

# *PROPOSAL*

## *VCT in Schools: Making HIV testing accessible to school-aged children in Zambia*

### **Team Members**

Pragnya Yogesh Alekal (MIT)  
Nedialka Douptcheva (Harvard School of Public Health)  
Jeff Hsu (MIT)  
Victoria Fan (MIT)  
Alexis White (Harvard School of Public Health)

## **TABLE OF CONTENTS**

<b>I. GOAL .....</b>	<b>2</b>
<b>II. STAKEHOLDERS .....</b>	<b>2</b>
<b>III. BACKGROUND .....</b>	<b>2</b>
<b>1. What is VCT .....</b>	<b>2</b>
<b>2. Why schools .....</b>	<b>2</b>
<b>3. The need for VCT in Zambia.....</b>	<b>6</b>
<b>4. VCT Models.....</b>	<b>7</b>
<b>5. Components of a Youth VCT Program.....</b>	<b>9</b>
<b>6. VCT Monitoring and Evaluation .....</b>	<b>10</b>
<b>7. Considerations .....</b>	<b>10</b>
<b>V. PROPOSED WORK PLAN .....</b>	<b>12</b>
<b>VI. MIT TEAM TASK LIST.....</b>	<b>13</b>
<b>VII. REFERENCES.....</b>	<b>15</b>

## **I. GOAL**

To develop a pilot VCT program for secondary government schools in Lusaka, Zambia. Such a program can serve as an enhancement to the already existing HIV/AIDS education programs in schools, and will include pre- and post-counseling and testing services. The ultimate goal is to create a successful model that can be replicated across the city, and possibly country.

## **II. STAKEHOLDERS**

- Ministry of Education
- Ministry of Health / Central Board of Health
- Zambian VCT centers
  - Latkings Mobile VCT
- Zambian peer education/sensitization organizations
  - Ukani
- Project Concern International (PCI)
- School administrators/staff
- School children
- Parents

## **III. BACKGROUND**

### **1. What is VCT**

Voluntary counseling and testing (VCT) for HIV is a confidential, if not anonymous, process that tests a person's HIV status while providing pre- and post-test counseling in order to help individuals make informed choices before and after HIV testing. As an entry point to other HIV/AIDS services, VCT supports individuals to access other HIV/AIDS related services, in particular, ART. Access to and maintaining the quality of VCT services must be scaled up if the target numbers of people are to have access to ART. VCT also serves as a means of social education and public awareness raising.

### **2. Why schools**

According to UNAIDS (2004), "Young people – 15-24 year olds – account for nearly half of all new HIV infections worldwide. They are the largest youth generation in history and need a protective environment – regular schooling, access to health and support services – If they are to play their vital part in combating the epidemic."

Zambia is no different from other countries, and women are much more susceptible to infection than men. Table 1 (HJKFF, 2005) shows how desperate the need is. Between 16-25% of young women between the ages of 15-24 are living with HIV. These are statistics that we cannot afford to ignore. According to Avert (2003) “most Zambians become sexually active at quite a young age. In 2003, among young people 15-19 years old, 28% of boys and 44% of girls reported having had sex within the last twelve months. The average age for first sex is around 17 in females and 17.5 in males. It is normal for men to be older than their partners; the average age difference is around 5 years. For many girls, their first sexual encounter is with an older boy or elderly man, some of whom entice them with money or gifts. This is one reason why girls aged 15-19 are six times more likely to have HIV than are boys of the same age.”

Indicator	Zambia	Sub-Saharan Africa	Global
Estimated number of people living with HIV/AIDS, 2003	920,000	25 million	37.8 million
Percent of adult population estimated to be living with HIV/AIDS, 2003	16.5%	7.5%	1.1%
Estimated number of deaths due to HIV/AIDS, 2003	89,000	2.2 million	2.9 million
Women as percent of adults estimated to be living with HIV/AIDS, 2003	57%	57%	48%
Percent of young women, ages 15-24, estimated to be living with HIV/AIDS, 2001	16.8 – 25.2%	8.9%	1.4%
Percent of young men, ages 15-24, estimated to be living with HIV/AIDS, 2001	6.5 – 9.7%	4.4%	0.8%
Estimated number of AIDS orphans, 2003	630,000	12.1 million	15 million
Number of people estimated to be receiving antiretroviral therapy (ART), June 2005	26,000 – 33,000	500,000	970,000
Number of people estimated to be in need of ART, June 2005	153,000	4.7 million	6.5 million

**Table 1:** Indicators of HIV/AIDS in Zambia  
Source: HJKFF, 2005

A study in Zambia found a marked decline in HIV prevalence rates in 15- to 19-year-old boys and girls with a medium to higher-level education, but an increase among those with lower educational levels (Kelly, 2000).

Considering that HIV or sex itself is a subject rarely tackled in the home or community, it is important that children have access to the information from somewhere. Schools are arguably the best setting to provide children with HIV/AIDS and sexual education because it is a pre-existing institution where theoretically a large percentage of children attend. In addition, Avert claims, “Men are targeting increasingly younger sexual partners whom they assume to be HIV-negative, and the “virgin cure” myth (which claims that sex with a virgin can cure AIDS) fuels much of the abuse.” A young girl, already scorned by society and

abused by the people she turns to, is unable to get information she might need. In addition, breaking the cycle of myths starts with educating the next generation.

According to the World Bank (2002), “education is a proven means of stopping the spread of HIV/AIDS... It has been proven to provide protection against HIV infection... It is among the most powerful tools for reducing girls’ vulnerability. Girls’ education can go far in slowing and reversing the spread of HIV by contributing to female economic independence, delayed marriage, family planning, and work outside the home. It offers a ready-made infrastructure for delivering HIV/AIDS prevention efforts to large numbers of the uninfected population – schoolchildren – as well as youth, who in many countries are the age group most at risk. It is highly cost-effective as a prevention mechanism, because the school system brings together students, teachers, parents, and the community, and preventing AIDS through education avoids the major AIDS-related costs of health care and additional education supply.”

**Box 1-2. Education: Why a window of hope?**

- Children 5 to 14 years old represent one window of opportunity because they are the least likely to be infected with HIV. Education before they reach the peak vulnerable years will protect them, and this protection will be reinforced by early training that promotes healthy life styles and avoidance of risky behaviors.
- Youth 15 to 24 years old represent a second window. This high-risk group, which accounts for some 60 percent of all new HIV infections in many countries, is also the one where ignorance remains dangerously high and where education efforts can yield maximum results.

**Figure 1:** Effects of education on HIV infection rates.  
Source: World Bank (2002)

Education does more than just reduce HIV/AIDS transmission rates; it benefits an entire country and community. It permeates well into other areas of a student’s life, as can be seen from the figure below. This pictorial diagram indicates the vicious cycle into which HIV/AIDS can trap a society. Education seems the only way to break this cycle.

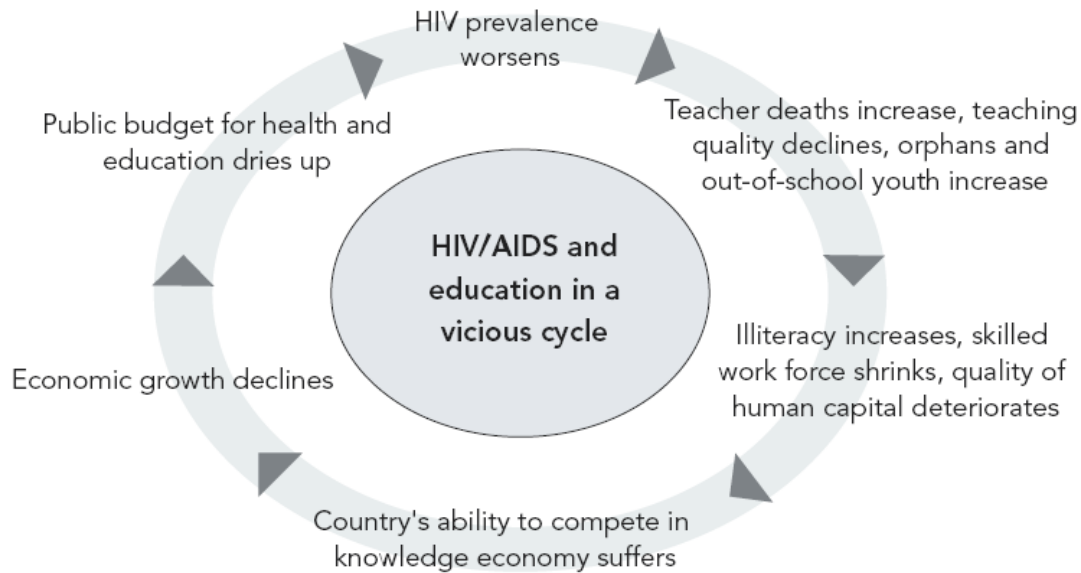
It is for this reason that we wish to focus on HIV/AIDS education programs in schools. We believe that the need is desperate and can have the most long-term benefit to the children and country in the end.

### **Box 1-3.** Education can protect women from HIV/AIDS

An analysis of demographic and household surveys from 32 countries since the early 1990s found that nearly half of all illiterate women lacked the basic knowledge to protect themselves against HIV/AIDS. Studies have shown that:

- Women with a postprimary education were three times more likely than uneducated women to know that HIV can be transmitted from mother to child.
- In Zimbabwe secondary education had a protective effect against HIV infection for women that extended at least into early adulthood (Gregson, Waddell, and Chandiwana 2001).
- In Zambia young women with a secondary education were less likely to be HIV-positive than those who had not received a secondary education (1995–97). During the 1990s the HIV infection rate fell by almost half among educated women, with little decline for women without any formal schooling (Vandemoortele and Delamonica 2000).
- In 17 countries in Africa and 4 in Latin America better-educated girls tended to delay having sex, and were more likely to require their partners to use condoms (UNAIDS 2000a).
- In Uganda, while infection rates among young women of all educational backgrounds fell, the decline was greatest for women with a secondary education (UNAIDS 2000a).

**Figure 2:** Effects of education on HIV prevalence rates among women.  
Source: World Bank (2002)



**Figure 3:** Consequences of Inaction.  
Source: World Bank (2002)

### **3. The need for VCT in Zambia**

The Zambian Voluntary Counseling and Testing Services began to be established in 1999, and by mid-2003 the country had at least 101 VCT centers (Huddart 2004). Between October 1999 and May 2003, almost 386,000 clients visited a VCT center, and more than 266,000 of these were tested (Huddart 2004). The overall HIV prevalence rate of those who were tested was 34% (Huddart 2004).

A majority of “youth” or “young people,” which refers to those aged 15-24 years, who engage in unsafe sex or other risky behaviors, are at risk of HIV infection. This age group accounts for more than 50 percent of all HIV infections worldwide (Boswell 2002:1). Preventing HIV among youth is particularly urgent in sub-Saharan Africa, where young people comprise more than 30 percent of the population and general HIV prevalence rates exceed 10 percent (Boswell 2002:1). In Zambia, young women had HIV prevalence rate in 1999 of 15.86 to 18.68, while young men had a prevalence rate of 7.08 to 9.32 (Boswell 2002:1).

Given these statistics, the problem of increasing HIV infection rates among young people in Zambia needs to be addressed, and the introduction of accessible VCT services would be an effective way to meet these needs.

#### **4. VCT Models for Young People**

Few countries have VCT services specifically developed for young people (Boswell 2002:2). Young people have different needs and seek out VCT services for different reasons. Some countries now acknowledge the importance of targeting youth through VCT (Boswell 2002:2). Furthermore, few services have been developed to help high-risk young people in developing countries.

##### Barriers to Youth VCT Services (Boswell 2002:15; Morin)

- Expense and travel time
- Availability and acceptability of VCT services
- Waiting time
- Costs and pressure by health staff to notify partners
- Worries about confidentiality and fear that results will be shared without consent
- Inaccurate risk perception
- Worries about stigmatization by family, friends, community
- Perceptions of consequences of those living with HIV
- Inadequate response from healthcare providers to meet HIV prevention, care and support for youth

##### Key Features of Youth VCT Services

Boswell (2002) identified key features of youth-friendly health services that include:

- Full participation of young people in decision making, planning and delivery of services
- Community mobilization to increase understanding of young people's health needs
- Peer education through community outreach and clinic-based educators and compensation packages to ensure participation and motivation
- Designated "youth-friendly corners" at clinics and freestanding VCT sites
- Health providers trained in youth-friendly approaches to communication and counseling
- Suitable accommodation ensuring discretion for issues of consent and disclosure
- Integration with other post-test health and psychosocial support services
- Confidentiality
- Adequate supplies of condoms, IEC materials and drugs

General Youth VCT Models (Boswell 2002)

Type of Model	What We Know	Issues for Consideration
Integration in primary health care	Young people are often reluctant to attend formal health services. As a result, youth-friendly health services (YFHS) may more effectively influence behavior and knowledge.	VCT and counseling can be integrated into YFHS, but there is no evidence that shows YFHS successfully increases youth use of health services.
Integrated into school and college healthcare services	A US study suggests that school-based clinics may provide easier access to VCT than other formal health settings.	This may not translate well to developing countries and also limits the population to those in school.
Integrated with TB and ARV services	VCT can be offered to receiving TB services.	
Integrated with STI services, family planning clinics		Low uptake since youth do not favor services within hospitals and clinics due to service provider attitudes, access issues such as parental consent for services and judgmental approaches.
Youth centers	Issues of confidentiality, testing quality, and adequate referral networks are major issues	Takes advantage of youth culture through music and drama
Mobile services	Mobile VCT have been developed to access hard-to-reach individuals through a van that makes scheduled visits, but research suggests limited uptake by youth.	The Kitovu Hospital Mobile Care Program in Uganda makes rural outpost visits and offers same-day VCT services at a local school for youth.
Private sector	Private health practitioners	
Home testing	Home test kits may help issues of confidentiality	Results may be misinterpreted and update of referral networks are reduced.

## **5. Components of a Youth VCT Program**

### *Youth Education*

- Train teachers to teach sexual and reproductive health in the classroom
- Involve students in curriculum design
- Involve parents in a parallel but separate course
- Refer students to the clinic
- Peer education sessions with sketches, videos on behavior-change communication, condom demonstration

### *Clinical Services*

- Open a VCT site that offer VCT as stand-alone services. Huddart (2004) found that stand-alone services attracted more clients. How this affected youth participation is not clear.
- Keep the clinic open daily with flexible times for adolescents, after hours, on weekends, through lunch breaks
- “Same-hour” HIV testing using simple/rapid tests
- Consistent and regular supply of testing kits
- Minimum waiting times
- Confidential, if not anonymous service
- Adolescent-friendly or –sensitive materials on sexual and reproductive health
- Provide free VCT, both pre- and post-testing counseling to adolescents
- Available and ongoing preventive and supportive individual and family counseling
- Ensure that referral networks and access to partner organizations TB information and preventive care, hospice care, home care, STI screening, treatment and management, violence and abuse, mental health problems
- Ensure regular training, supervision, and monitoring of counselors to ensure high-quality VCT by working with the Zambia Voluntary Counseling and Testing Services (ZVCTS) based at UTH in Lusaka that oversees VCT services. With the number of VCT centers now exceeding 100, this responsibility appears impossible to fulfill (Hubbart 2004)

### *Prevention*

- Free (WHO) or low-cost (Maximum/Reality) condoms
- Support for employment or income-generating activities
- Skills training for orphans

### *Public Awareness and Social Marketing*

- Awareness-raising and VCT mobilization
- Recreational activities and correspondence with youth through sports centers
- Promotional competitions and prizes

- Publicity campaign through posters, billboard and media spots. When former Zambian president Kaunda lost his son in the 1980s, he took a personal and open stand against the pandemic. Since then, he has given AIDS prevention public service announcements promoting openness about HIV/AIDS, abstinence, mutual fidelity, condom use, VCT, and compassion for those living with HIV/AIDS television and radio spots.
- Youth newspaper
- Advertising and community mobilization
- Lobby public officials

#### *Other Issues*

- Selection of a positive name and logo, eg, Hope House, New Start, Hope Humana, Winning through Caring, etc.

## **6. VCT Monitoring and Evaluation**

### *Desired Outcomes after Program Completion*

- After completing the program, do individuals have more knowledge, responsibility, and maturity towards sexuality?
- Do individuals become sexually active later?
- Do individuals increase use of contraception?
- Does the number of unwanted pregnancies decrease?
- Does VCT help individuals make therapeutic changes in their sexual behavior
- Do individuals access support services?
- Do counselors fulfill all requirements of pre- and post-testing?

## **7. Considerations**

While testing for HIV in schools is highly desirable for increasing knowledge of individual status and the attending behavioral changes that this knowledge typically triggers, it raises some considerations related to testing children that must be addressed before implementation. By general definition, children, as a group, include all people less than 18 years of age. This group receives special attention and rights under the Convention on the Rights of the Child, given their vulnerable status in most societies. As such, we must be careful not to propose an intervention that might jeopardize this protected status. This includes ensuring that proper parental consent is obtained prior to VCT, if we determine that this will improve and not hinder the outcomes for the children. This has debatable ramifications; some people claim that parental involvement will limit the number of students who seek VCT, as children who are sexually active may not want their parents to know about their sexual activity. Conversely, others claim that to place children in a situation where they may discover that they have

a fatal disease without the involvement of their family support network is unthinkable. Both of these points require further consideration and a better understanding of individual settings, norms, and trends will determine to what extent each should be accommodated in actual programming.

When designing an HIV testing program for a school-based setting we must be conscious not only of children's emotional capacity to deal with the reality of HIV but also of how they will, as individuals, manage the knowledge of their HIV status. As the years between 12 and 18 are very important developmentally, and children in this age group display a broad range of coping skills, emotional understanding, and communication ability, it is imperative to have child-centered counseling to accompany the testing program. This child-specific VCT should be part of a much larger HIV education program, so that sensitization to PLWHA is already underway and potential stigma can be minimized. We must also ensure that child confidentiality is appropriately addressed in the design of our VCT program. The chance that individual HIV status could become public information at the school would endanger both the students themselves and the success of the program. It should be understood at the outset that the school is simply a venue for providing VCT to an important audience and the school should remain an indifferent party to the outcome. Otherwise, if the school was involved beyond that, there is the chance that administrators or teachers may start to treat HIV-positive students differently.

Finally, to maximize the chance for successful integration of VCT into schools it will be crucial to obtain input and support from teachers, school administrators, students, and parents from the earliest phases of program design. If any one of these groups feels that their opinions and interests are not considered, their lack of cooperation could create major obstacles to implementing VCT in schools. Each has an important perspective and a common understanding is essential to program success. Short of requiring mandatory testing for all students, the hope for VCT in schools rests on the ability of these groups to come together to agree how to best serve the health needs of the children.

These ideas illuminate some other important related issues. Though we may feel that there is a moral obligation to test all children, we must be mindful that international human rights laws prohibit mandatory testing. Instead, we can rely on the recent precedent set by the partnership between the WHO and the Lesotho Ministry of Health and their initiative to *voluntarily* test every resident over the age of 12 by the end of 2007. We must also be aware of the potential of information networks, as children in schools participating in VCT programs will share information with children and adults not in school. How this is handled will have significant implications on the success of the program, as it is an important outlet for information sharing, but may have a significant impact on program capacity. Therefore, it must be decided up-front whether non-enrolled children, parents, and other members of the community can come to participating schools for testing.

## V. PROPOSED WORK PLAN

We are encouraged by the recent partnership between three NGOs in Lusaka, Project Concern International (PCI), Ukani, and Latkings, and how their pilot program addresses many of the issues discussed in the Considerations section, specifically, the importance of providing a comprehensive and synergistic package of youth-focused HIV education, sensitization, and VCT to children in schools. Their program has incorporated the expertise of these three organizations to provide a comprehensive HIV education and testing workshop for students in community schools: HIV education from PCI, peer and parent education and sensitization from Ukani, and VCT from Latkings.

In the pilot test of this partnership at St. Mary's School in November, PCI provided HIV education, Ukani conducted a three-week education/sensitization module for students, a one-day workshop for parents, and Latkings' counselors were able to test 250 people in one day, both students and their parents and caretakers. The program was very well received by both students and parents/guardians. Given the success of this pilot program in the Kafue district of Zambia, we propose to function as a coordinator to support the ongoing, collaborative work of these organizations.

As the current program relies on existing relationships with schools, we would conduct a needs assessment to expand the reach of their programs and VCT access for schoolchildren. This would involve surveying schools in Lusaka and the surrounding areas, assessing their existing HIV curriculum, determining the school's level of interest in and commitment to providing VCT in the school, and coordinating the timing for the education, training, and VCT. Following the program lead, we would identify the most vulnerable populations first, focus our efforts on bringing services to them, and expand to less vulnerable populations once these children have received adequate care. Ideally, with time and proven success, we can expand this type of program throughout the country.

### *Testing Guidelines*

Given that 16 is the current government age requirement for parental/guardian consent, we must address the issue of how to appropriately test children under age 16. We feel that the 13-16 year-old age group is especially important to reach with VCT as at 13 children are still in a relatively low risk group. As we have mentioned previously, it is within the 13–16 age range that many children make their sexual debut and need to be informed about their risks of contracting HIV. However, the main objective in undertaking this new project is to do so in a way that minimizes potential harm to participants. Therefore, while we agree that testing as many people as possible is the ideal, without an explicit change in the law we should not recommend testing children less than 16 years of age without the consent of a parent or guardian. To make an exception for HIV testing, while possibly beneficial on an individual level, could set a precedent that would have far greater, potentially negative ramifications for children as a group.

That said, we appreciate the importance of testing as many children as possible, so would like to find a way to ease the consent process. Oral consent from the parent or guardian seems adequate, if there is a way to document it. We do not think that passing the consent obligation along to the teacher is appropriate, as it will not ultimately be the teacher who is responsible for helping the child cope, whatever the outcome of his or her test. As part of our assessment we will create a system to consistently document oral consent.

Overall, we feel that VCT should be available to any child that wishes to participate. However, we as adults also have an obligation to protect children. Through the multi-faceted components of this partnership, even when a child cannot legally obtain testing without parental consent until he or she is 16, at least they will have education and sensitization that might help reduce their risk of contracting HIV in the interim. To ensure adherence to these consent guidelines, we will introduce a system to track and document consent for children under age 16.

### *Evaluation*

Ongoing evaluation of this program will be crucial, to ensure that we are providing a valuable service in a way that is improving equitable access to HIV education, counseling, sensitization, and testing. This will involve interviews and surveys with participants, including school administrators, healthcare providers, students, and parents. We will also conduct workshops with people providing VCT services to collect feedback and work with them to make their program as child-focused as possible.

Additionally, we will evaluate the validity of our consent tracking process, and work through ways to increase testing where legally possible.

## **VI. MIT TEAM TASK LIST**

The role of the MIT team in Zambia will be to facilitate the relationships between schools, educators, VCT providers, and HIV awareness building efforts. We will work within the existing partnership of Ukani, Latkings, and PCI to enhance their current projects and expand their reach in Zambia.

To this end, we have identified the following tasks:

- a. Identify point person in Zambia to work on needs assessment and project coordination
- b. Develop needs assessment tool to identify schools in need and prioritize list by most vulnerable
- c. Establish relationships with schools and coordinate the introduction/enhancement of HIV curriculum between Ukani, PCI, and Latkings
- d. Plan education programs, ensure commitment of schools, and set up VCT days following education module

- e. Create a standardized documentation process for parental consent for children less than 16 years of age. This will include a method to track oral consent. It will also determine how to deal with consent in situations where there may be children that have no parent(s), and possibly no guardian.
- f. Evaluate ongoing programs to ensure that children are receiving child-sensitive counseling, follow-up care for HIV positive children, and family support. In instances where family support is not considered adequate (or we determine that a child's test status has had a negative impact on their care), we will have to determine an appropriate alternative.

Throughout this program, we must remain focused on the effort to expand services, both education and VCT, in a way that reaches as many people as possible, but to do so in an equitable, accessible, and responsible manner.

## VII. REFERENCES

Avert (2003), *HIV and AIDS in Zambia: The Epidemic and its Impact*, <http://www.avert.org/aids-zambia.htm> . Accessed November 13, 2005.

Boswell, Deborah and Rachel Baggaley. 2002. VCT Toolkit: Voluntary Counseling and Testing and Young People: A summary overview. Family Health International. <[www.fhi.org](http://www.fhi.org)>

Esu-Williams, Eka, Katie Schenk, Joseph Motsepe, Scott Geibel, and Anderson Zulu. 2004. Involving Young People in the Care and Support of People Living with HIVS and AIDS in Zambia. The Population Council.

Huddart, Jenny, Rebecca Furth, and Joyce Lyons, of Initiatives, Inc. 2004. The Zambia HIV/AIDS Workforce Study: Preparing for Scale-up. University Research Co. <[www.qaproject.org](http://www.qaproject.org)>

Kelly, M. J. (1999). *The Impact of HIV/AIDS on Schooling in Zambia*. Paper presented at the XIth International Conference on AIDS and STDs in Africa, Lusaka, Zambia.

Kelly, M.J (2000). *The Encounter between HIV/AIDS and Education*. Harare, Zimbabwe: UNESCO, Sub-Regional Office for Southern Africa.

Morin, Steve and Gertrude Khumalo-Sakutukwa. The Feasibility of Community-Based VCT in Zimbabwe. AIDS Policy Research Center.

| The Henry J. Kaiser Family Foundation (HJKFF) (October, 2005), *HIV/AIDS Policy Fact Sheet: The HIV/AIDS Epidemic in Zambia*, <http://www.kff.org/hivaids/upload/7369.pdf>, Accessed November 14, 2005

UNAIDS (2004), *Executive Summary: 2004 Report on the Global AIDS Epidemic*, [http://www.unaids.org/bangkok2004/GAR2004\\_html/ExecSummary\\_en/Execsumm\\_en.pdf](http://www.unaids.org/bangkok2004/GAR2004_html/ExecSummary_en/Execsumm_en.pdf), Accessed November 14, 2005

UNAIDS. 2000. Voluntary Counseling and Testing (VCT). UNAIDS Technical update.

Walkowiak, Helena and Michael Gabra of Management Sciences for Health. 2002. VCT Toolkit: Commodity Management in VCT Programs: a planning guide. Family Health International [www.fhi.org](http://www.fhi.org)

World Bank (2002), *Education and HIV/AIDS: The Window of Hope*, [http://www1.worldbank.org/education/pdf/Ed%20&%20HIV\\_AIDS%20cover%20print.pdf](http://www1.worldbank.org/education/pdf/Ed%20&%20HIV_AIDS%20cover%20print.pdf), Accessed November 13, 2005