **Ellen Weiss**. 2006. "We are no longer called club members but caregivers": involving youth in HIV/AIDS caregiving in rural Zambia," *AIDS Care* 18(8): 888–894.
- Galvao, Loren W.**, Laurione C. Oliveira, **Juan Diaz**, Dhong-jin Kim, Nadia Marchi, **Johannes van Dam**, Roger F. Castilho, Michael Chen, and Maurizio Macaluso. 2005. "Effectiveness of female and male condoms in preventing exposure to semen during vaginal intercourse: a randomized trial," *Contraception* 71: 130–136.
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**Boris, Neil W., Lianne A. Brown, Tonya R. Thurman, Janet C. Rice, Leslie M. Snider, Joseph Ntaganira, and Laetitia N. Nyirazinyoye**. "Depressive symptoms among youth heads-of-household in Rwanda: Correlates and implications for intervention," accepted for publication in *Archives of Pediatric Medicine*.

**Denison, Julie A., Ann P. McCauley, Wendy A. Dunnett-Dagg, Nalakwanji Lungu, Michael D. Sweat**. "The HIV testing experiences of adolescents in Ndola, Zambia: do families and friends matter?," accepted May 2007 for publication in *AIDS Care*.

**Pulerwitz, Julie, Annie P. Michaelis, Sheri A. Lippman, Magda Chinaglia, Juan Díaz**. "HIV-related stigma, service utilization, and status disclosure among truck drivers crossing the Southern borders in Brazil," accepted June 2007 for publication in *AIDS Care*.

**Samuels, Fiona, Ravi K Verma, and CK George**. "Double stigma: discrimination and violence among female sex workers and feminized men in Andhra Pradesh," accepted for publication in *Gender and Health*, no. 9 in the *Gender, Society & Development series*.

**Sarna, A., SMF Luchters, S. Geibel, S. Kaai, P. Munyao, K.S. Shikely, K. Mandaliya, J. van Dam, and M. Temmerman**. "Sexual risk behavior and HAART: a comparative study of HIV infected persons on HAART and preventive therapy in Kenya," accepted August 2007 for publication in *International Journal of STD & AIDS*.

**Thurman, Tonya Renee, Leslie Snider, Neil Boris, Edward Kalisa, Laetitia Nyirazinyoye, and Lianne Brown**. "Barriers to the community support of orphans and vulnerable youth in Rwanda," accepted for publication in *Social Science & Medicine*.

**Verma, Ravi K., Julie Pulerwitz, Vaishali Mahendra, Sujata Khandekar, Gary Barker, P. Fulpagare and S.K. Singh**. 2006. "Challenging and changing gender attitudes among young men in Mumbai, India," accepted for publication in *Reproductive Health Matters*.

### **Submitted**

**Geibel, Scott, Elisabeth M. van der Elst, Nzioki Kingola, Stanley Luchters, Alun Davies, E. M. Getambu, Norbert Peshu, Susan M. Graham, R. Scott McClelland, Eduard J. Sanders**. "'Are you on the market?': a capture-recapture enumeration of men who sell sex to men in and around Mombasa, Kenya," submitted to *AIDS*.

**Kiragu, K.**, T.J. Ngulube, M. Nyumbu, P. Njobvu, C. Mwaba, and A. Kalimbwe. “Sexual potential occupational HIV exposure to hospital personnel in Zambia,” submitted to *South Africa Medical Journal*.

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Lillie, T., **J. Pulerwitz**, B. Korbou. “Kenyan in-school youths’ level of understanding of abstinence, being faithful, and condom use terms: implications for HIV-prevention programs,” submitted to *Health Education & Behavior*.

Marindo, Ravai, **Ellen Weiss**, and **Julie Pulerwitz**. “Promoting male involvement and HIV prevention during pregnancy in Zimbabwe,” submitted to *African Journal of Reproductive Health*.

**Sarna** , **Avina**, Stanley Luchters, **Scott Geibel**, Matthew F. Chersich, Paul Munyao, **Susan Kaai**, Kishorchandra N. Mandaliya, Khadija S. Shikely, Marleen Temmerman, and **Naomi Rutenberg**. “Short- and long-term efficacy of modified directly-observed therapy for HAART in Mombasa, Kenya: a randomised trial,” submitted to *Journal of AIDS*.

Names in **bold** represent Horizons staff and those from Horizons partner organizations (Population Council, ICRW, International HIV/AIDS Alliance, PATH, Tulane University, FHI, and Johns Hopkins University).

**C. Summary of Results Achieved (October 1, 2006 – September 30, 2007)**

**1. Activity Matrix: Non-Research Activities**

| Country/Hz ID/<br>Staff Monitor                        | Project Title<br>Type of Study<br>Focus | Project Budget/<br>Source/Codes/<br>Duration   | Activities and/or Results   | Partners/<br>Principal<br>Investigators  |
|--|---|--|---|--|
| Global<br><br>Horizons #98<br><br>Beverly Ben<br>Salem | Horizons Internship<br>Program          | \$150,000<br>(ca. \$14,000 balance)<br>Core<br><br>In-house #51728<br><br>7/98 – 5/08<br>ONGOING | <u>Activities:</u><br><ul style="list-style-type: none"> <li>• Interns LeeAnn Jones and Christina Fontecchio</li> </ul>   | Valley Trust,<br>JHU, Population<br>Council South<br>Africa  |
| Global<br><br>Horizons #110<br><br>Ellen Weiss         | Communications<br>and Dissemination     | Ca. \$100,000/year<br>Core<br><br>In-House #51745<br><br>8/97 – 7/08<br>ONGOING                  | <u>Activities:</u><br><ul style="list-style-type: none"> <li>• Produce high quality, user-friendly publications that highlight key findings from Horizons studies; prepare articles for submission to peer-reviewed journals</li> <li>• Disseminate findings through print and electronic media, and through face-to-face meetings globally</li> <li>• Promote research utilization by providing program managers and practitioners with user-friendly publications and opportunities to discuss the findings from the field</li> </ul> <u>Results:</u><br><ul style="list-style-type: none"> <li>• final reports, research summaries, research updates, 2 newsletters, CD updates, articles in peer-reviewed journals</li> <li>• APHA Annual Meeting: 4 orals, 10 posters</li> <li>• PEPFAR Implementer’s Meeting 2007 (Rwanda): 6 orals, 2 posters</li> </ul> | PATH, ICRW,<br>Intl. HIV/AIDS<br>Alliance, FHI,<br>Johns Hopkins<br>University,<br>Tulane Univ.,<br>Pop. Council |

| Country/Hz ID/<br>Staff Monitor                               | Project Title<br>Type of Study<br>Focus   | Project Budget/<br>Source/Codes/<br>Duration  | Activities and/or Results   | Partners/<br>Principal<br>Investigators                     |
|---|---|---|---|---|
| Global<br>Horizons #126<br>Naomi<br>Rutenberg                 | Project<br>Development<br><br>TECHNICAL<br>ASSISTANCE   | \$ 96,041<br>Core<br><br>In-house #51760<br><br>1/02 – 6/07<br>COMPLETED                  | <u>Activities:</u><br>Small budget formative research, workshops, and/or consultants to develop proposals, including:<br><ul style="list-style-type: none"> <li>• Thailand ARV mtg (Baker &amp; Stoeckel) \$10,500</li> <li>• Uganda consultant, Charlotte Johnson-Welch 1,000</li> <li>• Brazil JHU/Oswaldo Cruz 4,000</li> <li>• Cambodia consultant Stoeckel 6,175</li> <li>• Kenya elderly caregivers (proposal development) 13,610</li> <li>• India consultants re HIV prevention, young men 35,033</li> <li>• India consultants re ARV adherence study 30,488</li> <li>• Paraguay vulnerable populations 9,940</li> </ul> All of the above were completed prior to this reporting period. | Partner<br>organizations,<br>study partners<br>in the field |
| Global<br>Horizons #288<br>Carolyn Baek<br>Naomi<br>Rutenberg | Coordination of the<br>FP/HIV Integration<br>Working Group<br><br>TECHNICAL<br>ASSISTANCE<br><br>Prevention | \$100,000<br>Office of Population<br><br>In-house #51786<br><br>7/05 – 12/06<br>COMPLETED | <u>Activities:</u><br>Key activities were organizing two meetings on integration with responsibilities including overall meeting planning, implementation, and follow-up. On the theme of “Integrating FP and ARV Programs,” the first meeting was held Nov 3-4, 2005; 40 organizations were represented. The second meeting, held May 18-19, 2006, focused on FP/HIV integration and youth, with over 50 organizations represented. These meetings involved partnerships from family planning as well as HIV organizations that are not traditionally focused on FP/RH. Meeting reports were written and disseminated.   | USAID Office of<br>Population                               |

## 2. Detailed Description of Research Activities

### Title of study

**Hz ID:** *Horizons' identification number*

**Codes:** *Subagreement and/or in-house codes*

**Effective dates:** *Start and end dates of study (Status: Ongoing or Completed)*

**Staff monitors:** *Horizons' staff monitors*

**Fully loaded budget:** *Budget total (Source: Core, Mission, CDC)*

**Study type:** *Diagnostic, Intervention, Evaluation, or Technical Assistance*

### Type of research:

- *Assessment and/or Evaluation* includes problem identification and priority setting to determine the nature, determinants, or extent of a public health problem and whether it can be, should be, or already is being addressed.

Types of activities considered:

1. All formative research, baselines and end lines for interventions, specialized surveys of small target groups in preparation for interventions
2. Knowledge-attitudes-practices (KAP) surveys
3. Meta-analyses and literature reviews aimed at identifying successful interventions
4. Surveys or assessments to determine the current state of a public health problem

- *Development* includes applied or operations research to create or improve tools, approaches, and interventions to address a known public health problem. This could include trials, pilot tests, and other activities to develop a product, approach, or methodology, and test its initial effectiveness.

- *Introduction* includes activities to facilitate the adoption or implementation of a proven intervention, tool, or approach in the field. An intervention, approach, or tool already exists to address a given problem, but additional research may be needed to adapt it to and determine its effectiveness in the local context or to scale up the intervention. Types of activities considered:

1. Efforts to monitor/measure the effectiveness of a known intervention in the local context
2. Activities seeking to determine obstacles to scale-up or to achieving maximum effectiveness
3. Introduction studies of a new contraceptive method
4. Conferences, workshops, meetings, and publications specifically geared toward disseminating research results or methodology

**Research area:** *Care and treatment, Children affected by HIV/AIDS (Orphans), Children affected by HIV/AIDS (Non orphans), HIV-related stigma and discrimination, MTCT, PLHA, Prevention, Surveillance, or VCT*

### Research category:

- *Behavior/Behavior Change Research* - Studies that evaluate the contributions of behavioral, social, and lifestyle determinants in the development, course, treatment, and prevention of illness and related public health problems in individuals and communities, and the impact of service delivery interventions on behavior.
- *Biomedical/Clinical Research* - Studies in humans, usually conducted sequentially, that establish the safety, efficacy, and effectiveness (including acceptability), and cost-benefit of new or improved tools, interventions, and technologies-often referred to as phase I, II, and III type research studies involving randomized clinical trials. This

research is often described as establishing proof of principle. Facility-based- trials in hospital settings. Field-based- larger trials in field clinics and in community health worker service delivery settings.

- *Capacity Building for Research* - Workshops, courses, etc. that are primarily meant to develop research skills among developing country participants. If these take place as part of an ongoing research study, then they should be reported as part of the research study under one of the other categories. This category is specific to capacity building activities independent of any other research study.
- *Health Policy/Systems and Health Services Research* - Refers to research traditionally defined by USAID as Operations Research. Describes studies of the public health infrastructure on how to improve existing financing systems, policies, organizational structures, processes, and tools that affect access to, utilization of, quality of, and cost of health care inclusive of prevention and treatment in countries in transition and developing countries.
- *Introduction Research* - Research that helps prepare or translate findings for use at scale in real work public health settings. Pilots of new or improved technologies and interventions in real world settings to establish the feasibility, acceptability, and cost-effectiveness prior to uptake at a population level (often involving quasi-experimental trials).
- *Surveillance Research* - Epidemiological research and observational studies to determine, and evaluate the health status of a population and/or describe the health impact of the use of new or improved technologies/surveillance or other measurement approaches.

**Description:** *Brief description of the study.*

**Study objectives:** *Main objectives of the study.*

**Methodology:** *Brief description of the methodology.*

**Study significance:** *Rationale for undertaking the research.*

**Key results OR Progress to date:** *The key results and/or progress to date, including major milestones such as the completion of significant activities, results, or issues impeding study completion.*

**Partners:** *Names of subaward organizations and collaborating entities.*

**Final report OR Research summary:** *A link to the Final report or final Research summary if available.*

## Putting food on the table: An exploration of livelihood strategies and their role in maintaining nutritional status among antiretroviral treatment patients

**Hz ID:** 300

**Codes:** In-house #51800, Sub AI06.16A, Sub AI06.55A

**Effective dates:** 5/06 – 2/08 (Ongoing)

**Staff monitors:** F. Samuels, S. Kaai, N. Rutenberg

**Fully loaded budget:** \$208,939 (Core)

**Study type:** Diagnostic

**Type of research:** Assessment and/or evaluation

**Research area:** Care and treatment

**Research category:** Behavior/behavior change research

**Description:** The overall aim was to explore and understand the role of livelihood strategies in maintaining nutritional status among antiretroviral (ART) patients. In particular, it addressed the ability to achieve food security, defined as adequate access to food. Existing data from two existing Horizons projects that explored issues around ART and adherence was drawn upon for this study.

### Study objectives:

- Inform policy decisions regarding the role of food security and livelihood strategies/support as an alternative or adjunct to food supplementation for ART patients.
- Develop/pilot tools used to inform decisions on food supplementation programs and food targeting.

**Methodology:** A cross-sectional formative assessment was added to the second round of data collection for an ongoing study of treatment support, using quantitative, qualitative, and participatory methods. In Zambia, an expanded set of questions on livelihood strategies and food security was added. Detailed survey data from Kenya on economic activities was further analyzed to address the objectives of this study. In both settings, respondents for in-depth discussion were selected through analysis of adherence and BMI data. Respondents for the qualitative research include people on ART (16 per country), their families or cluster members, or members of their livelihood network (32 per country, i.e., two cluster members per person on ART).

**Study significance:** The importance of food and nutritional security for HIV-positive persons and people on ART is evident. As more people have access to ART, more information is needed on the role played by livelihood strategies in maintaining their nutritional and food security. Little is known about how people on ART maintain food security and adequate access to food. Additionally, in a situation in which food supplements are not given, it is critical to understand how people manage, what challenges they face, and what alternatives to food supplementation can be suggested as part of maintaining weight and ART adherence support. Results of this study have direct policy implications, addressing the urgent question of putting food on the table and providing nutritional support beyond the distribution of food and nutrition supplements.

### Key results:

- Most people on ART in Zambia are food insecure. In both Zambia and Kenya, most people on ART reported frequently missing meals.
- Food is mostly purchased by people on ART for themselves.
- People's livelihoods lie along a continuum, from least to most secure. Gender and age are important factors. In Zambia, most people are at the least secure end of the continuum.
- Having some form of asset, e.g. a room to rent out or a farm, is key for achieving livelihood security.
- The majority of respondents had major set-backs in their livelihoods as a result of their illness. With ART, their health rebounded but livelihoods lag behind.
- Most food supplementation is shared among family members and others.
- Food supplementation represented a life-line enabling recipients to eat and develop social capital.
- Livelihood networks are key in difficult times, consisting of family members, friends and shopkeepers.
- Family and friends are important members of an individual's livelihood network, representing a key coping strategy. However, neighbors are often even more significant to daily survival, due to proximity.
- Study participants reported using gardens/small farms for support.
- Respondents with high adherence and high BMI tended to be more self-reliant and more likely to have multiple income sources compared to those with low adherence and low BMI.

### Partners:

International Centre for Reproductive Health; Overseas Development Institute

## BRAZIL

### Risk factors for HIV infection in the MSM population in metropolitan Campinas City, Brazil, using respondent-driven sampling

**Hz ID:** 278

**Effective dates:** 6/05 – 7/07 (Completed)

**Fully loaded budget:** \$343,000 (Mission)

**Type of research:** Assessment and/or evaluation

**Research category:** Surveillance research

**Code:** In-house #51784

**Staff monitors:** J. Díaz, J. Pulerwitz, J. van Dam, W. Tun

**Study type:** Diagnostic

**Research area:** Surveillance

**Description:** This study determined the population size of men who have sex with men (MSM) in the metropolitan area of Campinas City (Brazil), their HIV prevalence and HIV risk and prevention behaviors, by subgroup.

**Study objectives:** To determine HIV prevalence among MSM and to characterize subgroups of MSM by different levels of risk for HIV infection, using socio-demographic, behavioral, and environmental factors in the metropolitan area of Campinas.

**Methodology:** Using a cross-sectional design, a total of 658 MSM who were at least 14 years old who lived in the metropolitan area of Campinas and were willing to be tested for syphilis were identified over twelve months starting in October 2005 through respondent-driven sampling. Only men having had oral or anal sex with a man within the previous 6 months were eligible to participate in the study. Data collection consisted of an audio computer-assisted self-interview (ACASI), a face-to-face interview on participant's social network, and blood collection to test for syphilis and HIV (optional) using rapid tests. ACASI included questions about perceptions and behaviors related to HIV, sexual self-identity, HIV/STI testing and diagnosis history, condom use, drug and alcohol use, and homophobic abuse experienced. A qualitative assessment was conducted to understand the reasons for the slow recruitment process.

**Study significance:** Despite a recent decline in HIV incidence in Brazil in some populations, HIV incidence rates are still on the rise in the younger age groups, including young MSM. This study was the first to provide population estimates of HIV and risk behaviors among MSM in Brazil. Further, it provides guidance for the use of response-driven sampling for national HIV surveillance among MSM in Brazil.

**Key results:** HIV seroprevalence was estimated to be 7 percent among MSM. Seroprevalence of syphilis (current or past infection) was estimated at 9 percent. One-third of all MSM had only one sex partner, about one-half had 2-5 sex partners, and nearly 20 percent had  $\geq 6$  partners in the past 2 months. Ninety percent had male sex partners, 11 percent transgender partners, and 16 percent female sex partners in the last 2 months. Among those who had MSM sex partners (men or transgender) in the last two months, 30 percent were estimated to have had unprotected receptive anal intercourse (URAI) with one MSM partner and 7 percent with more than one MSM partner. Additionally, of those who had URAI with single or multiple MSM partners, only 60 percent knew that their sex partner was HIV negative. Multivariate analysis revealed that having ever suffered homophobic violence (especially psychological abuse) was an important predictor of URAI in the past two months, along with a greater number of sexual partners, lower education, and living with an MSM partner. Having participated in HIV prevention activities in the past 12 months was found to lower the incidence of unprotected sex. Among those who live with MSM partners, nearly 40 percent reported having had sex with more than one partner in the past two months. Eight percent of these reported unprotected anal intercourse in the same period with more than one partner. Approximately 15 percent of MSM reported receiving payment (money, drugs or gifts) in exchange for sex in the past 2 months and ca. 8 percent declared themselves to be a commercial sex worker. About 42 percent of MSM had never been tested for the HIV. A high proportion (85 percent) reported having suffered homophobic violence at least once in their life, 70 percent in the past 12 months.

#### **Partners:**

Centers for Disease Control and Prevention

Coordenação de Vigilância e Saúde Ambiental (Covisa) de Campinas

Laboratório de Pesquisa em AIDS – HC – Unicamp

Municipal Laboratory of Campinas

National STD/AIDS Program/Brazil

Reference Centre for Gays, Lesbians, Transsexuals, Transvestites and Bisexuals (GLTTB) of Campinas

STD/AIDS Program of Campinas

## BRAZIL

### Validation of the accuracy of PSA detection in vaginal fluids, obtained by self-sampling, as marker of semen exposure and condom failure

**Hz ID:** 299

**Effective dates:** 7/06 – 7/07 (Completed)

**Fully loaded budget:** \$305,000 (\$255K CDC Brazil + Core)

**Type of research:** Assessment and/or evaluation

**Research category:** Biomedical/clinical research

**Codes:** In-house #51802, Sub A106.40C

**Staff monitors:** J. Díaz, J. van Dam, W. Tun

**Study type:** Diagnostic

**Research area:** Prevention

**Description:** The study assessed the accuracy of using the biological marker, prostate-specific antigen (PSA), to determine the amount of semen leaked into the vagina.

#### Study objectives:

- Compare the detection of prostate-specific antigen (PSA) after sexual intercourse with male condom and female condom with respect to self-collected samples and samples collected by a nurse.
- Compare the PSA detection after self-collected and nurse-collected samples when different amounts of semen were deposited in the vagina (simulating condom breakage).

**Methodology:** A total of 200 premenstrual women aged 18-48 years who were surgically sterilized were recruited in a university clinic in Brazil. In the first experiment, the women were randomly assigned to have two coital acts while their partners used a male condom followed two coital acts with a female condom or inversely. Rates of semen exposure during use of either the male or female condom were measured by quantifying the amount of PSA in the vaginal fluid. The second experiment consisted of inoculating various amounts of semen into the vagina, after which a self-collected and a nurse-collected sample of vaginal fluid were taken to measure PSA levels. A short questionnaire was administered after the final sample collections.

**Study significance:** Evaluation of the efficacy of the male and female condom is difficult; it is highly desirable to have biological markers able to detect condom failure. Although previous studies have reported on both the mechanical and user problems encountered using male and female condoms, few studies have used objective markers of semen exposure to measure condom effectiveness. This study assessed the feasibility of using PSA as a biological marker to detect semen spillage due to condom failure, using self-collected samples after intercourse.

**Key results:** Results of the first experiment showed that a very high percentage of women were able to comply with instructions on using both a male and female condom. A very high percentage of the users were able to correctly take vaginal samples; results comparing nurses and users are very similar (no significant difference with the male condom). With the female condom, a higher percentage of false positive results were found in samples taken by women. This may be due to contamination of the samples during removal of the condom. The results showed there were very low levels (less than 10 percent) of semen exposure as measured by PSA levels after sex using female and male condoms.

In the second experiment, there was a direct correlation between the amount of semen deposited in the vagina and the PSA levels detected in both participant-collected and nurse-collected samples. In other words, the women and the nurses were equally able to obtain appropriate samples from vaginal fluid.

**Conclusions:** Women were able to follow the instructions of using female and male condoms and obtain self-samples of vaginal fluid. Our data indicate an average condom failure rate of 10 percent. In addition, PSA levels can be detected in samples collected by both the women and the nurses even 3 hours after small amounts of semen were deposited in the vagina.

#### Partners:

Centers for Disease Control and Prevention

Human Reproduction Unit, Faculty of Medical Sciences, Universidade Estadual de Campinas (UNICAMP)

University of Campinas Department of Obstetrics and Gynecology

## Testing prepackaged therapy for male urethral discharge syndrome in Ghana: A feasibility study

Hz ID: 268

Effective dates: 10/04 – 6/07 (Completed)

Fully loaded budget: \$188,355 (Core: 25,420; Mission: 162,935)

Type of research: Development

Research category: Introduction research

Code: Sub AI04.51A

Staff monitor: P. Tapsoba

Study type: Intervention

Research area: Prevention

**Description:** During this study, attendants working in chemist shops and informal pharmaceutical providers were trained to identify and treat cases of male urethral discharge using pre-packaged treatment kits.

**Study objectives:** Results were intended to demonstrate the feasibility and effectiveness of training private sector and informal providers to complement services provided by the national STI/RTI program and increase access to effective management of male urethral discharge by clients in rural areas. Specific objectives included:

- Increase access to effective treatment for men suffering from urethral discharge.
- Increase the number of men receiving correct diagnosis and a full course of appropriate treatment.
- Increase the number of men who receive counseling on condom use and partner notification.
- Increase the dispensing of condoms to clients to prevent transmission of infection during treatment.
- Compare performance of franchised and non-franchised chemical sellers and other pharmaceutical providers.

**Methodology:** Pre-packaged therapy (PPT) kits were provided to chemical sellers and other providers, along with training and supervision. Activities were evaluated by comparing data collected from interviews with chemical sellers and data from mystery clients before and after the intervention. The study was carried out in three areas—Volta and Eastern Regions, and Greater Accra.

**Study significance:** STI management in Ghana is inconsistent in the public sector. Treatment of sexually transmitted infections (STIs) is largely in the hands of community members and pharmacists. These informal channels frequently give inaccurate diagnoses and drug regimens, contributing to the development of drug resistance. The study provided information to in-country health authorities to enable them to modify their policies in order to increase the accessibility and availability of quality STI management services.

**Key results:** In general, the performance of chemical shop attendants at baseline and end line showed a positive relationship between training shop attendants and provision of recommended treatment to men with UD. No significant difference was found between franchised and non franchised chemical shops.

Pre and post-intervention results are as follows:

- STIs reported by shop attendants rose from 82 to 96 percent for gonorrhea, 10- 32 percent for syphilis.
- Drugs for urethral discharge (UD) sold went from 9 to 49 percent of shop attendants.
- Referrals of clients to seek care from health facilities decreased from 42 percent to zero.
- Appropriate treatment given to clients using pre-packaged therapy increased from to 4 to 80 percent.
- Incomplete drug dosage decreased from 76 to 2 percent.
- Condom use and partner notification attributed to performance of shop attendants increased from 34 to 72 percent and 0 to 40 percent respectively.
- Information on HIV provided was still low at end line (18percent), but was an increase from zero at baseline.
- Advice to clients on correct dosage for self-medication increased from 40 to 81 percent.

Positive impact and quality of care provided by shop attendants was confirmed by using mystery clients. Incomplete dosage of antibiotic therapy, a common practice in Ghana, also was assessed using simulated clients. At end line, only 22 percent of attendants were willing to sell only a partial dose.

In conclusion, this study revealed that shop attendants in rural Ghana can be trained to provide adequate counseling and appropriate treatment of urethral discharge using pre-packaged antibiotics. Findings from this study are critical to the National AIDS and STI Control Program (NASCP) and its collaborators including SHARP, the USAID bilateral project as an innovative strategy to increase access to treatment of UD to rural populations. NASCP plans to support expansion of this approach in rural districts countrywide.

### Partners:

AED/SHARP project (USAID) HIV/AIDS bilateral project; Ghana Health Service: Health Research Unit (HRU) & National AIDS and STI Control Program; Ghana National Chemical Sellers Association; Ghana Social Marketing Foundation Enterprises Limited (GSMF-EL); Pharmacy Council; West Africa Project to Combat AIDS and STI (WAPCAS)

## INDIA

### Reducing HIV risk behavior among key populations by strengthening programs through community involvement

Hz ID: 219

Effective dates: 7/03 – 7/07 (Completed)

Fully loaded budget: \$778,134 (Core)

Type of research: Development

Research category: Behavior/behavior change research

Code: Sub AI03.32A

Staff monitor: R. Verma

Study type: Intervention

Research area: Prevention

**Description:** An evaluation of specific components of an innovative HIV prevention intervention among key populations (KPs) in Andhra Pradesh, India.

**Study objectives:** To study how HIV prevention programs can build or enhance local community involvement among key populations such as female sex workers (FSWs), men who have sex with men (MSM), and clients of sex workers. Additionally, this study examines the potential effect such involvement can have on reducing HIV risk.

**Methodology:** Horizons undertook a nested study to qualitatively assess the program. There were two rounds of qualitative data collection. At baseline, a total of 118 In-depth interviews (IDIs) were conducted in 8 sites: 32 with FSWs, 32 with MSM, 16 with PLHIV, 24 with gatekeepers who interact with key populations, and 14 with NGO staff working in the sites. In addition to the interviews, 32 FGDs across the 8 sites were conducted: 16 FGDs with FSWs and 16 FGDs with MSM. At end line, a total of 150 IDIs were conducted across 5 sites: 50 with FSWs, 50 with MSM and 50 with PLHIV. Strict ethical procedures were followed throughout. Transcripts were translated, transcribed, and entered into AtlasTi.

**Study significance:** Though still a relatively low HIV prevalence country (0.91 percent of the adult population); India is second only to South Africa in absolute numbers. In 2003, 5.1 million people were HIV-infected. There is growing recognition of the importance of focusing prevention efforts on people most likely to be infected, to have the greatest impact on the epidemic. These are key populations, not only in the sense that they are more vulnerable to infection and onward transmission, but also because without their mobilization, the epidemic will continue to grow. These populations include female sex workers (FSWs), men who have sex with men (MSM), and clients of sex workers.

**Key results:** The second round of data collection found higher levels of trust and involvement than the baseline data and highlighted several factors that led to greater trust and involvement. They include the pivotal role played by outreach workers (ORWs) recruited from among the key populations; improved access and quality of services as a result of the Mythri Clinics; availability and easy access to Drop-in Centres (DICs) and establishment of functional referral networks. At the same time, there were indications of perceived stigma attached to the NGO related to HIV among key populations; improper behavior of NGO staff continued to play an inhibiting role. There were clear indications that key populations were empowered for improved prevention.

#### Partners:

Administrative College of India

Institute of Health System, Hyderabad

International HIV/AIDS Alliance

National Institute of Public Health

INDIA

**From PPTCT to PPTCT Plus - diagnostic operations research to inform the national initiative on improving access to treatment, care, and support for HIV-positive women and their families**

Hz ID: 285

Code: In-house #51785

Effective dates: 7/05 – 2/07 (Completed)

Staff monitors: V. Mahendra, A. Sarna, N. Rutenberg

Fully loaded budget: \$28,000 (Core)

Study type: Diagnostic

Type of research: Assessment and/or evaluation

Research area: Care and treatment

Research category: Introduction research

**Description:** An assessment of HIV-positive women's experiences with the prevention of parent-to-child transmission (PPTCT) program in India implemented by the government and NGOs to improve access to treatment and care and support for HIV-positive women and their families.

**Study objectives:** To understand HIV-positive pregnant and postpartum women's needs relating to HIV treatment, care and support, reproductive health, and access to and utilization of services, and to propose strategies to strengthen service delivery.

**Methodology:** HIV-positive pregnant and postpartum women (0-24 months post-delivery) from 25 public and private sector PPTCT sites in three high prevalence states participated in 47 in-depth interviews and 268 structured interviews. Thirty five service providers and program managers of PPTCT programs were also interviewed.

**Study significance:** The national PPTCT program has demonstrated that antenatal care is an effective entry point to HIV prevention for infants. PPTCT is also an entry point to HIV care and sexual and reproductive health (SRH) services for HIV-infected mothers, but to date there was no assessment of whether it achieves this objective. This study offered insights for strengthening the national PPTCT initiative that provides a continuum of care and support to HIV-positive women and their families. It also provided insights into linking SRH and HIV prevention and treatment services.

**Key results:** The data indicate that PPTCT services are provided effectively to women. A majority of the women reported they received HIV voluntary counseling and testing services during antenatal care (ANC). A large majority of women mentioned that their husbands were also tested for HIV per the advice of the PPTCT provider. About one-fifth mentioned that their husband was HIV-negative or that they did not know their status. A majority of the women reported having disclosed their status to their husband, then to parents. A large majority of the women reported taking medication to prevent HIV transmission to their child and that their baby also received the syrup after birth. When the postpartum women were asked about the infant feeding options they chose, over three-fourths mentioned replacement feeding. Most of the women who chose to do replacement feeding said they did not want to risk transmission of infection and were advised so by the provider.

However, ANC and PPTCT providers were not major sources of information for HIV treatment and care. Of the 19 women on ART, only two mentioned that their PPTCT provider referred them to the ARV facility. Of the 20 women with HIV-positive children, only half mentioned that their PPTCT provider referred them for ARV therapy.

Similarly, women reported unmet sexual and reproductive health needs. A significant proportion of women mentioned their pregnancy was unplanned. In addition, the vast majority of HIV-positive women (87 percent) reported they did not want more children, as they were worried about their children's future without them. Despite these intentions, only a little over half reported using family planning methods.

These data indicate weak linkages between PPTCT programs, HIV care, and SRH services. Failure to address the SRH needs of women and to connect them to HIV treatment and care is a shortcoming of PPTCT programs.

**Partners:**

Andhra Pradesh State AIDS Control Society

Freedom Foundation

Karnataka State AIDS Prevention Society

Manipur State AIDS Control Society

Social Awareness Service Organization (SASO)

UNICEF

UNIFEM

**Final report:** [www.popcouncil.org/pdfs/horizons/IndiaPPTCT.pdf](http://www.popcouncil.org/pdfs/horizons/IndiaPPTCT.pdf)

## INDIA

### Promoting gender equity to reduce HIV/AIDS vulnerabilities among young women and men in India

Hz ID: 287

Code: In-house #51787

Effective dates: 7/05 – 2/08 (Ongoing)

Staff monitors: R. Verma, J. Pulerwitz, V. Mahendra

Fully loaded budget: \$72,800 (Core)

Study type: Intervention

Type of research: Development

Research area: Prevention

Research category: Introduction research

**Description:** Evaluation of an intervention aimed at promoting gender equity and reducing HIV/AIDS vulnerabilities among young men and young women in India.

**Study objectives:** The overall objective was to adapt (from a similar study in Brazil) and evaluate the impact of an intervention to reduce HIV/AIDS risk behavior among youth. The focus was on shifting harmful concepts of masculinity and promoting equitable gender norms among young men.

**Methodology:** Building on a pilot experience, this study included an evaluation of a group education intervention with 350 young men in each of three separate communities in Mumbai, India (a total of 1,050 young men). In addition, a “lifestyle” social marketing campaign to reinforce gender equity and HIV risk reduction messages on the community level was developed, implemented, and evaluated in one of the intervention sites. The intervention study compared the impact of the group education alone with group education combined with the community-based social marketing campaign. It also included a control group. Group education activities with about 500 young men were also implemented and tested in a rural setting (in Uttar Pradesh). In a second phase of the study, similar group education intervention activities for young women, focused on gender equity and self-efficacy, were adapted from similar activities in Brazil and tested.

**Study significance:** Unequal power dynamics and gender relations between men and women have been posited by various authors as important causes of HIV risk. Intervening at the level of social norms to impact the prevailing inequitable gender norms is therefore an important potential strategy for HIV risk reduction. As limited “skills-based” prevention programs—as opposed to general HIV awareness provision—are currently available for Indian youth in low-income communities, the intervention study combined both strategies: promoting gender equity, and risk reduction skill-development.

**Key results:** At baseline, close to one-third of the young men in all the study sites had low-equitable gender attitudes. Over one-third of the young men were sexually experienced, with sexual initiation taking place at an average age of 18 in urban slums and 16 in rural villages. Among the sexually active young men, the large majority reported not using condoms with their sexual partner over the last three months. A significant proportion of young men reported having STI symptoms during the three months prior to the survey.

The Yaari-Dosti intervention with young men was able to produce an improvement in young men’s gender attitudes across all the intervention groups in both urban and rural areas. At intervention sites, more young men reported using condoms with their last sex partner as compared to the control sites. Also, reported STI symptoms decreased in the intervention sites. Self-report of violence against any partner in six months declined significantly ( $p < .05$ ) in the intervention areas as compared to the control groups where it had increased. Similarly, young men reported significant improvement in communication with their partners after the intervention on key reproductive and sexual health issues such as condom use, sex and pleasure, STI and HIV/AIDS.

Analyses for correlated data, controlling for key socio-demographic variables such as age, education and occupation indicate that improvements on the gender norm scale was associated with positive changes in key HIV/STI risk outcomes including violence reduction.

The study highlights the need for addressing gender norms and in particular explicitly discussing norms related to masculinity. Also, the impact of the group education intervention alone was comparable with the impact of the combined intervention that included the campaign. Thus, either of the approaches can bring about the desired change in young men.

#### Partners:

CORO, Mumbai; DAUD Memorial Trust Gorakhpur; Institute PROMUNDO Brazil; International Institute for Population Sciences; MacArthur Foundation; MAMTA New Delhi Sangath Society for Child Development and Family Guidance; SSL International

## Operations research around the introduction of antiretroviral therapy in the management of HIV- infected individuals in Mombasa, Kenya

**Hz ID:** 207

**Codes:** In-house #51767, Sub AI03.26A

**Effective dates:** 5/03 – 9/07 (Completed)

**Staff monitors:** A. Sarna, S. Kaai, S. Geibel, N. Rutenberg

**Fully loaded budget:** \$1,318,389 (Core: 891,016; Mission: 427,373)

**Study type:** Intervention

**Type of research:** Development

**Research area:** Care and treatment

**Research category:** Introduction research

**Description:** This study examines whether a directly administered antiretroviral therapy (DAART) intervention is more effective in fostering adherence to antiretrovirals (ARVs) than standard follow-up.

### Study objectives:

- Determine whether a DAART strategy for the initial 24 weeks of highly active ARV therapy (HAART) will result in improved adherence when compared to self-administration and standard follow-up.
- Determine whether the DAART strategy will result in higher long-term adherence (at 48 and 72 weeks) among patients who begin self-administration of ARVs after cessation of the DAART intervention at 24 weeks, when compared to patients on self-administered treatment from the outset of treatment.

**Methodology:** This was a randomized controlled two-arm study conducted in Mombasa, Kenya. A total of 234 HIV-infected treatment naïve patients (DAART: 116 patients, non-DAART: 118 patients) were enrolled and all received an NNRTI-containing regimen. DAART patients received twice weekly-observed medication and adherence support for 24 weeks, followed by routine monthly follow-up. Non-DAART patients received standard monthly follow-up. Follow-up was carried out at three treatment sites and six DAART observation sites. Adherence was measured using clinic-based pill counts every month.

**Study significance:** A principal concern of ART programs is the ability of clients to maintain a high level of adherence. Adherence levels greater than 90-95 percent are required for successful treatment outcomes, which is challenging for both clients and health workers. After formative research, a modified directly observed treatment strategy called DAART was developed to promote and sustain adherence to HAART.

### Key results:

- The DAART group had higher adherence during the intervention (0-24 week: 92 percent vs. 80 percent;  $P=0.012$ ) but the effects of the intervention were not sustained in the early (25-48 weeks: 82 percent vs. 78 percent; NS) and late (72 weeks: 71 percent vs. 59 percent; NS) post-intervention periods.
- Although a higher proportion of DAART patients had undetectable viral loads compared to non-DAART patients at 48 weeks the differences were not significant (88 percent vs. 78 percent; NS). There was no difference between groups at 72 weeks (74 percent vs. 77 percent; NS).
- DAART Patients had greater improvements in body mass index compared to non-DAART patients during the intervention (0-24 weeks: 2.2 vs. 1.39;  $P<.014$ ) and early (25-48 weeks: 2.4 vs. 1.6;  $P, 0.047$ ) and late (72 weeks: 2.43 vs. 1.6; NS) post intervention period and late in the DAART.
- DAART patients also had a greater decline in depression scores in the early (25-48 weeks: 10.5 vs. 6;  $P, 0.04$ ) and late (72 weeks: 10 vs. 6.5;  $P, 0.03$ ) post intervention periods.

### Partners:

Bomu Mkomani Clinic  
Coast Provincial General Hospital  
Family Health International  
Government of Kenya  
International Centre for Reproductive Health  
Management Sciences for Health/Rational Pharmaceutical Management Plus  
Port Reitz District Hospital

### Research summaries:

[www.popcouncil.org/pdfs/horizons/Kenya\\_MombasaAdherenceSum.pdf](http://www.popcouncil.org/pdfs/horizons/Kenya_MombasaAdherenceSum.pdf)  
[www.popcouncil.org/pdfs/horizons/Kenya\\_MombasaSexualBehaviorSum.pdf](http://www.popcouncil.org/pdfs/horizons/Kenya_MombasaSexualBehaviorSum.pdf)  
[www.popcouncil.org/pdfs/horizons/Kenya\\_MombasaStigmaSum.pdf](http://www.popcouncil.org/pdfs/horizons/Kenya_MombasaStigmaSum.pdf)  
[www.popcouncil.org/pdfs/horizons/Kenya\\_MombasaHouseholdImpactSum.pdf](http://www.popcouncil.org/pdfs/horizons/Kenya_MombasaHouseholdImpactSum.pdf)

## KENYA

### **School as a workplace: Addressing the prevention needs and psychosocial burden of HIV and AIDS among teachers in Kenya**

**Hz ID:** 218

**Effective dates:** 1/06 – 3/08 (Ongoing)

**Fully loaded budget:** \$354,157 (Mission)

**Type of research:** Development

**Research category:** Introduction

**Code:** In-house #51797

**Staff monitors:** C. Mackenzie, K. Kiragu

**Study type:** Intervention

**Research area:** Prevention

**Description:** An intervention study to test an HIV prevention and care workplace initiative focused on teachers that use a peer education model. The workplace model would assist teachers who are infected and affected by HIV/AIDS by helping them to identify and access treatment and care services.

**Study objectives:** To test a workplace peer education model for increasing teachers' knowledge of HIV and AIDS, reducing their risk behavior (e.g. multiple partners and unprotected sex), increasing the number of teachers who seek VCT, and reducing the psychosocial burden of HIV and AIDS.

**Methodology:** This study used a quasi-experimental design with both intervention and delayed intervention groups. To evaluate the intervention, the study compared data from baseline and end line surveys of teachers. The study also included focus group discussions with teachers to inform the development of the intervention.

**Study significance:** Most school-based HIV interventions in sub-Saharan Africa rely on teachers to deliver prevention messages to children. Yet, very few HIV/AIDS programs, including those in Kenya, target teachers. This project tested a workplace, peer education model of HIV prevention and care activities with teachers as direct beneficiaries.

#### **Key results:**

- Teachers were greatly interested in the intervention and found it beneficial.
- The intervention was well implemented and provided useful lessons for the future.
- There was an improvement in the collective HIV/AIDS self-efficacy.
- There was greater awareness about the Education Sector Policy on HIV and AIDS.
- There remain concerns about HIV/AIDS confidentiality at work.
- The intervention was associated with improvement in HIV/AIDS knowledge, but reduction of stigma occurred across the board.
- There was a decline in the perceived risk of HIV/AIDS.
- There was an improvement in the awareness of post-exposure prophylaxis.
- There were improvements in awareness and attitudes toward male and female condoms.
- There was an improvement in HIV testing but the majority of teachers still do not know their HIV status or that of their partners.
- Most teachers with multiple partners were not protecting themselves from HIV/AIDS.
- An AIDS-related death had occurred in the family of nearly 40 percent of teachers.

#### **Partners:**

Kenya Institute of Education  
Ministry of Education  
Teachers Service Commission  
UNICEF  
University of Nairobi

**Final report:** [www.popcouncil.org/pdfs/horizons/Kenya\\_TeachersMatter.pdf](http://www.popcouncil.org/pdfs/horizons/Kenya_TeachersMatter.pdf)

## KENYA

### Beacon of light: mitigating HIV impact in Kenya by involving young Girl Guides and their parents

Hz ID: 262

Effective dates: 9/04 – 6/07 (Completed)

Fully loaded budget: \$272,712 (Mission)

Type of research: Development

Research category: Introduction Research

Code: In-house #51778

Staff monitors: K. Kiragu, T. Nelson

Study type: Diagnostic

Research area: Prevention

**Description:** An operations research study to evaluate the effectiveness of using Girl Guides as HIV/AIDS peer educators for in-school youth.

**Study objectives:** To improve knowledge and skills related to HIV prevention and care among in-school Girl Guides and their peers.

**Methodology:** This study employed a two-arm, quasi-experimental design. In late 2004, baseline data were collected from 1,251 Girl Guides and 1,192 male and female peers at 57 primary schools. In the intervention schools, Guide Leaders were trained to use an HIV prevention curriculum to train selected Girl Guides (Patrol Leaders) as peer educators. These peer educators would in turn disseminate information to fellow Guides and schoolmates on a variety of topics, including HIV/AIDS and sexually transmitted infections. After 12 months of the intervention, data were collected from 1,275 Girl Guides and 1,282 male and female peers at 51 primary schools in both the intervention and control arms. Data were collected using an interviewer-assisted self-administered questionnaire. All respondents were aged 10-15 years.

**Study significance:** The Girl Guides program began in Kenya in 1920 and now has over 100,000 members in 2,850 schools. Young girls have the highest rates of new HIV infection in Africa. In Kenya, it is estimated that 50 percent of new HIV infections occur in young people aged 15 to 24 years. Although studies show that 13 percent of girls and 31 percent of boys have had sex before age 15, few prevention programs exist to help young people before age 15. Providing information and communication skills may help to delay the initiation of sexual activity and/or raise awareness of how to prevent infection. In response to this need, the Kenya Girl Guide Association (KGGA) and Family Health International (FHI)/Impact began a program in 1999 to train young Girl Guides as HIV peer educators in their schools.

**Key results:** Logistic regression analysis suggests that the program was associated with several favorable outcomes among the Girl Guides. Girl Guides performed better than their non-Guide male and female peers with regards to social well-being, support for gender equity, acceptance of people living with HIV, and knowledge of HIV and AIDS. The results demonstrate that peer education conducted by Girl Guides is a feasible strategy for imparting HIV and AIDS education to school-going youth. However, such a program would need to be branded, strengthened, and appropriately resourced to attain positive results that extend beyond the Girl Guides to include their peers. The results also demonstrate that school girls in this study live in an environment where their male counterparts are more than seven times as likely to be sexually experienced, and may be exerting considerable pressure to have sex even on the strongest of girls. HIV risk-reduction programs directed at school girls may be more successful if they also address the risk behavior of school boys.

**Partners:**

FHI-IMPACT

Kenya Girl Guides Association

PATH

**Final report:** [www.popcouncil.org/pdfs/horizons/KenyaGirlGuidesEval.pdf](http://www.popcouncil.org/pdfs/horizons/KenyaGirlGuidesEval.pdf)

## KENYA

### A targeted evaluation of the effect of health facility stigma-reduction interventions on PMTCT provider attitudes and uptake of PMTCT services

Hz ID: 265

Effective dates: 7/05 – 8/07 (Completed)

Fully loaded budget: \$106,550 (Mission)

Type of research: Assessment and/or evaluation

Research category: Behavior/behavior change research

Code: In-house #51788

Staff monitors: S. Kaai, N. Rutenberg, S. Geibel

Study type: Intervention

Research area: HIV-related stigma and discrimination

**Description:** This study evaluated whether stigma-reducing interventions change provider attitudes and increase demand and uptake of prevention of mother-to-child transmission (PMTCT) services in two provinces in Kenya with high HIV prevalence. Comprised of activities and educational seminars aimed at health personnel, the intervention was based on Engender Health's curriculum "Reducing Stigma and Discrimination Related to HIV and AIDS Training for Health Care Workers," with adaptations from the "PLHA-friendly Achievement Checklist" for hospitals developed by Horizons in India.

#### Study objectives:

- Assess the effect of stigma-reduction programs conducted with health workers on their behaviors and attitudes toward people living with HIV.
- Assess the impact of the health facility interventions on the uptake of PMTCT services.

**Methodology:** The study used a pre-test, post-test, quasi-experimental design with intervention and control arms. Study sites included 42 health facilities with PMTCT services in two provinces in Kenya. The 42 sites were randomly divided into intervention and control arms. Interviews were conducted with a total of 146 PMTCT providers using a semi-structured questionnaire at baseline. In addition, 29 in-depth exit interviews were conducted with PMTCT clients to assess their perceptions of PMTCT services and providers. As part of intervention activities, 42 PMTCT providers from the 21 intervention facilities were trained by AMKENI on stigma-reduction. At follow up, 162 PMTCT providers from the intervention and control facilities were interviewed using a semi-structured questionnaire. Additionally, 29 in-depth interviews were conducted with PMTCT providers. Continuous monitoring of routine service statistics was done from July 2005 to May 2006.

**Study significance:** PMTCT services are rapidly expanding in Kenya, but uptake remains low at many sites. Challenges include human resources shortages, poor infrastructure (e.g., lack of space for confidential consultations), poor obstetric care and infection control practices, and periodic shortages of HIV testing kits. Utilization of PMTCT services is low, due to stigma among health workers and the general population. This study addresses this last challenge by evaluating whether stigma-reducing interventions can change provider attitudes and increase demand and uptake of PMTCT services. Programmatic implications of this study include: a) training and supervision of health workers reduced stigma in relevant programs; b) the scale of the stigma problem of stigma was better understood, including its effects on the uptake of PMTCT services.

**Key results:** Key findings included (1) a significantly lower proportion of health care workers in this study who were exposed to the stigma reduction intervention thought that PLHA should be treated differently than other patients, (2) knowledge among providers remains weak in certain areas related to HIV transmission (e.g. kissing and sweat are thought to be means of transmission, (3) the proportion of providers who thought a counselor should tell HIV results to a partner declined significantly from 27 percent to 12 percent; while those who thought a counselor should tell no one rose from 7 to 21 percent in the intervention group. The control group providers who thought a counselor should tell no one also increased, but not significantly.

#### Partners:

AMKENI

Engender Health

## KENYA

### Community-based approaches to PMTCT

**Hz ID:** 266

**Effective dates:** 5/04 – 9/07 (Completed)

**Fully loaded budget:** \$249,605 (Mission)

**Type of research:** Development

**Research category:** Introduction research

**Codes:** In-house #51777, Sub AI04.34A, Sub AI04.35A

**Staff monitors:** C. Baek, S. Kaai, N. Rutenberg

**Study type:** Intervention

**Research area:** MTCT

**Description:** Operations research to determine the impact and cost-effectiveness of community-based prevention of mother-to-child transmission (PMTCT) activities.

**Study objectives:** Objectives are three-fold: 1) to test and compare three community-based approaches to increase women's utilization of key PMTCT services; 2) document costs involved in each approach; and 3) analyze the extent to which psychosocial needs of women are met by each approach.

**Methodology:** The design includes three experimental arms: a mobile clinic, traditional birth attendants (TBAs) as PMTCT promoters, and peer counselors as PMTCT promoters, as well as a comparison area. The study also involves baseline and follow-up quantitative interviews of women < 10 weeks postpartum (n = 1800) to assess exposure to and impact of the intervention, and a review of service statistics and qualitative interviews with postpartum HIV-positive women.

**Study significance:** Evaluations of the introduction and rollout of PMTCT programs have found it feasible to integrate PMTCT services into the antenatal care/maternal and child health setting in low-resource countries. However, coverage is not optimal. A significant reason for the low uptake is a lack of demand by women for all the services that make up PMTCT programs. Medical recommendations made in PMTCT programs are often difficult for women to implement as they are overshadowed by community norms, values, and beliefs. Women's decisions to participate fully in a PMTCT program are influenced by opinions of their partners as well as other family and community members, and by women's perceptions or fears of negative reactions by others. Additionally, some women may lack physical access to services. Community-based approaches to delivering PMTCT services may overcome these barriers by offering services that are more acceptable and physically accessible to the community and to pregnant women. In collaboration with the International Medical Corps, three community-based approaches were tested. The intent of the mobile services was to bring integrated antenatal services, including information on and referrals for PMTCT, to women in their communities. The TBA arm enhanced an existing and trusted service by adding PMTCT information and referral and encouraging TBAs to bring their clients to the health center for delivery. The role of the HIV-positive peer educator was to offer "mother-to-mother" information and support in order to reduce social barriers to accepting PMTCT services.

**Key results:** Data from the study showed there were positive trends during the study period in most of the PMTCT indicators, including knowledge of MTCT, antenatal care (ANC) utilization, and delivery in health facilities. However, it is not possible to attribute all these positive trends to the community based interventions because similar positive trends were observed at the comparison site, with the exception of infant feeding indicators, TBA utilization during last pregnancy, and Nevirapine uptake. The inability to measure a greater effect of the interventions may be due to the small proportion of the study respondents (16 percent) who reported interaction with the mobile clinic providers, TBAs, or HIV-positive peer counselors.

**Partners:**

Center for Disease Control and Prevention  
International Medical Corps  
Steadman Research Services

**Final report:** [www.popcouncil.org/pdfs/horizons/KenyaCommunityPMTCT.pdf](http://www.popcouncil.org/pdfs/horizons/KenyaCommunityPMTCT.pdf)

## KENYA

### HIV testing competence and practices among health workers in Kenya: A diagnostic study

Hz ID: 275

Code: N/A

Effective dates: 9/04 – 12/06 (Completed)

Staff monitors: K. Kiragu, S. Kaai

Fully loaded budget: \$100,000 (CDC Purchase Order)

Study type: Technical assistance

Type of research: Assessment and/or evaluation

Research area: Care and treatment

Research category: Health policy/systems and health services research

**Description:** This national study examined the preparedness of health care workers (HCWs) in Kenya to conduct diagnostic HIV testing and counseling (DTC) in health care settings, as well as their HIV prevention and care needs. The study also documented HCWs' occupational HIV risk and personal risk-taking behavior, and the level of stigma toward persons with HIV or AIDS within clinical settings. The study was implemented by NASCOP (National AIDS & STD Control Programme) of Kenya's Ministry of Health, with support from CDC and technical support from the Horizons Program.

**Study objectives:** To document HCWs' HIV testing and counseling practices, their own HIV testing behaviors and attitudes toward testing, their level of occupational exposure to HIV and their responses to exposure, their sexual risk behaviors, their attitudes and behaviors toward people living with HIV, and their personal HIV care and support burden.

**Methodology:** In May and June 2005, data were collected from 1,897 medical personnel (doctors, clinical officers, nurses, laboratory technicians, counselors, and social workers) working in 247 health facilities (public, faith-based, and private) in 27 districts of Kenya. Respondents were interviewed using a guided self-administered questionnaire. Twenty-four focus group discussions were also conducted with a sample of HCWs. Data were weighted to reflect the national distribution of health personnel. The 2004 KPSA sampling frame was used, employing stratified proportionate sampling.

**Study significance:** Although HIV is a multisectoral crisis, Kenya's health care system is at the center of the response. Thus it is important that Kenya's health system be strengthened if it is to mount the kind of response necessary to halt and reverse the epidemic. The health care system is also at the heart of treatment and support for the millions who will need chronic AIDS treatment for years to come. The rollout of DTC by the Ministry of Health means that many HCWs now have to provide HIV testing and counseling at their facilities. This study documents their preparedness to undertake this task. It also examines other ways they are affected by HIV, both in their professional and personal lives.

#### Key results:

- 49 percent of HCWs interviewed conduct HIV counseling and/or testing; thus the remaining 51 percent represent staff who could offer this service if appropriate structures were in place.
- Only 33 percent of those directly charged with clinical care of AIDS patients (doctors, clinical officers and nurses) said they had been trained in AIDS patient management, and only 39 percent felt adequately prepared for this task.
- Only 57 percent of respondents reported having an adequate supply of running water, and 63 percent an adequate supply of soap. However, 75 percent reported an adequate supply of gloves.
- 41 percent of respondents said they did not know what post-exposure prophylaxis (PEP) was. Among those who said they knew, one in five could not accurately describe it. Among those who reported an incident of potential HIV exposure and also reported PEP was available at their facility, only 46 percent sought it, largely due to fear of HIV testing and of stigma.
- About two-thirds of HCWs have ever been tested for HIV, and about half say their partners have been tested.
- 94 percent of HCWs are "very concerned" about occupational HIV exposure and 17 percent reported being potentially exposed to HIV at least once in the past year.
- 37 percent of HCWs have an immediate family member who is HIV-positive or has died of AIDS.

#### Partners:

CDC  
NASCOP

**Final report:** [www.popcouncil.org/pdfs/horizons/KenyaHealthWorkerSurvey.pdf](http://www.popcouncil.org/pdfs/horizons/KenyaHealthWorkerSurvey.pdf)

## KENYA

### The alcohol and substance abuse profile of clients attending VCT sites: An operations research study

**Hz ID:** 290

**Codes:** In-house #51791, Sub AI05.67A, Sub AI06.11A

**Effective dates:** 9/05 – 3/08 (Ongoing)

**Staff monitors:** C. Mackenzie, K. Kiragu, W. Tun

**Fully loaded budget:** \$299,339 (Mission)

**Study type:** Intervention

**Type of research:** Development

**Research area:** Prevention

**Research category:** Introduction research

**Description:** An intervention study that assessed the feasibility, acceptability, and outcomes of integrating alcohol risk reduction counseling into voluntary counseling and testing (VCT) service provision.

#### **Study objectives:**

- Develop a profile of alcohol use among VCT clients.
- Explore the alcohol counseling needs of VCT clients.
- Determine the extent to which VCT providers ask clients about alcohol use.
- Determine whether there is unmet need for alcohol counseling as part of VCT.
- Develop and test guidelines on how alcohol risk reduction counseling can be integrated into VCT services.

**Methodology:** The study employed a quasi-experimental research design with intervention and comparison sites. Baseline and follow-up data were collected from 15 static and 10 mobile VCT sites from three provinces in Kenya. Exit interviews were conducted in June 2006 from 1,073 VCT clients using interviewer- administered survey questionnaires. Respondents were at least 18 years of age, gave informed consent, had gone through the VCT session, but need not have taken the HIV test. The intervention activities were implemented immediately after the baseline survey. They included development of an alcohol training module to train VCT counselors on a revised protocol that integrated alcohol issues into regular VCT service provision, and provision of BCC materials. A nested study of 32 VCT sessions was also conducted to assess how much time the alcohol component added tot VCT sessions. One year after implementation of activities, follow-up data were collected from 1,058 VCT clients from the same sites, using the same data collection methods as used during the baseline survey. The follow-up data had a section that explored exposure to the intervention. Analysis of data used baseline-end line comparisons to evaluate the effectiveness of this pilot project.

**Study significance:** Several studies have documented a link between alcohol use and high-risk sexual behavior. In Kenya, consumption of alcohol is a common and widely accepted mode of relaxation. With over 700 VCT centers now spread all over the country, VCT services are an important entry point for HIV prevention, care, and treatment services. During pre-test counseling, the client is given information on modes of transmission and HIV risk triggers. Anecdotal evidence suggests there is a lack of a formal structure to discuss alcohol use with VCT clients. Yet, VCT settings are ideal locations for discussion of alcohol abuse and its link to HIV because clients view VCT counselors as credible sources of information. Counselors have the potential to influence clients' risky behaviors such as those that might be precipitated by alcohol use.

**Key results:** Respondents from the intervention sites had better outcomes than their counterparts from the comparison sites. They were more likely to have been screened for their alcohol use and that of their partners, given feedback, and scheduled for follow-up re-visits for further discussions about their alcohol use. Both providers and clients felt the program was important. The alcohol counseling component increased VCT time by seven minutes, which providers did not find burdensome.

#### **Partners:**

Liverpool VCT, Care and Treatment  
Steadman Research Services

## Reducing HIV/STI risk and improving treatment for male sex workers in Mombasa, Kenya

Hz ID: 293

Effective dates: 1/06 – 03/08 (Ongoing)

Fully loaded budget: \$428,715 (Mission)

Type of research: Development

Research category: Introduction research

Codes: In-house #51796, Sub A106.12A

Staff monitors: S Geibel, E Williams, W Tun, C Mackenzie

Study type: Intervention

Research area: Prevention

**Description:** This study includes (1) implementing an intervention to address male sex workers' (MSWs) reproductive and sexual health needs and promote behavior change among this population in Mombasa; and (2) operations research to test the effectiveness of the intervention. The intervention study will provide information on how best to meet the sexual health needs of MSWs within a highly stigmatizing and discriminatory environment.

### Study objectives:

- Assess feasibility and acceptability of a program to address sexual and reproductive health needs of MSWs.
- Measure impact of this program on sexual risk behavior and treatment-seeking behavior of MSWs.
- Measure program impact on levels of perceived stigma by MSWs in healthcare settings.
- Increase the capacity and willingness of healthcare providers to offer appropriate and sensitive HIV/STI services to MSWs.
- Contribute to a better understanding of the context of male sex work in Kenya.

**Methodology:** Research activities include a cross-sectional pre-post survey of approximately 400 MSWs who have sex with men, as well as ten in-depth interviews and three focus groups with MSWs and health care workers. The intervention activities will be informed by the baseline results and will immediately follow. The study also includes an end line survey and qualitative data collection.

**Study significance:** Formative research by Horizons and the International Centre for Reproductive Health (ICRH) in 2002 found that male sex workers (MSWs) in Mombasa are at high risk of transmitting or becoming infected with HIV and other sexually transmitted infections. While programs have been implemented in Mombasa to address similar issues with female sex workers, no programs currently exist to address the sexual health concerns of MSWs who have sex with men. This is the first known intervention study to address these concerns among MSW in Kenya.

**Key results:** A capture-recapture enumeration of MSW revealed that over 700 MSW who sell sex to men were active in Mombasa District. Using time-location sampling, 425 MSW who had recently sold, and were currently willing to sell sex to men were invited to participate in a cross-sectional baseline survey. Thirty-five percent of respondents did not know HIV can be transmitted via anal sex, which was a significant predictor of unprotected anal sex (AOR 1.63, 95 percent CI: 1.16-3.16). Other associated factors included drinking alcohol three or more days per week (AOR 1.63, 95 percent CI: 1.05-2.54), self-report of burning urination within the past 12 months (AOR 2.07, 95 percent CI: 1.14-3.76), and having never been counseled or tested for HIV (AOR 1.66, 95 percent CI: 1.07-2.57). Forty MSW were recruited as peer educators and trained in basic HIV prevention and basic counseling skills. Twenty area health service providers were trained in syndromic management with a focus towards sensitization of MSM issues and symptoms. Over 500 MSM have been reached by peer educators and through the opening of a MSM-friendly drop-in center, and thousands of condoms distributed.

### Partners:

Institute of African Studies

International Centre for Reproductive Health Kenya

University of Nairobi

## KENYA

### Knowing myself first: Assessing the feasibility of HIV self-testing (HST) among health care workers (HCWs) in Kenya

Hz ID: 303

Effective dates: 3/06 – 9/07 (Completed)

Fully loaded budget: \$174,506 (Mission)

Type of research: Assessment

Research category: Behavior/behavior change research

Codes: In-house #51805, Sub SI07012A

Staff monitors: K. Kiragu, S. Kellerman, W. Tun

Study type: Intervention

Research area: Care and treatment

**Description:** A survey of health care workers in Kenya showed that 77 percent of those who had never been tested for HIV would like to self-test, were this option possible. Titled “Knowing Myself First”, the study was piloted in ten districts. Study participants were doctors, clinical officers, nurses, laboratory staff, counselors and social workers, individuals who already had some level of HIV awareness. After dry-runs in two districts (Naivasha and Kajiado), the study was expanded to eight others, including Mbagathi (Nairobi), Garissa (Northeastern), Malindi (Coast), Makueni (Eastern), Nyeri (Central), Homa Bay (Nyanza), Nanyuki (Rift Valley) and Bungoma (Western). In July 2007, focus group discussions with health workers were conducted to inform the content of the intervention. The current phase of the study ended prior to obtaining IRB approval for using the test kits available at CDC. In the next study phase, to be funded by CDC, these kits will be offered to providers who want to test themselves, after informational sessions and informed consent. Focus group discussions will be held in conjunction with kit distribution, and a post-intervention survey of 1000 health workers will be conducted to obtain information about usage and overall impact of this activity.

#### Study objectives:

- To test the feasibility of HIV self-testing among health care providers in Kenya.
- To increase the knowledge and safe usage of self-testing kits.
- To inform country policy on the use of minimally-invasive fluid HIV test technology, taken orally.

#### Methodology:

- Initial phase: Develop BCC materials and train 16 HST coordinators in HIV-self-testing (2 people from each of the hospitals in the pilot) based on results from FGDs and IDIs in the 10 sites. Obtain Aware HST test kit from CDC; re-package it to contain informational leaflets and materials for the HWs. Establish a 15-hour cell-phone counseling hotline for health care providers. This formative research phase was completed.
- Intervention phase: Offer HST to willing and consenting providers and their spouses. Offer phone hotline for those who need it. Avail referral for further testing and for treatment as appropriate
- Evaluation phase: Implement a post-intervention survey assessing utilization of HST and opinions about it from the providers.

**Study significance:** This study is important to confirm the feasibility and acceptability of home self-testing for HIV/AIDS by health workers.

**Key results:** A total of 161 respondents participated in the formative research. Analysis revealed a great potential demand for HST. Many health workers said they already tested themselves but lacked adequate psychosocial support. The research also revealed strong presence of stigma among health workers themselves, which deters many of them from even undertaking VCT or seeking PEP. Some respondents felt that they would do the self-test immediately, but others felt they would take it home and wait a few days before testing themselves. In general, respondents were reluctant to take the first self-test with their partners, and preferred to test themselves first before inviting them. Most HWs would not be willing to buy the self-test kit unless it is affordable, 50 Kenya shillings (US 75 cents) or less.

#### Partners:

CDC

Crystal Hill Ltd.

Kenya National STD Control Program (NAS COP)

## KENYA

### Barriers to uptake of pediatric HIV treatment and care in Kenya: A diagnostic study

**Hz ID:** 305

**Effective dates:** 3/07 – 3/08 (Ongoing)

**Fully loaded budget:** \$250,181 (Mission)

**Type of research:** Assessment and/or evaluation

**Research category:** Introduction

**Codes:** In-house #51806, Sub SI08004A

**Staff monitors:** K. Schenk, K. Kiragu, A. Sarna

**Study type:** Diagnostic

**Research area:** Children affected by HIV/AIDS

**Description:** Pediatric AIDS treatment in Kenya lags far behind treatment for adults: 40 percent of adults who need AIDS treatment receive it vs. only 11 percent of eligible children. There are 216 sites providing AIDS treatment to adults; 168 provide treatment to children. There are many explanations for the wide gap, including service delivery barriers and lack of trained health personnel. Community barriers exist as well. This study examined the level of community awareness about pediatric AIDS treatment in Kenya, and factors that may hinder parents and caregivers from seeking treatment for their infected children.

**Study objectives:** To assess community awareness of HIV in children and young adults, including parent /guardians' knowledge and attitudes toward availability and benefits of HIV testing and treatment. To assess the capacity of parents/caregivers to identify children and adolescents at risk of HIV infection and to effectively refer them for testing and care, including ART, in a timely manner. To work with partners to use research findings to develop and implement a small-scale intervention to increase the uptake of HIV testing and treatment among children and adolescents in selected study sites.

**Methodology:** The study was implemented in Eastern, Nyanza and Nairobi provinces, with both quantitative and qualitative components. Within each province, two districts were selected for participation, (6 sites total) plus an additional (KENWA) site in Nairobi, for a total of 7 sites. The quantitative component interviewed 1180 caregivers, evenly divided by gender: 375 from Nairobi, 401 from Eastern, and 404 from Nyanza Province. The quantitative component also included a mini survey of 103 health care providers using a self-administered questionnaire. Qualitative research activities included 7 FGDs and 7 IDIs (i.e. one of each at each site). The FGDs and IDIs involved health care providers, community health workers, and caregivers openly living with HIV+, to obtain their opinions about community-level barriers and their experiences in overcoming them. The study also collected facility-based data including service statistics and mini-surveys among health workers.

**Study significance:** Results are intended to inform a community sensitization campaign to reduce barriers to pediatric HIV treatment.

**Key results:** Poverty is a major barrier to health care for pediatric age children. Up to 78 percent of caregivers reported that drugs were unaffordable; about half had delayed care for their pediatric-age child due to cost constraints. According to the PLHIV parents, other parents caring for HIV+ children fear that the cost of food for an HIV+ child may be prohibitive. Other factors hindering access to care included not knowing that services are available and the services being far away. FGDs revealed that many caregivers still prefer alternative healers; by the time a caregiver comes to the clinic, s/he has already gone to traditional healers, faith healers and others. This means that a child arrives too late at the hospital and therefore if s/he dies, the death is associated with the modern medicine, further perpetuating the preference for alternative options. Quality of care was also reported as a barrier by caregivers; one in five had been displeased with care at the catchment health facility. Stigma remains a barrier; 60 percent of caregivers felt that an HIV+ child is a punishment for the parents' immoral behavior. There is widespread lack of in-depth awareness of pediatric HIV disease in the study areas. FGDs show many caregivers feel an HIV+ child will die anyhow, and thus maintain a fatalistic attitude. HIV+ adolescents are largely left out and seem to fall through the cracks. The majority of health care providers feel ill-prepared to care for HIV+ children.

#### **Partners:**

Arch Diocese of Nairobi Eastern Deanery AIDS Relief Program  
Christian Hospitals Association of Kenya (CHAK)  
Elizabeth Glaser Pediatric AIDS Foundation (EGPAF)  
Kenya Network of Women with AIDS (KENWA)

## KENYA

### Prevention with HIV-positive people: How to best support them in the community in Mombasa, Kenya?

Hz ID: 306

Effective dates: 4/07 – 9/07 (Completed)

Fully loaded budget: \$205,794 (Mission)

Type of research: Assessment

Research category: Health policy/systems and health services

Codes: In-house #51808, Sub SI07016A

Staff monitors: S. Geibel, A. Sarna, W. Tun

Study type: Diagnostic

Research area: Care and treatment

**Description:** To assess health-related needs of people living with HIV (PLWH) in Mombasa who are not taking ART and not accessing HIV care services. The study explored attitudes, sexual risk behavior, level of stigma and discrimination, access to prevention messages and commodities, and sought to increase meaningful involvement of HIV positive people as well as health care providers in the community.

**Study objectives:** Specific objectives were as follows:

- Identify effective strategies to reach tested treatment-naïve HIV positive persons in the community.
- Assess their level of knowledge and awareness of HIV disease, transmission, prevention and treatment availability.
- Determine sexual behavior among tested treatment-naïve HIV positive persons.
- Assess health-seeking behaviors and access to care and prevention services in this population.
- Assess barriers to health-seeking behaviors, particularly the role of stigma and discrimination, among tested treatment-naïve HIV positive persons in the community.
- Assess current levels of Behavior Change Communication (BCC) strategies for prevention.
  - › To identify contextually appropriate BCC strategies and interventions to be put in place.
  - › To assess how/who best to give HIV prevention messages in order to elicit response from treatment-naïve HIV positive persons.

**Methodology:** Using a cross-sectional study design and structured tools, HIV positive persons not accessing treatment were interviewed. Treatment-naïve HIV positive persons in the community were identified and selected as follows (a) HIV positive members of Post Test Clubs (PTC) were asked to bring other HIV positive persons who were not taking ART. Ten HIV positive peers were selected to serve as seeds in the 'snowball' sampling method from each of 8 PTCs. Each of the 10 seeds was asked to bring in 6 treatment-naïve HIV positive persons. (b) Community Health Workers in Mombasa form a well-established network that provides social support to HIV-positive persons, including home based care and treatment adherence support. Four CHWs were selected from each of the four divisions of Mombasa. Each CHW was asked to recruit 20 HIV positive treatment-naïve persons. A close-ended interviewer-administered structured questionnaire was used. Four post-survey focus group discussions were held (two with CHWs and two with PTC seeds) to better understand issues and challenges in recruiting HIV positive persons in the community and ways to overcome these barriers.

**Study significance:** In the past, prevention efforts primarily focused on developing risk reduction interventions for people presumed to be HIV negative but at risk of becoming infected. Programs for PLWH who are on treatment to prevent further spread of infection (PwP) have only begun to be addressed in clinical settings in Africa. Prior to this study, there was little clarity on what happens to PLWH living in the community who are not taking ARVs. This activity contributes to a better understanding of the health-related needs of treatment-naïve HIV positive persons in the community. Participants received information about referral services available in comprehensive care clinics (CCC) and other local HIV clinics. Additionally, information was obtained to guide policy-makers and service providers to develop and implement appropriate prevention interventions to reach this population, without which infection rates will continue to rise.

**Key results:** Quantitative data was collected from 712 HIV positive treatment-naïve respondents from the community between May 21 and August 10, 2007. Data is being analyzed; results will be available shortly.

**Partner:**

International Centre for Reproductive Health (ICRH)

## NICARAGUA

### Stigma reduction and community mobilization for HIV prevention via multi-media programs

Hz ID: 252

Effective dates: 5/03 – 2/08 (Ongoing)

Fully loaded budget: \$16,000 (Core)

Type of research: Introduction

Research category: Introduction research

Code: In-house #51771

Staff monitors: J. Pulerwitz, M. Ellsberg

Study type: Technical assistance

Research area: Prevention

**Description:** Evaluation of "Somos Diferentes, Somos Iguales" ("We are Different, We are Equal"), a national level communication strategy for social change to promote community development among young men and women and prevent HIV infection in Nicaragua.

**Study objectives:** To test the impact of the communication for social change strategy "Somos Diferentes, Somos Iguales," (SDSI) which fosters critical discussions about social and cultural issues that hinder HIV prevention among youth.

**Methodology:** Impact of 1) a weekly national educational entertainment "telenovela" entitled *Sexto Sentido*, 2) a daily call-in radio show, and 3) community-based intervention activities was measured through a longitudinal and representative sample in Nicaraguan urban areas with baseline, midterm, and end line surveys. At baseline (n = 4,567), male and female youth aged 13-24 years were surveyed with an over 70 percent response rate two years later at end line. In addition to quantitative data collection, in-depth interviews and focus group discussions were conducted with people who watched *Sexto Sentido* as well as those who did not, radio call-in show listeners, and local organization and media leaders.

**Study significance:** Social and cultural issues such as gender inequity, violence, and HIV-related stigma and discrimination hinder HIV/sexually transmitted infection (STI) prevention. A high proportion of youth ages 13-24 years in Nicaragua engage in HIV risk behaviors and stigma against people with HIV or AIDS is widespread. While HIV prevalence in Nicaragua is low, neighboring countries do have significant HIV epidemics. Interventions are needed to reduce risk and inhibit a potential epidemic in Nicaragua.

**Key results:** Results of the evaluation reveal that exposure to the SDSI project was widespread. At the end of the intervention, nine out of every ten people interviewed knew at least one of the mass communication components. *Sexto Sentido* TV was watched on a regular basis by a large part of the adolescent and youth population, with 59 percent of the sample corresponding to the category of "greater exposure" (people who watched "almost always" or "occasionally" for at least two of *Sexto Sentido* TV's three seasons). The proportion of people who had heard the *Sexto Sentido* Radio program increased substantially over time, from 9 percent in 2003 to 29 percent in 2005.

The survey findings indicate that SDSI led to positive changes on a population level. The intervention resulted in a significant reduction of stigmatizing and gender-inequitable attitudes; an increase in knowledge and use of HIV-related services; and a significant increase in interpersonal communication about HIV prevention and sexual behavior. Qualitative findings indicate that SDSI played an important role in promoting community-based dialogue on key topics, strengthened youth leadership, and fostered alliances between organizations.

The data suggests that greater exposure to SDSI has positive effects on interpersonal communication, which in turn helps people perceive personal risk of contracting HIV/AIDS, and provides capacity for individuals to address the issue of prevention with their partners. Partner communication about HIV/AIDS is directly and positively correlated with condom use. While the evaluation thus suggests that the indirect effects of SDSI on condom use are strong and positive, it found no direct association between SDSI and consistent condom use. This may be because consistent condom use is not directly related to the perception of self-efficacy induced by SDSI exposure, but rather is mediated by having talked effectively with one's partner about the issue.

**Partners:**

CIDS

PATH

Puntos de Encuentro

## PARAGUAY

### Assessment of the risk factors for HIV infection in sex workers and men who have sex with men in the triple-border area in Ciudad del Este, Paraguay

Hz ID: 289

Code: In-house #51799

Effective dates: 7/05 – 6/07 (Completed)

Staff monitors: J. Díaz, W. Tun

Fully loaded budget: \$249,624 (Mission)

Study type: Diagnostic

Type of research: Assessment and/or evaluation

Research area: Prevention

Research category: Behavior/behavior change research

**Description:** This study assesses HIV and syphilis seroprevalence and describes the contextual and behavioral factors influencing HIV-transmission among populations of female sex workers and men who have sex with men (MSM) in Ciudad del Este, Paraguay.

**Study objectives:** To estimate HIV and syphilis prevalence among female sex workers (FSW) and MSM in Ciudad del Este (CDE); examine knowledge, attitudes, and risk behaviors related to HIV and STIs; and describe the contextual and behavioral factors influencing HIV and STI transmission among MSM and FSWs in CDE.

**Methodology:** One hundred and sixty FSW and 296 MSM who were living in CDE or a neighboring city who were at least 16 years of age and willing to undergo a syphilis test were recruited in CDE between July and December 2006 through respondent-driven sampling (RDS). FSW included women who reported having sex in exchange for money, drugs, or gifts in the past 12 months; MSM included men or transsexuals who reported having sex with a man at least once during the past 12 months. Data collection consisted of a HIV-related risk behavior questionnaire and a blood sample for syphilis and HIV testing. Questionnaire topics included knowledge, attitudes, perceptions, and behaviors related to HIV, HIV/STI testing history; condom use, drug and alcohol use, social network, and physical and sexual abuse.

**Study significance:** This is the first bio-behavioral research study focused on MSM and FSWs—both hard-to-reach vulnerable populations - in Ciudad del Este, the second largest city in Paraguay. Results will be used to define policies and programs for these high-risk populations.

**Key results:** FSWs: Commercial sex was initiated at very early age (median 18 years). Approximately 1 percent of FSWs were found to be HIV seropositive and 38 percent tested positive on the VDRL test, an indication of current or past syphilis infection. Most reported having sex with regular or new clients in the past 30 days; FSWs also had non-paying sex partners. There's inconsistent use of condoms among FSWs regardless of type of partner and sexual activity. Consistent condom use during vaginal sex in the last 30 days was significantly more common with new clients (70 percent) than with regular clients (58 percent;  $p = 0.034$ ) and non-paying partners (18 percent;  $p < 0.001$ ). Condom use is high among those with more clients. Half of FSWs reported ever being tested for HIV; only half of those who tested actually received their last test results. Forty-one percent of the FSWs mentioned they had experienced sexual abuse when they were children.

MSM: Although HIV prevalence was low (0.5 percent) among MSM, syphilis prevalence was high (13 percent). Most didn't identify themselves as homosexual; a large proportion self-identified as heterosexual or bisexual. MSM tended to have occasional sex partners more often than permanent partners but condom use is low with all types of partners. A modest subset of MSM paid to have sex with commercial partners (primarily female partners). The majority of MSM have sex with both men and women. Men who have sex only with men (MSOM) tended to engage in receptive anal intercourse while men who have sex with men and women (MSMW) tended to engage in insertive anal intercourse. Condom use was very low regardless of type of partner or type of sexual activity. Almost 21 percent of all MSM indicated that they currently work as a male sex worker; they mainly had male clients, but also served female and transvestite clients. Only 12 percent of MSM had ever tested for HIV, about 40 percent of whom did not receive their test results. MSOM were more likely to be seropositive for syphilis compared to MSMW.

#### Partners:

Programa Nacional de SIDA, Ministerio de Salud Pública y Bienestar Social (Paraguay), Programa Regional de Combate al VIH/SIDA, Centro de Atención, Prevención y Vigilancia de niños y niñas y adolescentes, Prevención Alto Paraná, Consejería Municipal por los Derechos del Niño, Niña y Adolescentes (CODENI)/ Ciudad del Este

**Final report:** [www.popcouncil.org/pdfs/horizons/Paraguay\\_RiskFactors.pdf](http://www.popcouncil.org/pdfs/horizons/Paraguay_RiskFactors.pdf)

## RWANDA

### Assessing the psychosocial benefits of a community-based home visitation program for orphans and vulnerable children (OVC) in Rwanda

Hz ID: 220

Effective dates: 9/03 – 7/07 (Completed)

Fully loaded budget: \$393,987 (Core)

Type of research: Development

Research category: Introduction research

Code: Sub AI03.46A

Staff monitors: L. Brown, K. Schenk, P. Hutchinson

Study type: Intervention

Research area: Children affected by HIV/AIDS (Orphans)

**Description:** A three-year operations research study to assess the effectiveness of a community-based adult mentorship program on the emotional well-being of youth heads of households and children in their households in Gikongoro, Rwanda. The research project is a partnership between World Vision Rwanda, World Vision DC, Tulane School of Public Health, the Rwandan School of Public Health, and Horizons.

#### Study objectives:

- Develop, pilot, and refine a reliable and valid instrument to assess community-based psychosocial interventions.
- Assess the impact of an adult mentorship and home visitation program on improving the psychosocial wellbeing of youth heads of households.
- Assess the impact of the intervention on the mentors' own well-being, stress, motivation, and retention.

**Methodology:** This study uses a quasi-experimental design that involves pre- and post-intervention interviews and focus group discussions with youth heads of households and adult mentors.

**Study significance:** Children in sub-Saharan Africa are especially vulnerable to the severe consequences of the HIV/AIDS pandemic; it is essential for programs to support communities in general and the caregivers of children in particular. One model of community-based psychosocial support is the mentorship model, which utilizes trained adult volunteers from the local community as mentors to OVC, especially those living without adult supervision (child-headed households). Mentors not only assist with provision of basic needs, but more importantly develop a stable and caring relationship with OVC through regular home visits that provide emotional and social support. Psychosocial support through this mentor relationship is intended to mitigate the consequences of disrupted caregiving structures and to provide a supportive environment for children's well-being. To date, evaluations of psychosocial support programs, and the development of measurement tools and indicators for evaluating these programs, remain in their infancy. Without rigorous evaluations, the merit of adult mentorship programs remains unknown, and we are limited in our ability to improve delivery of services through this model.

#### Key results:

- Youth heads of households who participated in the mentorship program perceived a significant increase in adult support.
- Intervention participants reported a significant decrease in feelings of marginalization.
- Youth who did not participate in the intervention reported a significant increase in feelings of grief.
- Youth who participated in the intervention reported a significant decrease in maltreatment.
- Intervention participants reported a significant decrease in depressive symptoms.
- The frequency of mentor visits is important: higher frequency was associated with more positive perceptions of the mentor-youth relationship.
- Other children living in the households were minimally impacted by the mentorship program.
- The mentorship program is a scalable approach to improving psychosocial outcomes among vulnerable youth.
- The mentorship approach increased community participation in the care of vulnerable youth.
- Females may need additional assistance to overcome depressive symptoms and reduce maltreatment.
- Programs need to be realistic about what aspects of psychosocial distress a mentoring program can alleviate.

#### Partners:

Rwandan School of Public Health

Tulane School of Public Health

World Vision/DC

World Vision/Rwanda

**Research summary:** [www.popcouncil.org/pdfs/horizons/RwandaPsychOVCImpactSum.pdf](http://www.popcouncil.org/pdfs/horizons/RwandaPsychOVCImpactSum.pdf)

## SOUTH AFRICA

### Involving young people in the care and support of orphans and vulnerable children in KwaZulu Natal, South Africa

**Hz ID:** 271

**Effective dates:** 3/05 – 3/07 (Completed)

**Fully loaded budget:** \$230,333 (Mission)

**Type of research:** Development

**Research category:** Behavior/behavior change research

**Codes:** In-house #51794, Sub AI05.12A

**Staff monitors:** T. Nelson, E. Esu-Williams

**Study type:** Intervention

**Research area:** Children affected by HIV/AIDS (Orphans)

**Description:** An intervention study in KwaZulu Natal, South Africa to determine the role that young people can play in the provision of HIV education and support to orphans and vulnerable children (OVC) in a school-based setting.

**Study objectives:** To assess the feasibility and impact of building the capacity of older youth aged 18–24, to provide HIV education and support to in-school OVC within their communities and to explore in-school youth's perceptions of the ABC terms and behaviors.

**Methodology:** This intervention study utilized a pre-post test design. Survey data were collected from 11–15 year old learners at five primary schools in a location called Valley of 1000 Hills. Researchers utilized an anonymous, pre-tested, interviewer-assisted, self-administered questionnaire to measure learners' HIV knowledge, stigmatizing attitudes, and communication around HIV at baseline (October 2005) and at endline one year later (October 2006). The endline survey also included questions to determine learners' acceptability of and satisfaction with the program. Baseline and endline qualitative data were also collected from community members, learners, and caregivers. A small nested qualitative study was conducted among learners to explore their understanding of the ABC (Abstinence, Be Faithful, and Condom Use) terms and behaviors. Results of the nested study were used to inform the intervention messaging and content.

**Study significance:** OVC are particularly affected by HIV, yet they may be unable to access traditional care and support programs and activities due to a number of factors, including limited resources. In South Africa, with its large numbers of OVC, communities and many individuals, including children themselves, are tasked with providing adequate care and support services for OVC. Innovative strategies are needed to increase the ability of communities and individuals to cope with the unique needs of OVC. One such innovative approach, being tested in this study, is to provide ongoing care and support to these children in schools, which they can easily and freely access.

**Key results:** Learner participation was high, particularly among orphans. More than half (55 percent) of the program participants reported that they had been orphaned; 30 percent had experienced the death of a father only, 10 percent had experienced the death of a mother only, and 15 percent had experienced the death of both parents. Learners who participated in the program felt that they benefited from it. They reported positive changes as a result of their participation, such as having greater knowledge about HIV transmission and prevention, thus increasing their ability to protect themselves from HIV, being more accepted by their peers, having an easier time with schoolwork, and being able to more confidently ask for help if their rights were violated. Between baseline and end line, program participants and non-participants alike demonstrated increases in HIV knowledge and decreases in their negative attitudes toward people living with HIV and AIDS. Improvements were greater among program participants. Almost all male and female learners participating in the nested study's focus group discussions agreed that abstinence, being faithful and condom use were not common behaviors in their community and indicated that practicing these behaviors was difficult or even impossible. Participants reported an increase in HIV related communication. Volunteer youth caregivers were happy with the program, but felt limited in meeting the all the needs of OVC. Principals, teachers, and parents/guardians were supportive of the program.

**Partner:**

The Valley Trust

**Research summary:** [www.popcouncil.org/pdfs/horizons/SouthAfrica\\_YouthCareGiversSum.pdf](http://www.popcouncil.org/pdfs/horizons/SouthAfrica_YouthCareGiversSum.pdf)

## SOUTH AFRICA

### Evaluation of The Mothers Program in KwaZulu Natal, South Africa

Hz ID: 284

Effective dates: 7/05 – 6/07 (Completed)

Fully loaded budget: \$363,656 (Mission)

Type of research: Development

Research category: Introduction research

Code: Sub AI05.36A

Staff monitors: C. Baek, N. Rutenberg

Study type: Intervention

Research area: MTCT

**Description:** This evaluation documents the effectiveness of The Mothers Program—a psychosocial peer support program in KwaZulu Natal, South Africa, whereby HIV-positive mothers provide support to others who have been recently diagnosed.

**Study objectives:** Assess the impact of The Mothers Program on women’s utilization of key prevention of mother-to-child transmission (PMTCT) services and document HIV-positive pregnant and postpartum women’s experiences with the program.

**Methodology:** The design of the evaluation was quasi-experimental, comparing changes in pre- and post-intervention measures of service utilization and program impact. Baseline data were collected in the Pietermaritzburg area 1) from a cross-section of women receiving PMTCT services in three sites prior to the introduction of The Mothers Program and 2) from a second cross-section of women receiving PMTCT services after The Mothers Program had been in place for one year. The evaluation measured changes in program utilization by comparing service statistics before and after the introduction of The Mothers Program and measured program impact by comparing the pre- and post-intervention groups as well as women who joined and women who declined to join The Mothers Program.

**Study significance:** Many women interpret a positive HIV test result as a death sentence, leaving them with few options and little hope. The medical recommendations made in PMTCT programs are often difficult for women to implement as they are overshadowed by community norms, values, and beliefs. There are social costs to following provider’s recommendations both while pregnant and after delivery. Moreover, it can be challenging for women to take medication during pregnancy and to follow the recommended infant feeding practice for HIV positive women—breast milk substitutes or exclusive breastfeeding and then early weaning—as neither are normative practices. Given these factors, adherence to medical recommendations and continued participation in PMTCT programs is frequently low. This results in a prevalence of pediatric HIV infection, which could be substantially reduced by improved utilization of PMTCT services and the follow-up of HIV-positive mothers and their infants. Adding psychosocial support to the basic PMTCT clinical services may increase uptake of PMTCT programs and further reduce mother-to-child transmission of HIV.

Nurses and counselors do not have sufficient time to spend with individual clients to provide education and much-needed psychosocial support. Peer supporters thus fill in gaps that the medical health system does not have resources to cover. They meet with women regularly and provide consistent support to women to act on the medical recommendations they have received to reduce mother-to-child transmission (MTCT). Once women deliver, peer support in the postpartum phase enables women to access and follow-up on the care and support they need both for their infant as well as themselves.

**Key results:** The following results collected after the program was in place for one year highlight differences between new mothers who participated in the program and those who did not.

- Participants were more likely to disclose their HIV status to a partner, family member, or friend.
- 95 percent of participants and 88 percent of their babies received the medication that prevents mother-to-child transmission of HIV. These were significantly higher rates than those for nonparticipants.
- 89 percent of participants used safer forms of infant feeding, notably higher than among nonparticipants.
- Participants were more likely to have taken a CD4 test and to know their CD4 count, enabling them to access lifelong treatment for AIDS, if needed.
- Participants reported feeling less alone in the world, less overwhelmed by problems, and more hopeful about the future than nonparticipants.

**Partners:**

Elizabeth Glaser Pediatric AIDS Foundation  
Health Systems Trust  
The Mothers’ Program

**Final report:** [www.popcouncil.org/pdfs/horizons/m2mFinalReport.pdf](http://www.popcouncil.org/pdfs/horizons/m2mFinalReport.pdf)

## SOUTH AFRICA

### Building FBO capacity to deliver mutual monogamy interventions to church members in the Eastern Cape of South Africa

Hz ID: 286

Effective dates: 2/06 – 10/07 (Completed)

Fully loaded budget: \$558,653 (Mission)

Type of research: Development

Research category: Introduction research

Codes: In-house #51798, Sub AI06.08A, Sub SI07014A

Staff monitors: N. Sohaba, W. Tun

Study type: Intervention

Research area: Prevention

**Description:** The study seeks to develop and evaluate a faith-based organization (FBO)-based intervention to promote mutual monogamy (MM) among church members in the Eastern Cape Province, South Africa. The capacity of service providers and program managers of the FBOs and church leaders from 18 churches was developed to deliver the MM intervention package to church members.

**Study objectives:** Assess the feasibility, acceptability, and sustainability of an HIV prevention intervention promoting MM; Determine changes in acceptance, attitudes, perceptions, beliefs, and practices around MM among church members exposed to the MM intervention; Build the capacity of FBO service providers, program managers, and church leaders to deliver MM-related messages and services.

**Methodology:** A curriculum, based on behavior change theory and formative research, was developed to cover topics ranging from HIV transmission to relationships, gender dynamics, and couple communication. The curriculum was used to train church leaders, who then facilitated group workshops at their churches using modules from the curriculum. They also delivered sermons on the same topics to their entire congregations. In total, the intervention reached 1,363 church members through sermons on HIV and MM, and 316 people (76 men and 240 women) through workshops. To evaluate the intervention, a survey was administered to 345 church members before and 302 church members after the 3-month pilot program. In-depth interviews with intervention participants, workshop facilitators, church leaders, and program coordinators were also conducted.

**Study significance:** FBOs are key potential partners in implementing HIV prevention activities, particularly concerning the reduction of concurrent partnerships. The resources produced and lessons learned will be used to replicate the program in other churches in South Africa.

#### Key results:

- Knowledge that MM and consistent condom use were effective methods to prevent HIV was already high at baseline, but it increased at end line only among those with high participation in the program.
- There is a trend, post-intervention, toward lower rates of physical, sexual and psychological abuse in the past three months experienced by women in the high participation group.
- There was greater understanding of abuse (i.e. that abuse also includes psychological abuse).
- Extramarital relationships appear to be common in the community. At baseline and end line, nearly 70 percent of all respondents thought most men in the community have extramarital relationships; 40 percent thought so about women in the community.
- At baseline, approximately 15 percent of married or cohabiting respondents reported having another partner in the past three months besides their primary partner. Further, about one-quarter thought their partner had another partner outside their relationship. As expected, due to the short time of the intervention, there was no difference between baseline and end line for either of these variables.
- There was also no change among respondents in perceived difficulty to practice MM; approximately 50 percent thought it was difficult to implement.
- However, those in the high participation group at end line were more likely to consider communication about MM not to be difficult and to have communicated with their partner about MM compared to respondents at baseline and those in the little/no participation group.
- Participants of the program also uniformly emphasized the importance of MM in creating a healthy family.

#### Partners:

Alice Hospice

Butterworth Local Council of Churches HIV/AIDS Ministry

Eastern Cape Provincial Council of Churches

Progressus

South African Council of Churches

## SOUTH AFRICA

### A community-based intervention program to address the needs of elderly caregivers in the Eastern Cape Province of South Africa

**Hz ID:** 291

**Effective dates:** 3/06 – 5/07 (Completed)

**Fully loaded budget:** \$157,022 (Mission)

**Type of research:** Development

**Research category:** Introduction

**Code:** Sub AI06.10A

**Staff monitors:** E. Esu-Williams, K. Schenk, H. Brahmhatt

**Study type:** Intervention

**Research area:** Children affected by HIV/AIDS

**Description:** An intervention study that examines challenges faced by elderly caregivers and uses this information to develop and test interventions that increase the ability of the elderly to cope as caregivers for family members living with HIV and for orphans and vulnerable children (OVC).

**Study objectives:** To build the capacity of the elderly to provide care to OVC and people living with HIV, to help meet elderly caregivers' physical and psychosocial needs, to facilitate intergenerational communication between the elderly and their dependents, and to disseminate information to the elderly on existing social support services.

**Methodology:** The study used a quasi-experimental, pre-and post-test design. Approximately 400 elderly caregivers, aged 60 years and older, who took care of people living with HIV and/or OVC and belong to Age-in-Action-supported clubs, were enrolled in the study; half in the intervention arm and half in the comparison arm. Elderly caregivers in the intervention arm belonged to seven Age-in Action clubs in Kwanobuhle; in the comparison arm, the caregivers belonged to five clubs in Langa and Khayelitsha. Both groups received regular Age-in-Action services, while the intervention group received an enhanced intervention package. To assess the success of the care and support intervention, the study compared quantitative and qualitative data collected before and after the intervention.

**Study significance:** As a result of increasing illness and death among young parents in Africa, the elderly have assumed key care responsibilities for their children, grandchildren, and other dependents. Little information is available on the burden of care they carry, the challenges they experience, and how they are coping. Meeting the needs of elderly caregivers is a priority for home and community-based care and OVC programs. Interventions need to address both service-related and structural issues. Interventions to increase access to community care and psychosocial support for the elderly, and to develop their capacity to communicate more effectively with the different generations of dependents in their household are needed. This study will build the capacity of elderly caregivers to deliver services more effectively, utilize existing community resources and support, and help them cope with their own psychosocial concerns.

#### Key results:

- The intervention had an effect on the following knowledge and psychosocial variables associated with the care giving of the elderly. Elderly in the intervention group:
  - › Demonstrated improvement in knowledge levels related to HIV and AIDS.
  - › Were less likely to report depressive symptoms.
  - › Were less likely to report feeling helpless regarding tasks that needed to be achieved.
  - › Were less likely to worry about the future of their dependents when they passed on.
  - › Were less likely to want to abuse their dependents.
- The intervention had an impact on the negative coping skills of the elderly immediately post intervention.
- The intervention had a longer term effect on several variables at time 2 (3 months post intervention). The elderly in the intervention group increased their use of positive coping skills, reduced their perception of caregiving as burdensome, reported feeling less angry with their dependents, and were less likely to express fears about meeting the needs of their dependents.

#### Partners:

Age-in-Action

Medical Research Council

## SOUTH AFRICA

### Integrating AB into the Life Skills Program in Mpumalanga Province, South Africa

**Hz ID:** 292

**Effective dates:** 7/06 – 10/07 (Completed)

**Fully loaded budget:** \$405,817 (Mission)

**Type of research:** Development

**Research category:** Introduction research

**Code:** In-house #51795, Sub SI07032A

**Staff monitors:** N. Sohaba, E. Esu-Williams, T. Nelson

**Study type:** Intervention

**Research area:** Prevention

**Description:** A curriculum of comprehensive HIV prevention for youth was developed, centered on AB messaging. This curriculum was piloted to explore the feasibility and impact of integrating AB (abstinence, be faithful)-related activities and messages into the curriculum for students in grades 6 and 7 (10-14 years old) in Mpumalanga Province, South Africa. (Through Grade 3, this curriculum is termed “Life Skills”, with 3 learning areas. Thereafter (Grades 4-12) use the “Life Orientation” curriculum, with eight learning areas (incl. social science, technology, arts, and culture).

**Study objectives:** The objectives were 1) to develop an HIV prevention curriculum to promote a balanced ABC strategy by emphasizing abstinence (A) and being faithful (B) while building upon existing condom knowledge of 6th and 7th grade learners; 2) to assess the feasibility and acceptability of this curriculum among teachers and learners and 3) to strengthen the capacity of teachers to implement this curriculum in conjunction with the existing Life Orientation curriculum.

**Methodology:** Phase I included formative research and a mini-pilot to inform curriculum development; phase II was a pilot phase. In Phase II, the curriculum entitled *Dare to be Different* (D2BD) was implemented in 19 sixth grade and 19 seventh grade Life Orientation classes at nine schools April 23- June 22, 2007. D2BD reached a total of 1532 learners and 38 teachers. Horizons conducted teacher training and weekly support/monitoring visits. Following the implementation, 37 individual interviews and 17 mixed sex FGDs were conducted with learners. Learners were evenly distributed across schools by sex and grade. Fifteen individual interviews were conducted with teachers, evenly distributed across schools by grade.

**Study significance:** The Life Skills/Life Orientation program in South African schools is an important source of information on HIV and AIDS for in-school youth. Previous Horizons research identified gaps in the existing curricula around abstinence and faithfulness messaging. Historically, Life Skills curricula focused heavily on C (condom) messaging, with less information provided on AB (delaying sex, abstinence and being faithful, mutual monogamy). Integrating a module focused on AB can supplement existing Life Skills curricula in South African schools. This module provides in-school learners with more balanced ABC messaging and provides teachers and schools with a more comprehensive HIV strategy for risk reduction, ideally leading to desired behavior change.

**Key results:** D2BD is accepted by learners, teachers and parents, fills a gap in the Life Orientation Curriculum and is easily incorporated into the existing HIV prevention program. Teachers and learners were positive about the D2BD curriculum. After participating in D2BD, learners reported feeling more confident they could abstain, resist peer pressure, identify and reduce risky behaviors. Specifically, the learners agreed that abstinence was a positive behavior, were able to define secondary abstinence, were able to identify behaviors that put them at risk and understand the impact of risky behaviors on their future. Teachers and learners agreed that D2BD does more than provide the basics of HIV prevention. It builds critical thinking and decision-making skills. Teachers report that D2BD is positively different from the current Life Orientation HIV Prevention Program. Both teachers and learners report they benefitted from the parent- child communication activities. Language barriers, limited time for implementation and sensitivities around sexual topics were all reported as barriers. Additional barriers included variation in learners’ general HIV and sexual health knowledge, and teachers’ lack of knowledge about some of the sexual health issues discussed. A more rigorous evaluation is necessary to determine whether D2BD can have an impact on sexual behavior and knowledge.

**Partner:**

Mpumalanga Department of Education

## SOUTH AFRICA

### Different models of delivering antiretroviral therapy (ART) and integration of ART with TB services in South Africa: A situation analysis

Hz ID: 298

Code: In-house #51803

Effective dates: 7/06 – 8/07 (Completed)

Staff monitors: L. Ndhlovu, T. Maphanga, N. Rutenberg

Fully loaded budget: \$87,054 (Mission)

Study type: Diagnostic

Type of research: Assessment and/or evaluation

Research area: Care and treatment

Research category: Health policy/systems and health services research

**Description:** This evaluation study seeks to provide information about different models of care and key measures of success for integrating antiretroviral (ART) and tuberculosis (TB) services. Information was gathered from service providers and patients at health facilities that deliver ART and TB treatment and care services.

#### Study objectives:

- Identify and articulate key output and outcome indicators of ART and TB service provision, based on existing national, PEPFAR, and international indicators.
- Document inputs (financial and human resources), processes, outputs, and outcomes (e.g., quality, equity) in facilities offering ARTs selected for the study.
- Document the inputs and processes present at the sites with higher levels of indicators, and those that are absent in other sites.
- Document which of the service delivery models (e.g., government with private, government alone) have the inputs and processes that lead to successful delivery.
- Describe and document how TB and HIV services have been integrated, if at all, in different sites.

**Methodology:** Fourteen facilities that deliver ARTs and the associated TB facilities that serve as referral for TB services were selected. In-depth interviews were conducted with facility managers and key service providers at each facility. In addition, a quantitative survey of patients was conducted, with a minimum of fifteen people living with HIV or TB treatment interviewed per facility.

**Study significance:** The study identified different models of service delivery for ART and ART/TB integration. While it is clear that institutions deliver ART services in different environments and circumstances, this had never been systematically studied and documented. This study will provide a basis for identifying some elements associated with ART programs that function better than others.

#### Key results:

- All health care providers reported receiving training relevant to the services they delivered.
- Majority of service providers interviewed were from ART facilities.
- All clinical practitioners at ART facilities reported having received training on TB management; at TB facilities none of the service providers reported having received training in HIV management.
- Health care providers were significantly more likely to communicate HIV prevention messages to patients who came for ART-related services compared to TB patients seeking services at TB facilities.
- Most health facilities indicated only partial integration of the two services.
- Location of TB and HIV treatment services at different facilities is problematic.
- Travel distance to ART and/or TB services was cited as a barrier to patient access.
- Majority of patients (72 percent) were female; three times as many women reported accessing ART (78 percent female vs. 22 percent male).
- Professional nurses and counselors constituted almost half of the staff at all health facilities.

#### Partners:

AIDS Care Training and Support (ACTS)

Baragwanath Hospital

Diocese of Rustenburg

National Health Department

Perinatal Health Research Unit

Provincial Health Departments: Gauteng, KwaZulu Natal, Limpopo, Mpumalanga, and North West

Right to Care

## SOUTH AFRICA

### Expanding access to HIV/AIDS treatment to children through family centered approach in a South African setting: Pilot Phase

Hz ID: 304

Codes: In-house #51810

Effective dates: 7/07 – 6/08 (Ongoing)

Staff monitors: L. Ndhlovu, T. Maphanga, H. Brahmhatt

Fully loaded budget: \$201,804 (Mission)

Study type: Intervention/Evaluation

Type of research: Development

Research area: Care and Treatment

Research category: Health Policy/Systems and Health Services Research

**Description:** This feasibility study seeks to test a Family Centered Approach (FCA) to improve HIV counseling and testing rates among spouses, partners and children of HIV infected persons, in different kinds of health facilities that provide HIV/AIDS services to both children and adults. Information was gathered from service providers and patients at health facilities delivering the HIV/AIDS services. Due to extensive delays in gaining official approval, however, data collection in the pilot phase period was completed only at one facility. We plan to carry out pilot and expansion activities at an additional hospital and associated primary health facilities in the next phase.

#### Study objectives:

- To examine the feasibility of a family centered approach in delivering and expanding HIV treatment services to children.
- To examine the acceptability to family members and service providers of delivering a family centered approach in delivering ART services to children.
- To examine the potential impact of the family centered approach on recruiting HIV positive children for HIV care.

**Methodology:** Three facilities were selected as pilot sites for this study: Cecilia Makiwane Hospital in Eastern Cape Province and, Tapologo HIV/AIDS Program and Royal Bafokeng Health Facilities in North West Province. Activities were completed only at Tapologo, where five health facilities under Tapologo HIV/AIDS Program were visited. A total of 287 interviews were done with adult patients accessing HIV/AIDS services. Another 14 interviews were done with caregivers or parents who brought children for HIV/AIDS services in the facilities. A total of 283 referral cards were issued to participants who visited the facilities for HIV/AIDS services. Twenty-eight referral cards were returned by other participants who needed HIV/AIDS services.

**Study significance:** The study will help to ascertain whether a family centered approach to counseling, testing, care and treatment is feasible and acceptable in health facilities that provide HIV/AIDS services. Of particular note, this study will provide important information on approaches to testing high risk children who may have been missed during PMTCT. The study will also help to establish whether more children will receive HIV/AIDS treatment if more family members are involved. It will also help to establish whether it is possible to implement a service delivery model that includes more family members.

**Key results:** Of 287 interviews conducted with adults at Tapologo, 283 participants agreed to take a referral card. Ten percent of the cards were returned during the two month pilot study. This may be under reporting of impact, since it is likely that more cards would have been returned after data collection stopped and it is possible that family members obtained care at other facilities and therefore would have been missed in this study. Fourteen interviews were done with caregivers or parent (s) of children. Few children were accessing HIV/AIDS services at Tapologo HIV/AIDS program. Children coming for HIV/AIDS services are put in a same area with adult patients, indicating facilities did not have enough space (or had not thought) to cater to children.

Service providers were keen to provide services in a family centered way. However, due to many tasks in their clinics, one particular nurse was assigned to have an in-depth talk with each patient by encouraging her or him to bring a partner or children for VCT and other HIV/AIDS services.

**Partners:** Cecilia Makiwane Hospital; Provincial Department of Health: Eastern Cape and North West; Royal Bafokeng Health Centre; Tapologo HIV/AIDS Programme

## SOUTH AFRICA

### Factors affecting access to ART and HIV care services for Orphans and Vulnerable Children (OVC): A Situation Analysis in the Mariannhill Area of KwaZulu Natal

Hz ID: 307

Codes: In-house #51807, Sub SI07015A

Effective dates: 4/07 – 9/07 (Completed)

Staff monitors: H. Brahmhatt, K. Schenk

Fully loaded budget: \$210,240 (Mission)

Study type: Diagnostic

Type of research: Assessment and/or evaluation

Research area: Children affected by HIV/AIDS

Research category: Health policy/systems & health services research

**Description:** Cross-sectional study to assess factors affecting access to pediatric ART and HIV care services, and assess barriers and facilitators of HIV care services among caregivers of HIV positive children on treatment, as well as those not on treatment. Qualitative data was collected to assess perspectives as well as challenges faced by health service providers, community level workers and the staff at institutions caring for OVC.

**Study objectives:** Identify barriers and facilitators affecting caregivers of OVC to access pediatric ART and HIV care services, determine the challenges faced by caregivers supporting OVC on pediatric ART and HIV care and explore their perspectives, investigate healthcare workers' perspectives on OVC access to pediatric ART and HIV care and explore the challenges that they face.

**Methodology:** Health care providers, community level workers, and staff of institutions taking care of orphans were interviewed using qualitative methods (in-depth interviews and focus group discussions) to assess their perspectives and challenges and lessons learned in caring for and improving access to ART services and care for OVC. Qualitative and quantitative methods (mini-survey of 53 caregivers) were used to assess perspectives of caregivers of OVC. Quantitative data was analysed using SPSS version 15.0 software. Interviews conducted in isiZulu were audio-recorded, transcribed and translated into English; transcribed data were clustered around key data domains for analyses of qualitative data.

**Study significance:** Due to tragically low access for HIV-positive OVC to ART and care services, the need to understand barriers to access to HIV care and treatment is urgent. This study makes a valuable new contribution to this growing research area by focusing on understanding facilitators and barriers to accessing HIV care and treatment from the perspective of caregivers and service providers. This was designed to complement other studies within the Horizons and Population Council portfolios, including a FRONTIERS study in Uganda that focused on seeking the views of HIV-positive youth. Taken together with a third study exploring community attitudes towards pediatric ART in Kenya, these studies together make a substantial contribution to developing a comprehensive research agenda on supporting HIV-positive children and young people in ways that recognize and respond to the views of children and young people themselves.

#### Key results:

- Majority of HIV-positive children on treatment were cared for by their grandparents; 38 percent of children reported their biological parents were deceased.
- Respondents on average had a more positive perception of staff-related services compared to the delivery-related services (long waiting time at clinic) of the ARV facility.
- Caregivers were unanimous in their level of confidence about the benefits of receiving treatment, adhering to the treatment and receiving support in giving the treatment.
- On average, caregivers were more likely to adhere to the treatment regimen for their dependents than to default. If treatment was missed, it was more likely due to logistical problems, such as lack of transport.
- A majority of caregivers reported feeling satisfied with life and feeling happy most of the time. This is an important component, enabling caregivers to provide quality care to their dependents, as well as assist with adhering to hospital visits and HIV treatment regimens.
- Caregivers reported experiencing negative feelings and behaviors toward themselves and their dependents and the fear of stigma influenced their behavior. A majority reported that people were not aware that their dependent was HIV-positive and felt it was risky to reveal the HIV status of their dependent. Most also felt ashamed that their dependent was HIV-positive.

#### Partners:

Health Promotion Research Development Unit, Medical Research Council  
St. Mary's Hospital

## SWAZILAND

### Repositioning postnatal care in a high HIV prevalence environment: Operations research in Swaziland

Hz ID: 294

Codes: Sub AI06.02A

Effective dates: 1/06 – 3/07 (Ongoing)

Staff monitors: C. Warren, C. Baek

Fully loaded budget: \$167,969 (Core)

Study type: Intervention

Stage of research: Assessment and/or evaluation

Research area: MTCT

Research category: Health policy/systems and health services research

**Description:** Operations research to test whether a change in the National Guidelines for postnatal care strengthens postnatal care attendance and follow-up of mothers and infants.

#### Study objectives:

- Document the types of service delivery modifications required to improve care and follow-up of HIV-positive and HIV-negative postnatal women and their newborns.
- Measure the effect of changing the post-natal care policy guidelines on the quality of postnatal care and the utilization of postnatal services by all women.
- Increase the use of HIV care and support services by HIV-positive women and their infants.

**Methodology:** The research comprises a quasi-experiment to evaluate the effectiveness of the new postnatal service guidelines in four facilities providing delivery and/or MCH services. Baseline data were collected from 54 health care providers, 356 postnatal clients with an infant 0–10 weeks old, 160 observations of provider–client interaction at antenatal and postnatal visits, and 148 client flow checks. Record reviews include in-patient notes for normal delivery (61), caesarean section (40), and a facility inventory, including service statistics. The intervention is currently being implemented; the study will finish with an end line evaluation in March 2007.

**Study significance:** Since June 2004, comprehensive PMTCT services have been integrated into an MCH care package at selected sites in Swaziland. Antenatal attendance is about 96 percent; 74 percent of women deliver in health facilities. This coverage allows many women to access PMTCT services during the antenatal period. However, one of the main challenges identified for PMTCT programs is follow-up of mothers and infants after delivery. The postnatal period from birth to six weeks is critical for ensuring the health of the mother and infant and more comprehensive follow-up will assist in ensuring that mothers and their infants are healthy and thriving. A postnatal visit can address the specific care needs of an HIV-positive mother as well as her newborn, and include referrals between clinics or to hospitals, which are currently nonexistent. The Ministry of Health and Social Welfare (MOHSW) wishes to explore changing the policy of when postnatal visit(s) should occur. The operations research will collect the pertinent data needed to re-orient the postnatal visit, document the implementation of a revitalized postnatal service, assess the impact of these changes, and inform reproductive health programming with regard to HIV and AIDS.

**Key results:** It is feasible to change postnatal guidelines and acceptable to both providers and clients to have more visits during the early postpartum period. A significantly greater proportion of postpartum women had a visit at one week postpartum at end line. Many aspects of quality of care of mother and newborn improved over the study period. A greater proportion of HIV- negative women reported breastfeeding at end line, while fewer HIV-positive women reported mixed feeding at end line. Nine out of ten HIV-positive women took Nevirapine throughout the study period, and initiation of Cotrimoxazole increased at end line. Knowledge and skills of health care providers improved significantly yet continued efforts are needed to sustain improvements made regarding postnatal care.

#### Partners:

Basic Support for Institutionalizing Child Survival (BASICS)

Central Statistical Office

Elizabeth Glaser Pediatric AIDS Foundation

Linkages Project

Ministry of Health and Social Welfare

USAID/Regional HIV/AIDS Program

**Final report:** [www.popcouncil.org/pdfs/horizons/Swaziland\\_PostnatalCare.pdf](http://www.popcouncil.org/pdfs/horizons/Swaziland_PostnatalCare.pdf)

## Reducing HIV risk through violence prevention with young men in Tanzania

**Hz ID:** 204

**Effective dates:** 4/03 – 5/07 (Completed)

**Fully loaded budget:** \$567,134 (Core)

**Type of research:** Development

**Research category:** Introduction

**Codes:** Sub AI03.09A, Sub AI03.10A

**Staff monitors:** E. Weiss, S. Maman

**Study type:** Intervention

**Research area:** Prevention

**Description:** An intervention study to determine the impact of the *Tuelemishane* (Let's Educate Each Other) Project, which uses a combination of community theater and peer support groups to change norms and behaviors related to HIV risk and violence among young men in Dar es Salaam, Tanzania.

**Study objectives:** To reduce HIV risk and reported use of violence among young men, using a combination of peer support and community theatre.

**Methodology:** The formative research phase consisted of focus groups and in-depth interviews with young men and young women. To evaluate the intervention, the study used a matched untreated control group design with pre- and post-intervention measures. Young men in the intervention and control groups were interviewed at baseline and at two months post-intervention. In addition, female partners of 40 men in the intervention group were interviewed at end line.

**Study significance:** Men's control over the terms and conditions of their sexual relationships and intimate partner violence are emerging as important factors that fuel the HIV epidemic among young women. The ways in which gender power dynamics play out in adolescent relationships had not been well described, particularly from the perspective of young men. To address the overlapping epidemics of HIV and violence, an intervention for young men aged 16-24 years living in Dar es Salaam was designed and evaluated.

### Key results:

Findings from formative research which helped shape the intervention included:

- Social norms were seen to encourage women to be obedient and to fulfill men's needs.
- Male and female informants associated violence most commonly with infidelity.
- There was a great deal of mistrust between partners in relationships due to infidelity and the transactional nature of sex in this setting.

Findings from baseline and follow-up interviews included:

- At baseline, 23 percent of sexually active men reported they had been physically or sexually violent at least once with an intimate partner.
- At follow-up, men in the intervention community were significantly more likely to have used a condom in their last sexual encounter as compared to men in the control community.
- There were no significant differences in reported use of violence between intervention and control groups at follow-up. However, there were significant differences in the norms regarding the justification of violence. Men in the intervention community were significantly less likely to report that violence against women is justified under various scenarios.
- Men in the intervention community were significantly more likely to have favorably changed their attitudes regarding gender norms from the baseline period to the post-intervention period.

### Partners:

JHU School of Public Health  
 Muhimbili College of Health Sciences  
 University of Dar es Salaam Drama Department

## Refinement of HIV stigma indicators and evaluation of a stigma reduction intervention in Tanzania

Hz ID: 259

Effective dates: 12/05 – 5/07 (Completed)

Fully loaded budget: \$243,350 (Core)

Type of research: Development

Research category: Behavior/behavior change research

Codes: Sub AI05.68A, Sub AI05.69A

Staff monitors: J. Pulerwitz, L. Brown, P. Hutchinson

Study type: Diagnostic

Research area: HIV-related stigma and discrimination

**Description:** Further field-testing of quantitative measures for HIV-related stigma and discrimination, and an evaluation of a community-based intervention to reduce HIV-related stigma in Tanzania.

**Study objectives:** To test the impact of an intervention to reduce HIV-related stigma and discrimination and to refine quantitative measures for stigma.

**Methodology:** Surveys with more than 800 community members, qualitative interviews, and focus groups were conducted after the intervention. Results were compared to previous baseline surveys.

**Study significance:** Findings provide lessons on how best to confront HIV-related stigma and discrimination on the community level, as well as how best to quantitatively measure this complex concept.

### Key results

- The intervention worked for those most directly exposed. People who reported exposure to the intervention reported less stigmatizing attitudes.
- The intervention was successful in raising people's recognition of HIV-related stigma, a key first step in the process of stigma reduction.
- Despite HIV levels of knowledge about HIV transmission, fear of transmission through casual contact remains high and requires more intensive attention.
- Community leaders, in this case “balozi” leaders, are a promising entry point for stigma and discrimination reduction interventions. (“Balozi” is an administrative unit of approx. 10 households.)
- Stigma indicators performed well over time on measures of reliability and validity and provide a good basis for evaluating stigma-reduction programs.

### Partners:

International Center for Research on Women (ICRW)  
Kimara Peer Educators and Health Promoters Trust Fund  
Muhimbili University (MUCHS)  
Tulane University

## THAILAND

### Reducing dropouts, increasing adherence rates among PLHA on highly active antiretroviral therapy in northern Thailand

**Hz ID:** 237

**Effective dates:** 11/03 – 5/07 (Completed)

**Fully loaded budget:** \$1,176,512 (Core)

**Type of research:** Development

**Research category:** Introduction research

**Codes:** In-house #51774, Sub AI03.60A, Sub AI03.61A

**Staff monitor:** P. Guest, A. Sarna, N. Rutenberg

**Study type:** Intervention

**Research area:** Care and treatment

**Description:** Develop and evaluate different models of maintaining high levels of adherence to highly active antiretroviral therapy (HAART). Examine sexual risk behavior, health seeking behavior, health outcomes, and stigma and discrimination among clients who access antiretroviral treatment (ART) services.

**Study objectives:** Evaluate the use of practical guidelines for promoting ART adherence and a clinic-based counseling intervention with and without a peer-based component to reduce dropouts and promote short and long-term ART adherence.

**Methodology:** Modules for adherence counseling and peer education, counseling, and support were developed and providers trained to use tool kits to promote adherence to HIV treatment developed for the study. The study utilized a cluster randomized trial design with 45 hospitals in four northern provinces in Thailand, randomly allocated to three study arms. Arm I included the practical guidelines and the adherence counseling program. Arm II was the same as Arm I, but with a peer-based intervention added. Arm III was the comparison arm and included hospitals where patients in the ART program received the standard care package. A total of 753 HIV-positive people were recruited into the study and were followed for a period of 12 months to determine the extent to which they adhere to ART. Study subjects were interviewed at baseline, four months, and 12 months.

**Study significance:** HAART is associated with a significant reduction in AIDS-related morbidity and mortality, but maximum effectiveness requires 95 percent adherence. Maintaining this level is challenging, due to pill burden, side effects, the complexity of drug administration, and the lifelong need to take the medication. Research about adherence in resource-poor settings and evidence of interventions that improve adherence was lacking. As the availability of HAART becomes widespread in Thailand, maintaining adherence has become an important issue.

**Key results:** The levels of drop-outs from ART were very low and self-reported levels of adherence were very high. There is some evidence to suggest that the improved counseling provided in the intervention helped reduce drop-outs. Significant improvement was found in several of the precursors of adherence, including knowledge of HIV and ART, and perceptions of ART and self-efficacy in taking ARV. Furthermore, the changes tended to be greater in the intervention arms compared to the non-intervention arm, suggesting that the interventions may have long-term impact on adherence. The ART program has had a major impact on the lives of the patients in the study. Their physical health improved, with less reported illness and fewer episodes of hospitalization. Mean CD4 counts increased dramatically and there was a more than 10 percent increase in mean weight. At the same time, the patients' economic situation has improved, with higher proportions working and earning increased levels of income. Both physical and mental quality of life significantly improved over the 12 months of the study.

#### **Partners:**

Department of Psychiatry (Chiang Mai University)

Ministry of Public Health:

AIDS Division

AIDS, TB and STD Bureau

Center for Disease Prevention and Control, Region 10

Research Institute for Health Sciences (Chiang Mai University)

The Northern NGOs Coalition on AIDS

The Upper Northern Thai PLHA Network

## UGANDA

### Improving food security of AIDS-affected households in Uganda

**Hz ID:** 239

**Effective dates:** 7/03 – 12/06 (Completed)

**Fully loaded budget:** \$729,673 (Core)

**Type of research:** Development

**Research category:** Introduction research

**Codes:** Sub AI03.33A, Sub AI03.41A

**Staff monitors:** K. Kiragu, E. Weiss, J. Ogden, L. Nyblade

**Study type:** Intervention

**Research area:** PLHA

**Description:** Horizons and the International Center for Research on Women (ICRW) collaborated with the National Agricultural Organization (NARO) and The AIDS Support Organization (TASO) in Uganda to develop and test strategies that link knowledge and technologies from different sectors (e.g., HIV/AIDS, agriculture, nutrition) in order to improve the ability of vulnerable individuals to consume a sufficient quantity and quality of food to meet their daily needs.

**Study objectives:** To improve the food security of vulnerable households through community-based interventions that are implemented as a result of increased collaboration between HIV/AIDS, agriculture, and nutrition specialists.

**Methodology:** Case studies were prepared on the process and outcomes of developing and sustaining partnerships between the different sectors and of the resulting interventions to improve food security among vulnerable households. Specific research activities included interviews with individuals involved in the partnership process (e.g., HIV/AIDS, agriculture, and nutrition specialists; farmers' groups; community members) at different points during the study period.

**Study significance:** In most of sub-Saharan Africa, the AIDS epidemic is crippling the livelihood systems of households, particularly in rural communities, where nearly 85 percent of the population lives. Long-term effects of the epidemic have eroded the ability of households to produce food and other agricultural products, generate income, and care for and feed family members. Therefore, interventions to improve food security are urgently needed.

#### **Key results:**

- Inter-sectoral partnerships between organizations to link and leverage different sets of skills for common goals are feasible and practical. It is important to build management capacity for partnership at all institutional levels; that process must be participatory.
- The coordination of agricultural extension and HIV/AIDS education and awareness can enhance the outcomes of both sets of activities.
- Farmers' groups provide a non-stigmatizing context for conducting HIV/AIDS education, information, and sensitization activities.
- Men and women are willing to change negative gender-related attitudes and behaviors when they understand, in terms that relate directly to their own experience, how gender inequality perpetuates household food insecurity.

#### **Partners:**

International Center for Research on Women  
National Agricultural Research Organization  
The AIDS Support Organization

**Final report:** [www.popcouncil.org/pdfs/horizons/UgandaFoodSecurity.pdf](http://www.popcouncil.org/pdfs/horizons/UgandaFoodSecurity.pdf)

## UGANDA

### Building evaluation capacity among the staff of The Straight Talk program

**Hz ID:** 274

**Effective dates:** 12/04 – 9/07 (Completed)

**Fully loaded budget:** \$199,072 (Mission)

**Type of research:** Assessment and/or evaluation

**Research category:** Capacity building for research

**Code:** In-house #51781

**Staff monitors:** K. Kiragu, T. Nelson

**Study type:** Technical assistance

**Research area:** Prevention

**Description:** Straight Talk (ST) is a large, well-known program in Uganda that has been providing information about sexual and reproductive health to youth for the past decade. Horizons was asked to help ST evaluate various aspects of their program and to build capacity of ST staff to carry out their own assessments in the future.

**Study objectives:** To assess the impact of current programs on youth; to build ST capacity to collect data on the use of ST products by different age groups; to build ST capacity to evaluate the effects of activities on youth, including a new activity to train parents to discuss HIV issues with their children; and to build ST capacity to establish a monitoring and evaluation system, including looking at program costs.

**Methodology:** The study is a retrospective analysis of the ST program, which includes interviews with teachers, youth, and parents. Specifically, data were collected using structured interviews from 2,137 never-married adolescents ages 10-19 years in 96 villages in six districts. As part of a household survey conducted in five districts; interviews were conducted with 736 parents of adolescents ages 10-19 years. To evaluate ST's School Environment Program, data were collected from 567 teachers and 921 students from 59 schools. A cost study is documenting the cost of ST activities.

**Study significance:** Despite intense HIV prevention campaigns in Uganda, many adolescents are uninformed about basic reproductive health facts and thus are at high risk of unwanted pregnancy, HIV/AIDS, and other sexually transmitted infections (STIs). ST's program includes a multi-media campaign (radio, print) for conveying comprehensive ABC (abstinence, be faithful, condom use) messages intended to enable adolescents to make sound decisions about their sexual behavior. Another component is the School Environment Program, which seeks to foster a positive school atmosphere. Thus, ST reaches both in-school and out-of-school youth. But ST has little information about the effects of exposure to ST campaigns by youth so that they can improve their programs. In addition, with the breakdown of traditional institutions in Uganda, parents now have a greater role in educating their own children about sexual health. However, they need to be better prepared to effectively convey HIV prevention messages to their children. Findings will be used to improve and refine messages for parents delivered through Parent Talk, the flagship newsletter for Ugandan parents.

**Key results:** The evaluation included a community-based survey of adolescents and a subsample of their parents in six districts; a survey of teachers and youth; and a cost analysis. The evaluation revealed that nearly all secondary students, two-thirds of primary school students, and more than half of out-of-school youth have been exposed to at least one Straight Talk product. Results demonstrated that exposure to STF materials has improved adolescents' knowledge and attitudes about sexual and reproductive health and helped them to adopt safer behaviors. Exposure to STF activities was also associated with getting tested for HIV. Female adolescents were three-and-a-half times more likely to have been tested than those not exposed, and male adolescents were nearly four times more likely to have been tested. The evaluation also revealed some disturbing attitudes among parents, many of whom are unable or unwilling to talk with their adolescent children about sexual and reproductive health.

**Partners:**

Department for International Development

Family Health International

Straight Talk Foundation

**Final report:** [www.popcouncil.org/pdfs/horizons/UgandaStraightTalk.pdf](http://www.popcouncil.org/pdfs/horizons/UgandaStraightTalk.pdf)

## VIETNAM

### Reducing HIV/AIDS-related stigma and discrimination in the healthcare setting in Vietnam

**Hz ID:** 295

**Effective dates:** 12/05 – 10/07 (Completed)

**Fully loaded budget:** \$791,791 (Core: 191,791; Mission: 600,000)

**Type of research:** Introduction

**Research category:** Introduction research

**Codes:** Sub AI05.70A, Sub AI05.71A

**Staff monitors:** J. Pulerwitz, P. Guest, J. Ogden, L. Nyblade

**Study type:** Intervention

**Research area:** HIV-related stigma and discrimination

**Description:** In Vietnam, stigma and discrimination in the healthcare setting toward people living with HIV and AIDS has been recognized as an important issue. This project implements and evaluates interventions to reduce stigma and discrimination toward people with HIV and AIDS in the healthcare setting in Vietnam. It replicates and adapts similar intervention research conducted by Horizons in India.

**Study objectives:** To test the impact of hospital-based interventions to reduce stigma and discrimination toward people living with HIV and AIDS.

**Methodology:** The study compares the impact of interventions that address two underlying causes of stigma: health workers' fear of contagion and social stigma, and negative value judgments of people living with HIV. One hospital receives the fear-reduction intervention and the other the combined intervention. Baseline data are collected via a quantitative survey with a census of hospital workers (n = 344), qualitative interviews with staff and HIV-positive patients, and structured observations of hospital practices. Monitoring visits are conducted monthly to track changes at the hospitals. An endline study is conducted after 4-6 months after intervention activities begin.

**Study significance:** Findings will provide lessons on how best to confront HIV-related stigma and discrimination in the healthcare setting in Vietnam.

#### **Key results:**

- At baseline, hospital workers reported high levels of both fear-based and value-based stigma.
- Discriminatory behaviors and hospital practices were also common at baseline, and associated with stigma.
- Hospital policies enable stigma and discrimination, affecting quality of care.
- Both interventions were successful in reducing both fear- and value-based stigma.
- Both interventions were successful in reducing various discriminatory behaviors and hospital practices.
- The impact of the fear-based plus social stigma reduction intervention was greater than the fear-based stigma alone intervention.
- Lessons learned include key elements of S & D reduction interventions.

#### **Partners:**

Haiphong TB and Pulmonary Hospital  
Institute of Social and Development Studies  
International Center for Research on Women  
Quang Ninh TB & Pulmonary Hospital

**Final report:** [www.popcouncil.org/pdfs/horizons/Vietnam\\_HospitalStigmaReduction.pdf](http://www.popcouncil.org/pdfs/horizons/Vietnam_HospitalStigmaReduction.pdf)

## Promoting the sustainability of care and support activities by young people in Zambia (Phase II)

**Hz ID:** 31

**Code:** In-house #51772

**Effective dates:** 4/03 – 3/07 (Completed)

**Staff monitors:** E. Esu-Williams, K. Schenk

**Fully loaded budget:** \$195,860 (Core)

**Study type:** Intervention

**Type of research:** Introduction

**Research area:** PLHA

**Research category:** Introduction research

**Description:** An initial pilot program resulted in 1,000 youth from 60 school and community anti-AIDS clubs in two districts in Zambia being mobilized, trained, and involved in the care and support of people living with HIV and orphans and vulnerable children (OVC) in more than 90 communities. Each club member helped care for, on average, four HIV-positive persons and five OVC per month. Given the success of the pilot, a program was designed to foster sustainability of the program in 32 clubs. Limited funds were available to support locally designed activities to foster community ownership and sustainability, such as establishing stakeholder sustainability committees, building partnerships with local organizations and services, mobilizing local resources, and building the capacity of club members. The study examined the success of the program's strategies in fostering the sustainability of the model by anti-AIDS clubs.

**Study objectives:** The purpose of the study is to evaluate interventions promoting the sustainability of a community-based youth caregivers program. The specific objectives are to:

- Train members of the project management committees in Mansa and Nchelenge to take full responsibility for running the program.
- Establish local partnerships and mobilize resources to ensure that care and support activities initiated in the pilot phase are sustained.
- Strengthen the skills of youth caregivers to better meet the needs of people living with HIV and OVC, and to sustain activities.
- Identify and document lessons learned that are relevant to the scale-up of the program in Zambia.

**Methodology:** To examine the extent to which 32 anti-AIDS clubs mobilized human and financial resources to continue activities, data were collected from interviews with youth caregivers and club leaders, and from focus groups with PLHIV beneficiaries and program managers.

**Study significance:** Community-based programs are often fixed-term projects and rarely have resources to develop strategies to meet long-term needs of people living with HIV and their families. Despite the need to ensure that communities affected by HIV/AIDS have continuous access to services, there is little data about how community programs that provide care and support can be sustained. This study documents and analyzes strategies that promote sustainability of community-based interventions.

**Key results:** Although the level and intensity of inputs to the anti-AIDS clubs was reduced, the clubs were able to sustain caregiving activities. Clubs demonstrated their ability to mobilize resources and community partnerships were sustained and expanded. The district-level management committees that were set up to run the project ultimately provided little input and were difficult to sustain.

**Partners:**

Catholic Diocese, Mansa  
Luapula Foundation, Mansa

## ZAMBIA

### **Caring for health workers (HWs): Addressing the psychosocial burden of HIV/AIDS on health personnel in Zambia**

**Hz ID:** 242

**Effective dates:** 12/03 – 2/08 (Ongoing)

**Fully loaded budget:** \$287,703 (Core)

**Type of research:** Introduction

**Research category:** Introduction research

**Codes:** In-house #51775, Sub AI03.68A

**Staff monitors:** K. Kiragu, N. Rutenberg

**Study type:** Intervention

**Research area:** Prevention

**Description:** In cooperation with the Institute for Economic and Social Research (INESOR) in Zambia, Horizons developed a quasi-experimental operations research initiative to test the feasibility of an HIV/AIDS workplace model in a hospital environment to increase knowledge, acceptability, and use of HIV services and to reduce stigma in the hospital setting.

**Study objectives:** To document if a work-based program targeting health workers (HWs) improves their knowledge, attitudes, and behaviors toward HIV/AIDS; if the intervention reduces stigma among HWs who are HIV-positive; if the intervention increases the proportion of HWs who get tested regularly for HIV; if access to care and support is increased for HWs who need it; whether HWs can influence policies that affect their risk for HIV/AIDS; and the optimum manner to deliver the intervention.

**Methodology:** A quasi-experimental design was utilized, with two hospitals serving as intervention sites and three others as comparison sites. Baseline data were collected in 2004 (n=1424) and follow-up data in 2006 (n=1336).

**Study significance:** The Caring for the Caregivers Project in Zambia was implemented in recognition that human resources in the health sector must be strengthened if the system is to cope with the AIDS epidemic. Because they are seen as caregivers, medical staff are rarely the beneficiaries of health interventions, and few hospitals have formal HIV/AIDS workplace programs for their employees. This study tested a workplace approach to strengthening the willingness and capacity of health workers to reduce their risk of HIV acquisition and utilize HIV testing and care and support services.

#### **Key results:**

- 25 percent of the hospital staff had participated in the intervention; 37 percent were aware of it but had not participated and 39 percent were not aware of it.
- Half the health workers reported having had a family member either die of HIV or currently infected
- The intervention was associated with an improvement in knowledge and reduction in stigma. Those who had participated in the intervention were three times more likely to have higher knowledge and 1.7 times more likely to have lower stigma.
- 40 percent of health workers had been tested for HIV at the follow-up survey, with greater gains in the intervention sites (from 25 percent to 40 percent) compared to comparison sites (31 percent to 40 percent). Participants in the intervention were 70 percent more likely to have been tested than nonparticipants.
- Sexually active respondents in the intervention sites were less likely to have multiple partners (26 percent at baseline vs 14 percent at follow-up,  $p=0.001$ ), while those in the comparison sites remained unchanged (21 percent vs 22 percent both rounds,  $p=0.538$ ).
- Sexually-active respondents in the intervention sites who had multiple partners were also more likely to report ever use of condoms (57 percent at baseline to 75 percent at follow-up;  $p=0.016$ ), compared to those in the comparison sites (71 percent at both rounds,  $p=0.983$ ).

#### **Partners:**

Institute for Economic and Social Research (INESOR)/University of Zambia  
Support to the HIV/AIDS Response in Zambia  
Zambia Health Education and Communication Trust  
Zambia Integrated Health Program  
Zambia Medical Association

## Community education and referral: Supporting adherence to antiretroviral treatment (ART) and prevention for people with HIV in Zambia

**Hz ID:** 260

**Effective dates:** 5/04 – 7/07 (Completed)

**Fully loaded budget:** \$771,148 (Core: 621,148; Mission: 150,000)

**Type of research:** Assessment and/or evaluation

**Research category:** Introduction research

**Codes:** Sub AI04.18A, Sub AI04.19A

**Staff monitors:** F. Samuels, A. Sarna, S. Geibel

**Study type:** Intervention

**Research area:** Care and treatment

**Description:** An operations research project in Lusaka and Ndola, Zambia that aims to improve health-seeking behavior, equity of access to care, adherence to antiretrovirals (ARVs), and HIV prevention through a community engagement strategy.

### Study objectives:

- Increase understanding of how to expand health literacy, particularly about ARVs; achieve better health-seeking behavior; improve equity of access; boost ARV adherence; improve prevention for people with HIV.
- Document approaches for mobilizing and building on existing community structures and involving people with HIV to support ARV adherence and HIV prevention.
- Explore strategies that decrease stigma and discrimination through efforts targeted at different community stakeholders (e.g., health care providers, people with HIV, traditional healers, and other service providers).

**Methodology:** The study used a quasi-experimental, comparative pre- and post-test design to measure the effects of the intervention. Study sites include one intervention and one comparison site in Lusaka and in Ndola. Cross-sectional qualitative and quantitative data were collected at two points in time: baseline data between November 2004 and March 2005 and endline data collected post intervention, between July and December 2006. Quantitative data were collected via a community survey (n=1200 at both baseline and endline) and a survey of people on ART (n=322 at baseline and n=501 at endline). The qualitative data were collected via in-depth interviews and focus groups. The quantitative data were analyzed using SPSS; the qualitative data were translated, transcribed and analyzed using Atlas.ti©.

**Study significance:** While ART is rapidly being scaled-up in Zambia, concerns remain around issues of access, equity, and adherence. A community preparedness strategy helps community members seek HIV-related services (testing, prevention, and treatment) and helps HIV-infected persons manage their treatment. Evidence-based information will effectively aid the national program scale-up service delivery.

### Key results:

- Significant increase among people on ART in Lusaka who cited PLHIV peer groups as a source of information.
- HIV knowledge increased over time but there was little difference between the intervention and comparison sites, and misconceptions persisted.
- Relatively high levels of HIV testing in the study communities.
- Serostatus disclosure among people on ART increased in the Lusaka sites, but remained the same in the Ndola site.
- Mean 4-day self-reported adherence was very high in all study sites at baseline and endline, but decreased over longer periods of recall.
- Positive changes in knowledge of partner's status and sex with casual partners among people on ART in the Lusaka intervention site compared to the comparison site.
- Significant reductions in internalized stigma among people on ART in Lusaka but not in Ndola.
- Community stigma decreased over the study period in both the intervention and comparison sites, however it remains a problem.

**Partners:** Africa Directions; Archdiocese of Lusaka; Catholic Diocese of Ndola; Institute for Economic and Social Research; Int'l HIV/AIDS Alliance; Mwengu Social Health Research Center; Ndola Central Hospital; Network of Zambian People Living with HIV/AIDS; Trad'l Health Practitioners Assn. of Zambia

**Research summary:** [www.popcouncil.org/pdfs/horizons/Zambia\\_ARVAdherenceSum.pdf](http://www.popcouncil.org/pdfs/horizons/Zambia_ARVAdherenceSum.pdf)

### III. FINANCIAL SUMMARY

#### A. Financial Status Report

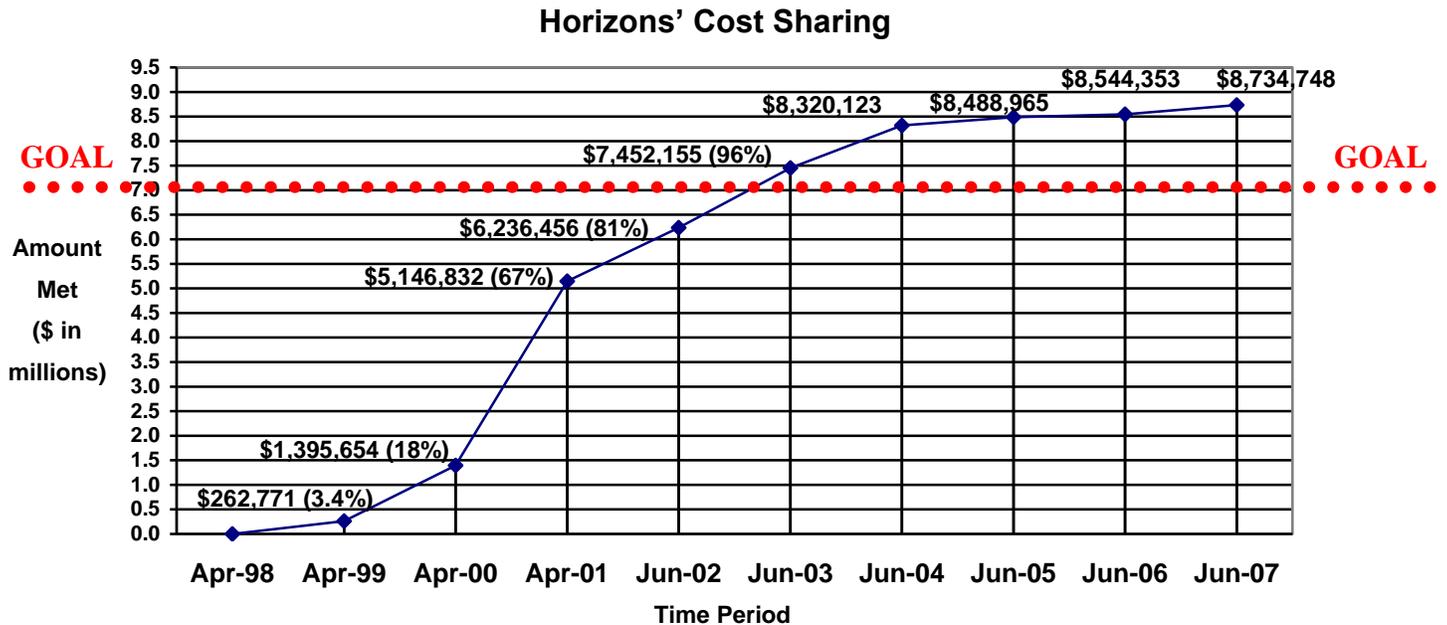
##### **Modif. Form SF 269 to 9/30/2007 (USAID FY 2007 – Qtr 4)**

|   |  |            |
|---|--|------------|
| A | Total Outlays Previously Reported (June 30 fiscal report)                      | 90,993,699 |
| B | Estimated Q4 Outlay  | 1,896,748  |
| E | Total Outlays Cumulative thru 2007 Q4 (A+B)<br>Incl. \$8,734,748 cost share    | 92,890,447 |
| G | Total Federal Share of Outlays Cumulative 2007 Q4                              | 84,155,699 |
| J | Federal Share of Unliquidated Obligations                                      | 650,000    |
| K | Total Federal Share of Outlays and Unliquidated<br>Obligations 2007 Q3&4 (G+J) | 84,805,699 |
| L | Total Federal Funds Authorized   | 86,938,955 |

|    |  |           |
|----|--|-----------|
| 1. | Balance of Federal Funds as of 9/30/07 (L minus G) | 2,133,256 |
| 2. | Less estimated payables on subcontracts to 9/30/07 |           |
| 3. | Balance remaining as of 9/30/07                    | 2,133,256 |

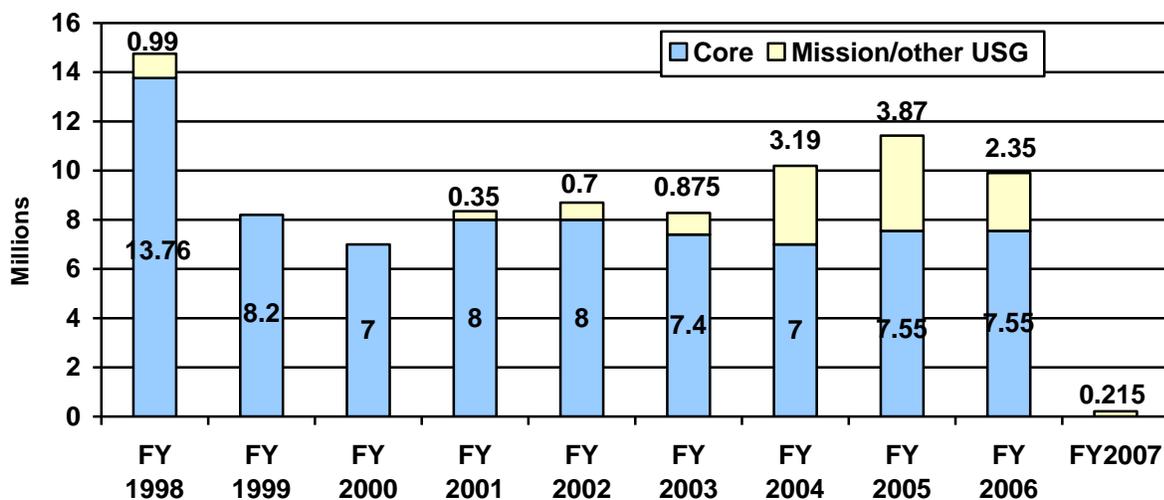
## B. Cost Share Update

- \$4 million – Horizons I goal. We achieved \$6.2 million in first five years.
- \$7.7 million – new goal (combined Horizons I and II)
- \$8.7 million – documented by 6/30/07



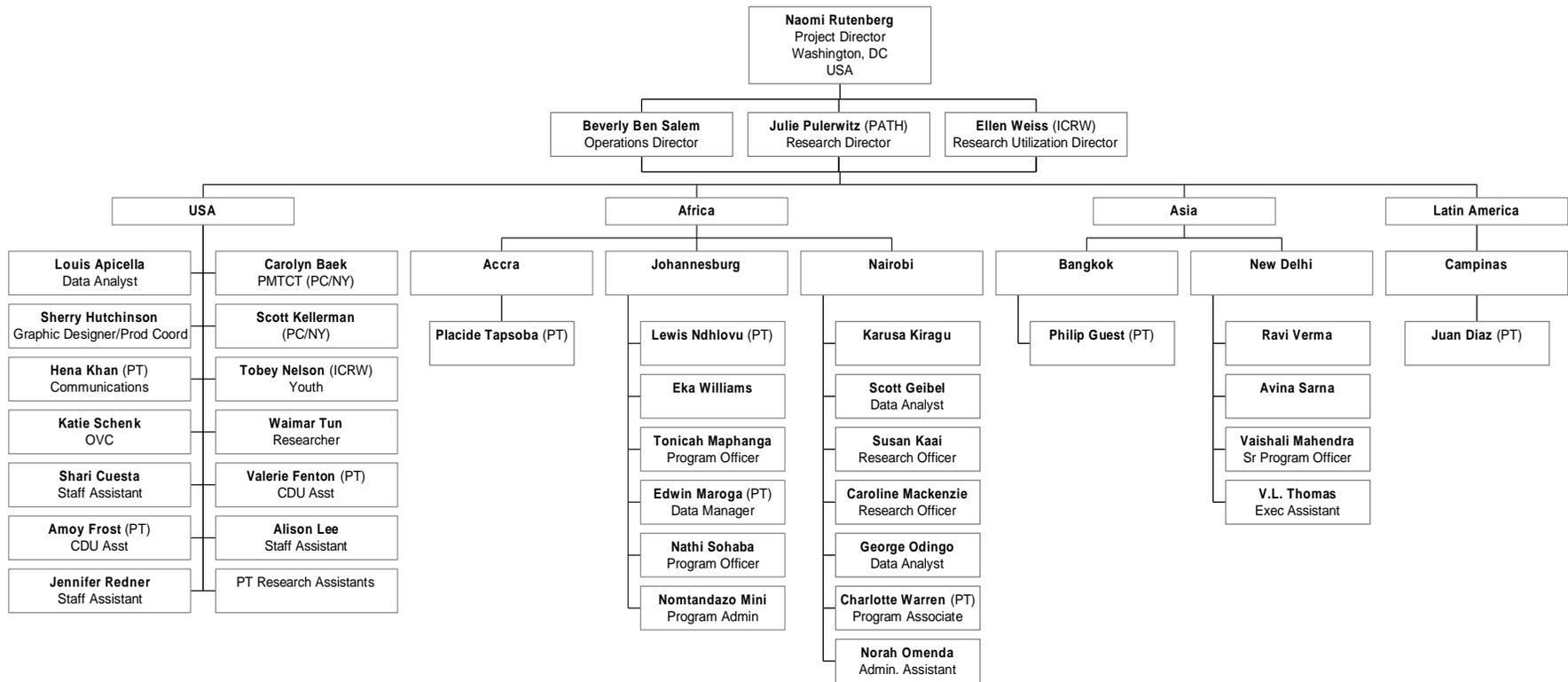
## C. Core and Mission Funding

Funding Received from Core and Mission/other USG By Fiscal Year



## IV. ANNEXES

### A. Program Organizational Chart



**B. Project Locations – Past and Present**

