

Article

Survey of HIV and AIDS knowledge in internally displaced persons camps in northern Uganda

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Accepted 27 March, 2009

This paper is a summary of the results of a survey conducted in the Agoro and Potika internally displaced person's camps in Kitgum district of northern Uganda. The survey looked at HIV knowledge levels, service knowledge and levels of stigma. The survey found noteworthy results, one being that the "ABC's" of prevention (Abstain, Be faithful, and use a Condom) were generally well-known; however, many people did not know how the virus was actually transmitted. (11% of men and 17% of women could correctly list the "ABC's" or prevention, but did not know how the virus was transmitted). We found differences in gender, sex and age for most of the categories and found no difference of knowledge and stigma levels between those who knew someone living with HIV/AIDS and those who did not. Levels of service knowledge were very low; women in particular did not know about MTCT (mother to child transmission) and few had used condoms before. The paper concludes with recommendations for current practices and ideas for expanded efforts.

Key words: HIV/AIDS, Internationally displaced persons (IDP), internally displaced persons camps (IDP Camps), Kitgum district, northern Uganda.

BACKGROUND

Uganda's success

Uganda is claimed to be the world's success story in the "fight" against HIV and AIDS (Avert, 2008; Green et al., 2006; World Health Organization 2008) because on a national level Uganda has had the largest decrease in overall prevalence level in the world. The epidemic is complicated when compared to other success stories because there is no key factor identified that played the largest role in this national decrease. The three main HIV success stories are often summed up in just a few words: Thailand: Condoms, Brazil: Treatment and Senegal: Heading it off. The success in Uganda on the other hand can not be pinned down to one factor or one methodology.

Researchers trying to understand the success in Uganda have come to several different conclusions; and all most likely play important roles. When HIV first gained international attention Uganda was forming a new government with the introduction of Museveni as president.

Museveni himself played a key role in Uganda's success as he spoke about HIV and AIDS himself and required ministers to speak about HIV when they made public speeches. The government and local organizations (most famous being The AIDS Support Organization, TASO (<http://www.tasouganda.org/>) spoke about prevention, treatment, testing, and support for people living with HIV and AIDS frequently and openly. Also, a famous Ugandan musician, Philly Lutaya, spoke openly about his HIV status and brought national attention to the topic (Monitor, 2007). Another factor was that Ugandans may have just been ready for change, whatever it might be, due to the political and social turmoil as a by-product of a long-running conflict. It is thought that the behavioral, sexual and education change was accepted more readily due to the long-running suffering (Wikipedia, 2008). Museveni talked about the new war against HIV, and people did make changes in their lives (Stevenson and Richar, 2003). Age of sexual debut increased and condom use increased, although Museveni claimed that Abstinence and Faithfulness were the true factors of prevention (Herling and Allison, 2004). At an international AIDS conference he even went so far as to claim falsely that Uganda has the lowest condom use per capita in Africa (Health Gap, 2008). Interestingly, the decrease in incidence of HIV infections began to decrease before all

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of these factors took prominence, thus leaving many questions unanswered.

Uganda's epidemic started in the south-western region where prevalence levels around thirty percent was recorded (Russell and Sabin, 2005). Today Uganda's national average is usually stated as being between 4 and 7% (CIA Factbook, 2008; Global Youth Coalition 2008). It may never be known which factors played the most important roles in reducing Uganda's national HIV prevalence. However, it has become clear that support from the national level is the key factor, as it occurs within all successes in the HIV and AIDS global pandemic.

Civil war

A historic peace process has been on-going in Southern Sudan since August 2006, where the Lord's Resistance Army rebel group tentatively signed a cessation of hostilities agreement with the Ugandan government, thus putting a halt to two decades of civil war (BBC, 2008). At the height of the conflict two million people were internally displaced into government-created camps, which were intended to increase security. Although, in retrospect, it appears that the camps led to an increase in abductions (Oxfam, 2007). Until the recent peace process began most people living in the northern districts of Uganda were totally dependent upon assistance from local, national, and international organizations.

Every aspect of life within these districts was greatly affected by the attacks. Because attacks and abductions were random, the threat of attacks was omnipresent. In some camps residents were told not to carry flashlights after nightfall or else they would be assumed to be rebels. These factors created a powerful psychological impact upon the northern peoples, mostly of the Acholi ethnic group. Even as the peace talks have begun very few feel secure enough to return to their original homesteads, despite the efforts of government and international organizations in pushing for their repatriation.

Epidemic in northern Uganda

In terms of socio-cultural and physical vulnerability, the Acholi people can be marked as an ethnic group at greater risk for high HIV prevalence than the residents of other regions. The war is a major factor: in some camps 60% of young women and girls have been sexually abused (IRIN, 2005). In the camp settings traditional cultural norms have been lost and as a consequence, young people are engaging in aberrant behaviors, such as excessive drinking (Based upon witness testimony and interviews done by authors). Sexual debut for females occurs at a very early age in the northern region, beginning for some at puberty; while many have had a sexual experience by the age of 14 (Based on information presented by a local organization, Agoro Community Development Organization). Sexual debut is higher for males

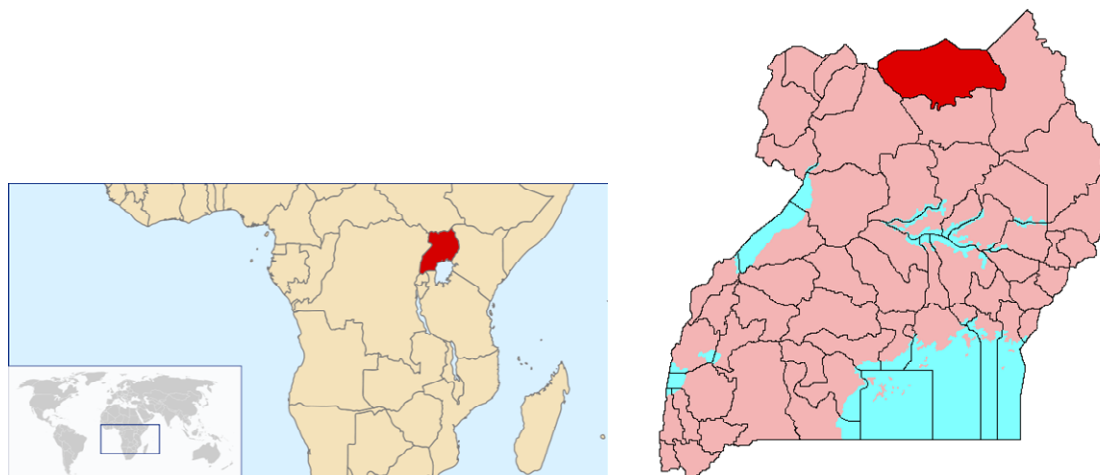
due to their later maturation; however, it is still low by normal standards. Young females, in particular in the camp setting, marry young. Many girls will be married by the age of 16 and most marry men much older than themselves (Based on statistics from the Agoro IDP primary school, supplied by the headmaster who provided detailed student gender ratios in each grade. He knew many children starting from grade 2 who left for marriages. By grade six, a class of fifty would have only 5-8 girls). In the Acholi tradition men are not circumcised, and this practice has been linked to higher probabilities of infection during sexual exposure (Based upon witness testimony and interviews done by authors). The northern region of Uganda is a place where medical and secondary educational facilities are sparse. In Kitgum district, for example, there is only one government-run hospital offering free surgeries and it is staffed by only one surgical doctor. In most camps there are no secondary school options at all. Before 2006 very few organizations were working within the camp areas and consequently medical attention and voluntary HIV counseling and testing were found only in towns. To date, while organizations claim to offer testing within the internally displaced camps, they do so irregularly and without giving notice. As a result, residents did not know on which two days a month testing is available and most thought that there was no place to get tested at all. Condoms are available free at hospital clinics, but very few knew of this service and many camp residents mentioned that they had never seen a condom before, nor would they use condoms if they were available. In northern Uganda three widely-supported practices are:

- (1) The absence of male circumcision.
- (2) The early age of sexual debut.
- (3) A wide difference in marriage ages for wife and husband.

These practices increase the epidemiological probability of HIV prevalence. In addition to these three factors, high HIV prevalence is increased by lack of medical services, twenty years of war, population displacement, and widespread sexual abuse. Although the national HIV prevalence levels are 4-7 % estimates in the north suggest prevalence rates between 9 and 12 percent (Taken from the Ugandan Ministry of Health (9%) and international organizations (IRC, MSF, ICRC) who are offering VCT services in the Kitgum district).

METHODOLOGY

The data presented in the following section was gathered while working to empower, a Canadian non-profit organization, was doing educational work in partnership with a community-based organization in northern Uganda (Map 1). The work and survey took place in Agoro sub-district of Kitgum District, bordering Sudan. The project was carried out within two internally-displaced people's camps, Agoro and Potika (both within visual distance of the Sudanese border). The first round of survey data (given in the "Results" section below) was gathered to gain an understanding of the local



Map 1. (left) Uganda in Africa (right) Kitgum district in Uganda.

Table 1. Summary of the Surveys Completed.

Camp	Female	Male	Total
Agoro	73	46	119
Potika A	79	73	152
Potika B	76	49	125
Total	228	168	396
Percent	58%	42%	100%

dynamics and needs for HIV education. A follow-up survey was performed to evaluate the performance of the project; these results are not included in the paper here as they concern the effectiveness of the project work while the focus here is to share the information concerning HIV gathered in the northern displaced regions.

The survey was performed by members of each community who spoke and wrote English. The survey questions were written in English and each translator wrote the respondents' answers in English; however, each conversation during the surveying process took place in the local dialect, Luo. The issue of translation led to some problems, including a misunderstanding of two of the questions. In order to avoid such problems before they began their work, the entire team gathered, discussed each question, how they would translate, and in what format each answer should be (such as a 'yes' or 'no', or a probing for more information in the case of 'List the ways that HIV can be transmitted'). In addition, some groups of people that were targeted within the educational program were not included within the survey process, such as the soldiers and police. In the case of the military soldiers, they were totally lacking within the survey, as soldiers do not leave the barracks unless on shift and the military housing was not included in the surveying process. The same applies to the police who lived in town settings, while our survey took place in internally displaced person's camps exclusively. Within that context, and acknowledging the possibility of errors with the translation as well as the limitations of our relatively-small sample size, the results are presented below. They are consistent with the personal observations of those who were working in the region, and the responses in many question and answer sessions with internally displaced people.

RESULTS

The survey was conducted in the IDP camps of Agoro

sub-district. In the Agoro IDP camp 119 surveys were completed: 73 female and 46 male. In Potika A, 152 surveys were completed: 79 female and 73 male. In Potika B, 125 surveys were completed: 76 female and 49 male. Therefore 58 percent of the surveys were completed by females and 42 percent were completed by males (Table 1).

The gender breakdown: 9,797 out of 18,918 total population are female, which accounts for 52%. The additional 6% of female respondents was likely due to the way the survey was conducted by visiting the huts in the afternoon (females who are primarily responsible for home duties such as cooking food were more likely to be home than males). To address any gender selection bias that may have entered the survey, we have broken down the data into males and females where the responses differed.

The total population of the three camps was 18,918 (10,575 people in Agoro and 8,353 in Potika A/B). Assuming 50% of the camp population is under the age of 14, the target (sexually active) population is 9,459 (Nation Master: 50.1% of Uganda's population is under 14 years of age, the highest percentage in the world. Available at: http://www.nationmaster.com/graph/peo_age_str_0_14_yea-age-structure-0-14-years). Our sample size is 396, or 4.2% of that population.

The survey generally found a surprising amount of HIV/AIDS knowledge within both the Agoro and Potika IDP camps. The camp inhabitants have been exposed to the government's widespread "ABC" campaign, but some lack complete understanding of disease transmission, awareness of mother to child transmission, knowledge of where to get and how to use condoms; and many exhibit high levels of stigma. A noteworthy number of individuals also responded with many myths about HIV transmission. Younger age categories had a higher level of HIV transmission and knowledge of condoms than those who were older. Women and girls in particular seem to be particularly lacking in some HIV knowledge categories. The first question in the

How is HIV/AIDS Transmitted?

Female

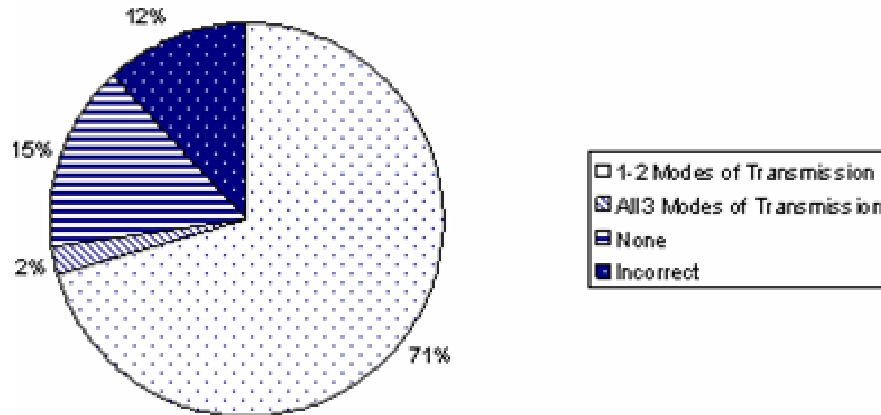


Figure 1. Responses of the 228 female respondents to the question, “How is HIV/AIDS transmitted?” 71% of women gave 1-2 correct modes of HIV transmission, 2% gave all three modes of HIV transmission, 15% gave no answer, and 12% gave an answer that was incorrect.

survey was: “How is HIV/AIDS transmitted?” The surveyor then wrote down in English exactly what the respondent said and ensured that the respondent was finished before moving on to the next question. This question therefore, had a wide variety of answers, both correct, and incorrect. The answers were categorized in four broad categories:

- 1). One or two correct modes of HIV transmission (of sex, blood-to-blood, and mother-to-child)
- 2). All three correct modes of transmission
- 3). No correct mode of transmission
- 4). Incorrect modes of transmission.

The data were analyzed separately for males and females, as males typically exhibited a higher level of knowledge than females. Figure 1 has a breakdown of responses to “How is HIV transmitted” by females. The response from women in Potika A and B, and Agoro are combined for a total sample size of 228 women. It was found that 70.6% of females were able to correctly identify 1-2 of the 3 primary modes of HIV transmission (sex, blood to blood, and mother to child), only 2.2% correctly listed all three modes of transmission. 11.8% of women listed an incorrect mode of transmission, such as, “Eating with a person infected with HIV.” If the person listed one or more correct answers, but also listed an incorrect answer the answer was counted as incorrect. An additional 15.3% could not list one of the primary modes of HIV transmission. The most common response for this category was simply, “I don’t know.” Of the males, 81.5% could list 1-2 modes of HIV transmission, 4.2% could list

all three modes (sex, blood to blood and mother to child), 11.3% listed an incorrect mode of transmission and 3.0% listed no mode at all. Figure 2 shows the percent responses to the question, “How is HIV/AIDS transmitted?” Potika A and B and Agoro were combined together for a total sample size of 168 men.

The distribution of each mode of transmission was equivalent for males and females so they have been combined here. Figure 3 shows the percentage of respondents who identified each mode of HIV transmission. The incorrect responses will be addressed later in the paper. Sexual intercourse was the most frequently identified mode of transmission with 80% of respondents listing it. Blood to blood transmission was identified by 52.8% or just over half of the respondents. Mother to child transmission of HIV was identified by only 5.6% of respondents. Lack of knowledge about mother to child transmission was a consistent trend found in the survey, as well as in our work in the Agoro sub-district IDP camps. This trend is a matter that should be addressed by future work in this area.

The distributions of correct responses to this question, “Which ways can people protect themselves against getting HIV/AIDS?” were fairly similar between men and women, with men showing a slightly higher level of knowledge than women (Figure 4). Both men and women were more likely to identify a way to protect themselves than a correct mode of transmission. In identifying methods, 85.1% of women were able to identify one or more methods of protection, 9.6% gave no answer and 5.3% gave an incorrect answer, such as “Don’t share a basin with a person who has the disease.” Once again, males

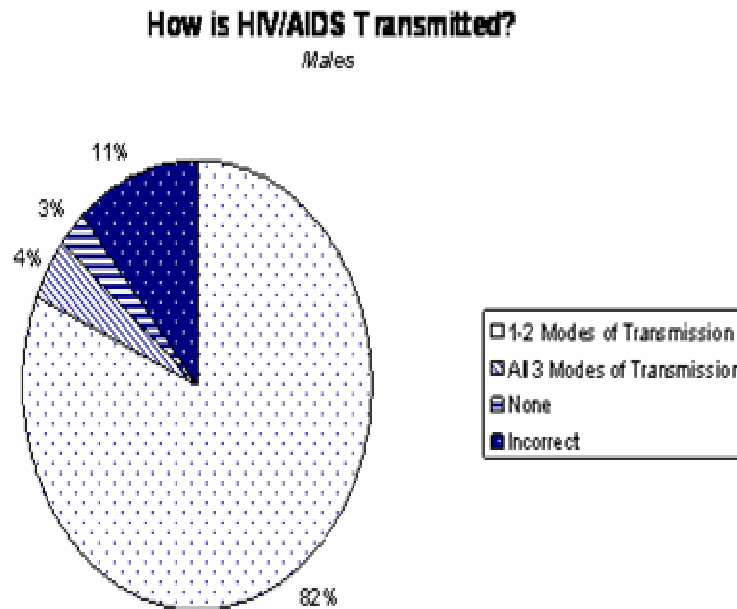


Figure 2. Responses of the 168 male respondents to the question, “How is HIV/AIDS transmitted?” 82% of men gave 1-2 correct modes of HIV transmission, an additional 4% gave all three modes of HIV transmission, 3% gave no answer, and 11% gave an answer that was incorrect.

Responses in Identifying Modes of HIV Transmission

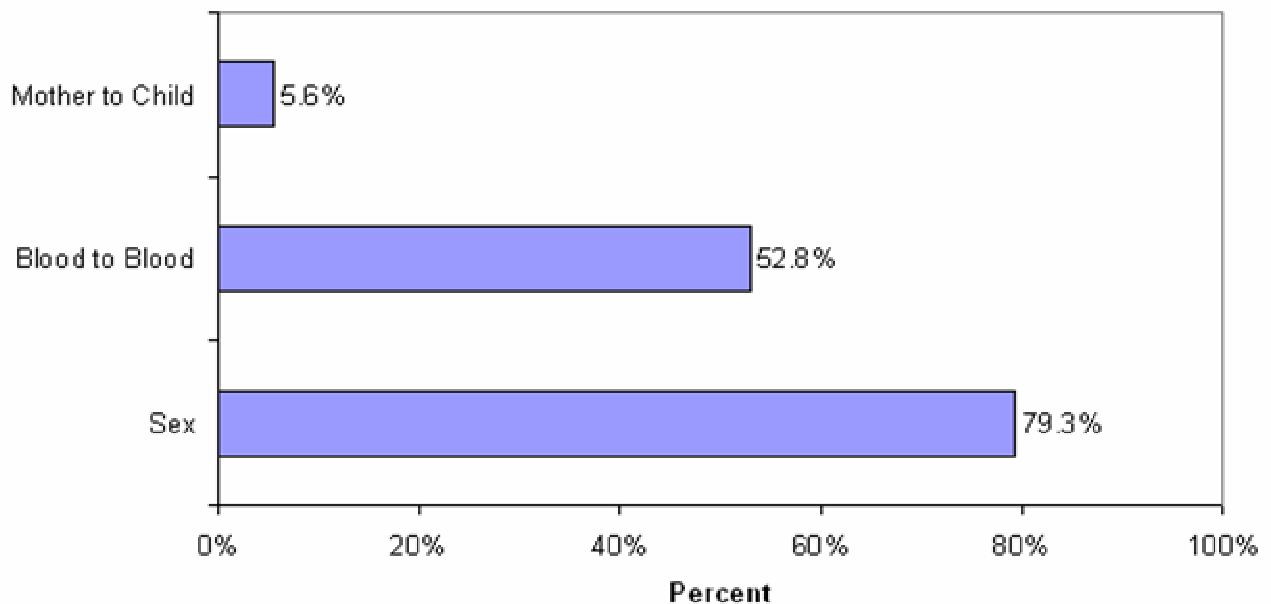


Figure 3. Percent of respondents who identified transmission by the above routes, from sample of 396 residents of mixed gender and age. Only 5.6% knew about mother-to-child transmission.

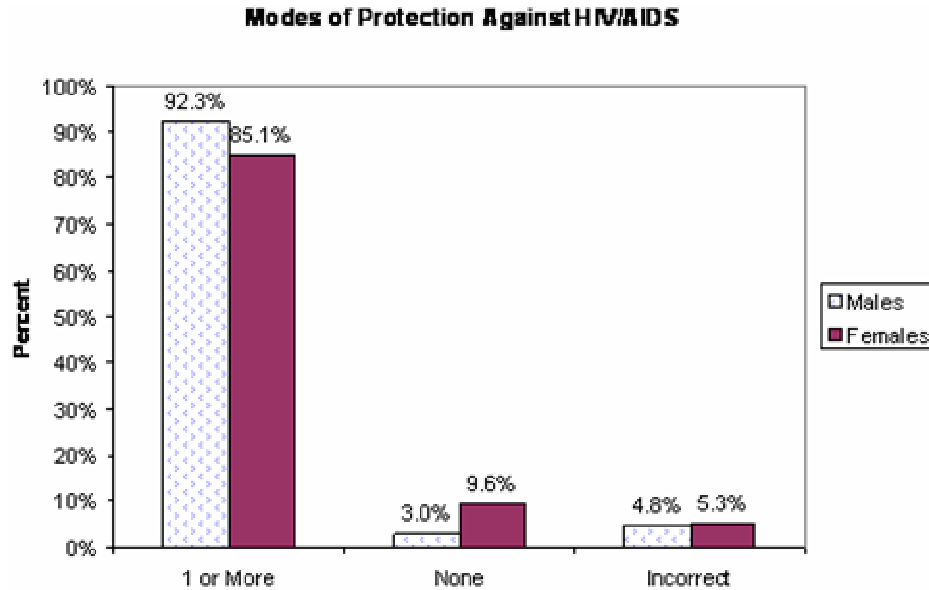


Figure 4. Responses of the 396 male and female respondents to the question, "What ways can people protect themselves from becoming infected with HIV/AIDS?" 92% of men and 85% of women were able to identify at least one correct method of HIV prevention.

Table 2. Methods of Protection Listed. One person could list several modes of prevention. This table is combined for both men (N=168) and women (N=228). By far, the most cited mode of transmission was "Use a Condom" as it was listed by 79 percent of men and 50 percent of women

Mode of Protection	Number of Males	Percent of Males (%)	Number of Females	Percent of Females (%)
Abstain	25	14.9	19	8.3
Be Faithful	53	31.5	86	37.7
Use Condom	132	78.6	113	49.6
Don't Share a Razor	21	12.5	25	11.0
Testing	53	31.5	44	19.3
PMTCT	1	0.6	1	0.4
Treatment	2	1.2	3	1.3

exhibited a higher level of knowledge than females. 92.3 percent of males knew one or more modes of protection while only 3.0% gave no answer and 4.8% gave an incorrect answer.

The relative frequency of each correct method of protection is listed in Table 2. Each individual could list more than one method of prevention. For both men and women, the most listed method of protection was "use a condom" (78.6% for men and 49.6% for women). However, "be faithful" was also a common response (31.5% of men and 37.7% of women) as well as "abstinence" (14.9% for men and 8.3% for women). Prevention of Mother to Child Transmission (PMTCT) was alarmingly low. PMTCT included everything from "don't breast feed the baby" and "visit the doctor for medicines if you are pregnant." However, only one of 228 women (0.4%) and one of 168 men (0.6%) listed PMTCT. During analysis of the data, an interesting trend was discovered that related

to the Ugandan focus upon the "ABC" prevention approach. Many people said, "I don't know," or listed an incorrect response to question 1 ("How is HIV/AIDS transmitted?"), but listed a correct method of protection for question 2 ("How can people protect themselves from becoming infected with HIV/AIDS?"). The percentage is displayed in Table 3.

Further, 11.3% of men and 16.7% of females got question 1 wrong, but question 2 correct. Table 4 gives examples of individual's responses when they did not know how HIV is transmitted, but transmission, but were able to recite the ABCs of HIV prevention. The government has been actively promoting the "ABC" prevention strategy on posters, on the radio, and in the schools, but information about the disease transmission is lacking. Question 3: Do you know someone who is living with HIV? Roughly half of the respondents (54.4% of women and 50.6% of men) know someone living with HIV/AIDS.

Table 3. People who answered Question 1 incorrectly, but answered Question 2 correctly. Male: N= 168, Females: N = 228.

Answered Q1 (How is HIV transmitted?) incorrectly, but answered Q2 (How to protect against HIV infection?) correctly:		
Gender	Number	Percent
Males	19	11.3%
Females	38	16.7%

Table 4. Examples of what people said when they answered Question 1 incorrectly, but answered Question 2 correctly. There is a trend of not understanding basics of HIV transmission, but being able to recite the ABC's (Abstain, Be Faithful, Use a Condom) of prevention.

Q1: How is HIV/AIDS Transmitted?	Q2: What ways can people protect themselves against getting HIV/AIDS?	Gender, age
"Through sharing handkerchief. By sharing a towel."	"Use condom. Use the pill."	Male, 20
"Through eating with an infected person. Through using broken pieces of iron."	"Having only one boy/girl friend. Conduct yourself in a meaningful way. Abstain, Use condom."	Male, 19
"Sharing drinking cup. Unsterilized instruments."	"Use condom."	Male, 18
"Through getting accident."	"Use condom. Be faithful. Abstain."	Female, 40
"I don't know"	"Being faithful to your partner."	Female, 39
"By man who like working at night. Sleeping outside."	"Avoid having sex with woman. Abstinence from sex."	Male, 47
"When a person having AIDS drink with the AIDS free person."	"Use of condom. By testing for HIV/AIDS and knowing the status."	Male, 23
"Through [bathing] shelter"	"By using condoms."	Female 30
"I don't know how HIV can be transmitted"	"Use condom. Be faithful to my husband."	Female, 27
"Being dirty. Through [bathing] shelter."	"Abstinence from sex. Be faithful."	Female, 48
"I don't know"	"Use condom."	Female, 29
"Through smoking together with HIV/AIDS positive person."	"Use condom."	Male, 16
"Through sharing the latrine."	"You can use a condom to avoid getting HIV."	Male, 27
"I don't know"	"Be faithful"	Female, 29
"I don't know"	"They should use condom. Be faithful."	Male, 56

Previous research has found a relationship between knowing someone with HIV/AIDS and knowledge about the disease. The survey data were examined to see whether those who know someone with HIV/AIDS were more likely to know how the virus is transmitted or have a less stigmatizing attitude towards those living with HIV/AIDS. The survey found very little difference between those who knew someone with HIV/AIDS and those who did not.

Women who knew someone living with HIV/AIDS were more likely to know one or more modes of HIV transmission (77 versus 65%). Women who knew a person living with HIV/AIDS were also more likely to have less stigmatizing attitudes towards those living with HIV/AIDS. Furthermore, 69% of women who knew a person living with HIV/AIDS (PLWHA) would help a neighbor living with HIV versus 65% for women who did not know a neighbor. Also, 69% of women who knew a PLWHA would allow a

female HIV positive teacher to continue teaching, versus 63% for those women who did not a PLWHA (Figure 5).

The difference between men who knew a PLWHA and those who did not was less clear. Men who know a PLWHA were only slightly more likely to know a correct mode of HIV transmission (87% versus 84%). For the stigma questions, men who know a PLWHA exhibit a higher level of stigma than those who did not know a PLWHA. Although 78% of men who did know a PLWHA would help an HIV-positive neighbor, while 81% of those who do not know a PLWHA would help an HIV-positive neighbor. Likewise, only 58% of individuals who know a PLWHA would allow an HIV-positive female teacher to teach while 69% of individuals who did not know a PLWHA would allow an HIV-positive female teacher to teach (Figure 6). These results are unexpected, as it is generally thought that individuals who know someone

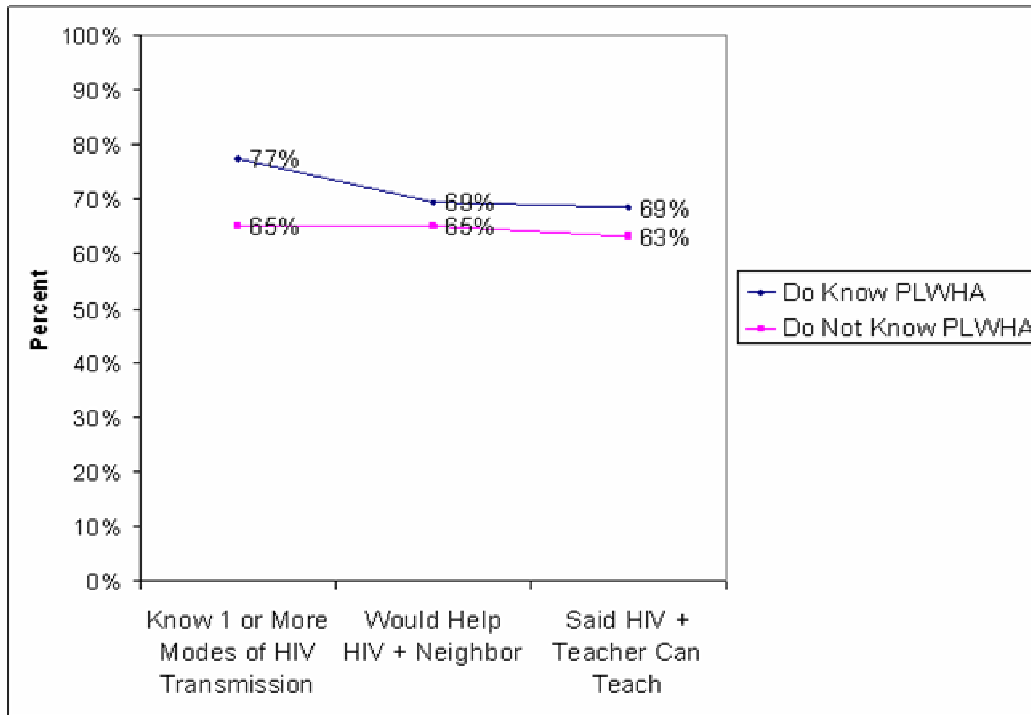


Figure 5. Responds were asked if they knew someone living with HIV/AIDS. Although many respondents answered yes, stigma and discrimination remained high.

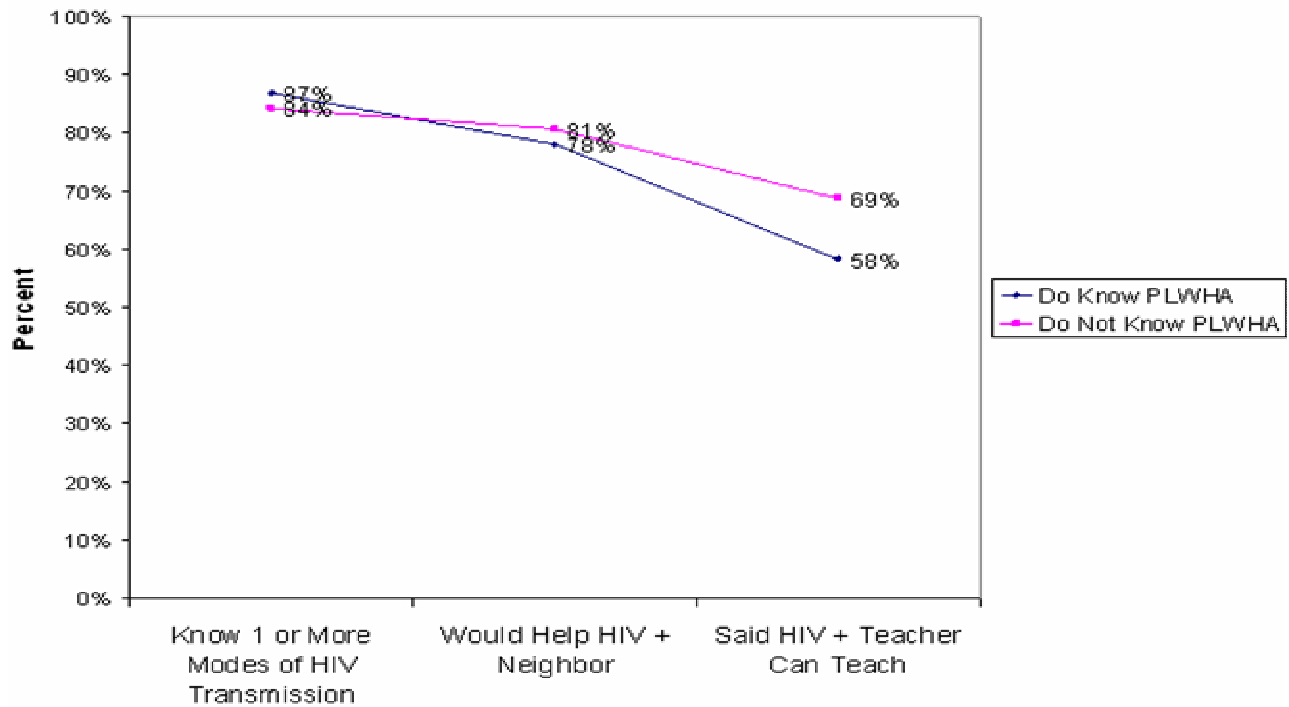


Figure 6. The percent of males who know at least one mode of HIV transmission, who would help an HIV positive neighbor and think that a female HIV positive teacher should be allowed to continue teaching broken down by those who do know a person living with HIV/AIDS and those who do not know a person living with HIV/AIDS. N=228. Men who do know PLWHA have a slightly higher level of knowledge of HIV transmission, but slightly higher levels of stigma than those who do not know PLWHA.

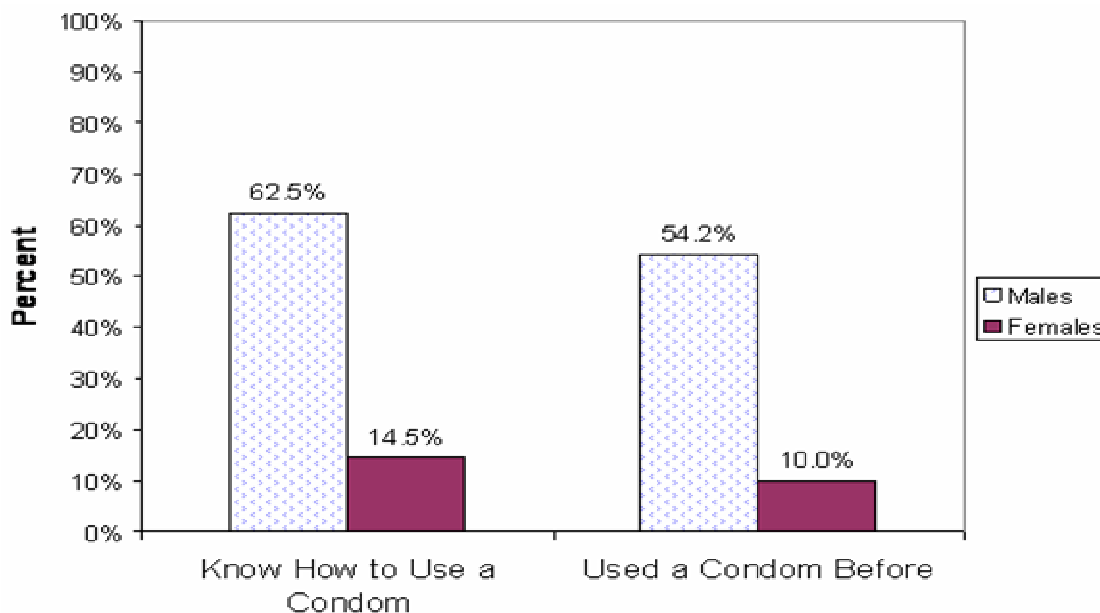


Figure 7. Condom Knowledge and use in both males (N=167) and females (N=228). 63% of men knew how to use a condom and 54% had used one before; while only 15% of women knew how to use a condom and 10% had used them before.

with HIV/AIDS would exhibit fewer stigmas towards HIV positive individuals. Within these IDP camps people daily expressed a desire to be tested, but testing is only available for two days a month and the people are usually unaware of the testing days. People would tell us that they want to get tested, but they have no way of finding out when the testing will be available at the clinic. Likewise the military said they cannot leave their barracks when they are off duty so they cannot get tested at the clinic.

In Agoro IDP camp, very few people knew where to access condoms, while in the Potika camp most people knew that condoms are available at the hospital or from the International Rescue Committee (IRC) condom distributors. In Agoro only two people had picked up condoms from the hospital over a 3-month period prior to our work in the camp. In Potika, the hospital representative said that people never come to pick up condoms at the hospital, but people did acquire condoms from the IRC condom distributors.

Regardless of whether they had used a condom or not, most individuals surveyed planned to use a condom in the future. However, there was a large difference between the genders in condom knowledge and whether they had used a condom in the past. The majority of males (62.5%) knew how to use a condom and (54.2%) had used a condom before. Females showed very little knowledge of how to use a condom with only 14.5% saying they knew how to use a condom and as well as very little experience using condoms in the past (10.0%). Figure 7 shows condom knowledge and use in both males and females.

In Agoro, Potika A, and B, two questions were asked in regarding stigma: First, "Would you help care for a neighbor who was living with HIV/AIDS?" and secondly, "A female teacher is living with HIV, but not sick, should she be allowed to continue teaching?" For these questions, a large amount of stigma was seen as well as some major misconceptions about HIV/AIDS and its transmission. Men, who generally had a higher level of knowledge about HIV transmission, were more willing to help a neighbor living with HIV/AIDS than women (78% of men offered their help while only 65.8% of women did). However, for the question about the female teacher living with HIV, roughly an equal percentage of men and women said that she should teach (64.9% of men and 62.7% of women Figure 8).

In the case of not allowing the HIV positive teacher to continue teaching, many people seemed concerned for the well-being of the students. Alarmingly, a common-cited concern was that the teacher would rape the male students or pay the older boys to have sex with her. Another concern was that she would either intentionally or accidentally infect the students with her blood or thereby transmit the virus to the children. Another concern was that the female teacher had "bad thinking" or was not a good person because of her HIV status and therefore should not be teaching students because she might teach them bad things. Lastly people were concerned that she would get sick and die soon and so would be useless as a teacher. However, some viewed the teacher's HIV status as beneficial. A number of people said it was good she could continue teaching and instruct the students about HIV using herself as an example. However, others gave very

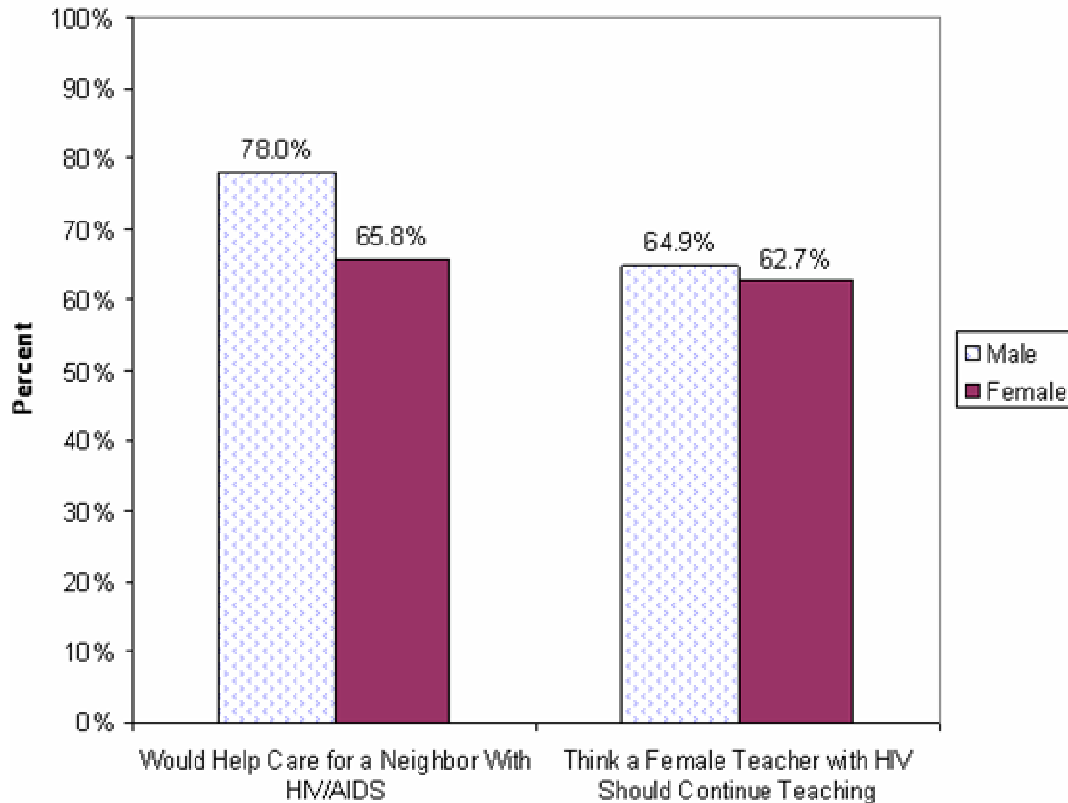


Figure 8. Questions relating to stigma: In general, men showed slightly less stigma than women. While 78 percent of men would help care for a neighbor living with HIV/AIDS, only 66 percent of women would help (N=167 for men; N=223 for women). Furthermore, 65% of men and 63% of women think that a female teacher living with HIV should be allowed to teach (N=164 for men; N=224 for women). Some individuals did not answer this question or left it blank.

negative and stigmatizing answers:

- i). "She should not be allowed to teach because what she is thinking is not good" (Male, age 45).
- ii). "She must not teach because she can easily inject the pupils with her blood" (Male, age 28).
- iii). "No, because she can spread it to the young ones" (Male, age 21).
- iv). "No, she must be stopped from teaching because she may also do rape" (Female, age 39).
- v). "No, she can convince the young students to play sex with her" (Male, age 20).
- vi) "She must not be in the school compound" (Male, age 52).

When it came to helping an HIV/AIDS infected neighbor, people offered a variety of responses. Some said they would only help if it was a relative or that they would only help by giving advice. However, some said they would give enormous help. One man said, "Yes, I will carry her to the hospital." Others said they would help prepare food, wash clothes, help care for children, or give money for food and medicine. There were also some serious misunderstandings about the disease transmission.

Some listed fear of infection as the reason they did not want to help their neighbor.

Breakdown by Age as well as Gender: The age breakdown was conducted in four broad age categories: 15-24 years old, 25-34 years old, 35-50 years old and over 50 years old. The younger age categories generally exhibited higher levels of knowledge about HIV transmission as well as condom use and knowledge.

Figure 9 displays the percentage of both males and females (broken down by age) who could name one or more correct modes of HIV transmission. Once again, males exhibit a much higher level of knowledge of HIV transmission than women in all age categories. For both men and women, the knowledge of HIV/AIDS transmission peaks in the 25-34 age category (89% of men and 80.2% of women in this category could name one or more correct modes of HIV transmission).

Condom use and knowledge in men (Figure 10) also peaks in the 25-34 year age range. In this age category there is also an unusual phenomenon: more men in this age category say they have used a condom than say they know how to use a condom. This is opposite to the usual trend of more men saying they know how to use a condom than actually having used a condom. The condom distributors

Percent of Males and Females by Age Who Knew 1 or More Modes of HIV Transmission

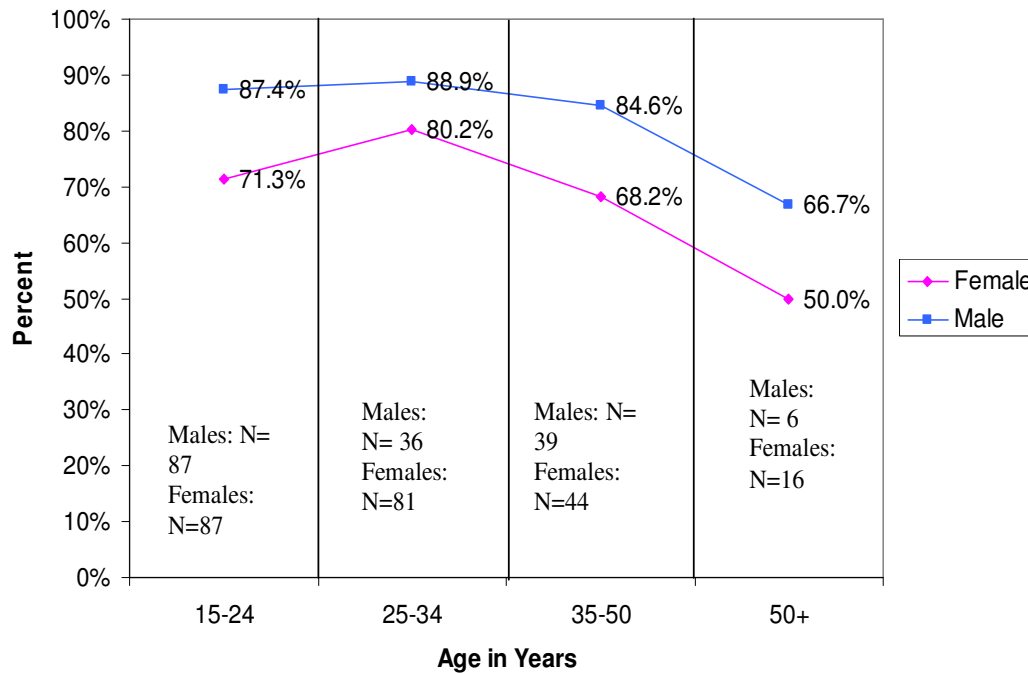


Figure 9. Percent of Males and Females who knew one or more mode of transmission broken down by age. At all ages, the males (blue line), exhibit higher knowledge of HIV transmission than females (pink line). In general, the 25-34 age range had a slightly higher level of knowledge of HIV transmission than the other later age groups. In both genders the 50-and-above age range had the lowest level of knowledge concerning HIV transmission.

Condom Knowledge and Usage in Men

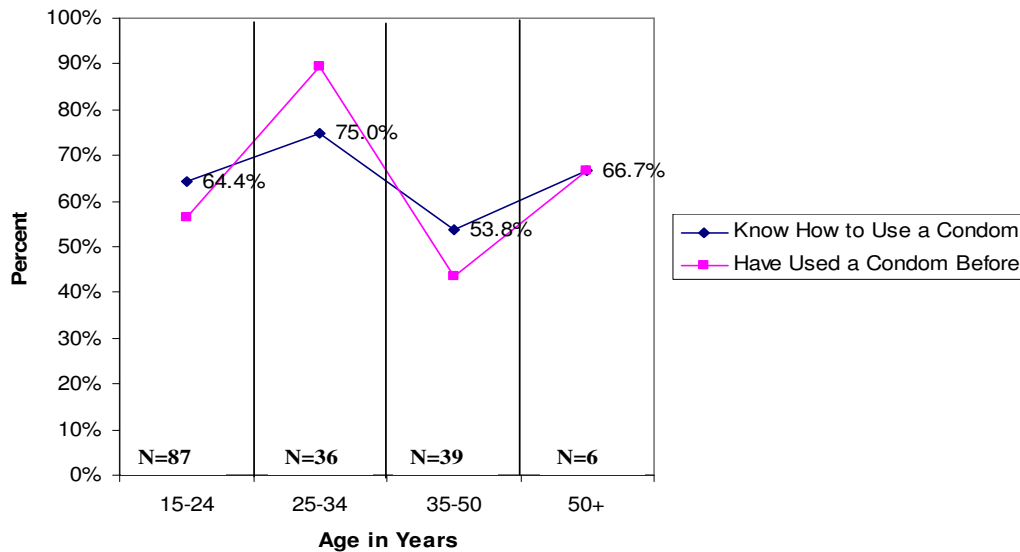


Figure 10. Condom use and knowledge in men broken down by age. As with the knowledge of HIV transmission, there seems to be a peak of knowledge of how to use condoms and experience with condoms in the 25-34 age group. The 50-and-above age group had only six men in it and therefore may be a less reliable percentage than the other age categories

Condom Knowledge and Usage in Women

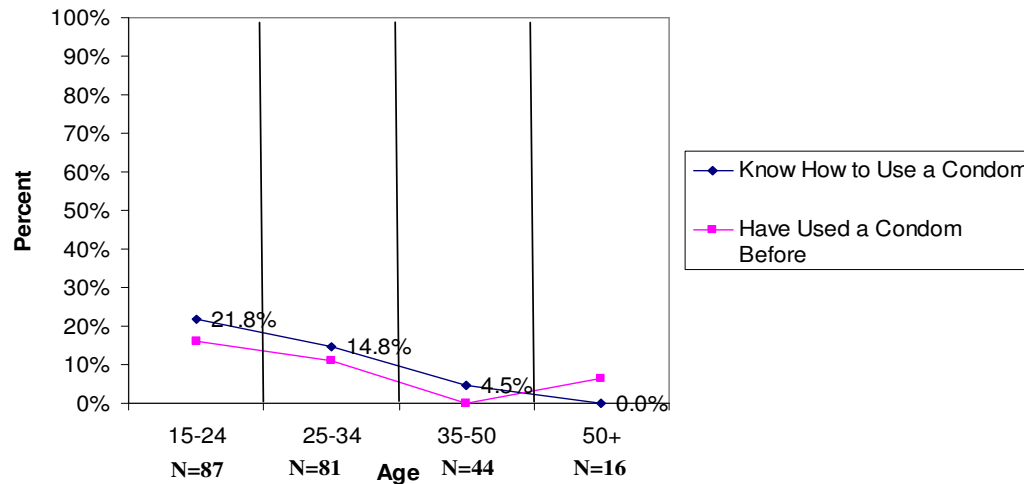


Figure 11. Condom use and knowledge in women broken down by age. Overall, women exhibit a low level of condom knowledge and use. The younger girls are more likely to know how to use a condom (pink line) or to have used a condom before (black line).

in the Potika IDP camp said that some men try once to use a condom, but something goes wrong and then they do not try again. Therefore it is possible that men have tried to use a condom before, but do not know how to use a condom.

Once again, very low levels of condom knowledge and use were seen in women (Figure 11). Condom use and knowledge peaked in the earliest age category, 15-24, and decreased as age increased. This is consistent with the early age of sexual debut of girls in Acholi society as well as the increasing availability of condoms in recent years

RECOMMENDATIONS

Voluntary counseling and testing (VCT): In regard to HIV and Aids, voluntary counseling and test are vital, especially in the case of Kitgum district and the IDP camps where medical services are generally lacking. Without considering financial and infrastructural barriers, it is recommended that:

- i) VCT should be offered in each camp with the local clinics; as, currently, NGOs cooperate with the government to offer two days of testing with each IDP camp.
- ii) This service (VCT) should be offered on consistent days each month.
- iii) Each clinic should be given at least one week notice in advance of the anticipated testing.
- iv) Posting of clinic dates placed through the camp to notify residents of pending service.
- v) Inclusion of the military. As the soldiers cannot leave their area, they have requested VCT to come to their grounds. A one-day visit to the military bases (found around the camps) is strongly recommended.

Distribution and use of condoms: As faithfulness and abstinence are largely personal choices, the final “C” of the “ABCs” of prevention requires the assistance of condom availability. Condoms are, in fact, abundant in the Kitgum district (as exemplified in the Kitgum government storeroom). It is distribution that remains problematic. In the case of Agoro, as in other camps, the local clinic offers free condoms. Knowledge of this service, however, is very scarce, and comes with barriers. It is recommended that:

- i) Information about free condom distribution and use be better shared within the community.
- ii) A low-cost posting system within clinics and within camps should be set up on a bi-monthly basis to provide better public information.
- iii) By-passing of the long clinic line-ups should be permitted for those persons accessing condoms.
- iv) Clear signage to advertise that condoms are free and where they can be picked up at the clinic counter.
- v) Removal of requirement to sign for condoms. This signing practice leads to embarrassment and avoidance of use.
- vi) Expansion of used of condom distributors in the camps. This practice was successful in Potika IDP camp.

HIV Education for females: A gap identified within the general population is the lack of HIV knowledge within the female youth age group. This could be caused by a variety of reasons, including: fewer years of education, early marriage, less free time to attend programs and fewer female gathering places for socializing as compared with men. It is recommended that:

- i) Education programs target females, especially younger

ones.

ii) At least one female condom distributor be provided in each camp.

Information about available services: General knowledge regarding VCT and condoms is lacking, and people in the camps do not know that prevention of Mother to Child Transmission (PMTCT) programs exist, that full and free ART are available, that various PLWHA support groups exist and that other organizations such as the WFP offer specific nutritional support for people living with HIV and AIDS. It is recommended that:

i) Information about various services be advertised by posting in the camps.

ii) Greater collaboration be established among organizations working in the area (over 30 at present).

iii) All groups promote information of each others' services

iv) Regular notices about services availability should be distributed to churches, youth groups, schools, and local governments.

Peer Education: Peer education approaches have been implemented within the district. However, they have not been notably successful, have occasionally been abused (for example, double reporting by organizations for financial benefit), and most have ceased operating. Consequently, it is recommended that: Peer Education should be replaced by other education efforts; such as, school AIDS clubs and speakers to address large gatherings waiting for food and other distributions.

HIV Education Problems: Despite widespread knowledge of HIV, certain misinformation remains. Therefore it is recommended that special attention be given to addressing the following:

i) Clarification of HIV transmission to dispel the false ideas that HIV can be spread by sharing latrines, beds, basins, showers, etc. or by mosquitoes.

ii) Dispelling the social stigma currently attached to those with HIV-AIDS.

iii) Special emphasis on vertical transmission (MTCT) and its prevention (PMTCT programs).

Conclusion

It is hoped that the above recommendations, based as they were on field experience, can be useful to those organizations currently working in HIV-AIDS prevention.

REFERENCE

- World Health Organization (2008) Uganda reverses the tide of HIV/AIDS. Accessed August 11th, 2008: <http://www.avert.org/aids/uganda.htm>
- Additional information about TASO and their organization can be found online: <http://www.tasouganda.org/>
- Herling, Allison (2004) Delaying Sexual Debut among Uganda's Youth. Presentation at CCIH (May, 2004). Accessed August 11th, 2008: <http://www.ccih.org/conferences/presentations/2004/uganda-sex-debut.ppt>
- Health Gap (2008) Press Clippings on Uganda Condon Crisis. Accessed August 11th, 2008: http://www.healthgap.org/press_releases/05/091905_Uganda_condoms_press_clippings.html
- Russell, Sabin (2005) Uganda's HIV rate drops, but not from abstinence. Accessed August 11th, 2008: <http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2005/02/24/MNG2PBG3VF1.DTL>
- Global Youth Coalition on HIV/AIDS (2008) Uganda. Accessed August 11th, 2008: http://www.youthaidscoalition.org/pages.html?pages=east_africa
- Oxfam (2007). Between Hope and Fear.
- IRIN (2005) Rape rampant in largest northern IDP camp. Accessed August 12th, 2008: <http://www.irinnews.org/report.aspx?reportid=54952>
- Based upon witness testimony and interviews done by authors.
- Based on information presented by a local organization, Agoro Community Development Organization.
- Based on statistics from the Agoro IDP primary school, supplied by the headmaster who provided detailed student gender ratios in each grade. He knew many children starting from grade 2 who left for marriages. By grade six, a class of fifty would have only 5-8 girls.
- Based upon witness testimony and interviews done by authors
- Green et al (May, 2006) Uganda's HIV Prevention Success: The role of sexual behavior change and the National response. AIDS and Behavior, July, 10(4): p. 335-346.
- The Monitor (22, Oct., 2007) Philly Lutaya Legacy Lives On. Accessed August 11th, 2008: <http://allafrica.com/stories/200710220196.html>
- Stevenson R (2003). Bush has praise for Uganda and its fight against AIDS. New York Times.
- Avert (2008). HIV & AIDS in Uganda. Accessed August 11th, 2008: <http://www.avert.org/aidsuganda.htm>
- Wikipedia (2008). Uganda and HIV/AIDS. Accessed August 11th, 2008: http://en.wikipedia.org/wiki/HIV/AIDS_in_Uganda
- CIA Factbook (2008) Uganda. Accessed August 11th, 2008: <https://www.cia.gov/library/publications/the-world-factbook/geos/ug.html>
- BBC (2008). Uganda: Country Profile. Accessed August 12th, 2008: http://news.bbc.co.uk/2/hi/africa/country_profiles/1069166.stm