



HIV and AIDS Behavioral Surveillance Survey (BSS)

Refugee Camps and Hosting Communities
in Kawambwa and Mporokoso, Zambia

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I. Executive Summary

The summary of this report presents methods, results and analysis of the first Behavioral Surveillance Survey (BSS) carried out in two refugee camps and surrounding communities in Zambia: Kala refugee camp (population 18,967) in Kawambwa District, Luapula Province and Mwange refugee camp (population 20,784) in Mporokoso District, Northern Province. The research study was carried out from September 10-26, 2006 in Kawambwa and from September 27 to October 9, 2006 in Mporokoso. The objective of the survey was to establish baseline data on HIV risk behavior and provide information to inform future interventions both in Zambia and the country of origin of refugees, the Democratic Republic of Congo (DRC).

This research was a cross sectional survey of refugees from the DRC and Zambians living in surrounding communities between 15 and 49 years of age. A total of 1,746 refugees from 1,098 households in the camps and a total of 1,719 men and women from 1,052 households in surrounding communities were surveyed. An existing BSS questionnaire designed by UNHCR was modified to capture HIV risk behavior variables.

Selected results and recommendations are presented below including results on selected core indicators presented in the following tables.

Characteristics of Respondents

There was no significant difference in age groups between the Zambians and the refugee population in Kawambwa and in Mporokoso. In Mporokoso the refugee and surrounding community population was nearly same with 43% of refugees and surrounding community residents aged 15-24 years. In Kawambwa, 44% of refugee and 46% of the community host population were aged 15-24 years. As expected most of refugees were from DRC while almost all persons in the surrounding communities were Zambian. 92% in Kala and 99% in Mwange were refugees from DRC while 99% of the population in communities surrounding Kala and all participants from Mwange surrounding villages were Zambian nationals.

In Kawambwa, the percentage of married individuals was significantly higher ($p < 0.001$) among the refugees (68%) than among the surrounding community residents (60%). The reverse trend was evident in Mporokoso, though the difference was not statistically significant (71% surrounding community residents vs. 68% refugees were married $p = 0.182$).

In both sites surrounding community residents had a better education than refugees. In Kawambwa 18% of refugees compared to 6% of surrounding community residents ($p < 0.001$) had no formal education. Nationals had a higher percentage of those who attained secondary education than the refugee community with 46% of surrounding community residents having secondary education versus only 22% of the refugees. The picture is similar for Mporokoso: 17% of refugees had no education compared to only 7% of the surrounding community while 24% of surrounding community residents had secondary education compared to 22% of the refugees. Males were better educated in both refugees and surrounding community populations.

Male Circumcision

More male refugees are circumcised compared to surrounding community residents. In Kawambwa, 88% of male refugees and only 8% of men in the surrounding community are circumcised. In Mporokoso 91% of male refugees compared to 4% of the surrounding community men are circumcised.

Displacement and Mobility

Kala refugee camp was established in August 2000 and Mwange camp was established in March 1999. Many refugees had lived in the area for many years with the stable Zambian surrounding community and there are frequent visits between the populations. In Kawambwa 63% of refugee respondents and 46% of surrounding community residents have lived in the camp and surrounding communities for a period of 5 or more years. In Mporokoso 93% of refugees have lived in Mwange camp and 64% of surrounding community residents have lived in surrounding villages for a period of 5 years or more.

There are frequent visits by refugees and surrounding community residents to the camp or villages in the area to visit friends/relatives, conduct business and purchase food. In Kawambwa there are more visits from surrounding community residents to Kala refugee camp than vice versa ($p < 0.001$). However, in Mporokoso

there is no difference between the frequency of visits from surrounding community residents to Mwangi refugee camp when compared to the frequency of visits from refugees to the surrounding community.

Alcohol and Sex

More surrounding community residents compared to refugees as well as more men than women (in both populations) engaged in sexual intercourse under the influence of alcohol. In Kawambwa 14% of sexually active surrounding community residents (24% men and 4% women) compared to 8% of sexually active refugees (15% men and 3% women) had sex while under the influence of alcohol. In Mporokoso 10% of surrounding community residents (20% men and 3% women) and 5% of refugees (11% men, and 2% women) reported having sex under the influence of alcohol.

Sexual Behavior

The median age at first sex was 17 for males and 16 for females in Kala refugee camp and 16 for both male and female surrounding community residents in the surrounding communities in Kawambwa. In Mporokoso men in both the refugee camp and surrounding community are older at first sex, with a median age of 18, compared to women, with a median age of 16 for refugee women and 17 for surrounding community women in Mporokoso. In both sites women marry at a younger age. In Kawambwa the median age of first marriage is 17 for refugee women and 18 for surrounding community women. In comparison men are older at first marriage in both settings with a median age of 22 years in the surrounding communities and 21 in the refugee camp. In Mporokoso surrounding community men are older than male refugees at their first marriage by one year; the median age is 23 and 22 respectively at their first marriage.

Polygamous marriages are more common among refugees than surrounding community residents. In Kawambwa 15% of married refugee men and 8% of married surrounding community men were in polygamous marriages. Among women, 21% of married refugee women and 7% of married surrounding community women in Kawambwa were in polygamous relationships. In Mporokoso, 9% of refugee men, 4% of surrounding community men, 12% of refugee women and 10% of surrounding community women are in polygamous relationships.

Youth (age 15-24) in both communities engage in sexual activities. In Kawambwa 73% of unmarried refugee youth and 75% of unmarried surrounding community youth had sex with a regular partner in the past 12 months while 20% of unmarried refugee youth and 26% of surrounding community youth had sex with a non-regular partner in the last 12 months prior to the interview. In Mporokoso 71% of unmarried refugee youth and 80% of unmarried surrounding community youth had sex with a regular partner. In comparison 24% of unmarried refugee youth and 16% of refugee youth in Mporokoso reported sex with a non-regular partner.

Married men and women had also sex with other partners. In Kawambwa 18% of refugees (29% men and 10% women) and 22% of surrounding community residents (37% men and 11% women) married (either polygamous or monogamous) or living with a partner had a sexual relationship with another regular partner(s) in the last 12 months while 10% of refugees (20% men and 3% women) and 13% of surrounding community residents (28% men and 2% women) had sex with a non-regular partner in addition to their spouses in the last 12 months. About 12% of married refugees and 10% of married surrounding community residents in Kawambwa also had sex in exchange for money (transactional sex) in the last 12 months.

In Mporokoso 13% of married refugees and 14% of surrounding community residents had a sexual relationship with another regular partner in the past 12 months and 12% of refugees and 7% of surrounding community residents had sex with a non-regular partner. 8% of refugees and 5% of surrounding community residents who are married engaged in transactional sex.

Condom use was lower among refugees than surrounding community residents across all age groups. In Kawambwa 18% of refugees and 47% of surrounding community residents used a condom at last sex with a regular partner. In Mporokoso 27% of refugees and 37% of surrounding community residents used a condom at last sex with a regular partner.

In Kawambwa, among those who had sex with a non-regular partner, only 29% of refugees and 60% of surrounding community residents used a condom at last sex. Of those who had transactional sex only 18% of

refugees and 47% of surrounding community residents in Kawambwa used a condom. In Mporokoso only 27% of refugees and 40% of surrounding community population used a condom at last sex with a non-regular partner while 31% of refugee and 48% of surrounding community population used a condom at last transactional sex.

Forced Sex

Forced sex was reported more among surrounding community residents than refugee women. In Kawambwa 8% of surrounding community women and 7% of refugee women reported ever having forced sex. The same trend was evident in Mporokoso with 9% of surrounding community women and 8% of refugee women reporting forced sex. The main perpetrators of forced sex in refugee camps were refugees themselves and in the surrounding communities, the main perpetrators were persons from the local community. Nearly 48% in Kala camp and 56% in Mwangi camp mentioned refugees as the main perpetrators of forced sex. 94% of Kala and 73% of Mwangi surrounding community mentioned persons from the local community as perpetrators of forced sex.

Sexually Transmitted Infections (STIs)

Among male and female respondents in Kawambwa 5% of refugees and 6% of surrounding community residents reported either a history of genital discharge or genital ulcer/sore in the last 12 months. In Mporokoso 3% of refugees and 2% of surrounding community residents reported a genital discharge while 3% of refugees and 2% of surrounding community residents reported a genital ulcer in the last 12 months. Over 85% of respondents reporting an STI sought treatment. Both refugee and surrounding community respondents seek services of traditional healers and self-medicate for STIs.

Knowledge, Attitudes and Misconceptions about HIV and AIDS

Over 90% of refugees and surrounding community population have heard of HIV/AIDS in both sites but knowledge on prevention is higher among surrounding community residents than the refugee population.

Refugees in Kala Camp cited community health workers (40%) and radio (40%) as the primary sources of HIV/AIDS information. Over 60% of surrounding community residents reported radio ads as the most common source of information. In Mporokoso both refugees and surrounding community residents cited relatives as the main source of HIV/AIDS information followed by the radio.

In Kawambwa the percentage of refugees who received information on HIV/AIDS from a local NGO was 27% compared to 18% of surrounding community residents ($p < 0.001$). In Mporokoso the percentages are higher with 34% of refugees and 26% of surrounding community residents receiving information on HIV/AIDS from a local NGO. The difference is also statistically significant in Mporokoso between the refugees and surrounding community residents ($p < 0.001$).

In Kawambwa 99% of surrounding community residents vs. 86% of refugees were aware that abstinence from sex protects against HIV, 98% of surrounding community residents vs. 89% of refugees knew that staying faithful to one uninfected sex partner prevents HIV, and 82% of surrounding community residents vs. 68% of refugees knew that correct and consistent use of condoms prevents the spread of HIV. In Mporokoso 95% of surrounding community residents and 89% of refugees knew that abstinence protects against HIV, 93% of surrounding community residents and 86% of refugees knew that faithfulness protects against HIV, while 77% of surrounding community residents and 71% of refugees knew that correct and consistent use of condoms prevents HIV transmission. Knowledge of prevention is significantly higher among surrounding community residents than refugees in both study sites ($p < 0.001$).

Stigma and misconception is high in both communities. In Kawambwa 25% of refugees and 14% of surrounding community residents believed that people can get HIV by sharing food with an infected person. In Mporokoso 32% of refugees and 17% of surrounding community residents also believed this misconception. In Kawambwa 15% of refugees and 8% of surrounding community residents do not think a healthy looking person can be infected with HIV compared to 25% of refugees and 19% of surrounding community residents in Mporokoso. The differences between the refugee population and surrounding community residents are statistically significant ($p < 0.001$) with the refugee populations harboring more stigmatizing attitudes and misconceptions than surrounding community residents.

Negative attitudes towards people with HIV are still high. In Kawambwa 51% of refugees and 50% of surrounding community residents would like to keep it secret if a member of their family was HIV positive. In Mporokoso similar proportions were observed with 51% among refugees and 49% among surrounding community residents would like to keep HIV status a secret.

In Kawambwa 16% of refugees and 7% of surrounding community residents would not take care of a female relative who was infected with HIV. In Mporokoso the percentages were higher with 18% of refugees and 9% of surrounding community residents reporting the same attitude. When asked about caring for a male relative, 15% of refugees and 7% of surrounding community residents in Kawambwa, and 17% of refugees and 8% of surrounding community residents in Mporokoso would not care for a male relative who was infected with HIV.

41% of refugees and 26% of surrounding community residents in Kawambwa and 36% of refugees and 42% of surrounding community residents in Mporokoso were of the opinion that young adolescents should not be taught about condom use.

HIV Testing

Only 25% of refugees and 28% of surrounding community residents in Kawambwa have ever been tested for HIV. Of those ever tested in Kawambwa 67% of refugees and 47% of surrounding community residents were tested in the last 12 months and very high percentages (91% of refugees and 87% of surrounding community residents) of those who tested received their results. In Mporokoso 11% of refugees and 12% of surrounding community residents have ever been tested for HIV and 55% of refugees and 56% of surrounding community residents were tested in the past 12 months. Of those who were tested 87% of refugees and 75% of surrounding community residents received their results.

Comparison According to Gender

A statistically significant difference was observed between young male refugees (age 15-24 yrs) and surrounding community residents who were never married. More young male refugees abstained from sexual intercourse for the past 12 months than male youth from the surrounding community ($p=0.045$). However, the difference was not statistically significant between young female refugees and surrounding community female youth. Condom use varied between the two populations. Surrounding community residents, both male and female, were more likely to report condom use at last sex compared to male and female refugees ($p=0.056$ and 0.057 for males and females respectively). In addition, more refugee men than surrounding community men had an HIV test and received results ($p=0.026$). The difference was not statistically significant between female refugees and surrounding community females.

Comprehensive knowledge on HIV/AIDS was higher among males and females from the surrounding community compared to male and female refugees ($p<0.001$ for difference between males and females in both populations). In addition, more surrounding community males and females indicated accepting attitudes towards PLHA than the male and female refugees ($p<0.001$ and $p<0.001$ for male and female respectively).

Recommendations

- Male circumcision is a proven strategy for HIV prevention. However, information and education on male circumcision must be provided as part of a comprehensive HIV/AIDS prevention strategy, particularly targeting the surrounding host community. Programs must stress that male circumcision is not a foolproof prevention method in order to avoid creating a false sense of protection, disinhibition, and exclusion of other prevention strategies.
- There is a great deal of interaction between refugees residing in camps and surrounding village communities. HIV/AIDS prevention programs should target both populations using all proven means and strategies for information dissemination.
- Women in both communities often have their first sexual encounter at a very early age as evidenced by the median age of sexual debut in both communities. Reproductive health education must be provided at an early age. Refugee camps need to have structures in place that support informal learning and sensitization on dangers of early sexual debut and early marriage.

- Married individuals engaging in extramarital relationships put themselves, as well as their partners, at risk of HIV/AIDS and other STIs. HIV/AIDS interventions must incorporate messages to couples on behavior change, reinforcement of faithfulness and condom use.
- Organizations implementing HIV prevention strategies should train health workers and lay people to distribute condoms, provide correct and factual information on condom use, as well as general counseling, to increase uptake and usage.
- In both Kala and Mwange, education level was better among surrounding community residents than the refugee population in the camp. Education is a very important tool for behavior change; therefore programs (formal or informal) to improve educational status are needed especially amongst refugees in the camp.
- Condom use is very low among the refugee population compared to surrounding community population. Programs to improve knowledge and enforcement of positive behavior change, including condom use, should be developed and implemented targeting the refugee population. Community Programs, both through formal education and informal learning processes, can increase an individuals' ability to practice positive and healthy behaviors, including communication with partners on condom
- Data show that STIs are common and that both refugee and surrounding community respondents seek services of traditional healers and self-medicate. HIV prevention programs in both refugee camps and surrounding community can work with traditional healers to create referral systems for proper management and counseling of patients. In addition, HIV prevention programs can train owners of drug stores/dispensing outlets to properly dispense STI drugs and refer customers to health facilities when needed.
- Stigma and negative attitudes towards people with HIV are very common in both communities surveyed. Innovative programs reaching out to refugee camps and surrounding communities with easy-to-understand and factual information are needed to reduce stigma and discrimination.
- Knowledge level is high among refugees and surrounding community residents on HIV. HIV prevention programs need to go beyond simply creating awareness to providing skills and creating an enabling environment to change behaviors with regard to abstinence, being faithful and using condoms.
- Radio, friends and health facilities are the main sources of information for refugees and the surrounding community. HIV prevention programs can explore using local radio stations to reach out to communities with HIV information as well as using peer education programs including adult-to-adult and parent-to-child education.
- HIV testing is an important HIV prevention strategy. Unfortunately, uptake of HIV testing is low in both refugee and surrounding community populations. Counseling and testing services need to be expanded including introduction of an 'opt-out' HIV testing strategy in the clinical setting. Routine counseling and testing should be integrated in most HIV prevention activities and care activities.

Table 1. Core Indicators, Kawambwa, Zambia, UNHCR BSS 2006: Kala Refugee Camp and Surrounding Community

Indicator	Kala Refugee Camp			Surrounding Communities		
	Male	Female	Total	Male	Female	Total
Sexual Behavior						
Never married young people aged 15-24 who never had sex	n=152 24.3%	n=207 22.2%	N=359 23.1%	n=187 23.0%	n=215 15.8%	N=402 19.2%
Never married young people aged 15-24 who have abstained from sexual intercourse for past 12 months	n=48 20.8%	n=24 20.8%	N=72 20.8%	n=82 7.3%	n=44 13.6%	N=126 9.5%
Sex with non-regular partner in past among men and women aged 15-24	n=116 34.5%	n=160 6.9%	N=276 18.5%	n=144 38.2%	n=180 8.9%	N=324 21.9%
Condom use at last sex with a non-regular partner men and women aged 15-24	n=32 40.0%	n=10 30.0%	N=42 38.1%	n=51 56.9%	n=14 64.3%	N=65 58.5%
Sex with a transactional partner in past 12 month among men and women aged 15-24	n=114 26.3%	n=161 16.1%	N=275 20.4%	n=144 25.7%	n=180 16.1%	N=324 20.4%
Condom use at last sex with a transactional partner among men and women aged 15-24	n=23 30.4%	n=19 5.3%	N=42 19.1%	n=25 60.0%	n=17 41.2%	N=42 52.3%
High risk sex ^a in past 12 months among men and women aged 15-24	n=153 35.9%	n=207 16.4%	N=360 24.7%	n=187 38.0%	n=215 17.7%	N=402 27.1%
Condom use at last high risk sex among men and women aged 15-24	n=153 11.1%	n=207 1.9%	N=360 5.8%	n=187 19.3%	n=215 6.0%	N=402 12.2%
HIV Testing						
Had HIV test and received results among men and women aged 15-49	n=353 24.6%	n=457 29.3%	N=810 23.1%	n=420 17.9%	n=447 30.7%	N=867 24.5%
Sexually Transmitted Infections						
Had STI symptom in past 12 months among men and women 15-49	n=358 7.8%	n=464 3.0%	N=822 5.1%	n=420 7.9%	n=449 3.6%	N=869 5.6%
Had STI symptom in past 12 months and sought treatment at health facility among men and women aged 15-49	n=28 100%	n=14 92.9%	N=42 97.6%	n=33 87.9%	n=16 87.5%	N=49 87.8%
Knowledge, Attitudes and Misconceptions						
Comprehensive correct knowledge of HIV/AIDS among men and women aged 15-49	n=344 46.8%	n=434 39.6%	N=778 42.8%	n=417 65.5%	n=446 64.8%	N=863 65.1%
Accepting attitudes towards PLH/A among men and women aged 15-49	n=344 20.9%	n=434 17.5%	N=778 19.0%	n=417 32.9%	n=446 30.7%	N=863 31.7%
Displacement Situations						
Percent of women aged 15-49 ever forced to have sex		n=464 6.5%			n=449 7.6%	
Percent of women aged 15-49 who were forced to have sex in past 12 months		n=464 1.1%			n=449 2.4%	
Men and women aged 15-49 years who reside in current community for less than 12 months	n=358 1.7%	n=464 1.1%	N=822 1.3%	n=420 7.1%	n=449 5.8%	N=869 6.4%
Away from home for four or more consecutive weeks in past 12 months among men and women aged 15-49 years	n=358 30.7%	n=464 7.5%	N=822 17.6%	n=420 26.4%	n=449 19.2%	N=869 22.7%
Men and women aged 15-49 years who visit surrounding communities at least once a month	n=298 81.5%	n=272 77.2%	N=570 79.5%	n=319 84.0%	n=294 86.4%	N=613 85.2%
Access to Information						
Percent of men and women who have been talked to by an NGO operating from RC camp on HIV/AIDS	n=358 22.9%	n=464 29.7%	N=822 26.8%	n=420 20.7%	n=449 16.3%	N=869 18.4%

^a High risk having sex with non-regular partner or sex in exchange for money

Table 2. Core Indicators, Mporokoso, Zambia, UNHCR BSS 2006: Mwanze Refugee Camp and Surrounding Community

Indicator	Mwanze Refugee Camp			Surrounding Communities		
	Male	Female	Total	Male	Female	Total
Sexual Behavior						
Never married young people aged 15-24 who never had sex	n=149 25.5%	n=242 21.1%	N=391 22.8%	n=118 22.9%	n=215 16.3%	N=333 18.6%
Sex with non-regular partner in past among men and women aged 15-24	n=111 41.4%	n=191 13.1%	N=302 23.5%	n=91 30.8%	n=180 3.9%	N=271 12.9%
Condom use at last sex with a non-regular partner men and women aged 15-24	n=42 42.9%	n=21 9.5%	N=63 31.7%	n=26 38.5%	n=5 40.0%	N=31 38.7%
Sex with a transactional partner in past 12 month among men and women aged 15-24	n=109 26.6%	n=188 16.0%	N=297 19.9%	n=91 15.4%	n=180 9.4%	N=271 11.4%
Condom use at last sex with a transactional partner among men and women aged 15-24	n=23 34.8%	n=23 30.4%	N=46 32.6%	n=10 60.0%	n=8 37.5%	N=18 50.0%
High risk sex ^b in past 12 months among men and women aged 15-24	n=149 38.3%	n=242 19.0%	N=391 26.3%	n=118 27.1%	n=217 9.7%	N=335 15.8%
Condom use at last high risk sex among men and women aged 15-24	n=149 14.1%	n=242 3.3%	N=391 7.4%	n=118 10.2%	n=217 2.3%	N=335 5.1%
HIV Testing						
Had HIV test and received results among men and women aged 15-49	n=356 10.5%	n=545 8.4%	N=901 9.2%	n=343 7.6%	n=509 9.0%	N=852 8.9%
Sexually Transmitted Infections						
Had STI symptom in past 12 months among men and women 15-49	n=356 5.3%	n=545 0.9%	N=901 2.7%	n=343 3.5%	n=509 1.6%	N=852 2.3%
Had STI symptom in past 12 months and sought treatment at health facility among men and women aged 15-49	n=19 89.5%	n=5 60.0%	N=24 83.3%	n=12 83.3%	n=8 87.5%	N=20 85.0%
Knowledge, Attitudes and Misconceptions						
Comprehensive correct knowledge of HIV/AIDS among men and women aged 15-49	n=353 39.9%	n=515 35.3%	N=868 37.2%	n=342 49.7%	n=501 48.7%	N=843 49.1%
Accepting attitudes towards PLH/A among men and women aged 15-49	n=353 22.7%	n=515 16.7%	N=868 19.2%	n=342 30.1%	n=501 21.2%	N=843 24.8%
Displacement Situations						
Percent of women aged 15-49 ever forced to have sex		n=545 6.6%			n=509 8.6%	
Percent of women aged 15-49 who were forced to have sex in past 12 months		n=545 1.3%			n=509 3.9%	
Men and women aged 15-49 years who reside in current community for less than 12 months	n=356 0.6%	n=545 0.2%	N=901 0.3%	n=343 4.1%	n=509 4.5%	N=852 4.3%
Away from home for four or more consecutive weeks in past 12 months among men and women aged 15-49 years	n=356 34.4%	n=545 10.1%	N=901 20.1%	n=343 22.7%	n=509 14.7%	N=852 18.0%
Men and women aged 15-49 years who visit surrounding communities at least once a month	n=304 82.9%	n=348 73.3%	N=652 77.8%	n=302 76.8%	n=373 75.6%	N=675 76.1%
Access to Information						
Percent of men and women who have been talked to by an NGO operating from RC camp on HIV/AIDS	n=356 33.1%	n=545 34.5%	N=901 34.0%	n=343 24.8%	n=509 27.5%	N=852 26.4%

^b High risk having sex with non-regular partner or sex in exchange for money

Table 3. Comparison of Core Indicators by Gender: Kala Refugee Camp and Surrounding Community, Kawambwa, UNHCR BSS 2006

Indicator	Male Refugee	Male Surrounding Community	p-values	Female Refugee	Female Surrounding Community	p-values
Sexual Behavior						
Never married young people aged 15-24 who never had sex	n=152 24.3%	n=187 23.0%	0.871	n=207 22.2%	n=215 15.8%	0.120
Never married young people aged 15-24 who have abstained from sexual intercourse for past 12 months	n=48 20.8%	n=82 7.3%	0.046	n=24 20.8%	n=44 13.6%	0.328
Sex with non-regular partner in past among men and women aged 15-24	n=116 34.5%	n=144 38.2%	0.625	n=160 6.9%	n=180 8.9%	0.627
Condom use at last sex with a non-regular partner men and women aged 15-24	n=32 40.0%	n=51 56.9%	0.225	n=10 30.0%	n=14 64.3%	0.144
Sex with a transactional partner in past 12 month among men and women aged 15-24	n=114 26.3%	n=144 25.7%	0.976	n=161 16.1%	n=180 16.1%	0.890
Condom use at last sex with a transactional partner among men and women aged 15-24	n=23 30.4%	n=25 60.0%	0.077	n=19 5.3%	n=17 41.2%	0.092
High risk sex ^c in past 12 months among men and women aged 15-24	n=153 35.9%	n=187 38.0%	0.786	n=207 16.4%	n=215 17.7%	0.832
Condom use at last high risk sex among men and women aged 15-24	n=153 11.1%	n=187 19.3%	0.056	n=207 1.9%	n=215 6.0%	0.057
HIV Testing						
Had HIV test and received results among men and women aged 15-49	n=353 24.6%	n=420 17.9%	0.026	n=457 29.3%	n=447 30.7%	0.716
Sexually Transmitted Infections						
Had STI symptom in past 12 months among men and women 15-49	n=358 7.8%	n=420 7.9%	0.908	n=464 3.0%	n=449 3.6%	0.781
Had STI symptom in past 12 months and sought treatment at health facility among men and women aged 15-49	n=28 100%	n=33 87.9%	-	n=14 92.9%	n=16 87.5%	-
Knowledge, Attitudes and Misconceptions						
Comprehensive correct knowledge of HIV/AIDS among men and women aged 15-49	n=344 46.8%	n=417 65.55	<0.001	n=434 39.6%	n=446 64.8%	<0.001
Accepting attitudes towards PLH/A among men and women aged 15-49	n=344 20.9%	n=417 32.9%	<0.001	n=434 17.5%	n=446 30.7%	<0.001
Displacement Situations						
Percent of women aged 15-49 ever forced to have sex				n=464 6.5%	n=449 7.6%	0.599
Percent of women aged 15-49 who were forced to have sex in past 12 months				n=464 1.1%	n=449 2.4%	0.184
Men and women aged 15-49 years who reside in current community for less than 12 months	n=358 1.7%	n=420 7.1%	<0.001	n=464 1.1%	n=449 5.8%	<0.001
Away from home for four or more consecutive weeks in past 12 months among men and women aged 15-49 years	n=358 30.7%	n=420 26.4%	0.213	n=464 7.5%	n=449 19.2%	<0.001
Men and women aged 15-49 years who visit surrounding communities at least once a month	n=298 81.5%	n=319 84.0%	0.480	n=272 77.2%	n=294 86.4%	0.006
Access to Information						
Percent of men and women who have been talked to by an NGO operating from RC camp on HIV/AIDS	n=358 22.9%	n=420 20.7%	0.514	n=464 29.7%	n=449 16.3%	<0.001

^c High risk having sex with non-regular partner or sex in exchange for money

Table 4. Comparison of Core Indicators by Gender: Mwanze Refugee Camp and Surrounding Community, Mporokoso, UNHCR BSS 2006

Indicator	Male Refugee	Male Surrounding Community	p-values	Female Refugee	Female Surrounding Community	p-values
Sexual Behavior						
Never married young people aged 15-24 who never had sex	n=149 25.5%	n=118 22.9%	0.724	n=242 21.1%	n=215 16.3%	0.061
Sex with non-regular partner in past among men and women aged 15-24	n=111 41.4%	n=91 30.8%	0.155	n=191 13.1%	n=180 3.9%	0.002
Condom use at last sex with a non-regular partner men and women aged 15-24	n=42 42.9%	n=26 38.5%	0.916	n=21 9.5%	n=5 40.0%	0.154
Sex with a transactional partner in past 12 month among men and women aged 15-24	n=109 26.6%	n=91 15.4%	0.080	n=188 16.0%	n=180 9.4%	0.086
Condom use at last sex with a transactional partner among men and women aged 15-24	n=23 34.8%	n=10 60.0%	0.167	n=23 30.4%	n=8 37.5%	0.517
High risk sex ^d in past 12 months among men and women aged 15-24	n=149 38.3%	n=118 27.1%	0.074	n=242 19.0%	n=217 9.7%	0.007
Condom use at last high risk sex among men and women aged 15-24	n=149 14.1%	n=118 10.2%	0.435	n=242 3.3%	n=217 2.3%	0.715
HIV Testing						
Had HIV test and received results among men and women aged 15-49	n=356 10.5%	n=343 7.6%	0.243	n=545 8.4%	n=509 9.0%	0.815
Sexually Transmitted Infections						
Had STI symptom in past 12 months among men and women 15-49	n=356 5.3%	n=343 3.5%	0.318	n=545 0.9%	n=509 1.6%	0.494
Had STI symptom in past 12 months and sought treatment at health facility among men and women aged 15-49	n=19 89.5%	n=12 83.3%	0.507	n=5 60.0%	n=8 87.5%	0.314
Knowledge, Attitudes and Misconceptions						
Comprehensive correct knowledge of HIV/AIDS among men and women aged 15-49	n=353 39.9%	n=342 49.7%	0.012	n=515 35.3%	n=501 48.7%	<0.001
Accepting attitudes towards PLH/A among men and women aged 15-49	n=353 22.7%	n=342 30.1%	0.031	n=515 16.7%	n=501 21.2%	0.082
Displacement Situations						
Percent of women aged 15-49 ever forced to have sex				n=545 6.6%	n=509 8.6%	0.257
Percent of women aged 15-49 who were forced to have sex in past 12 months				n=545 1.3%	n=509 3.9%	0.011
Men and women aged 15-49 years who reside in current community for less than 12 months	n=356 0.6%	n=343 4.1%	0.004	n=545 0.2%	n=509 4.5%	<0.001
Away from home for four or more consecutive weeks in past 12 months among men and women aged 15-49 years	n=356 34.4%	n=343 22.7%	<0.001	n=545 10.1%	n=509 14.7%	0.028
Men and women aged 15-49 years who visit surrounding communities at least once a month	n=304 82.9%	n=302 76.8%	0.063	n=348 73.3%	n=373 75.6%	0.526
Access to Information						
Percent of men and women who have been talked to by an NGO operating from RC camp on HIV/AIDS	n=356 33.1%	n=343 24.8%	0.018	n=545 34.5%	n=509 27.5%	0.017

^d High risk having sex with non-regular partner or sex in exchange for money

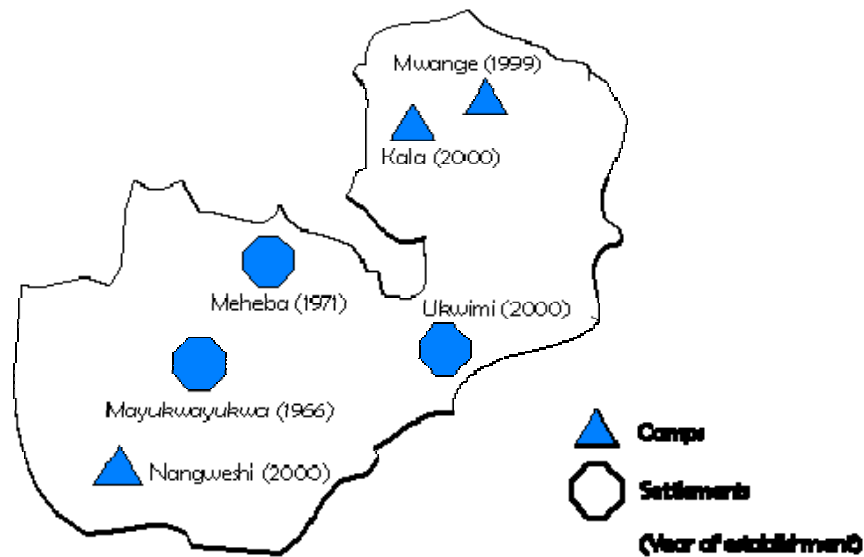
II. Background and Introduction

Since 1999 there have been an estimated 50,000 deaths amongst Internally Displaced People (IDP) in the Democratic Republic of Congo (DRC). Over five hundred thousand persons have left DRC to other countries in the region (Ahoua et al 2006). Conflict and displacement of people can fuel morbidity and mortality including sexually transmitted infections and HIV/AIDS.

In September and October 2006 Family Health International (FHI) carried out a behavioral surveillance survey (BSS) in the Kala and Mwanze refugee camps and the surrounding communities in Zambia, as indicated in the map below. FHI conducted the BSS with technical input from UNHCR in Geneva (Switzerland), Pretoria (South Africa) and Kawambwa (Zambia). Additional input was provided by Refugee Officers from Kala and Mwanze camps as well as partners providing HIV and AIDS prevention services in these areas including Zambian Red Cross Society, Hodi, World Vision Zambia, Aktion Africa Hilfe (AAH) and the District AIDS Task Forces (DATF) in Kawambwa and Mporokoso.

Kala Refugee Camp, established by the United Nations High Commission for Refugees (UNHCR) in August 2000, is located in Kawambwa District in Luapula Province, approximately 25 kilometers north of the town and 45 kilometers from the DRC border. Mwanze Refugee Camp, established by UNHCR in Zambia in March 1999 for DRC refugees, is located in Mporokoso District, Northern Province, approximately 35 kilometers from Mporokoso town. The two camps are approximately 130 kilometers apart.

Figure 1: Map of Zambia, with Refugee Camps including Kala and Mwanze Study Sites, UNHCR BSS 2006



A BSS is a cross-sectional survey which uses a consistent sampling strategy and is best used to track trends over time on key indicators with multiple rounds of data collection. This survey is the first round for these two study sites.

These surveys use reliable methods to track HIV risk behaviors over time as part of an integrated surveillance system which monitors various aspects of the epidemic. They are especially useful in providing information on behaviors among sub-populations who may be difficult to reach through traditional household surveys, but may be at a high risk for contracting or passing on HIV. Results from BSS are used to measure the relative success and impact of public health interventions, including prevention activities, and inform program design and planning. In addition, BSS data provides information to help assess the relative impact of existing HIV prevention programs and to monitor results of prevention activities as part of a national response to track behavior patterns that influence spread of HIV in sub or general population (FHI BSS Guidelines, 2000)

The questionnaire used in these surveys was adapted from a tool developed by UNHCR and partners under the GLIA program, which incorporates specific questions on conflict and displacement.

The specific objectives of the BSS implemented in Kala and Mwange refugee camps and surrounding communities were to measure type and frequency of HIV risk behaviors, provide information to guide prevention program planning, provide data to compare with other behavioral surveillance studies carried out among refugee populations, and to assess exposure to interventions provided by various implementing partners in the camps. In addition to providing information for future HIV/AIDS programs in the camps, the information will be shared with colleagues in the DRC in order to inform their planning to assist Congolese refugees returning to DRC.

III. Methods

Study Design

This was a cross-sectional survey of refugees from DRC residing in Kala and Mwange camps along with Zambian nationals living in surrounding villages within a 25 kilometer radius of each camp.

Survey Instruments

Two instruments were used for the BSS: a checklist and a questionnaire.

The **checklist**, adapted from a UNHCR nutritional survey, collects information on the number of persons in each household, ages, sex, and relation to the head of household. The checklist was used to select eligible participants.

The standard **BSS questionnaire** adopted by UNHCR from the FHI generic protocol (Behavioral Surveillance Surveys, Guidelines for Repeated Behavioral Surveys in Populations at Risk of HIV, 2000), was used with a few modifications and additions to suit the context of this study and was reviewed and approved by UNHCR prior to implementation. The questionnaire was translated into Bemba by translators in Lusaka and Kawambwa. Translated versions were later reviewed by research assistants during data collection training in both Kawambwa and Mporokoso. A questionnaire, with both English and Bemba questions/responses, was produced for each research assistant to use during interviews. However, only the English questionnaire was completed by the research assistants.

A **consent form** approved by both the Protection of Human Subject Committee (PHSC) of FHI and the Zambia Ethical Research Committee (ZERC) was translated into four languages: English, Bemba, Swahili and French. Each research assistant had a copy of the four consent forms but completed only the English copy.

Sample Size Calculation

The sample size for both camps and surrounding communities were calculated based on the following assumptions:

- 65% of those having extra-marital sex used a condom at last sex
- 50% of respondents 15-49 years correctly mention ways to prevent the sexual transmission of HIV and other STIs and reject misconception about HIV transmission and prevention.

To determine the necessary sample size the initial value of point prevalence (PI) was set at 50% in order to have a large enough sample size to make accurate estimates and to detect a difference of 15% (P2=65%) resulting from ongoing interventions. The design effect (DE) was estimated at 2.0 because of the cluster design used to sample target groups in both camps and surrounding communities. The level of precision was set at 0.05 to find a probability that married individuals with extra-marital relationships are protecting themselves by using a condom at last sex. The study was powered at 80% to show a 15% significant difference.

The overall sample for each community, taking into account incomplete interviews and individuals who do not engage in extramarital sexual relationships, was estimated at 800 per domain (camp or surrounding community) to take into account the design effect. A total of 3200 individuals were targeted for the study from Kala and Mwange camps and surrounding communities. Twenty households were estimated for a random selection from each cluster, an estimated total of 2,240 clusters, assuming that each household would have two eligible adults (age 15-49 years) for inclusion in the study.

Training

Research assistants were trained in data collection for three days in both Kawambwa and in Mporokoso. The training included basic information on HIV/AIDS, purpose of survey and design, approaching participants, obtaining informed consent and other ethical issues, completing the checklist, survey administration and daily record keeping. Day two of the training was focused on understanding the survey questions, interpretation in Bemba (and in some Swahili), and role-playing interviews. The third day consisted of a field exercise in the community where each research assistant administered the checklist and questionnaire to male and female participants in the community. Following the Kawambwa field test the questionnaire was reviewed and revised. After both field exercises the problems faced during interviews were discussed including how to handle participants who did not understand either English or Bemba. For these participants one of the field supervisors assisted with the interviews in Swahili and in French.

A total of 26 research assistants were trained to collect data; 14 in Kawambwa (seven female) and 12 in Mporokoso (seven female). Four exceptional research assistants (two female) from Kawambwa joined the twelve research assistants in Mporokoso to assist with data collection in Mporokoso. These four research assistants participated in the first day of research assistant training in Mporokoso and then began data collection while the other research assistants completed the three day training. In total 16 research assistants collected data in Mporokoso.

Team Composition

The research team included four consultants experienced in conducting BSS, one as a team leader and three as field supervisors and editors in the field. One of the supervisors was from DRC and spoke English, French, Swahili, and Bemba, and was available to assist with translation as issues arose. Each supervisor managed a team of three to four research assistants. Each research team was allocated a number of clusters (sections and villages households) to interview.

The team leader, field supervisors and research assistants met on a daily basis following data collection and briefly every morning prior to starting field work. In addition, the team leader and supervisors met each evening to review progress that day as well as plan work for the following day, including formation of teams. The team leader reviewed and edited completed questionnaires on a daily basis and provided feedback to data collectors and the team.

Survey Populations

Refugees residing in Kala and Mwangwe refugee camps as well as households in surrounding villages within 25 kilometers of the camps were surveyed in this BSS. Households were defined as a group of people sleeping in the same shelter and eating from the same pot under the responsibility of one household head at least two weeks prior to survey. All refugees living in the two camps are originally from DRC.

Both Kala and Mwangwe camps are divided into sections named with letters of the alphabet A-Z, AA-DD and streets. Kala camp has 35 sections with up to four streets per section. Mwangwe camp has 28 sections with approximately five streets per section. There is an overall male camp leader ('papa de camp') and a female deputy camp leader ('mama de camp') as well as a male and deputy female leader for each section and each street.

All surrounding village communities have village headmen which are all men except for one village in Kala and one village in Mwangwe which have women leaders. The size of each village varies greatly ranging from less than 30 houses to over 500 houses per village.

Data for the refugee populations in the two camps was provided by UNHCR to use as the primary sampling unit. Data for surrounding communities was provided by village headmen during a mapping exercise prior to the start of the survey. The village headmen based their population estimates on registered voters prior to the general elections held at the time of the survey. All village headmen carried out an exercise to count and notify the Districts Commissioner's office the number of registered voters in their villages.

In 2005 the population of Kala camp was estimated at 18,967 from 4,815 households with approximately 9,477 (50%) between the ages of 15-49 years. In Mwangwe the camp population was estimated at 20,784

individuals from 6,324 households of which 49% were aged 15-49 years. In Kawambwa the mapping exercise identified 25 villages surrounding Kala Camp while in Mporokoso 28 villages were identified around Mwange Camp.

A total of 3,478 people from 2,155 households between the ages of 15 and 49 years were interviewed. In Kawambwa 828 refugees from Kala camp and 880 residents from the surrounding community were interviewed. In Mporokoso 916 refugees from Mwange camp and 854 residents of the surrounding community were interviewed (see Table 5a below). The refusal rate overall was low; the highest was 3% in Kala camp.

Table 5a. Sampling and respondents, Kawambwa and Mporokoso Zambia, UNHCR BSS 2006.

Location	Target Respondents	Target HHs ^a	Total HH Sampled	Total Forms Completed	No. Ref	% Ref ^b	No Abs	% Abs ^b
Kala Camp	800	400	495	828	34	3.1	224	20.6
Kala Communities	800	400	486	880	17	1.6	169	15.9
Kawambwa Total	1600	800	981	1708	51	2.4	393	18.3
Mwange Camp	800	400	608	916	20	1.5	389	29.4
Mwange Communities	800	400	566	854	16	1.3	349	28.6
Mporokoso Total	1600	800	1174	1770	36	1.4	738	29.0

^a based on estimated 2 eligible adults per household

^b denominator is sum of refusals+ those who participated +those absent

Table 5b provides a breakdown of the absentees, by age and sex. In Kala and Mwange Camps, and the surrounding community in Mwange, there is a statistically significant difference between the age groups and sex of the absentees.

Table 5b. Analysis of absentees by age and sex, Kawambwa and Mporokoso Zambia, UNHCR BSS 2006.

Location	Kala Refugee Camp			Kala Surrounding Community			Mwange Refugee Camp			Mwange Surrounding Community		
	Male (%)	Female (%)	N	Male (%)	Female (%)	N	Male (%)	Female (%)	N	Male (%)	Female (%)	N
15-19	35.9%	54.1%	N=74	47.2%	52.8%	N=53	57.8%	42.2%	N=116	50.0%	50.0%	N=102
20-24	79.3%	20.7%	N=29	45.5%	41.5%	N=41	58.2%	41.8%	N=67	47.7%	52.3%	N=65
25+	73.3%	26.7%	N=120	62.2%	37.8%	N=74	75.6%	24.4%	N=205	70.8%	29.2%	N=178
	P<0.001			P=0.233			P=0.001			P<0.001		

Sample Design

Prior to study implementation a mapping exercise was conducted to demarcate villages and sections into clusters. A meeting was held with camp and section leaders to explain the purpose and methodology of the study. A day before interviews were conducted in a given cluster the team leader and supervisors visited each camp section leader and village headman to remind them of the upcoming interviews. If the data collection day coincided with food distribution at the camps (scheduled every two weeks) the camp leaders assisted the team to plan on visiting sections where food would not be distributed that day. The village headmen informed their residents of survey and the interview team visits. The village head persons and section leader were counseled not to coerce or raise unnecessary expectation but just to alert the residents of the household visits.

The survey used a two-stage cluster sampling method. Prior to the start of the study discussions were held with camp section leaders and village headmen. Each section and village was counted as a cluster and the number of houses and households within each cluster enumerated. The overall adult population (individuals ages 15-49 years) for each cluster was estimated. The sampling interval was calculated by dividing the total adult population by the number of clusters. A random number was obtained from table of random numbers to assign the cluster number. The first village or camp on the list was cluster one and subsequent clusters were obtained by adding the random number to the sampling interval. Those falling within subsequent clusters were given cluster numbers and those falling outside or beyond the cluster numbers were assigned a '0' cluster number.

Using the cluster interval a list of households, excluding those with zero '0' cluster, was developed. The number of households sampled was proportionate to clusters. For example, those sections or villages with two clusters had double number of households invited for interviews while those with three clusters had three times the number compared to a single cluster.

The second stage involved use of section leaders or village headmen to select households within each cluster. In the camp the section leader accompanied the research team to the central street and identified the middle point on the street. Using a random number (from a table of random numbers) the starting household was identified and the research assistants were instructed to visit 20 consecutive households to their left.

In the surrounding village communities the village headman helped the team identify the center of the village. A bottle was then spun to select a random direction to follow. The first household was then selected in the cluster as the one corresponding to a random number 'n' using a random number table. Interviewers began with household on the left following a selected random household and visited 20 consecutive households. In a village with less than 25 households all households in the village were sampled.

Survey Implementation

The research study was carried out over a period of four weeks from September 10 to 26, 2006 in Kala Camp and surrounding villages, in Kawambwa District of Luapula Province and from September 27 to October 9, 2006 in Mwange Camp and surrounding villages in Mporokoso District of Northern Province.

A checklist was used to collect information from a household representative about each member of the household including names, ages and relationship to the head of household. Individuals less than 15 years of age or over 49 years of age were documented as ineligible. Eligible individuals were invited for an interview using a standard questionnaire. Oral informed consent was obtained prior to the interview and was signed by each interviewer as evidence of obtaining it. Each interview was recorded as completed, not completed or refused. Those not available at the time of the visit were recorded as absent and arrangements were made for a revisit the same day or the following day. The interviewers communicated to street leaders, section leaders or household members about intentions to revisit those absent. Due to time and transport limitations some households in surrounding communities were revisited only once before the household member was recorded as absent. In camps households were revisited a maximum of three times before the household member was finally declared absent.

Almost all members of households visited within the Kala and Mwange camps were refugees from DRC. Individuals interviewed in the surrounding communities were all Zambian nationals. Although some DRC refugees were found in the surrounding villages during the survey they were not eligible as members of the households interviewed.

Table 5a provides a breakdown of the numbers of households sampled, interviews completed, refusal and absentee rate, as well as targeted number of respondents and households.

Overall refusals were low in both Kawambwa and Mporokoso (2% as indicated in Table 5a). In total there were 51 refusals from an expected 2152 eligible persons. There were 36 (1%) refusals in Mporokoso out of 2544 estimated eligible population. There was a high percentage of absenteeism; 16% in Kawambwa and 29% in Mporokoso. The common reason for being absent given by members of household who were present at the time of the survey was being outside of town for business that would take days or weeks. In the surrounding community the main reason was that they had gone to the fields to farm. Where possible the research assistant returned but, due to distance and time constraints, it was not possible to return to most of the households.

Data Processing and Analysis

Completed questionnaires were transported to the FHI office in Lusaka. Data entry was done twice by four data entry clerks using EpiData Version 3.1. One pair of clerks entered and re-entered data for Kawambwa and another pair entered and re-entered data for Mporokoso (for camps and the surrounding community). Data entered was validated by the bio-statistician.

There was a 0.5% to 1% individual variability and discrepancies detected between two data entry clerks on the same questionnaires. A list of discrepancies was generated and all questionnaires with discrepancies were reviewed to correct data entered based on both the written response in the questionnaire as well as the logical flow of responses. The major problems were related to 'skip' questions.

The cleaned and validated data was exported into Statistical Package for Social Sciences (SPSS) Version 14.0 for analysis. Simple proportions were calculated to determine prevalence and to assess differences in each site between the camps and surrounding communities at a 5% significance level. The Pearson Chi square test was used for contingency tables higher than 2 by 2. For 2 by 2 tables the Yates corrected Chi square test was used. For expected frequencies of less than 5 the Fisher's Exact test was used.

IV. Results and Recommendations: Kala Refugee Camp and Surrounding Communities in Kawambwa District, Luapula Province

A. Characteristics of Respondents

Table 6 presents the demographic characteristics of refugees in Kala Camp and from surrounding communities in Kawambwa District. There was no statistically significant difference in ages between the two groups with the refugee population having fewer people in the age group 20-24 (21%) than surrounding communities (24%) but having slightly more in the age group 25 years and above than surrounding community 56% against 54%

Within the refugee camp age patterns are similar between males and females. However, there is a statistically significant difference ($p < 0.001$) in age group 15-19 years between females and males in the surrounding community groups (26% and 19% respectively).

The majority (92%) of people surveyed in the refugee camps identify themselves as refugees from DRC while the majority (99%) of respondents from the surrounding villages identified themselves as Zambians.

Nearly 71% of women in the refugee population are married compared to 63% of women in the surrounding community. Lower percentages of men report being married; 65% of men in the refugee camp and 57% of men in the surrounding community.

Among those married 21% of female refugees and 7% of surrounding community females are in polygamous marriages. 15% of male refugees and 8% of surrounding community males are in a polygamous marriage.

Data indicates that 61% of respondents from Kala refugee camp and 66% from the surrounding community are Protestant and approximately one-third of respondents are Catholic (32% of refugees and 34% from surrounding community). Very few respondents in the camp and none in surrounding villages are Muslim.

Overall, respondents from the surrounding community were more educated than refugees. Approximately 18% of refugee respondents reported having no education compared to 6% of respondents from the surrounding community with this difference being statistically significant, $p < 0.001$. Among refugees a higher proportion of men (88%) had ever been to school compared to women (77%) who had ever been to school ($p < 0.001$) but no difference was observed in surrounding community ($p = 0.599$). The difference between respondents attaining secondary level or higher education is also statistically significant ($p < 0.001$) with a higher percentage of respondents from the surrounding community achieving higher educational levels. When stratified by gender women were less educated than men in both the refugee camp and the surrounding community.

Information on languages show that the four languages that most refugees can read are: 81% Swahili (89% male and 75% female), 37% Bemba (48% male and 27% female), 34% French (48% male and 21% female) and 9% English (14% male and 4% female). Among the surrounding community residents 79% can read Bemba (84% male and 75% female), 50% English (58% male, 41% females), 1.3% French and 1.2% Swahili.

Table 6. Demographic characteristics of refugees and surrounding community residents in Kawambwa, UNHCR BSS 2006.

Characteristics	Kala Refugees			Kala Surrounding Communities		
	Male	Female	Total	Male	Female	Total
Age (years)	N=357	N=463	N=820	N=420	N=448	N=868
15-19	19.9%	25.5%	23.0%	25.7%	19.2%	22.4%
20-24	23.0%	19.2%	20.9%	18.8%	28.8%	24.0%
25+	57.1%	55.3%	56.1%	55.5%	52.0%	53.7%
Nationality	N=358	N=464	N=822	N=420	N=449	N=869
Kenyan	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%
Somali	0.0%	0.2%	0.1%	0.2%	0.2%	0.2%
Congo DRC	93.0%	91.8%	92.3%	0.2%	0.7%	0.5%
Burundian	0.0%	0.0%	0.0%	0.2%	0.4%	0.4%
Eritrean	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%
Zambian	7.0%	8.0%	7.5%	98.8%	98.7%	98.7%
Refugee status	N=355	N=461	N=816	N=405	N=425	N=830
Refugee	99.7%	99.6%	99.6%	1.7%	1.4%	1.6%
Not refugee	0.3%	0.4%	0.4%	98.3%	98.6%	98.4%
Marital status (current)	N=342	N=446	N=788	N=405	N=446	N=851
Married	65.5%	70.6%	68.4%	57.0%	63.2%	60.3%
Single	31.0%	15.2%	22.1%	40.2%	21.7%	30.6%
Divorced	2.9%	8.5%	6.1%	1.7%	10.5%	6.3%
Widow/Widower	0.3%	4.7%	2.8%	1.0%	3.8%	2.5%
Co-habiting	0.3%	0.9%	0.6%	0.0%	0.7%	0.4%
Type of marriage	n=224	n=311	N=535	n=227	n=277	N=504
Polygamous	14.7%	21.2%	18.5%	7.9%	7.2%	7.5%
Religion	N=351	N=458	N=809	N=417	N=446	N=863
Catholic	30.8%	32.5%	31.8%	36.0%	32.5%	34.2%
Protestant	60.4%	61.6%	61.1%	63.5%	67.3%	65.5%
Moslem	0.3%	0.7%	0.5%	0.0%	0.0%	0.0%
Other	8.5%	5.2%	6.7%	0.5%	0.2%	0.4%
Education	N=358	N=463	N=821	N=420	N=448	N=868
Ever attended school: Yes	87.7%	76.9%	81.6%	93.3%	94.4%	93.9%
	n=314	n=355	N=669	n=391	n=422	N=813
Primary	65.0%	84.5%	75.3%	41.7%	57.3%	49.8%
College	2.9%	0.8%	1.8%	2.0%	1.4%	1.7%
Secondary	30.3%	14.6%	22.0%	53.5%	39.6%	46.2%
High school	0.6%	0.0%	0.3%	2.8%	1.2%	2.0%
University	1.3%	0.0%	0.6%	0.0%	0.5%	0.2%

B. Male Circumcision

Table A in Appendix 1 provides information on male circumcision. A recent study from South Africa indicates that male circumcision has protective effects against HIV when sexual behavior factors are controlled for. The Orange Farm Study in South Africa (Auvert B et al 2005) found the protective effect of male circumcision is estimated to be equivalent to what a high efficacy vaccine would achieve. In December 2006 the National Institute of Health trials in Kisumu in Kenya and Rakai were stopped by the Data and Safety Management Monitoring Board (DSMB) since the results were found to confirm the Orange Farm findings.

In this BSS both male and female respondents were asked questions related to circumcision. 88% of male refugees and 8% of surrounding community males ($p<0.001$) had been circumcised. 35% of refugees ($n=314$) and 12% of surrounding community males ($n=33$) were circumcised before the age of five and 25% of refugees and 18% were circumcised between the age of five and nine while 14% of male refugees and 9% of surrounding community males were circumcised at 10 or more years. The others did not know their age at circumcision.

The main reasons for being circumcised among male refugees ($N=314$) included traditional/religious reasons (67%), health and hygiene (10%), prevention of infection (10%) and sexual satisfaction (5%). Among men

in the surrounding communities (n=33) the main reasons reported were health and hygiene (46%), prevent infection (21%), tradition/religion (9%) and sexual satisfaction (9%).

12% uncircumcised refugee men (N=41) and 26% of uncircumcised surrounding community men (N=387) reported they would be interested in circumcision if it was affordable and safe.

Recommendation

- The majority of male refugees are circumcised compared to 8% of surrounding community males. Research shows that male circumcision reduces HIV transmission and manifestation of other sexually transmitted diseases. Open discussion on the benefits of the procedure should be initiated particularly targeting surrounding community residents.
- Comprehensive information on male circumcision must be provided if it is promoted as a prevention method. Male circumcision does not fully protect men from being infected with HIV through sexual intercourse nor does it protect sexual partners against HIV infection. It will be essential to promote male circumcision as part of a comprehensive prevention package including correct and consistent condom use, behavior change, and voluntary counseling and testing.

C. Source of Income

The population in the surrounding community is more involved with income generation activity than the refugee population ($p < 0.001$). The data shows that 61% of surrounding community residents (N=864) and 40% of refugees (N=813) have an income generation activity. More than half of men in both the refugee camp (59%) and the surrounding community (67%) have an income generating activity while only 35% of female refugees and 55% of the surrounding community females reported an income generation activity.

The income generation sectors are varied. Among male refugees 43% are engaged in trading, 22% in agriculture, and 13% in private services while 63% of the female refugee population is engaged in trading, 13% in agriculture and 11% in private services. Among surrounding community residents 55% of men are involved in agriculture, 17% in trading and 12% in private services, while among women, 44% are involved in agriculture, 37% in trading and 8% in private services.

Recommendation

- Income generation activities are an important component of social well-being. Both population groups need training programs to enable them to identify means of income generation. Training in agriculture related work as a means to provide income would also result in increased food security. Agricultural extension services and the related training would equip the refugees with skills to generate income and food for subsistence.

D. Displacement and Mobility

Table 7 below provides a breakdown of data on residency and mobility in Kawambwa. About 63% of the refugee respondents have lived in Kala refugee camp for more than five years and 46% of surrounding community residents have lived in the surrounding community for more than five years. Nearly half (49%) of the refugee population said they visited surrounding communities frequently/many times. More refugees (63%) had stayed longer than five years in the camps in comparison to the length of time the surrounding community members had resided in the local villages (46%). This difference is statistically significant ($p < 0.001$).

Table 7. Time in community, mobility and community interaction, Kawambwa, UNHCR BSS 2006.

Characteristics	Kala Refugee Camp			Kala Surrounding Community		
	Male	Female	Total	Male	Female	Total
Time in current community (years)	n=356	n=461	N=817	n=414	n=446	N=860
Always	0.3%	0.2%	0.2%	26.3%	26.9%	26.6%
< 2years	3.7%	3.0%	3.3%	13.5%	11.9%	12.7%
2-4	32.9%	33.4%	26.6%	16.7%	13.2%	14.9%
5+	63.2%	62.9%	63.0%	43.5%	48.0%	45.8%
Don't know	0%	0.4%	0.2%	0.0%	0.0%	0.0%
Prolonged absence from home	n=357	n=462	N=819	n=418	n=446	N=864
Yes	30.5%	7.6%	17.6%	26.6%	19.3%	22.8%
Frequency of visiting other community	n=284	n=263	N=547	n=307	n=289	N=596
Less than once a month	14.8%	20.2%	17.4%	13.0%	12.5%	12.8%
Once a month	33.8%	33.8%	33.8%	19.9%	20.1%	20.0%
Many times	51.4%	46.0%	48.8%	67.1%	67.5%	67.3%

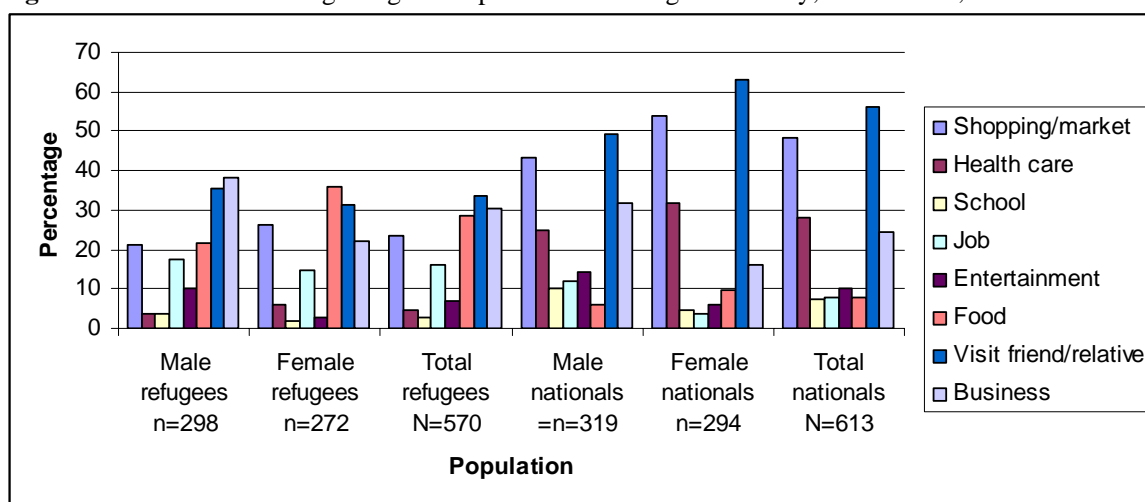
In last 12 months prior to the survey 18% of the refugees (31% male, 8% female, $p < 0.001$) had been away from the camp for longer than one month. Among surrounding community residents 23% (27%, 19% females, $p = 0.014$) had been away from their villages for longer than a month.

Figure A in Appendix 1 provides a breakdown of reasons for prolonged absence from their homes. The primary reason for absence from home for male refugees was mostly work related (41%). In the case of female refugees it was friend/family related (51%) while for surrounding community for both male (45%) and female (76%) was friend/family related.

Seventy two percent of refugees visited the neighboring communities (85% of males, 64% of females) and 79% of surrounding community visited the refugee camp (88% males, 74% females).

Figure 2 depicts reasons that respondents gave for visiting surrounding communities as well as the refugee camp. Refugees visit the surrounding community for variety of reasons. The main reason for both refugees (34%) and surrounding community residents (56%) is to visit friends/relatives.

Figure 2: Reasons for visiting refugee camp and surrounding community, Kawambwa, UNHCR BSS 2006.



Recommendation

- Given the mobility of the refugee population and the surrounding community population and the mix between the two populations HIV/AIDS interventions should target both populations in order to achieve the desired goals. The information should target populations in markets through peer education in appropriate language in terms of content and understanding. Health centers should be used to provide prevention services.

E. Alcohol and Drug Use

Alcohol use and abuse is directly linked to risky sexual behavior and therefore an indirect contributor to HIV transmission (Fritz et al, 2002). HIV prevention programs must include strategies to reduce alcohol abuse, and enhance awareness and protective sexual behaviors among individuals who do use alcohol (Morojele et al, 2006).

Table B in Appendix 1 provides data on alcohol and drug use among respondents. Fourteen percent of sexually active surrounding community respondents and 8% of sexually active refugee respondents have engaged in sexual activity under the influence of alcohol (p=0.006). In both populations more men than women reported sexual activity under the influence of alcohol. More surrounding community residents than refugee population reported use of un-prescribed drugs (9% of surrounding community residents compared to 4% of refugees). The most common drug used was daga (ichamba).

Recommendation

- There is enough documented evidence to support that alcohol and un-prescribed drugs tend to lead to behavior that may increase the spread of HIV and other sexually transmitted infections. It also negatively influences adherence to treatment regimens. Alcohol and drug abuse leads to poor risk perception and irrational and poor judgment. Though reported sex under the influence of alcohol was relatively low the researchers observed a number of households with home brew or that sold traditional beer especially Lutuku-Gin. HIV prevention programs should incorporate alcohol awareness and reduction strategies in the interventions.

F. Sexual Behavior

Delaying age at first sexual debut is one way of reducing the spread of HIV infection through sexual intercourse, the primary mode of transmission in Zambia. The Zambia Sexual Behavior Survey (2005) found that the median age at first sex is 19.5 years for men and 18.5 years for women among respondents aged 20-49 at the time of the survey. For those aged 15-24 in 2005 the median age at first sex was 18.5 for both males and females.

Table 8 indicates that among both the refugee and surrounding community populations the age of first sex is lower for women (p<0.001). The median age of first marriage is also lower for women in both the refugee and surrounding community populations with a four year difference in the age of first marriage between males and females (p<0.001).

Table 8. Median age at first sexual intercourse and first marriage, Kawambwa, UNHCR BSS 2006.

	Kala Refugees		Surrounding Community	
	Male	Female	Male	Female
Median age at first sex (years) (Q1, Q3)	n=278 17 (15, 20)	n=380 16 (15, 18)	n=343 16 (15, 18)	n=378 16 (15, 18)
Median age at first married (years) (Q1,Q3)	n=220 21 (19, 24)	n=356 17 (15, 18)	n=231 22 (19, 25)	n=321 18 (16, 20)

The survey explored current marital relationship status. Among those married 14% of refugee men and 21% of refugee women said were in a polygamous relationship compared to 8% of men and 7% of women in the surrounding community.

Reduction in the number of sexual partners is another way to reduce the transmission of HIV and other STIs. Respondents were asked about their sexual history and risk behaviors including sex with a non-regular partner^e and regular^f partner, transactional sex^g and condom use with different sexual partners.

^e A non-regular partner is defined as any casual sexual partner different from the live in partner, regular girlfriend or paid for sex partner/sex worker.

^f A regular sexual partner is defined as a girlfriend NOT spouse/wife, not live in partner in the 12 months prior to survey.

^g Transactional sex was defined as exchange of money, gifts or favors for sex.

Table 9 below presents results of casual (non-regular) and transactional partners among people reporting ever having had sex. There was a statistically significant difference between the refugee population and surrounding communities ($p < 0.015$) with a higher percentage of the surrounding community respondents having had sex with a non-regular partner (19%) compared to 14% of refugee respondents. There are statistically significant differences between males and females across all age groups and populations with more men reporting having had sex with a non-regular sex partner than females ($p < 0.001$).

Of those who reported sex with a non-regular partner only 29% of refugees and 60% of surrounding community residents reported using a condom during last sex. Less than a third of male refugees (29%) and 28% of female refugees said they used a condom the last time they had sex with a non-regular partner. Among surrounding community residents 59% of males and 65% of females reported using a condom during last sex with a non-regular partner.

Respondents were asked whether they ever had sex in exchange for gifts or money and refugees responding affirmatively were further asked whether it was before or after displacement. Surrounding community residents were asked whether it was before or after the refugees arrived. Figure B in Appendix 1 provides data on transactional sex in Kawambwa. The difference in occurrence of transactional sex is not significant between refugee and surrounding community respondents but is statistically significant between male and female respondents among refugees ($p = 0.001$) and surrounding community population ($p = 0.010$). Among refugee men 22% reported ever having transactional sex compared to 9% female refugees while among surrounding community men 19% of men and 12% of women reported a history of sex in exchange for money and or gift. (Figure B in Appendix B and in Table 9 below).

Among refugees half of transactional sex took place after displacement (51%). Respondents from the surrounding community reported that 79% of transactional sex took place after the refugees arrived. Among unmarried respondents almost 82% of refugees and 89% of surrounding community residents reported sex with a regular sex partner while 98% of refugees and 84% of surrounding community residents reported sex with a non-regular partner in past 12 months.

Amongst married men 29% of male refugees and 37% of surrounding community males reported sex with another regular sex partner. 20% of male refugees and 28% of surrounding community males had sex with non-regular sex partner and 20% of male refugees and 15% of surrounding community males reported transactional sex in past 12 months.

Among married women 10% of refugee women and 11% of surrounding community women reported sex with a regular partner and 3% of female refugees and 2% of surrounding community females had sex with a non-regular partner. Six percent of female refugees and surrounding community females reported engaging in transactional sex 12 months prior to the survey.

Table 9. Casual and transactional partners among people reporting ever having had sex, Kawambwa, UNHCR BSS 2006.

Characteristics	Kala Refugee Camp			Kala Surrounding Community		
	Male	Female	Total	Male	Female	Total
Had sex with non-regular partner by age group						
	n=316	n=412	N=728	n=375	n=413	N=788
Age 15-24	33.6%	6.9%	18.1%	38.2%	8.9%	21.9%
Age 25-49	22.1%	3.2%	11.6%	28.1%	5.2%	16.6%
All ages	26.6%	4.6%	14.2%	32.0%	6.8%	18.8%
Used condom during sex with the latest non-regular partner by age group						
	n=72	n=18	N=90	n=108	n=23	N=131
Age 15-24	41.9%	20.0%	36.6%	56.9%	64.3%	58.5%
Age 25-49	9.8%	25.0%	20.4%	61.4%	66.7%	62.1%
All ages	29.2%	27.8%	28.9%	59.3%	65.2%	60.3%
Ever had sex in exchange for money/gift by age group						
	n=316	n=414	N=730	n=375	n=413	N=788
Age 15-24	26.1%	15.5%	19.9%	25.7%	16.1%	20.4%
Age 25-49	19.5%	5.2%	11.5%	14.3%	8.6%	11.4%
All ages	21.8%	9.2%	14.7%	18.7%	11.9%	15.1%
Condom use during last time had sex in exchange for money/gift by age group						
	n=39	n=27	N=66	n=44	n=30	N=74
Age 15-24	30.4%	5.6%	19.5%	62.5%	41.2%	53.7%
Age 25-49	18.8%	11.1%	16.0%	40.0%	38.5%	39.4%
All ages	25.6%	7.4%	18.2%	52.3%	40.0%	47.3%
Unmarried and had sex with regular partner by age group						
	n=70	n=33	N=103	n=114	n=61	N=175
Age 15-24	71.4%	75.8%	72.8%	74.6%	75.4%	74.9%
Unmarried and had sex with non-regular partner by age group						
	n=108	n=77	N=185	n=155	n=92	N=247
Age 15-24	28.7%	7.8%	20.0%	34.2%	12.0%	25.9%
Married or Living with partner and had sex during the last 12 months but had also sex with different partner						
Had sex with regular partner	n=213	n=295	N=508	n=178	n=235	N=413
	29.1%	10.2%	18.1%	37.1%	11.1%	22.3%
Had sex with non-regular partner	n=213	n=295	N=508	n=178	n=235	N=413
	19.7%	3.1%	10.0%	28.1%	2.1%	13.3%
Had sex in exchange for money/gift	n=213	n=295	N=508	n=178	n=235	N=413
	19.7%	6.1%	11.8%	14.6%	6.0%	9.7%

Recommendation

- Due to the early age of sexual debut among youth as well as the early age of marriage among females early education on sexual and reproductive health is critical
- Condoms, when used correctly and consistently, are an effective way of preventing transmission of sexually transmitted infections. The proportion of those using condoms with different sexual partners is very low. Innovative strategies that reach out to every sexually active individual in both refugee and surrounding community will be necessary. Benefits of using condoms and making them available and accessible will go a long way to prevent HIV infection.
- Many of those who are married in refugee camps and the surrounding community, especially men, have sex with partners other than their spouses thereby putting their spouses in danger of STIs including HIV. HIV prevention programs should aim at reaching out to married men and women with messages that include the benefits and skills of staying faithful to one's sexual partner.
- The risks of transactional sex must be addressed in both communities particularly among young men.

G. Forced Sex

Respondents were asked about the occurrence of forced sex which was defined as a sexual act performed against one's will. There was no difference between the occurrence of forced sex between refugee and surrounding community respondents. Among refugees 6% of women reported forced sex in the past 12 months compared to 7% in the surrounding community. Table 10 below provides a breakdown of the results and perpetrator of forced sex, in Kala camp, 48% mentioned fellow refugees while 94% in surrounding community mentioned person from local community.

Table 10. Forced Sex, Kawambwa, UNHCR BSS 2006

Characteristics	Kala Refugee Camp			Kala Surrounding Community		
	Males	Females	Total	Males	Females	Total
Ever been forced to have sex	n=312	n=413	N=725	n=373	n=411	N=784
Yes	5.4%	7.3%	6.5%	5.6%	8.3%	7.0%
Forced to have sex in previous 12 months	n=17	n=29	n=46	n=20	n=32	n=52
Age (years)						
15-24	5	4	32.1%	5	6	42.3%
25-49	0	1	5.6%	4	5	34.6%
Total 15-49	5	5	21.7%	9	11	38.5%
Perpetrator of forced sex	n	n	N=44	n	n	N=52
Refugee	9	12	47.7%	0	0	0%
Person from community	7	3	22.7%	20	29	94.2%
Military/other Security Forces	1	6	15.9%	0	0	0%
UN Peace Keeper	0	0	0%	0	0	0%
Humanitarian Worker	0	3	6.8%	0	1	1.9%
Husband	0	1	2.3%	0	2	3.9%
Traditional Healer	0	1	2.3%	0	0	0%
Don't know	0	1	2.3%	0	0	0%
Total	17	27	100%	20	32	100%

Of the women ever forced to have sex 17% of refugee women and 19% of the surrounding community women reported forced sex in the 12 months prior to the interview. Most of the forced sex occurred amongst those aged 15 and 24 years.

Recommendation

- The results from the questions on forced sex provide inconclusive results primarily due to the large number of responses from men. Men may have interpreted the questions to refer to circumstances that lead them to have forced sex. In addition, women may not openly disclose instances of forced sex if a known partner is involved. Further research, including qualitative and quantitative methods, is required to fully understand the extent of this practice and design interventions accordingly. Addressing the issue of forced sex should be integrated into HIV prevention programs.

H. Condom Knowledge and Use

Table C and D in Appendix 1 provides information on condom knowledge and use in Kala Camp and surrounding areas in Kawambwa by age group, educational level and gender. There were statistically significant differences between refugees and surrounding community residents in all variables related to condom knowledge as well as differences between male and female refugees.

91% of refugees and 97% of surrounding community residents ($p < 0.001$) have heard of condoms while 50% of refugees and 56% of surrounding community residents said that they have heard of female condoms ($p = 0.023$). The difference in knowledge level by age groups was not statistically significant.

In general, knowledge of condoms is high with nearly 89% of refugees and 96% of surrounding community residents ($p < 0.001$) being aware that condoms protect against STI/HIV/AIDS. Fewer respondents were aware of condom use as a means of pregnancy prevention; 32% of refugees and 37% of surrounding community residents ($p = 0.043$).

Figure C in Appendix 1 identifies places where respondents obtain condoms. Refugees identified health centers (61%) and community health workers (38%) as the primary sources of condoms.

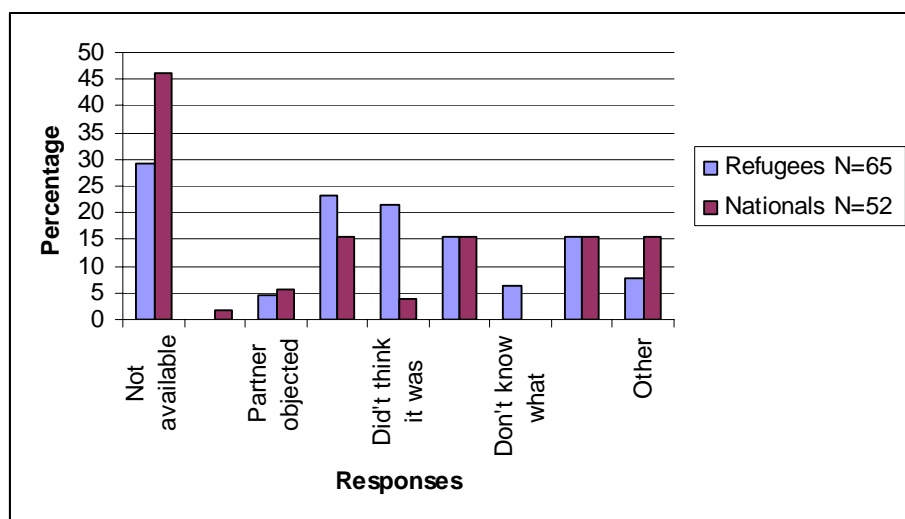
Although knowledge of condom use was high only 18% of refugees and 47% of surrounding community residents used a condom with their regular partner at the time of last sex. Condom use rates are also higher among surrounding community residents (60%) than among refugee community (29%) with non-regular partners. For transactional sex condom use is higher among surrounding community residents than the refugee community with 47% of surrounding community residents and only 18% of refugee having used a condom at the last transactional sex.

Condom use and level of education was also assessed with regular, non-regular and paying sex partners. Condom use was higher among those with secondary or higher level of education. Among refugees with none/primary education 14% used condoms at last sex with a regular partner compared to 27% condom use by refugees with secondary or higher education. Among surrounding community residents the difference in condom use was also higher by educational level with 38% with none/primary education used a condom at last sex with a regular partner compared to 54% of those with secondary/higher education.

With non-regular partners 25% of refugees with none/primary education used a condom at last sex compared to 34% of refugees with secondary/higher level education. Among surrounding community respondents condom use at last sex with a non-regular partner was 50% for those with none/primary education and 68% for those with secondary/higher education. Condom use during last transactional sex was also high with higher level of education especially among surrounding community respondents.

Respondents were asked to give reasons for not using a condom during their last sexual intercourse with non-regular (casual), regular and transactional partners. Reasons cited among refugees include unavailability of condoms (29%), not liking them (23%) and not thinking it was necessary (21%). Among surrounding community resident, the most common reason reported was unavailability of condoms (46%) followed by dislike of condoms (15%). Figure 3 below presents the reasons for not using condom at last sex with casual or non-regular partner.

Figure 3. Reasons for not using condoms at last sex with non-regular (casual) partner; Kawambwa, UNHCR BSS 2006.



Health worker attitudes were cited by 23% of the refugee population as one of the primary constraints to obtaining condoms. Inappropriate working arrangements and non availability of condoms were other reasons mentioned. Most surrounding community residents (41%) cited distance as one of the constraints followed by non-availability and health worker attitudes. Figure D in Appendix 1 depicts the constraints discussed by both populations, disaggregated by gender.

Recommendation

- Reproductive health programs to improve knowledge and positive behavior (including condom use) are required at Kala camp and surrounding communities. Formal education and informal adult learning, increases an individual’s ability to practice positive health behaviors, including communication with partners on condom use (McGinn, et al, 2006).
- Training of health workers and other providers of condoms is needed in order to effectively contribute to condom promotion and properly provide information on other prevention methods.
- NGOs providing HIV prevention services need to re-position themselves as service providers including provision of condoms through non traditional systems in both the camp and community. Increased availability and accessibility of condoms through innovative outlets including homes, markets, and taverns/bars is required. Social marketing of condoms needs to be accompanied by proper behavior

change messages, in the appropriate language, along with training condom providers on issues of confidentiality

- There seem to be barriers preventing the refugee population to act upon the health information received to protect themselves against HIV and other STIs. Additional qualitative research is required to understand the social and gender barriers in order to guide behavior change interventions for this community.

I. Sexually Transmitted Infections (STIs)

The existence of an association between sexually transmitted infections and HIV has been observed in many cross-sectional and case-control studies (WHO/UNAIDS, 2000). Respondents were asked about their personal history of STIs. Table E in Appendix 1 provides information on respondents who had a history of primary STI symptoms during 12 months prior to survey.

Slightly more surrounding community residents than in the refugee population reported a history of genital discharge/sores/ulcers in the past 12 months although the difference is not statistically significant. Among the surrounding community population 6% reported a history of genital discharge in the past 12 months (8% male and 4% female) compared to 5% of refugee respondents (7% male and 4% female).

Nearly 6% of surrounding community residents (8% of males and 4% of females) and 5% of refugees (8% of males, 3% of females) reported a history of genital sore/ulcers in the past 12 months.

Most respondents reporting STI symptoms sought care (88% of refugees, 98% of surrounding community residents) from health workers, traditional healers, pharmacy and friends/relatives. The data is presented in Figure E in Appendix 1.

Recommendation

- Reported symptoms of sexually transmitted infections are a good indicator of risk behavior. A strong monitoring system to identify STIs and encourage early treatment is critical. Early treatment of STIs not only reduces complications but reduces the risk of HIV transmission.
- Data indicate that traditional healers play a large role in STI treatment. HIV programs must secure buy-in of traditional healers; sensitize them on STIs, treatment, and referral for appropriate case management.
- Many people self-treat their STIs by purchasing drugs directly from a pharmacy rather than seeking care from a medical provider. Pharmacy staff should be trained in management of STIs so they are able to advise clients accordingly and dispense correct medication.

J. Knowledge, Opinions, and Attitudes toward HIV/AIDS

Respondents were asked a series of questions to measure their knowledge of HIV/AIDS including modes of transmission as well as their opinions and attitudes toward people living with HIV/AIDS.

Table 11 presents knowledge of HIV and its transmission. General awareness of HIV is extremely high. Refugee awareness (95%) was slightly lower than awareness among the surrounding community residents (99%). There was a statistically significant difference ($p < 0.001$) in the percent of refugees (86%) and surrounding community residents (98%) who know that abstinence from sex can protect against HIV infection. More surrounding community residents (98%) than refugees (89%) are aware that HIV can be prevented by staying faithful to one sexual partner. In addition, 82% of surrounding community residents and 68% of refugees were aware that correct and consistent condom use protects against HIV.

Knowledge of mother-to-child transmission was also higher among surrounding community residents than refugee populations and knowledge of infection during delivery and transmission through breast milk between the two groups was slightly higher among surrounding community residents.

Respondents were also asked about misconceptions about HIV infection and transmission. Table 11 demonstrates that misconceptions are higher among refugees than surrounding community residents. Only 75% of refugees compared to 86% of surrounding community residents ($p < 0.001$) knew that HIV can not be transmitted by sharing food with PLHA and more surrounding community residents (92%) than refugees (85%) knew that a healthy looking person can be infected with HIV ($p < 0.001$).

Comprehensive HIV knowledge includes knowing that abstinence, being faithful and correct and consistent condom use (ABC) prevents transmission of HIV; that a healthy looking person can be infected with HIV; and that a person can not be infected by sharing a meal with some one infected with HIV or has AIDS. Comprehensive knowledge was statistically significant ($p < 0.001$) higher among surrounding community residents than the refugee population. Among the refugees 43% exhibited comprehensive knowledge while 65% of surrounding community residents had comprehensive knowledge of HIV.

Table 11. Knowledge of HIV and its transmission, Kawambwa, UNHCR BSS 2006

Characteristics	Kala Refugee Camp			Kala Surrounding Community		
	Male	Female	Total	Male	Female	Total
Percentage of respondents who say that:						
They have ever heard of HIV	n=357 96.4%	n=460 93.7%	N=817 94.9%	n=418 99.3%	n=444 99.3%	n=862 99.3%
Sharing needles may lead to infection	n=344 94.2%	n=431 92.3%	n=775 93.1%	n=415 96.9%	n=441 98.6%	N=856 97.8%
HIV can infect unborn child during delivery	n=344 69.5%	n=431 78.2%	n=775 74.3%	n=415 81.0%	n=441 78.5%	N=856 79.7%
Breast feeding can transmit HIV if mother is infected	n=344 79.7%	n=431 80.3%	n=775 80.0%	n=415 83.1%	n=441 83.4%	N=856 83.3%
Measure of Comprehensive Knowledge of HIV/AIDS: percentage of respondents who say that -						
Abstaining from sex protects from HIV	n=344 86.0%	n=431 85.4%	n=775 85.7%	n=415 98.8%	n=441 98.2%	N=856 98.5%
Staying faithful to one uninfected faithful sex partner	n=344 91.0%	n=431 88.2%	n=775 89.4%	n=415 98.1%	n=441 98.4%	N=856 98.2%
Using condoms every time correctly when having sex protects	n=344 70.6%	n=431 65.2%	n=775 67.6%	n=415 80.5%	n=441 84.1%	N=856 82.4%
People cannot get HIV by sharing food with infected persons	n=344 77.6%	n=431 71.9%	N=775 74.5%	n=415 87.7%	n=441 84.1%	N=856 85.9%
Healthy looking person can be infected with HIV	n=344 85.8%	n=431 83.8%	N=775 84.7%	n=415 92.8%	n=441 91.6%	N=856 92.2%
Composite indicator for comprehensive knowledge: Percent of respondents who had comprehensive knowledge of HIV transmission	n=344 46.8%	n=434 39.6%	N=778 42.8%	n=417 65.5%	n=446 64.8%	N=863 65.1%

Table 12 presents the attitudes towards people who are infected or affected or HIV/AIDS. The results show a level of HIV stigma is higher in the refugee population. Half of refugees and surrounding community residents of Kawambwa believe that a family members' HIV positive status should remain a secret. Sixteen percent of the refugee population would not provide care for a female relative infected with HIV, compared to 7% of the surrounding community respondents ($p < 0.001$). Forty-one percent of the refugee population and 26% of the surrounding community believed that young adolescents should not be taught how to use condoms ($p < 0.001$).

Table 12. Attitudes towards people who are HIV infected; Kawambwa, UNHCR BSS 2006.

Characteristics	Kala Refugee Camp			Kala Surrounding Community		
	Male	Female	Total	Male	Female	Total
Percent of respondents who say that:						
If a family member is infected with HIV, it should remain a secret	n=344 48.0%	n=431 52.7%	N=775 50.6%	n=415 50.6%	n=441 49.0%	N=856 49.8%
If female relative was infected with HIV, they would NOT care for her	n=344 16.3%	n=431 15.8%	N=775 16.0%	n=415 8.2%	n=441 6.3%	N=856 7.2%
If male relative was infected with HIV, they would NOT care for him	n=344 14.2%	n=431 16.0%	N=775 15.2%	n=415 6.5%	n=441 6.8%	N=856 6.7%
Young adolescents should NOT be taught how to use condom	n=344 42.7%	n=431 38.7%	N=775 40.5%	n=415 26.3%	n=441 25.4%	N=856 25.8%

Recommendation

- The HIV prevention activities should be strengthened with messages strategically developed and targeted to reach the refugee and surrounding community populations using innovative methods. Facts must be provided on alternative prevention methods including efficacy and protective effects of condoms.
- Knowledge level is high among refugee and surrounding community population. Prevention programs should therefore aim to create an environment to enable behavior change to increase the level of

abstinence, being faithful and condom use (ABC) along with counseling & testing, treatment availability, post-exposure prophylaxis, family planning, treatment of STIs and prevention of mother-to-child transmission.

K. Exposure and Access to Information about HIV/AIDS

Figure 4 provides data on the source of information about HIV/AIDS reported by respondents without probing. Radio, friends and health facility were the primary sources of HIV/AIDS information for both populations.

Figure 4. Most common source of HIV/AIDS information in Kawambwa, UNHCR BSS 2006

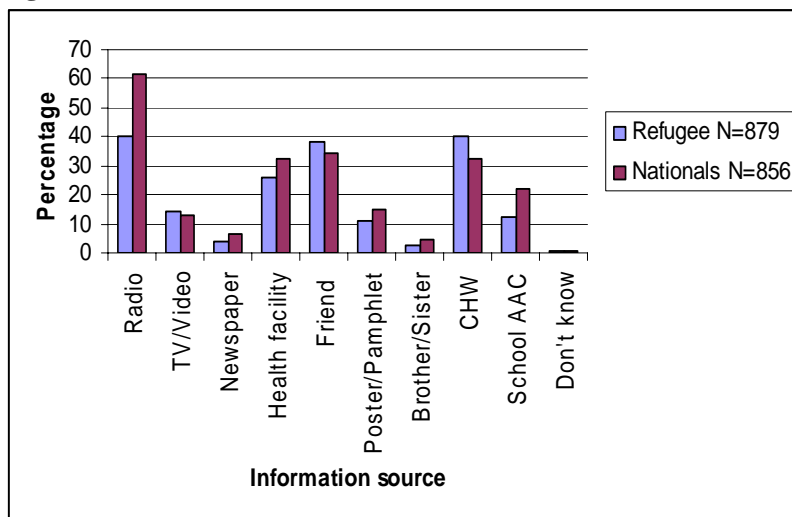


Table 13 below provides information on HIV counseling and testing. Twenty-five percent of the refugee respondents and 28% of surrounding community respondents have ever been tested. Of those ever tested 67% of the refugees and 47% of the surrounding community residents were tested in the 12 months prior to the interview. More females than males have been tested, and received results in the past 12 months in both populations.

Table 13. Voluntary Counseling and Testing, Kawambwa, UNHCR Zambia BSS 2006.

Characteristics	Kala Refugee Camp			Kala Surrounding Community		
	Male	Female	Total	Male	Female	Total
Ever been tested for HIV	n=353 17.3%	n=457 31.7%	N=810 25.4%	n=420 21.0%	n=447 34.7%	N=867 28.0%
Been tested in the past 12 months	n=61 59.0%	n=145 69.7%	N=206 66.5%	n=88 42.0%	n=155 49.0%	N=243 46.5%
Last test, received results	n=61 86.9%	n=145 92.4%	N=206 90.8%	n=88 85.2%	n=155 88.4%	N=243 87.2%

Recommendation

- Future information dissemination efforts should take into account where refugees and surrounding community residents access HIV/AIDS information. Radio, friends and health facilities are the main sources of information. These channels need to be strengthened through engagements with local radio station, building peer to peer education and positioning health facilities as centers for behavior change messages and information. All messages should be designed to meet the educational levels of the target populations.
- Information on HIV testing is critical given the low percentages of adults having been tested. In addition, access to testing needs to be expanded by evaluating the location of service delivery sites, hours of operation, etc. based on population preferences and identified barriers.

V. Results and Recommendations: Mwange Refugee Camp and Surrounding Communities in Mporokoso District, Northern Province

A. Characteristics of Respondents

Table 14 presents the demographic characteristics of refugees in Mwange Camp and from surrounding communities in Mporokoso District. The difference in ages between the two groups surveyed are statistically significant with the refugee population being younger than residents of surrounding communities ($p=0.005$). Twenty-one percent of respondents interviewed from the refugee camp were in the 15-19 year age group compared to 16% of surrounding community respondents.

Within the refugee camp age patterns are similar between males and females. However, within the surrounding community there is a statistically significant difference between percent of males and females in the 15-19 age group.

The vast majority (99%) of people surveyed in the refugee camp identify themselves as refugees from DRC while all respondents from surrounding villages are Zambians.

Amongst the refugee population 71% of women are married compared to 74% of women in the surrounding community. Lower percentages of men report being married; 64% of refugee men and 67% of the surrounding community men were married.

Among those married 12% of female refugees and 10% of surrounding community women were in a polygamous relationship compared to 9% of refugee men and 4% of surrounding community.

The data showed that 50% of respondents from Mwange refugee camp and 59% from surrounding community are Protestant. Approximately one-third of respondents are Catholic (34% of refugees and 32% from surrounding community). Very few respondents are Muslim.

Overall, respondents from the surrounding community were more educated than refugees with 93% of surrounding community residents having ever attended school compared to 83% of refugees ($p<0.001$). Among the refugees a higher proportion of men than women had ever been to school ($p<0.001$) but there was no significant difference between sexes in the surrounding communities ($p=0.585$).

The difference between respondents attaining secondary level or higher education is statistically significant ($p=0.008$) with a higher percentage of respondents from the surrounding community achieving higher educational levels. When stratified by gender females were less educated than men in both the refugee camp and the surrounding community.

When asked about a language in which they found it easy to read a paper, the top four languages among refugees were Swahili, French, Bemba and English. About 85% of refugees found it easy to read a paper written in Swahili (90% men and 81% women), and 36% said they found reading French easy (48% men and 27% women). Twenty nine percent of refugees (38% men and 22% women) found it easy to read a paper written in Bemba while 13% (20% men and 7% women) said that they find it easy to read a paper written in English. Among surrounding community 71%, 35%, 3% and 2% mentioned Bemba, English, Swahili and French respectively as languages that they found easy to read.

Table 14. Demographic characteristics of refugees and surrounding community residents in Mporokoso, UNHCR BSS 2006.

Characteristics	Mwange Refugees			Mwange Surrounding Communities		
	Male	Female	Total	Male	Female	Total
Age (years)	N=356	N=544	N=900	N=343	N=508	N=851
15-19	20.2%	21.7%	21.1%	13.7%	17.3%	15.9%
20-24	21.6%	22.8%	22.3%	20.7%	25.6%	23.6%
25+	58.1%	55.5%	56.6%	65.6%	57.1%	60.5%
Nationality	N=356	N=545	N=901	N=343	N=509	N=852
Kenyan	0.3%	0.4%	0.3%	0.0%	0.0%	0.0%
Somali	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%
Ethiopian	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%
Congo DRC	98.0%	98.9%	98.6%	0.0%	0.0%	0.0%
Burundian	0.3%	0%	0.1%	0.0%	0.0%	0.0%
Zambian	1.1%	0.6%	0.8%	100.0%	100.0%	100.0%
Refugee status	N=356	N=543	N=899	N=300	N=435	N=735
Refugee	98.6%	99.1%	98.9%	0.0%	0.2%	0.1%
Not refugee	1.4%	0.9%	1.1%	100%	99.8%	99.9%
Marital status	N=348	N=541	N=889	N=342	N=506	N=848
Married	64.4%	70.6%	68.2%	67.0%	74.3%	71.3%
Single	31.9%	18.1%	23.5%	29.8%	15.8%	21.5%
Divorced	1.7%	8.9%	6.1%	1.5%	7.3%	5.0%
Widow/Widower	0.9%	1.5%	1.2%	0.6%	2.4%	1.7%
Co-habiting	1.1%	0.9%	1.0%	1.2%	0.2%	0.6%
Type of marriage	n=222	n=373	N=595	n=225	n=374	N=599
Polygamous	8.6%	12.3%	10.9%	4.0%	9.9%	7.7%
Religion	n=348	n=538	N=886	n=341	n=508	N=849
Catholic	31.0%	36.2%	34.1%	32.0%	32.3%	32.2%
Protestant	49.4%	50.9%	50.4%	57.2%	60.6%	59.2%
Moslem	1.7%	1.7%	1.7%	0.0%	0.0%	0.0%
Other	17.8%	11.2%	13.8%	10.9%	7.1%	8.6%
Education	N=356	N=545	N=901	N=342	N=509	N=851
Ever attended school: Yes	90.2%	77.8%	82.7%	93.6%	92.3%	92.8%
	n=321	n=422	N=743	n=318	n=468	N=786
Primary	60.1%	75.4%	69.0%	55.0%	72.0%	65.2%
College	5.0%	2.6%	3.6%	3.8%	1.2%	2.2%
Secondary	26.5%	19.2%	22.3%	31.8%	18.3%	23.7%
High school	6.9%	2.6%	4.4%	2.9%	0.8%	1.7%
University	0.9%	0.2%	0.5%	9.0%	0.0%	0.0%

B. Male Circumcision

Table A in Appendix 2 provides information on male circumcision. A recent study from South Africa indicates that male circumcision has protective effects against HIV when sexual behavior factors are controlled for. This is equivalent to what a vaccine of high efficacy would achieve (Auvert B et al 2005). Both male and female respondents were asked questions related to circumcision.

Nearly 91% of male refugees but less than 4% of surrounding community males ($p < 0.001$) had been circumcised. 92% of female refugees and 8% of surrounding community females would prefer a sexual partner who was circumcised. Amongst uncircumcised men 0% of male refugees and 14% of surrounding community males would be interested in circumcision if made affordable and safe.

With regard to age at which men circumcised 34% of refugee men ($n=325$) were circumcised before age five, 25% between 5 and 9 years, 15% at or after 10 years of age and 27% did not know age at which they were circumcised. Among surrounding community males ($n=12$) 1 was circumcised before age 5 another between 5 and 9 years, 4 were at 10 and over years while 6 did not know. Reasons for circumcisions varied; among refugee men 64% was traditional, 16% to prevent genital infection, 10% for health and hygiene, and 2% mentioned sexual satisfaction and 8% did not know the reasons for circumcision. Among surrounding community males 6 of the 12 (50%) mentioned prevention of genital infection, 1 mentioned sexual satisfaction while 5 did not know why they were circumcised.

Recommendation

- Male circumcision, besides ensuring genital hygiene, has been proven through studies to reduce efficiency of transmission of HIV in a man. The strategy needs to be promoted by through open discussions and marketing its benefits. However, factual information must be provided to avoid disinhibition effects, i.e. circumcised men thinking that they are fully protected and not adopting other prevention measures including condom use and faithfulness.
- Comprehensive information on male circumcision must be provided if it is promoted as a prevention method. Male circumcision does not fully protect men from being infected with HIV through sexual intercourse nor does it protect sexual partners against HIV infection. It will be essential to promote male circumcision as part of a comprehensive prevention package including correct and consistent condom use, behavior change, and voluntary counseling and testing.

C. Source of Income

Seventy-two percent of surrounding community residents compared to 50% of refugees have income generating activities (IGA) $p < 0.0010$. More men than women in both areas have income generating activities. More men than women are involved in income generating activities in both the refugee and surrounding communities; 59% of refugee men compare to 36% of refugee women and 78% of surrounding community men compared to 69% of surrounding community women.

Among male refugees 43% are involved in trading, 26% in agriculture and 7% in craft making. Among female refugees 54% are involved in trading, 19% in agriculture and 9% in crafts among others. In the surrounding community 78% of males are in agriculture, 9% in trading and 4% in public service. Amongst women, 80% are working in agriculture, 12% in trading and 3% in crafts.

Recommendation

- Income generation activities are an important component of social well-being. Both population groups need training programs to enable them to identify means of income generation. Training in agriculture related work as a means to provide income would also result in increased food security. Agricultural extension services and the related training would equip the refugees with skills to generate income and food for subsistence.

D. Displacement and Mobility

About 93% refugee respondents have lived in Mwangi refugee camp for more than five years and 78% of surrounding community residents have lived in the surrounding community for over five years. Nearly half (45%) of refugee population said they visited surrounding communities frequently (Table 15 below). This difference is statistically significant ($p < 0.001$).

Table 15. Time in community, mobility and community interaction, Mporokoso, UNHCR BSS 2006.

Characteristics	Mwangi Refugee Camp			Mwangi Surrounding Community		
	Male	Female	Total	Male	Female	Total
Time in current community (years) ^a	n=353	n=542	N=895	n=343	n=505	N=848
Always	0.0%	0.0%	0.0%	16.0%	11.9%	13.6%
< 2years	2.8%	0.6%	1.5%	9.9%	10.9%	10.5%
2-4	6.5%	5.2%	5.7%	7.9%	8.9%	8.5%
5+	90.7%	94.3%	92.9%	61.8%	65.5%	64.0%
Don't know	0.0%	0.0%	0.0%	4.4%	2.8%	3.4%
Prolonged absence from home	n=353	n=536	N=889	n=339	n=506	N=845
Yes	35.7%	10.3%	20.4%	22.1%	14.4%	17.5%
Frequency of visiting other community	n=292	n=331	N=623	n=292	n=367	N=662
Less than once a month	15.1%	23.3%	19.4%	20.5%	20.8%	20.7%
Once a month	31.5%	38.1%	35.0%	21.2%	24.2%	22.8%
Many times	53.4%	38.7%	45.6%	58.2%	55.1%	56.5%

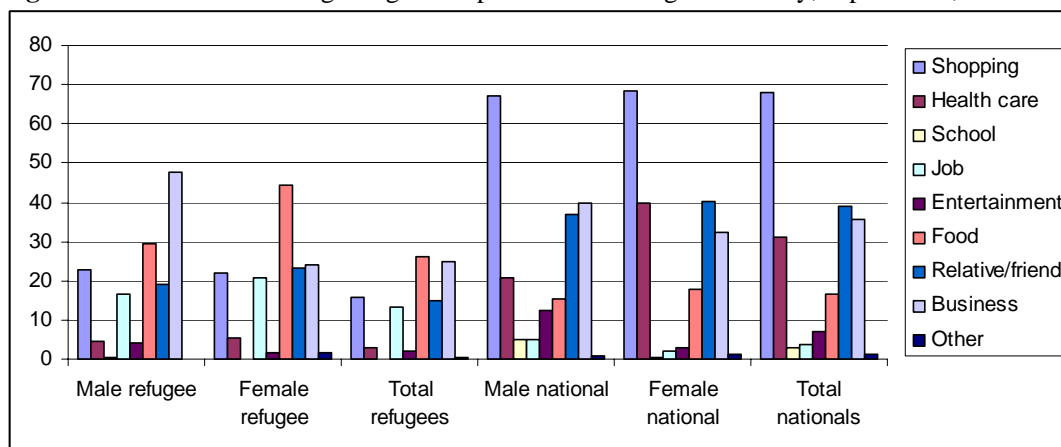
a-those who always lived in current community there was none in surrounding community residents) where added to 5+years.

In the 12 months prior to the survey 20% of the refugees (36% male, 10% female, $p < 0.001$) had been away from the camp for longer than one month. Among surrounding community residents 18% (23%, 15% females, $p = 0.004$) had been away from their villages for longer than a month.

Figure A in Appendix 2 provides a breakdown of reasons for prolonged absence from their homes. The primary reason for absence men in both communities is work while for women it is visiting friends or relatives.

Figure 5 depicts reasons that respondents gave for visiting surrounding communities as well as the refugee camp. Refugees visit the surrounding community for food (26%) or business (25%).

Figure 5. Reasons for visiting refugee camp and surrounding community, Mporokoso, UNHCR BSS 2006.



Recommendation

- Given the mobility of the refugee population and the surrounding community population and the mix between the two populations HIV/AIDS interventions should target both populations in order to achieve the desired goals. The information should target populations in markets through peer education in appropriate language in terms of content and understanding. Health centers should be used to provide prevention services.

E. Alcohol and Drug Use

Alcohol use and abuse is directly linked to risky sexual behavior and therefore an indirect contributor to HIV transmission (Fritz et al, 2002). HIV prevention programs must include strategies to reduce alcohol abuse and enhance awareness and protective sexual behaviors among individuals who do use alcohol (Morojele et al, 2006).

Table B in Appendix 2 provides data on alcohol and drug use among respondents. Ten percent of surrounding community respondents and 5% of refugee respondents have engaged in sexual activity under the influence of alcohol ($p = 0.000$). In both populations more men than women reported sexual activity under the influence of alcohol. More surrounding community residents than refugee population reported use of recreational drugs (8% of surrounding community residents compared to 2% of refugees). The most common drug used was daga (ichamba).

Recommendation

- There is enough documented evidence to support that alcohol and recreational drugs tend to lead to behavior that may increase the spread of HIV and other sexually transmitted infections. It also negatively influences adherence to treatment regimens. Alcohol and drug abuse leads to poor risk perception and judgment. HIV prevention programs should incorporate alcohol awareness and reduction strategies in interventions.

F. Sexual Behavior

Delaying age at first sexual debut is a way of reducing the spread of HIV infection through sexual intercourse, the primary mode of transmission in Zambia. The Zambia Sexual Behavior Survey (2005) found that the median age at first sex is 19.5 years for men and 18.5 years for women among respondents aged 20-49 at time of survey. For those aged 15-24 in 2005, the median age at first sex was 18.5 for both males and females.

Table 16 indicates that among both the refugee and surrounding community populations, the age of sexual debut is lower for females than males ($p < 0.001$).

Table 16. Median age at first sexual intercourse and first marriage, Mporokoso, UNHCR BSS 2006.

	Mwange Refugees		Surrounding Community	
	Male	Female	Male	Female
Median age at first sex (years) (Q1, Q3)	n=307 18 (16, 20)	n=480 16 (15, 18)	n=301 18 (15, 20)	n=460 17 (15, 19)
Median age at first married (years) (Q1, Q3)	n=234 22 (20, 25)	n=431 17 (15, 19)	n=234 23 (15-19)	n=413 18 (16, 20)

The survey explored current marital relationship status among those married. Nine percent of refugee men and 12% of refugee women were in a polygamous relationship compared to 4% of men and 10% of women in surrounding community.

Reduction in the number of sexual partners is another way to reduce the transmission of HIV and other STIs. Respondents were asked about their sexual history and risk behaviors, including sex with a non-regular partner^h and regularⁱ partner, transactional sex^j and condom use with different sexual partners.

Table 17 below presents results of non-regular casual (non-regular) and transactional partners among people reporting ever having had sex. There was a statistically significant difference between the refugee population and the surrounding communities ($p < 0.001$) with 17% of refugee respondents having had sex with a non-regular compared to 10% of surrounding community respondents. There are statistically significant differences between males and females across all age groups and populations with more men reporting having had sex with a non-regular sex partner than females ($p = 0.001$).

Of those who reported sex with a non-regular partner only 27% of refugees and 40% of surrounding community residents reported using a condom during last sex. One-third of male refugees (33%) and 15% of female refugees said they used a condom last time they had sex with a non-regular partner.

Among those married or living with a partner 21% of refugee men and 8% of refugee women said they had sex with a regular sexual partner in the last 12 months, other than their spouse. Among the surrounding community resident, 30% of men and 5% of women had another regular partner.

Among the refugee population 21% of married men and almost 8% of married women had sex with at least one non-regular sex partner besides their spouses 12 months prior to the interview. Among the surrounding community residents 17% of married men and 2% of women had sex with a non-regular partner 12 months prior to interview.

Of married respondents 13% of male refugees and 6% of female refugees engaged in transactional sex. Among surrounding community residents 7% of male and 4% of females who were married also reported transactional sex in last 12 months prior to the interview.

^h A non-regular partner is defined as any casual sexual partner different from the live in partner, regular girlfriend or paid for sex partner/sex worker.

ⁱ A regular sexual partner is defined as a girlfriend NOT spouse/wife, not live in partner in the 12 months prior to survey.

^j Transactional sex was defined as exchange of money, gifts or favors for sex.

Respondents were asked whether they ever had sex in exchange for gifts or money. Refugees responding affirmatively were further asked whether it was before or after displacement while surrounding community residents were asked whether it was before or after refugees arrived. The difference in occurrence of transactional sex is statistically significant between refugee and surrounding community respondents ($p < 0.001$), with almost double the percentage of refugees (13% compared to 7%) engaging in transactional sex. Among refugees men were twice as more likely to engage in transactional sex than female refugees ($p < 0.001$). The difference between males and females in the surrounding community population is not statistically significant (Figure B in Appendix 2 and in Table 17 below).

Among refugees most transactional sex took place after displacement (70%). Respondents from the surrounding community reported that 63% of transactional sex took place after the refugees arrived. Among unmarried youth respondents 71% of refugees and 80% of surrounding community residents reported sex with a regular sex partner in the last 12 months.

Table 17. Casual and transaction partners among people reporting ever having had sex, Mporokoso, UNHCR BSS 2006.

Characteristics	Mwange Refugee Camp			Mwange Surrounding Community		
	Male	Female	Total	Male	Female	Total
Had sex with non-regular partner by age group						
Age 15-24	41.4% (n=111)	13.1% (n=191)	23.5% (N=302)	30.8% (n=91)	3.9% (n=180)	12.9% (N=271)
Age 25-49	19.7% (n=203)	8.2% (n=294)	12.9% (N=497)	16.4% (n=220)	3.1% (n=290)	8.8% (N=510)
All (age 15-49)	27.4% (n=314)	10.1% (n=485)	16.9% (N=799)	20.6% (n=311)	3.4% (n=470)	10.2% (N=781)
Used condom during sex with the latest non-regular partner by age group						
Age 15-24	42.9% (n=42)	9.5% (n=21)	31.7% (N=63)	38.5% (n=26)	40.0% (n=5)	38.7% (N=31)
Age 25-49	21.2% (n=33)	20.0% (n=20)	24.5% (N=53)	42.9% (n=35)	33.3% (n=6)	41.5% (N=41)
All (age 15-49)	33.3% (n=75)	14.6% (n=41)	26.7% (N=116)	41.0% (n=61)	36.4% (n=11)	40.3% (N=72)
Ever had sex in exchange for money/gift by age group						
Age 15-24	26.6% (n=109)	16.0% (n=188)	19.9% (N=297)	15.4% (n=91)	9.4% (n=180)	11.4% (N=271)
Age 25-49	13.2% (n=204)	5.7% (n=296)	8.8% (N=500)	6.0% (n=218)	4.5% (n=290)	5.1% (N=508)
All (age 15-49)	17.9% (n=313)	9.7% (n=484)	12.9% (N=797)	8.7% (n=309)	6.6% (n=470)	7.4% (N=779)
Condom use during last time had sex in exchange for money/gift by age group						
Age 15-24	36.4% (n=22)	30.4% (n=23)	33.3% (N=45)	60.0% (n=10)	37.5% (n=8)	50.0% (N=18)
Age 25-49	25.0% (n=16)	33.3% (n=6)	27.3% (N=22)	62.5% (n=8)	28.6% (n=7)	46.7% (N=15)
All (age 15-49)	31.6% (n=38)	31.0% (n=29)	31.3% (N=67)	61.1% (n=18)	33.3% (n=15)	48.5% (N=33)
Unmarried and had sex with regular partner by age group						
Age 15-24	n=74 77.0%	n=41 61.0%	N=115 71.3%	n=59 84.7%	n=35 71.4%	N=94 79.8%
Unmarried and had sex during the past 12 months with non-regular partner by age group						
Age 15-24	n=112 33.0%	n=89 12.4%	N=201 23.9%	n=85 23.5%	n=68 7.4%	N=153 16.3%
Married or Living with partner and had sex during the last 12 months but had also sex with different partner						
Had sex with regular partner	21.1% (n=209)	7.5% (n=375)	12.8% (n=584)	30.2% (n=202)	5.2% (n=362)	14.2% (n=564)
Had sex with non-regular partner	20.6% (n=209)	7.5% (n=375)	12.2% (n=584)	16.8% (n=202)	1.7% (n=362)	7.1% (n=564)
Had sex in exchange for money/gift	13.4% (n=209)	5.6% (n=375)	8.4% (n=584)	7.4% (n=202)	3.9% (n=362)	5.1% (n=564)

Recommendation

- Due to the early age of sexual debut among youth as well as the early age of marriage among females, early education on sexual and reproductive health is necessary.
- Condom use with different partners including transactional sex remains low. Condom use is an effective way of preventing HIV where abstinence and being faithful to one un-infected partners is not possible or challenging. Dual promotion of condoms as a prevention strategy for STIs including HIV and pregnancy is needed to reach to all those who need information and commodities.
- Many married partners are having extra-marital sex relationships with different partners. Programs involved with HIV prevention need to incorporate issues of family, couple counseling and packaging of desired messages and the benefits of faithfulness to one's sexual partner.

G. Forced Sex

Respondents were asked about the occurrence of forced sex defined as a sexual act performed against one's will. Eight percent of refugee women and 9% of surrounding community women said they were ever forced to have sex. Of the women forced to have sex 19% of refugee women and 48% of surrounding community women said forced sex occurred in the 12 months prior to the interview. Table 18 provides a breakdown of

the results. Most of the forced sex occurred amongst those aged 15 and 24 years and perpetrator of forced sex, in Mwanze camp, 56% mentioned fellow refugees while 73.1% in surrounding community mentioned person from local community.

Table 18. Forced Sex, Mporokoso, UNHCR BSS 2006

Characteristics	Mwanze Refugee Camp			Mwanze Surrounding Community		
	Male	Female	Total	Male	Female	Total
Ever been forced to have sex	n=308	n=475	N=783	n=309	n=471	N=780
Yes	9.7%	7.6%	8.4%	3.6%	9.3%	7.1%
Forced to have sex in previous 12 months						
15-24 years	50.0% (n=10)	33.3% (n=21)	38.7% (n=31)	33.3% (n=3)	42.9% (n=21)	41.7% (n=24)
25+	5.6% (n=18)	0.0% (n=15)	0.0% (n=33)	57.1% (n=7)	52.4% (n=21)	53.6% (n=28)
All	21.4% (n=28)	19.4% (n=36)	19.4% (n=36)	50.0% (n=10)	47.6% (n=42)	48.1% (n=52)
Perpetrator of forced sex	n	n	N=66	n	n	N=52
Refugee	18	19	56.1%	0	1	1.9
Person from community	9	7	24.2%	9	29	73.1%
Military/ Security Forces	0	5	7.6%	0	0	0
UN Peace Keeper	0	5	7.6%	0	0	0
Humanitarian Worker	0	0	0	0	0	0
Husband	0	0	0	0	12	23.1%
Traditional Healer	0	1	1.5%	0	0	0
Don't know	2	1	1.5%	0	0	0
Total	30	36	100	10	42	100

Recommendation

- The results from the questions on forced sex provide inconclusive results primarily due to the large number of responses from men. Men may have interpreted the questions to refer to circumstances that lead them to have forced sex. In addition, women may not openly disclose instances of forced sex if a known partner is involved. Further research, including qualitative and quantitative tools, are required to fully understand the extent of this practice and design interventions accordingly. Addressing the issue of forced sex should be integrated into HIV prevention programs.

H. Condom Knowledge and Use

Table C and D in Appendix 1 provides information on condom knowledge and use in Mwanze Camp and surrounding areas in Mporokoso by age group, educational level and gender. There were statistically significant differences between refugees and surrounding community residents in all variables related to condom knowledge as well as differences between male and female refugees.

About 89% of refugees and 96% of surrounding community residents ($p < 0.001$) have heard of condoms, while 50% of refugees and 58% of surrounding community residents said that they have heard of female condoms ($p = 0.003$). The difference in knowledge level by age groups was not statistically significant.

In general, knowledge of condoms is high; nearly 90% of refugees and 95% of surrounding community residents ($p < 0.001$) are aware that condoms protect against STI/HIV/AIDS. Fewer respondents were aware of condom use as a means of pregnancy prevention; 31% of refugees and 45% of surrounding community residents ($p < 0.001$).

Figure C in Appendix 2 identifies places where respondents obtain condoms. Refugees identified health centers (61%) and community health workers (39%) as the primary sources of condoms.

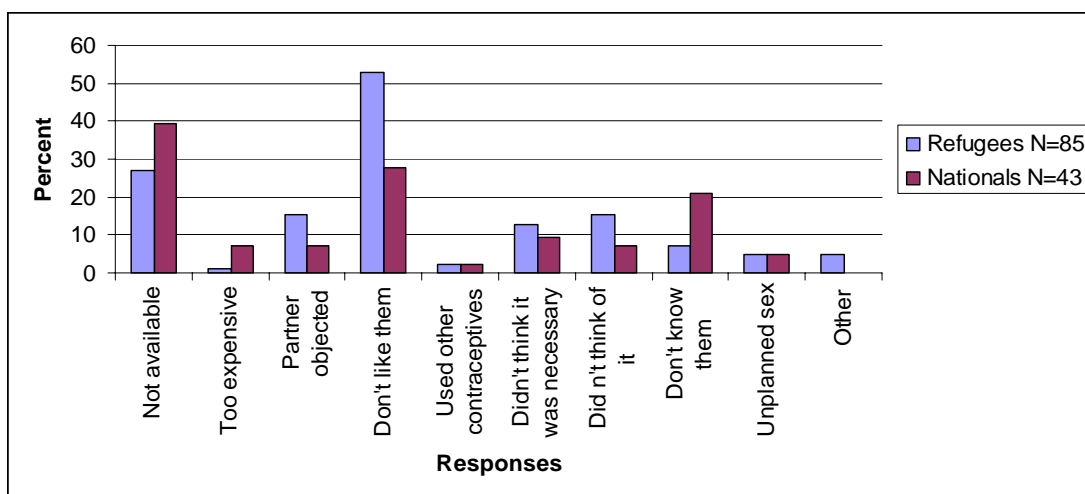
Although knowledge of condom use was high only 27% of refugees and 37% of surrounding community residents used a condom with their regular partner at the time of last sex. Condom use rates are similar with non-regular partners. For transactional sex condom use is a bit higher with 31% of refugees and 46% of surrounding community residents using a condom at last transactional sex.

Condom use and level of education was also assessed with regular, non-regular and paying sex partners. Condom use was higher among those with secondary or higher level of education. Among refugees with none/primary education 20% used condoms at last sex with a regular partner compared to 52% condom use by refugees with secondary/higher education. Among surrounding community residents the difference in condom use was lower by educational level; 35% with none/primary education used a condom at last sex with a regular partner compared to 41% of those with secondary/higher education.

With non-regular partners 21% of refugees with none/primary education used a condom at last sex compared to 37% of refugees with secondary/higher level education. Among surrounding community respondents condom use at last sex with a non-regular partner was 33% for those with none/primary education and 57% for those with secondary/higher education. Condom use during last transactional sex was also higher with more education among both refugees and surrounding community respondents.

Respondents were asked to give reasons for not using a condom during their last sexual intercourse with non-regular (casual), regular and transactional partner. Reasons cited among refugees include dislike of condoms (53%), unavailability (27%) and objection from partner. Among surrounding community residents the most common reason reported was unavailability of condoms (39%) followed by dislike of condoms (30%). Figure 6 presents the reasons given for not using condom at last sex with casual or non-regular partner.

Figure 6. Reasons for not using a condom at last sex with non-regular (casual) partner; Mporokoso, UNHCR BSS 2006.



The primary constraints mentioned by refugees to obtain condoms were cited as non-availability (25%), fear of being seen (24%), and health worker attitudes 13%. Among surrounding community residents the constraints mentioned include non-availability of condoms (38%) followed by health worker attitudes (18%). Figure I in Appendix 1 depicts the constraints discussed by both populations disaggregated by gender.

Recommendation

- Reproductive health programs to improve knowledge and positive behavior (including condom use) are required at Mwanze camp and surrounding communities. Formal schooling and informal adult learning increases an individual’s ability to practice positive health behaviors including communication with partners on condom use (McGinn, et al, 2006).
- There seem to be barriers preventing the refugee population to act upon the health information received to protect themselves against HIV and other STIs. Additional qualitative research is required to understand the social and gender barriers in order to guide behavior change interventions for this community.
- NGOs providing HIV prevention services need to re-strategize as service providers, including provision of condoms, in both the camp and community. Increased availability and accessibility of condoms through innovative outlets including homes, markets, taverns and bars is required. Social marketing of

condoms needs to be accompanied by proper behavior change messages, in the appropriate language, along with training condom providers on issues of confidentiality.

I. Sexually Transmitted Infections (STIs)

The existence of an association between sexually transmitted infections and HIV has been observed in many cross-sectional and case-control studies (WHO/UNAIDS, 2000). Respondents were asked about their personal history of STIs. Table E in Appendix 2 provides information on respondents who had a history of primary STI symptoms during the 12 months prior to the survey.

More refugees than surrounding community residents reported a history of genital discharge/sores/ulcers in the past 12 months, although the difference is not statistically significant. Among the refugee population 3% reported a history of genital discharge in the past 12 months (6% male and 1% female) compared to 3% of surrounding community respondents (4% male and 2% female).

Nearly 3% of refugees and surrounding community residents reported a history of genital sore/ulcers in the last 12 months.

Most respondents reporting STI symptoms sought care (83% of refugees and 85% of surrounding community residents) from health workers, traditional healers, pharmacy and friends/relatives. The data is presented in Figure E in Appendix 2.

Recommendation

- Reported symptoms of sexually transmitted infections are a good indicator of risk behavior. A strong monitoring system to identify STIs and encourage early treatment is critical. Early treatment of STIs not only reduces complications but the risk of HIV transmission.
- Data indicate that traditional healers play a large role in STI treatment. HIV programs must secure buy-in of traditional healers; sensitize them on STIs, treatment, and referral for appropriate case management.
- Many people manage their STIs by purchasing drugs directly from a pharmacy rather than seeking care from a medical provider. Pharmacy staff should be trained in management of STIs so they are able to advise clients accordingly and dispense correct medication.

J. Knowledge, Opinions, and Attitudes toward HIV/AIDS

Respondents were asked a series of questions to measure their knowledge of HIV/AIDS, including modes of transmission, as well as opinions and attitudes toward people living with HIV/AIDS.

Table 19 presents knowledge of HIV and its transmission. General awareness of HIV is extremely high. 96% of refugee and 99% surrounding community have heard of HIV. There was a statistically significant difference ($p < 0.001$) in the percent of refugees (90%) and surrounding community residents (95%) who know that sexual abstinence protects against HIV infection. More surrounding community residents (93%) than refugees (86%) are aware that HIV can be prevented by staying faithful to one sexual partner. In addition, 77% of surrounding community residents and 71% of refugees were aware that correct and consistent condom use protects against HIV.

Knowledge of mother-to-child transmission was comparable between refugees and surrounding community residents with similar results in knowledge of infection during delivery and transmission through breast milk between the two groups.

In addition, respondents were asked about misconceptions about HIV infection and transmission. Table 19 demonstrates that misconceptions are higher among refugees than surrounding community residents. Only 68% of refugees compared to 83% of surrounding community residents ($p < 0.001$) knew that HIV cannot be transmitted by sharing food with PLHA and more surrounding community residents (81%) than refugees (75%) knew that a healthy looking person can be infected with HIV ($p < 0.002$).

Comprehensive knowledge of HIV prevention and transmission was statistically significant ($p < 0.001$) higher among surrounding community residents than the refugee population. Among the refugees 37%

exhibited comprehensive knowledge while 49% of surrounding community residents had comprehensive knowledge.

Less than a half in both camp and surrounding community had comprehensive^k knowledge of HIV transmission. There was no difference in percent of refugees or surrounding community respondents who had comprehensive correct knowledge of HIV by educational attainment or by sex.

Table 19. Knowledge of HIV and its transmission, Mporokoso, UNHCR BSS 2006

Characteristics	Mwange Refugee Camp			Mwange Surrounding Community		
	Male	Female	Total	Male	Female	Total
Percentage of respondents who say that:						
They have ever heard of HIV	n=355 99.2%	n=543 94.7%	N=898 96.4%	n=343 99.7%	n=507 98.8%	n=850 99.2%
Sharing needles may lead to infection	n=352 91.2%	n=514 91.1%	N=866 91.1%	n=342 93.6%	n=501 95.6%	N=843 94.8%
HIV can infect unborn child during delivery	n=352 81.5%	n=514 83.7%	N=866 82.8%	n=342 84.8%	n=501 84.4%	N=843 84.6%
Breast feeding can transmit HIV if mother is infected	n=352 82.1%	n=514 86.8%	N=866 84.9%	n=342 83.3%	n=501 84.8%	N=843 84.2%
Measure of Comprehensive Knowledge of HIV/AIDS: percentage of respondents who say that -						
Abstaining from sex protects from HIV	n=352 88.1%	n=514 90.1%	N=866 89.3%	n=342 95.6%	n=501 94.2%	N=843 94.8%
Staying faithful to one uninfected faithful sex partner	n=352 81.8%	n=514 87.9%	N=866 85.5%	n=342 92.1%	n=501 94.2%	N=843 93.4%
Using condoms every time correctly when having sex protects	n=352 70.2%	n=514 71.0%	N=866 70.7%	n=342 74.9%	n=501 78.6%	N=843 77.1%
People cannot get HIV by sharing food with infected persons	n=352 73.3%	n=514 65.8%	N=866 68.0%	n=342 84.2%	n=501 82.6%	N=843 83.3%
Healthy looking person can be infected with HIV	n=352 79.3%	n=514 71.2%	N=866 74.5%	n=342 82.5%	n=501 80.6%	N=843 81.4%
Composite indicator for comprehensive knowledge: Percent of respondents who had comprehensive knowledge of HIV transmission ^l	n=352 39.9%	n=514 35.3%	N=868 37.2%	n=342 49.7%	n=501 48.7%	N=843 49.1%

Table 20 presents the attitudes towards people who are infected or affected or HIV/AIDS. The results show the level of stigma attached to HIV is higher among refugee population. Fifty-one percent of refugees believe that a family members' HIV positive status should remain a secret compared to 49% of surrounding community respondents. Eighteen percent of the refugee population would not provide care for a female relative infected with HIV compared to 9% of surrounding community respondents (p<0.001). However, 36% percent of the refugee population believed that young adolescents should not be taught how to use condoms compared to 42% of surrounding community respondents (p=0.024).

Table 20. Attitudes towards people who are HIV infected; Mporokoso, UNHCR BSS 2006.

Characteristics	Mwange Refugee Camp			Mwange Surrounding Community		
	Male	Female	Total	Male	Female	Total
Percent of respondents who say that:						
If a family member is infected with HIV, it should remain a secret	n=352 48.3%	n=514 52.3%	N=866 50.7%	n=342 51.2%	n=501 47.7%	N=843 49.1%
If female relative was infected with HIV, they would NOT care for her	n=352 14.8%	n=514 20.6%	N=866 18.2%	n=342 5.3%	n=501 11.4%	N=843 8.9%
If male relative was infected with HIV, they would NOT care for him	n=352 12.2%	n=514 20.4%	N=866 17.1%	n=342 4.4%	n=501 9.9%	N=843 7.6%
Young adolescents should NOT be taught how to use condom	n=352 33.2%	n=514 37.5%	N=866 35.8%	n=342 33.3%	n=501 48.1%	N=843 42.1%

Recommendation

^k Comprehensive knowledge refers to individuals who knew that abstinence, being faithful and correct and consistent condom use every time prevents HIV and that sharing food with an infected person transmits HIV and know that a healthy-looking person can have HIV.

- The HIV prevention activities should be strengthened. Messages must be strategically developed and targeted to reach the refugee and surrounding community populations using innovative methods. Facts must be provided on alternative prevention methods including efficacy and protective effects of condoms.
- Prevention programs should use comprehensive strategies which include abstinence, being faithful and condom use (ABC) along with counseling & testing, post-exposure prophylaxis, family planning, treatment of STIs and prevention of mother-to-child transmission. HIV prevention knowledge is high among different groups what is lacking are enforcing mechanisms to act on this knowledge. Therefore behavior change strategies need to address this situation.

K. Exposure and Access to Information about HIV/AIDS

Over 90% of all respondents have heard of HIV/AIDS. Figure 7 provides data on the source of information reporting by respondents, without probing. Community health workers followed by radio programs were the primary sources of HIV/AIDS information for both populations.

Figure 7. Most common source of HIV/AIDS information in Mporokoso, UNHCR BSS 2006

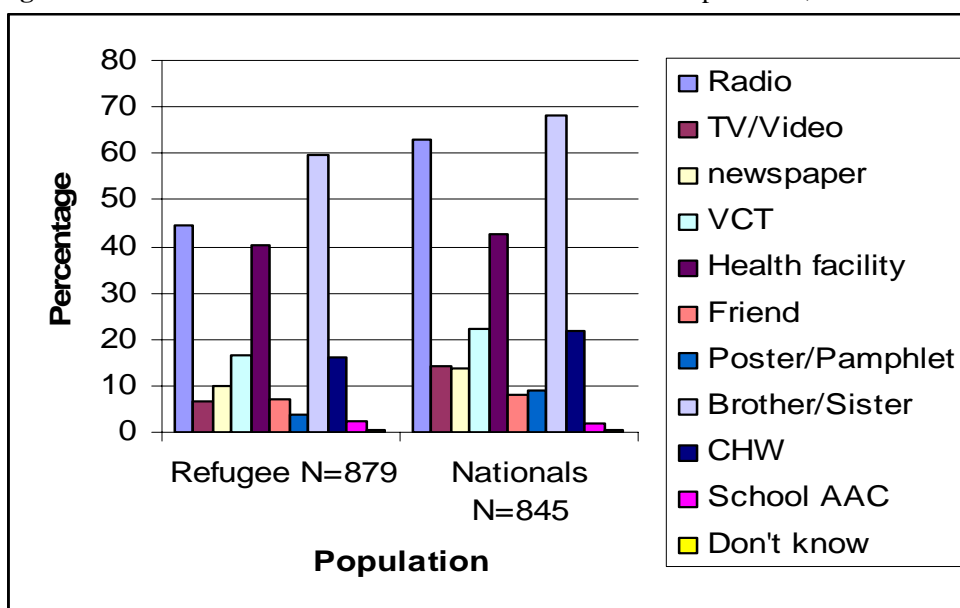


Table 21 below provides information on HIV counseling and testing. Only 11% of the refugee respondents and 12% of surrounding community respondents have ever been tested, mostly in the past 12 months. More females than males have been tested in the last 12 months for both populations.

Table 21. Voluntary Counseling and Testing, Mporokoso, UNHC Zambia BSS 2006.

Characteristics	Mwange Refugee Camp			Mwange Surrounding Community		
	Males	Females	Total	Males	Females	Total
Ever been tested for HIV	n=356 12.1%	n=545 9.7%	N=901 10.7%	n=343 9.3%	n=509 13.0%	N=852 11.5%
Been tested in the past 12 months	n=43 41.9%	n=53 66.0%	N=96 55.2%	n=32 46.9%	n=66 60.6%	N=98 56.1%
Last test, received results	n=43 86.0%	n=53 86.8%	N=96 86.5%	n=32 81.3%	n=66 71.2%	N=98 74.5%

Recommendation

- Future information dissemination efforts should take into account where refugees and surrounding community residents access HIV/AIDS information. Refugee respondents prefer radio, health facility, and public meetings for their HIV/AIDS information while surrounding community residents cited health facilities, followed by radio and then community health worker as the preferred source of HIV information. All messages should be designed to meet the educational levels of the populations of interest.

- Information on HIV testing is critical given the low percentages of adults having been tested. In addition, access to testing needs to be expanded by evaluating location of service delivery sites, hours of operation, etc. based on population preferences and identified barriers.

VI. Challenges for the Study in both Kawambwa and Mporokoso

Perceptions of Research Team

In Kala village (Kawambwa) and Melu village (Mporokoso) perceptions that the research team members were Satanists contributed to refusals to participate in the survey. Village members believed that the team wanted to draw blood and obtain information for Satanist rituals. The villagers were pacified by the village headman and the situation addressed.

Transportation

Research assistants traveled to and from their homes on a daily basis during the course of the survey. Over one hour was lost for work due to transportation time. In addition, the distance between villages and the road networks slowed down the pace of data collection.

Rains

The research study was conducted during the dry season but there were rains on some days. This delayed data collection in the field.

Consent

In the refugee camps most married women were not free to discuss issues of extra-marital sexual relationship without consent from their husbands. In addition, adults were not enthusiastic about having adolescent youth being interviewed due to the sensitivity of some of the questions. The research team explained the protocol and the desired age groups for the survey.

Absenteeism

The study was carried out during a period of political campaigns for both parliamentary and presidential elections in Zambia. In addition, the survey coincided with the preparation for the rainy season with both refugees and surrounding community residents working in the fields. These factors contributed to absenteeism from homes during the research study. In the camps research assistants made up to three repeat visits before they could declare someone as absent. In the surrounding villages up to two visits were conducted. Due to transport problems and time constraints three visits were not possible in the surrounding community. Besides refugees being away in the fields to plough some had also left the camp for business returning just before the bimonthly food distribution day. However, since the survey aims to provide baseline information about HIV knowledge, behaviors and risk factors, the findings are still useful to apply to programs aimed at reducing HIV transmission.

VII. References

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Appendix 1: Kawambwa Tables and Figures

Table A. Circumcision, Kawambwa, Zambia, UNHCR BSS2006.

Characteristics	Kala Refugee Camp		Kala Surrounding Community	
	Male	Female	Male	Female
Circumcised	n=358	n=464	n=420	n=449
Yes	88.3%	3.0%	7.9%	1.1%
Main reason for being circumcised	n=314	n=14	n=33	n=5
Traditional/Religion	66.6%	78.6%	9.1%	0
Health/Hygiene	9.8%	7.1%	45.5%	0
Sexual satisfaction	4.8%	0	9.1%	0
Prevent infection	9.2%	7.1%	21.2%	20%
Don't know	9.6%	7.1%	15.2%	80%
Would prefer a sexual partner who was circumcised ^a	n=41	n=444	n=387	n=444
Yes	63.4%	81.3%	10.3%	23.0%
No	24.4%	5.9%	76.7%	60.1%
Don't know	12.2%	12.9%	12.9%	16.9%
Would be interested in getting circumcised ^a	n=41	n=444	n=387	n=444
Yes	12.2%	4.7%	25.6%	3.6%
No	73.2%	82.0%	70.0%	85.8%
Don't know	14.6%	13.3%	4.4%	10.6%

^adenominator is those not circumcised

Figure A. Reasons for prolonged absence Kawambwa, UNHCR BSS 2006

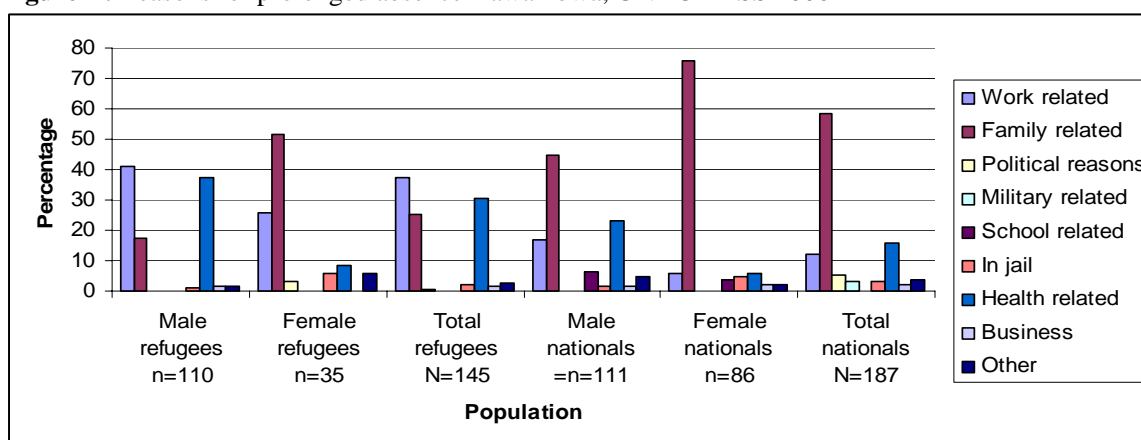


Table B. Alcohol, drug and condom use, Kawambwa, UNHCR BSS 2006

Characteristics	Kala Refugee Camp			Kala Surrounding Community		
	Male	Female	Total	Male	Female	Total
Ever taken drug	n=355	n=454	n=809	n=418	n=445	n=863
Yes	6.5%	1.3%	3.6%	17.7%	0.9%	9.0%
Had sex while under influence of alcohol ^a	n=318	n=409	N=727	n=375	n=413	N=788
Yes	14.8%	2.7%	8.0%	23.7%	4.4%	13.6%
Condom was used during last time had sex after taking alcohol	n=47	n=11	N=58	n=89	n=18	N=107
Yes	21.3%	9.1%	19.0%	46.1%	27.8%	43.0%

^a this represents only those who had sex under influence of alcohol, there was no filter question to explore frequency or number who took alcohol.

Figure B: Sex with non-regular partner and transactional partner, Kawambwa, UNHCR BSS 2006

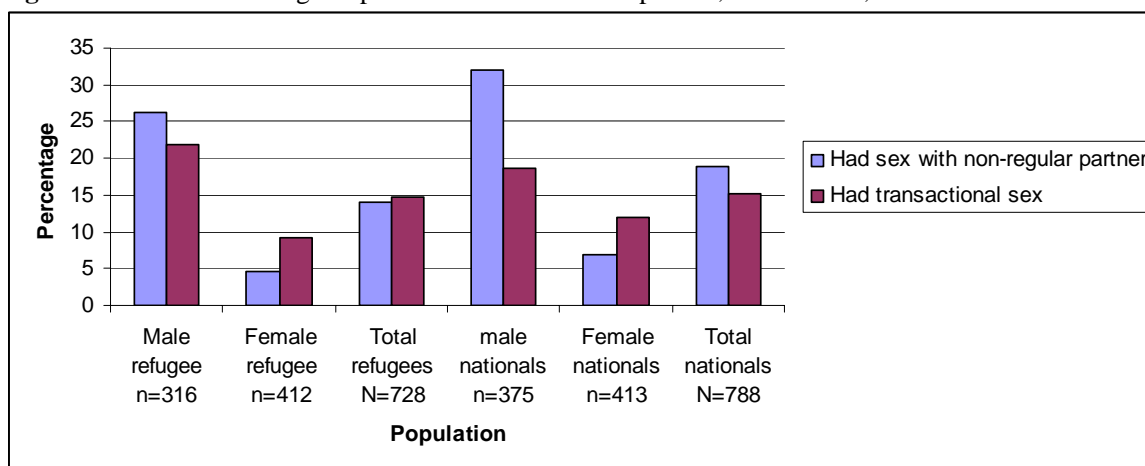


Table C: Respondents who have heard of or used condoms according to sexual partnerships, age group, education level by sex, Kawambwa, UNHCR BSS 2006

Characteristics	Kala Refugee Camp			Kala Surrounding Community		
	Male	Female	Total	Male	Female	Total
Ever heard of condoms	n=358	n=464	N=822	n=420	n=447	N=867
Yes	96.6%	86.4%	90.9%	97.1%	97.3%	97.2%
Ever heard of female condoms	n=346	n=401	N=747	n=408	n=435	N=843
Yes	48.8%	51.1%	50.1%	52.0%	59.5%	55.9%
What are condoms used for?	n=346	n=401	N=747	n=408	N=435	N=843
Protects against STI/HIV/AIDS	92.8%	85.3%	88.8%	96.1%	96.6%	96.3%
Prevents pregnancy	29.2%	33.7%	31.6%	34.1%	38.9%	36.5%
Family planning	22.8%	26.7%	24.9%	35.0%	37.2%	36.2%
Don't know	4.0%	9.0%	6.7%	0.5%	1.1%	0.8%
Was condom used during the last sex with your last/current regular partner	n=118	n=68	N=186	n=172	n=99	N=271
Yes	19.5%	16.2%	18.3%	51.2%	40.4%	47.2%
Was condom used during the last sex with your last/latest non-regular partner	n=72	n=18	N=90	n=108	n=23	N=131
Yes	29.2%	27.8%	28.9%	59.3%	65.2%	60.3%
Was condom used during the last sex with paying sex partner(transactional sex)	n=39	n=27	N=66	n=44	n=30	N=74
Yes	25.6%	7.4%	18.2%	52.3%	40.0%	47.3%

Table D: Respondents who have heard of or used condoms by age, education level, Kawambwa, UNHCR BSS 2006

Characteristics	Kala Camp Male/female Combined	Kala Surrounding Community Male/female Combined
Ever heard of condoms	N=820	N=866
Age 15-24 years	88.9%	96.8%
Age 25-49 years	92.4%	97.6%
Ever heard of female condom	N=738	N=837
Age 15-24 years	41.2%	54.9%
Age 25-49 years	57.4%	57.4%
Ever heard of condom by education level		
None	83.4% (n=151)	94.3% (n=53)
Primary	91.1% (n=504)	96.3% (n=405)
Secondary or higher	97.6% (n=165)	98.5% (n=408)
Ever heard of female condom by education level		
None	43.7% (n=126)	56.0% (n=50)
Primary	48.4% (459)	51.5% (n=390)
Secondary or higher	65.8% (152)	60.7% (n=402)
Condom use by age group		
At last sex with current/last regular partner:	N =186	N =271
Age 15-24 years	24.5%	55.8%
Age 25-49 years	10.0%	35.7%
At last sex with last/latest non-regular partner:	N=90	N =131
Age 15-24 years	39.0%	58.5%
Age 25-49 years	20.4%	62.1%
At last sex with paying partner (transactional sex):	N=46	N=74
Age 15-24 years	19.5%	53.7%
Age 25-49 years	16.0%	39.4%
Condom use by education level		
At last sex with regular partner:	N=184	N=179
None/primary	14.4%	37.9%
Secondary/higher	27.1%	53.6%
At last sex with non-regular partner:	N=89	N=131
None/primary	24.6%	50.0%
Secondary/higher	34.4%	67.5%
At last sex with paying partner (transactional):	N=66	N=74
None/primary	21.2%	34.4%
Secondary/higher	7.1%	57.1%

Figure C: Primary place where respondents sought condoms, Kawambwa, UNHCR BSS 2006

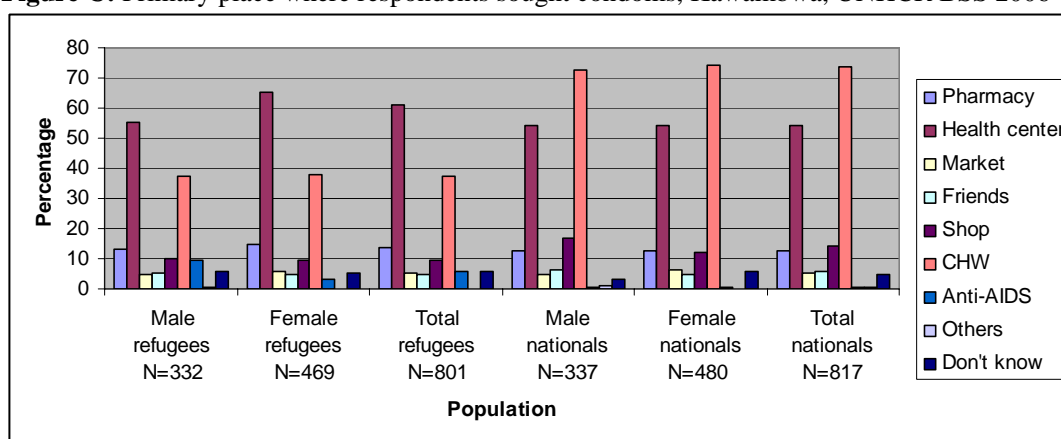


Figure D: Primary constraints in obtaining condoms, Kawambwa, UNHCR BSS 2006.

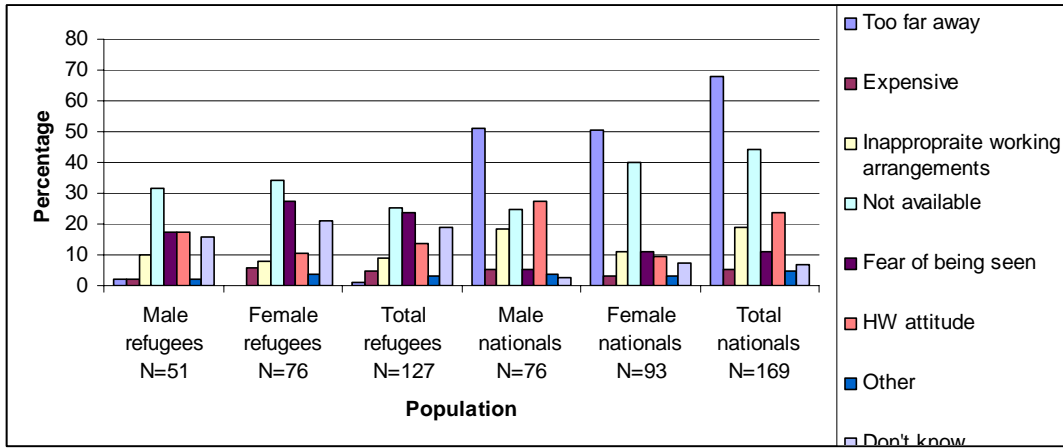
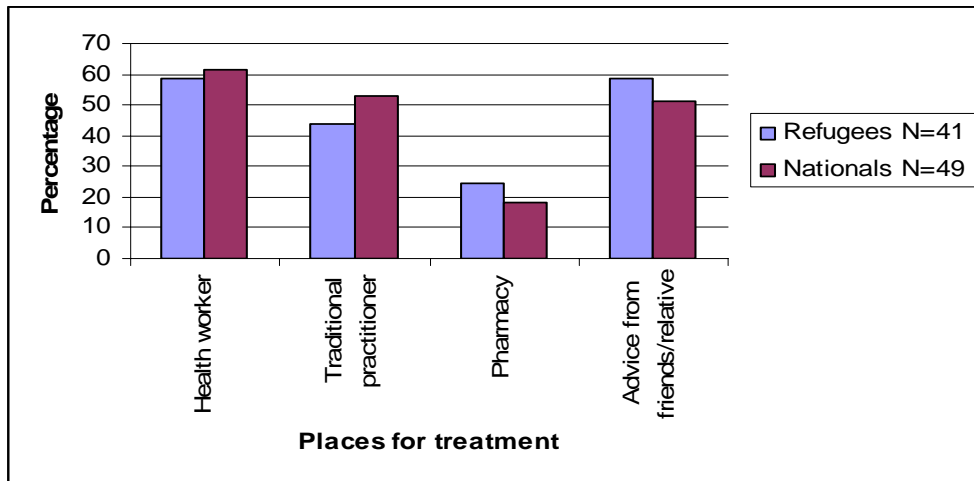


Table E: Respondents who have had symptoms of sexually transmitted infections; Kawambwa, UNHCR BSS 2006

Characteristics	Kala Refugee Camp			Kala Surrounding Community		
	Male	Female	Total	Male	Female	Total
Symptom	n=281	n=357	N=638	n=356	n=389	N=745
Genital discharge	7.5%	4.2%	5.5%	8.1%	3.9%	5.9%
Symptom	n=289	n=328	N=617	n=355	n=389	N=744
Genital sores/ulcers	8.3%	2.7%	5.3%	8.2%	3.6%	5.8%
Sought treatment	n=28	n=14	N=42	n=33	n=16	N=49
Yes	100%	92.9%	97.6%	87.9%	87.5%	87.8%

Figure E: STI treatment seeking behavior in Kawambwa, by first place of treatment visited, UNHCR BSS2006



Appendix 2: Mporokoso Tables and Figures

Table A. Circumcision, Mporokoso, Zambia, UNHCR BSS2006.

Characteristics	Mwange Refugee Camp		Mwange Surrounding Community	
	Male	Female	Male	Female
Circumcised	n=356	n=545	n=343	n=509
Yes	91.3%	7.2%	3.5%	0.6%
Main reason for being circumcised	n=325	n=39	n=12	n=3
Traditional/Religion	64.3%	51.3%	0*	0*
Health/Hygiene	9.8%	20.5%	0*	0*
Sexual satisfaction	1.8%	0%	1*	0*
Prevent infection	16.3%	5.1%	6*	0*
Don't know	7.7%	23.1%	5*	3*
Would prefer a sexual partner who was circumcised ^a	n=28	n=498	n=328	n=504
Yes	21*	92.2%	5.5%	7.7%
No	5*	3.2%	88.8%	87.7%
Don't know	2*	4.6%	6.7%	4.6%
Would be interested in getting circumcised	n=25	n=467	n=323	n=501
Yes	0*	9.9%	13.9%	6.6%
No	25*	88.9%	84.8%	92.8%
Don't know	0*	1.3%	1.2%	0.6%

*data indicates raw number rather than a percentage.

^a.denominator is those not circumcised

Figure A. Reasons for prolonged absence, Mporokoso, UNHCR BSS 2006

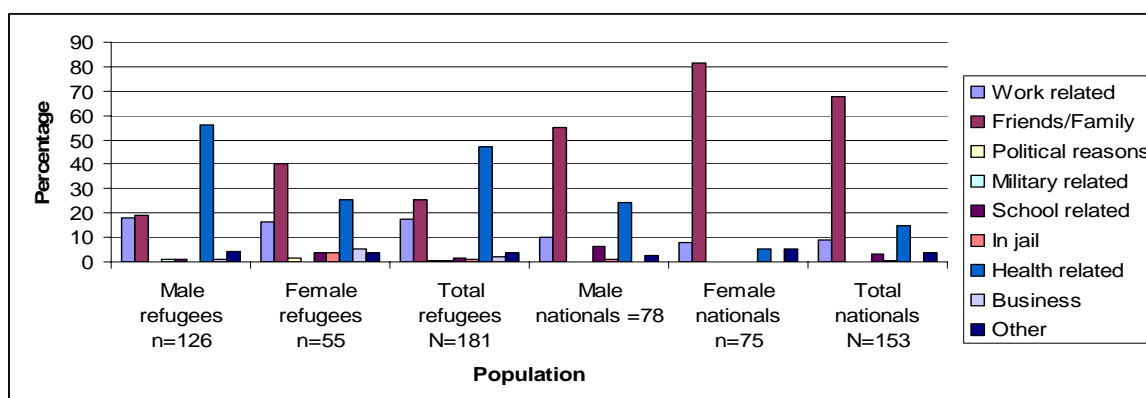


Table B. Alcohol and drug use, Mporokoso, UNHCR BSS 2006

Characteristics	Mwange Refugee Camp			Mwange Surrounding Community		
	Male	Female	Total	Male	Female	Total
Had sex while under influence of alcohol ^a	n=311	n=480	N=791	n=311	n=471	N=782
Yes	10.6%	1.7%	5.2%	19.6%	3.2%	9.7%
Condom was used during last time had sex after taking alcohol	n=33	n=8	N=41	n=61	n=15	N=76
Yes	18.2%	25.0%	19.5%	21.3%	6.7%	18.4%
Use of unprescribed drugs	n=345	n=534	N=879	n=343	n=507	N=850
Yes	5.2%	0.4%	2.3%	18.1%	0.6%	7.7%

^a this represents only those who had sex under influence of alcohol - there was no filter question to explore frequency or number who took alcohol.

Figure B: Commercial sex work, Mporokoso, UNHCR BSS 2006

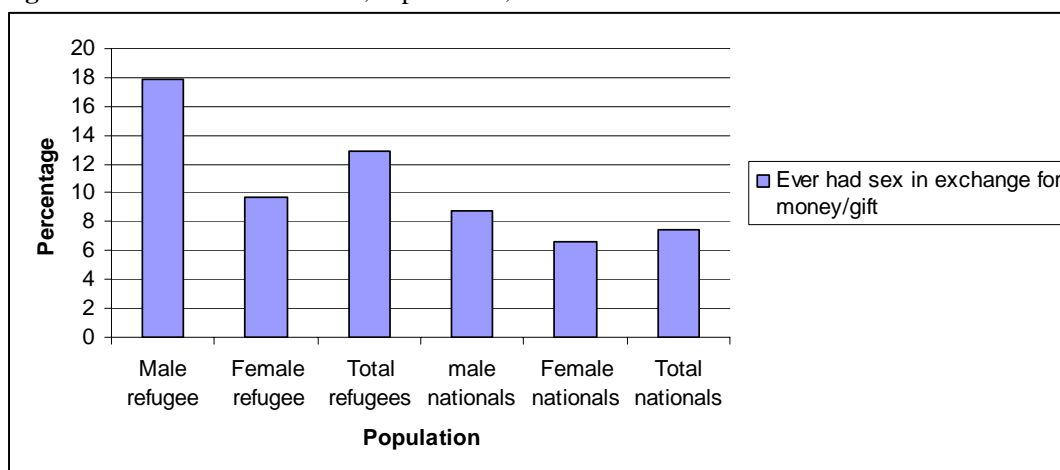


Table C: Respondents who have heard of or used condoms according to sexual partnerships, age group, education level and sex, Mporokoso, UNHCR BSS 2006

Characteristics	Mwange Refugee Camp			Mwange Surrounding Community		
	Male	Female	Total	Male	Female	Total
Ever heard of condoms	n=356	n=545	N=901	n=343	n=507	N=850
Yes	93.3%	86.1%	88.9%	98.3%	94.7%	96.1%
Ever heard of female condoms	n=332	n=469	801	n=337	n=480	N=817
Yes	52.7%	48.6%	50.3%	57.0%	58.3%	57.8%
What are condoms used for?	n=332	n=469	N=801	n=337	n=480	N=817
Protects against STI/HIV/AIDS	91.9%	88.5%	89.9%	97.0%	93.3%	94.9%
Prevents pregnancy	36.1%	31.6%	31.0%	41.5%	47.7%	45.2%
Family planning	32.5%	41.2%	37.6%	49.0%	53.8%	51.8%
Don't know	5.4%	7.5%	6.6%	2.1%	4.8%	3.7%
Was condom used during the last sex with your last/current regular partner	n=106	n=71	N=177	n=126	n=57	N=183
Yes	32.1%	19.7%	27.1%	40.5%	28.1%	36.6%
Was condom used during the last sex with your last/latest non-regular partner	n=86	n=49	N=135	n=64	n=16	N=80
Yes	29.1%	12.2%	23.0%	39.1%	25.0%	36.3
Was condom used during the last sex with paying sex partner(transactional sex)	n=32	n=26	N=58	n=18	n=17	N=35
Yes	31.3%	30.8%	31.0%	61.1%	29.4%	45.7%

Table D: Respondents who have heard of or used condoms by age, education level, Mporokoso, UNHCR BSS 2006

Characteristics	Mwange Camp Male/female Combined	Mwange Surrounding Community Male/female Combined
Ever heard of condoms	N=900	N=849
Age 15-24 years	87.5%	94.3%
Age 25-49 years	90.9%	97.3%
Ever heard of female condom	N=789	N=810
Age 15-24 years	44.6%	55.4%
Age 25-49 years	55.6%	59.8%
Ever heard of condom by education level		
None	80.1% (n=156)	91.8% (n=61)
Primary	88.5% (n=513)	95.7% (n=552)
Secondary or higher	95.2% (n=230)	97.9% (n=234)
Ever head of Female condom by education level		
None	47.2% (n=125)	67.9% (n=56)
Primary	48.7% (n=454)	57.05 (n=528)
Secondary or higher	56.2% (n=219)	56.8% (n=229)
Condom use by age group		
At last sex with current/last regular partner:	N =173	N =179
Age 15-24 years	31.8%	37.3%
Age 25-49 years	26.6%	37.7%
At last sex with last/latest non-regular partner:	N=86	N =72
Age 15-24 years	31.7%	38.7%
Age 25-49 years	20.8%	41.5%
At last sex with paying partner (transactional sex):	N=67	N=33
Age 15-24 years	33.3%	50.0%
Age 25-49 years	9.1%	46.7%
Condom use by education level		
At last sex with regular partner:	N=75	N=179
None/primary	20.0%	34.7%
Secondary/higher	52.0%	40.7%
At last sex with non-regular partner:	N=116	N=70
None/primary	21.3%	32.6%
Secondary/higher	36.6%	55.6%
At last sex with paying partner (transactional):	N=61	N=33
None/primary	22.2%	37.5%
Secondary/higher	52.0%	77.8%

Figure C: Primary place where respondents sought condoms, Mporokoso, UNHCR BSS 2006

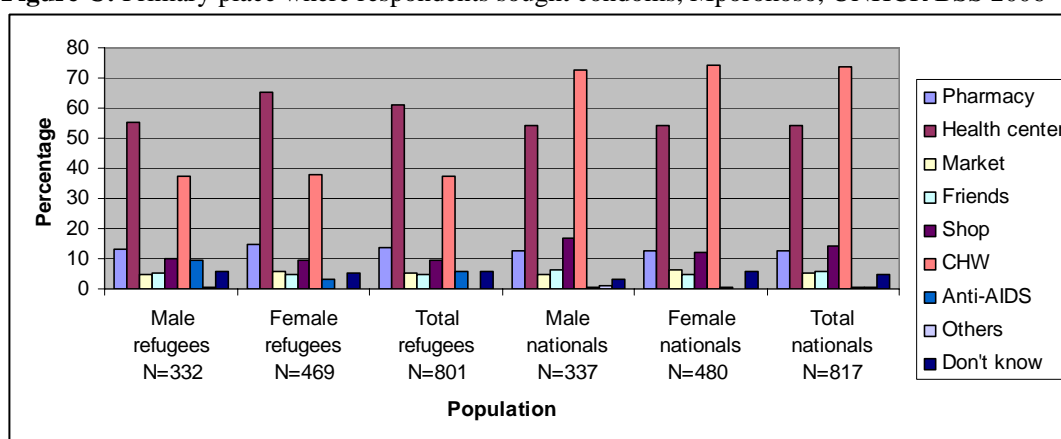


Figure D: Primary constraints in obtaining condoms, Mporokoso, UNHCR BSS 2006.

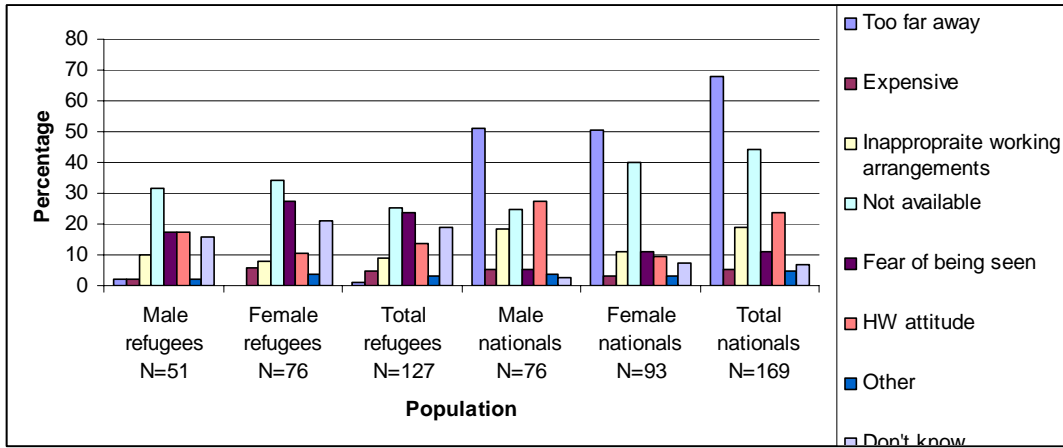
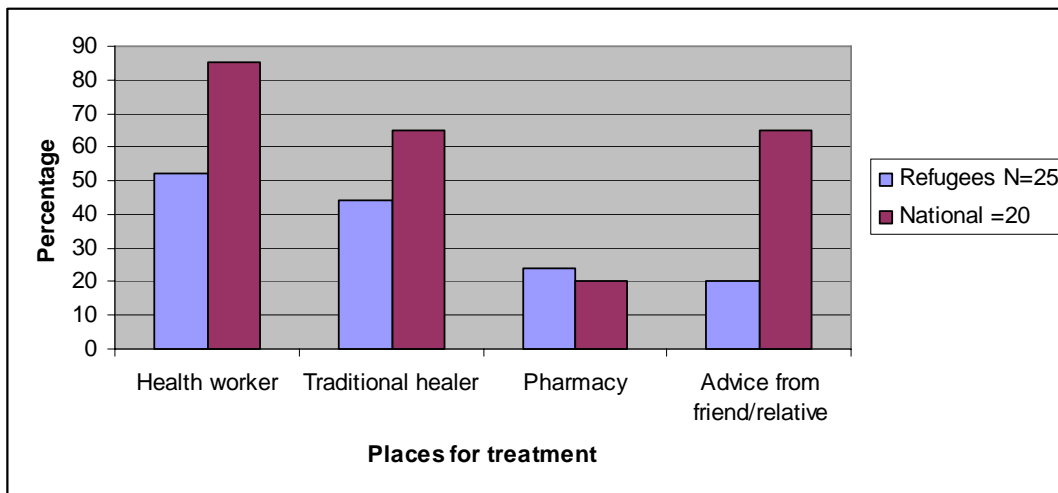


Table E: Respondents who have had symptoms of sexually transmitted infections; Mporokoso, UNHCR BSS 2006

Characteristics	Mwange Refugee Camp			Mwange Surrounding Community		
	Male	Female	Total	Male	Female	Total
Symptom	n=280	n=359	N=639	n=304	n=450	N=754
Genital discharge	6.1%	1.1%	3.3%	3.9%	1.8%	2.7%
Genital sores/ulcers	4.6%	1.1%	2.7%	3.9%	1.6%	2.5%
Sought treatment	n=19	n=5	N=24	n=12	n=8	N=20
yes	17	3	83.0%	10	7	85.0%

Figure E: STI treatment seeking behavior in Mporokoso, by first place of treatment visited, UNHCR BSS2006



FAMILY HEALTH INTERNATIONAL (FHI)
HIV/AIDS/STD BEHAVIORAL SURVEILLANCE SURVEY (BSS)
FOR USE WITH MALE AND FEMALE REFUGEE POPULATION AND SURROUNDING
COMMUNITY

Introduction: “My name is..... I’m working for the **Family Health International (FHI)**. We are interviewing people here in [name of Refugee camp/community] in order to find out about peoples HIV/AIDS knowledge, attitudes and risk behavior. Have you been interviewed in the past few days or week for this study? **IF THE RESPONDENT HAS BEEN INTERVIEWED BEFORE DURING THIS ROUND OF BSS, DO NOT INTERVIEW THIS PERSON AGAIN. TELL THEM YOU CANNOT INTERVIEW THEM A SECOND TIME. THANK THEM AND END THE INTERVIEW. IF THEY HAVE NOT BEEN INTERVIEWED BEFORE, CONTINUE: GET CONSENT USING THE STANDARD CONSENT FORM.**

001 QUESTIONNAIRE IDENTIFICATION NUMBER |__|__|__|__|

002 TOWN_____

003 REFUGEE CAMP _____

004 PLACE OF INTERVIEW:

- 1. House (inside)
- 3. House(outside)
- 4. Community Centre
- 5. Others (Specify) _____

005 ZONE/VILLAGE_____

006 DATE INTERVIEW: ______
D \M \Year

007 TOTAL TIME USED _____

008 CHECKED BY EDITOR: Signature _____ Date _____

SECTION I: BACKGROUND CHARACTERISTICS (25 questions)

N°	QUESTIONS	ANSWERS	SKIP
101.	Record sex of the respondent	1 = Male 2 = Female	
102.	In what month and year were you born Nimumweshi nshi nomwaka mwafyalilwemo?	MONTH 99 = MONTH UNKNOWN YEAR 99 = YEAR UNKNOWN	
103.	How old were you at your last birthday? Bushe mwali ne myaka inga lintu mwashalikishe ukusefya ubushiku mwafyalilwemo? (Record age in years) COMPARE WITH Q102 AND CORRECT Q102 IF NECESSARY	99 = DON'T KNOW	
104.	In which country were you born? Bushe nimuchalonsi muntu mwafyalilwe?	1 = Kenya 2 = Somali 3 = Sudan 4 = Ethiopia 5 = Congo (DRC) 6 = Burundi 7 = Eritrea 8 = Zambia 9 = Other (Specify) _____	
105.	What is your current nationality? Nga pali ino nshita mulibamuchalonsi?	1 = Kenyan 2 = Somali 3 = Sudanese 4 = Ethiopian 5 = Congolese (DRC) 6 = Burundian 7 = Eritrean 8 = Zambian 9 = Other (Specify) _____	
106.	Are you a refugee? Bushe mulibamo baisa (mbutushi)?	1 = Yes 2 = No	
107.	What is your religion? Bushe mwasumina muchilonganinonshi ichamapepo?	1 = Catholic 2 = Protestant 3 = Moslem 4 = Other (Specify) _____	
108.	Have you ever attended school? Bushe mwaliyapo kusukulu? (Different from literacy program)	1 = Yes 2 = No	If 2 go to 111
109.	What is the highest level/grade/form you completed? Mwapelele pesa mumasambililo yenu?	1 = Primary 2 = College 3 = Secondary 4 = High school 5 = University	
110.	How easy is it for you to read a paper written in Bushe kuti chamyangukila shani ukubelenga ipepala ililembelwe mufitundu ifi i. Turkana? ii. Juba arabic iii. Somali? iv. Swahili? v. English vi. Bemba vii. French viii. Lingala ix. Vira x. Fuliru xi. Kibembe xii. Mashi xiii. Kirundu xiv. Kinyarwanda (Hold up a paper written in each language) CIRCLE ONE FOR EACH QUESTION	1 = Easy 2 = Difficult 3 = Do not read at all 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3	
111.	Do you have any income generating activity? Bushe mwalikwatapo imilimo iyo musangilamo ulupiya?	1 = Yes 2 = No	If 2 go to 113

N°	QUESTIONS	ANSWERS	SKIP
112.	In what sector do you earn a living? Bushe nimunchitonshi umo mumwenamo ubwikashi? <i>(Record the principal sector)</i>	1 = Agriculture 2 = Trading 3 = Pastoralism 4 = Transport 5 = Fishing 6 = Crafts 7 = Private services 8 = Public services 9 = Other (Specify) _____	
113.	How long have you been living in this place? Bushe mwaikalamo inshita shani munchende ino?	1 = Always 2 = Less than 6 months 3 = Between 6-12 months 4 = 1-2 years 5 = 2-5 years 6 = 5 years or more 99 = Don't Know	
114.	In the last 12 months have you been away from this place for longer than one month or more? Mumwaka wapita bushe mwalitala mwafumamo muno munchende ukuchilapa mweshi umo?	1 = Yes 2 = No	If 2 go to 116
115.	Why were you away from this place for longer than a month? Chinshi chalengele ukuti mufume munchende ino ukuchilapo pamweshi umo?	1 = Work-related 2 = Family-related 3 = Political reasons 4 = Military-related 5 = School-related 6 = In jail 7 = Health-related 8 = Business 9 = Other (specify) _____	
116.	Do you visit the neighbouring community (camp or surrounding community)? Bushe mulaya mukutandala mumishi iyapalamina(inkampu/imisi yapalamina)?	1 = Yes 2 = No	If 2 go to 119
117.	How often do you go to the camp/surrounding community to visit? Bushe mulayamo libilibili mu nkampu ne mishi yapalamina mukutandala?	1 = Never 2 = Less than once a month 3 = Once a month 4 = Many times in a month	
118.	Why do you visit the refugees/ host community? Ninshi mutandalila imbutushi nangu imishi yapalamina? RECORD ALL ANSWERS GIVEN WITHOUT PROBING	1 = Shopping/ Market 2 = Health care 3 = School 4 = Job (formal/informal) 5 = Entertainment 6 = Food 7 = Visit relative/friend 8 = Business 9 = Other (specify) _____	
119.	Have you in the past 12 months talked to an NGO staff in the refugee camp concerning HIV and AIDS? Bushe mumwaka wapita mwalilandapo nababonfi ababombela munkampu (ba Red Cross HODI, Anti-AIDS club) pa bulwele bwa HIV na AIDS?	1 = Yes 2 = No	
120.	Have you ever been married? Bushe mwalitala upa (nangu ukupwapo)	1 = Yes 2 = No	If 2 go to 122
121.	How old were you when you first married? Bushe mwali ne myaka inaga elyo mwaupile/upilwe umuku wakwamba?	Age in years 99 = Don't Know	
122.	What is your current relationship status? Bushe pali ino nshita mwalikwata abena mwenu nangu iyo?	1 = Married 2 = Single 3 = Divorced 4 = Widow/ Widower 5 = Not married but living with a long term partner	If ≠ 1 go to 124
123.	Are you in a monogamous or polygamous marriage? Bushe mwaba mweka muchupo nangu mwaba mu mpali?	1 = Monogamous 2 = Polygamous	
124.	Have you ever been involved in any official or unofficial military activities? Bushe mwali sangwapo mumilimo ya bushilikali ubulibonse (iyasuminishiwa nangu ishasuminishiwa)?	1 = Yes 2 = No	If 2 go to 201
125.	How long were you involved in military activities? Bushe mwakokwelemo shani mumilimo yabushilikali? (Bushe mwaupa impali)	1 = Less than 6 months 2 = > 6 to 12 months 3 = > 1 to 2 years 4 = >2 to 4 years 5 = > 4 years	

SECTION II: MALE and FEMALE CONDOMS (8 questions)

N°	QUESTIONS	ANSWERS	SKIP
201.	Have you ever heard of condoms? Bushe mwalitala umfwapo ifya ma condom?	1 = Yes 2 = No	If 2 go to 301
202.	What do you think condoms are used for? Bushe mutontonkanya ati condom yibomba inchitonshi? (RECORD ALL ANSWERS GIVEN)	1 = Protects against STI/HIV/AIDS 2 = Prevents pregnancy 3 = Family Planning 4 = Other (Specify) _____ 99 = Don't know	
203.	Where can you/a person get condom from? Nikwisa uko imwe nangula umuntu engasanga condom? (RECORD ALL ANSWERS GIVEN)	1 = Pharmacy 2 = Health facility 3 = At the market 4 = From my friends 5 = At the shop 6 = Community health worker 7 = Other (Specify) _____ 99 = Don't know	
204.	How easy is it to obtain a condom from this place? Bushe chali anguka ukusanga condom muli ino inchende	1 = Easy 2 = Difficult 3 = It depends	If 1 go to 206
205.	What are the constraints to obtaining a condom? Bushe maafyanshi ayo mukwata pakusanga ama condom? <i>Record all answers given</i>	1 = Too far away (geographical access) 2 = It's expensive 3 = Inappropriate working arrangement 4 = Not available 5 = Fear of being seen 6 = Health worker's attitude 7 = Other (specify) _____ 99 = Don't know	
206.	Have you ever heard of a female condom? Bushe mwalitala umfwapo palwa condom yabanamayo?	1 = Yes 2 = No	If 2, go to Q301
207.	How easy is it to get a female condom? Bushe chalianguka ukusanga condom yabanamayo?	1 = Easy 2 = Difficult 3 = It depends	
208.	Would you/your partner be willing to use female condom if available? Bushe imwe nangu umutemwikwa wenu kuti mwatemwa ukubomfya condom yabanamayo ngamwaliyisangile?	1 = Yes 2 = No 99 = Don't know	

SECTION III: SEXUAL HISTORY AND RISK BEHAVIOUR (50 questions)

N°	QUESTIONS	ANSWERS	SKIP
A. REGULAR PARTNERS			
301.	Have you ever had sexual intercourse? Bushe mwalitala kumanapo no mwaume/umwanakashi?	1 = Yes 2 = No	IF 2 THEN GO TO Q339
302.	At what age did you first have sexual intercourse? Bushe mwakwete imyaka inga ilyo mwakumenepo umu ku wa kubala	Age in years 99 = Don't know	
303.	IS RESPONDENT CURRENTLY MARRIED OR LIVING WITH A PARTNER WITH WHOM HE/SHE HAS A SEXUAL RELATIONSHIP? CHECK ANSWER TO Q122	1 = Yes 2 = No	
304.	Have you ever had a regular (sexual) partner? (A regular sexual partner is defined as a girl friend NOT spouse/ wife, not live in partner in the 12 months prior to survey) Bushe mwalitala kwatapo umutemwika wapambali	1 = Yes 2 = No	If 2 go to Q312
305.	What is the nationality of your last/ current regular partner? Bushe umutemwika wenu mwashalikishe ukukwata nangu uwo mwakwata waku chalonsi?	1 = Kenyan 2 = Somali 3 = Sudanese 4 = Ethiopian 5 = Congolese (RDC) 6 = Burundian 7 = Eritrean 8 = Zambian 9 = Other (Specify) _____	
306.	How old was/is your last/ current regular partner? Bushe umutemwikwa wenu mwakwete uwachilanshinta uwo mwakwete/kwata ali ne myaka inga?	Age in years 99 = Don't know	
307.	Was a condom used during the LAST TIME you had sex with your last/ current regular partner?	1 = Yes 2 = No	If 2 go to Q309

N°	QUESTIONS	ANSWERS	SKIP
	Umuku walekeleshe ukukumana no mutemwikwa wenu uwo mwakwata/mwakwete bushe mwali bonfesheshe condom?		
308.	Who suggested the use of a condom? Nani uwapingwile ukubonfya condom?	1 = My partner 2 = Myself <input type="checkbox"/> 3 = Joint decision	Igo to 310
309.	Why was a condom not used during the last time you had sex with your last/ current regular partner? Chinshi icho tamwa bonfweyeshe condom ilyo mwakumene no mutemwikwa we nu umukuwakulekhesha no mutemwikwa wenu uwo mwakwete nangu uwo mwakwata? <i>Record all answers given</i>	1 = Not available <input type="checkbox"/> 2 = Too expensive <input type="checkbox"/> 3 = Partner objected <input type="checkbox"/> 4 = Don't like them <input type="checkbox"/> 5 = Used other contraceptive <input type="checkbox"/> 6 = I trust my partner <input type="checkbox"/> 7 = Didn't think of it <input type="checkbox"/> 8 = Don't know what condom is <input type="checkbox"/> 9 = Other (Specify) _____ <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
310.	How many regular partners did you have in the last 12 months (or since you arrive in this place, if less than 12 months)? Nibanga abatamwikwa abomwakwete mumwaka uwapita nangu apomwafikila muli ino nchende ngachakuti tapalapita umwaka. REFUGEE ONLY	Provide Number If none, state 0 <input type="text"/> 99 = Don't know	
311.	How many regular partners did you have sex with during the last 12 months (or since you arrive in this place, if less than 12 months)? Nibanga abatamwikwa abomwakwete mumwaka uwapita nangu apomwafikila muli ino nchende ngachakuti tapalapita umwaka. SURROUNDING COMMUNITY ONLY	Provide Number If none, state 0 <input type="text"/> 99 = Don't know	
B. NON REGULAR (OCCASIONAL) PARTNERS			
312.	Have you ever had sex with a non regular partner? (A non regular partner is defined as any sexual partner different from the live in partner, regular girlfriend or paid for sex/sex worker) Bushe mwalitala amukumanapo naumbi ushili mutemwikwa wenu uwachilanshita?	1 = Yes <input type="checkbox"/> 2 = No	If 2 go to Q322
313.	What is the nationality of your last/current non regular partner? Bushe umtemwikwa wenu uwo mwakwe nangu owo mukweke wamu chalonshi?	1 = Kenyan 2 = Somali 3 = Sudanese 4 = Ethiopian <input type="text"/> 5 = Congolese (DRC) 6 = Burundian 7 = Eritrean 8 = Zambian 9 = Other (Specify) _____ 99 = Don't know	
314.	What is the marital status of your last/current non regular partner? Bushe umtemwikwa wenu uwushili wachilanshita uwomwakwete nangu uwo mwakwata bushe alyupwa nangula iyoo?	1 = Married 2 = Single 3 = Divorced <input type="text"/> 4 = Widow/widower 5 = Other (Specify) _____ 99 = Don't know	
315.	What is the profession of your last non regular partner? Milimonshi intu asambilila umtemwikwa wenu ushili wa chilanshita?	1 = Student 2 = unemployed 3 = Driver/ Truck driver <input type="text"/> 4 = Housemaid 5 = Traders 6 = Pastoralist 7 = Farmer 8 = military/ security forces 9 = Commercial sex workers 10 = Humanitarian agent 11 = Other (Specify) 99 = Don't know	
316.	How many non regular partners did you have sex with during the last 12 months (or since you arrived here if <12 months)? Nibanga abatamwikwa abashili bacilanshita abomwakwete mumwaka uwapita nangu apomwafikila muli ino nchende ngachakuti tapalapita umwaka. REFUGEE ONLY	Provide Number If none, state 0 <input type="text"/> 99 = Don't know	
317.	How many non regular partners did you have sex with during the last 12 months (or since you arrived here, if less than 12 months)? Nibanga abatamwikwa abashili bacilanshita abomwakwete mumwaka uwapita nangu apomwafikila muli ino nchende ngachakuti tapalapita umwaka.	Provide Number If none, state 0 <input type="text"/> 99 = Don't know	

N°	QUESTIONS	ANSWERS	SKIP
	SURROUNDING COMMUNITY		
318.	How many non regular partners did you have sex with during the last 30 days? Muli uyu mweshi wapiti nibanga abatemiwika benu abashili bachilanshita abo mwakumananabo?	Provide Number If none, state 0 _____ 99 = Don't know	
319.	Was a condom used during the last time you had sex with a (the latest) non regular partner? Umuku mwalekeleshe ukukumana no ushili mutemiwika wenu bushe mwali bonfeshe condom?	1 = Yes 2 = No	If 2 go to Q321
320.	Who suggested the use of a condom? Nani uwapingwile ukubonfwa condom?	1 = My partner 2 = Myself _____ 3 = Joint decision	Go to 322
321.	Why was a condom not used during the last time you had sex with a non regular partner? Mulanunshi uwo tamwa bonfwyeshe condom ilyo mwakumene no ushili mutemiwika wenu <i>Record all answers given</i>	1 = Not available _____ 2 = Too expensive _____ 3 = Partner objected _____ 4 = Don't like them _____ 5 = Used other contraceptive _____ 6 = Didn't think it was necessary _____ 7 = Didn't think of it _____ 8 = Don't know what condom is _____ 9 = Unplanned sex _____ 10 = Other (Specify) _____ 99 = Don't know _____	
C. OTHER			
322.	Have you ever had sex in exchange for money/ gift? Bushe mwalitala pokapo ulupiya nangu ichilambu panuma yak u kumana no muntu?	1 = Yes 2 = No _____	If 2 go to Q331
323.	During which period did you have sex in exchange for money/ gift? Bushe nililali ilyo mwapelwepo impiya nangu ichabupe panuma yakuku mana no muntu? <i>Record all given answers</i> REFUGEE ONLY	1 = Before displacement 2 = During displacement _____ 3 = After displacement	
324.	During which period did you have sex in exchange for money/ gift? Bushe nililali ilyo mwapelwepo impiya nangu ichabupe panuma yakuku mana no muntu? <i>Record all given answers</i> SURROUND COMMUNITY ONLY	1 = Before refugees arrived 2 = After refugees arrived _____	
325.	How many persons did you have sex with during the last 30 days in exchange for money/ gift? Muli uyu mweshi wapiti nibanga abantu abo mwakumanapo nabo muchifulo chakupelwa ulupiya nangu ichabupe	Provide Number If none, state 0 _____ 99 = Don't know	If 0 go to q331
326.	Who did you have sex with in exchange for money/ gift? Bushe kuti mwanjebako abomwakumene nabo ukuti benga mipela ulupiya nangu ichabupe ichili chonse?	1 = Refugee _____ 2 = Person from local community _____ 3 = Military _____ 4 = UN peacekeeper _____ 5 = Humanitarian worker _____ 6 = Other (Specify) _____ 99 = Don't know _____	
327.	When was the last time you had sex in exchange for money/ gift? Nililali mwalekeleshe ukukumana muchifulo chakupelwa ulupiya nangu ichabupe?	1 = less than one month 2 = 1 - 3 months 3 = >3 - 6 months _____ 4 = >6 - 12 months 5 = More than 1 year 99 = Don't know	
328.	Was a condom used during the last time you had sex in exchange for money/ gift? Bushe mwalibonfeshe condom umuku mwashalikeshe ukukumana muchifulo chakupilwa nangu ukupelwapo fimo?	1 = Yes 2 = No _____	If 2 go to Q330
329.	Who suggested the use of a condom? Nani uwapingwile ukubonfya condom?	1 = The partner 2 = Myself _____ 3 = Joint decision	Go to Q331
330.	Why was a condom not used during the last time you had sex in exchange for money/ gift? Mulanunshi mushabonfwyeshe condom umuku mwashalikeshe ukukumana muchifulo chakupilwa nangu ukupelwa fimo? <i>Record all answers given</i>	1 = Not available _____ 2 = Too expensive _____ 3 = Partner objected _____ 4 = Don't like them _____ 5 = Used other contraceptive _____ 6 = Trust my partner _____ 7 = Didn't think of using one _____ 8 = Don't know what condom is _____ 9 = Unplanned sex _____	

N°	QUESTIONS	ANSWERS	SKIP
		10 = Other (Specify) _____ <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
331.	Have you ever been forced to have sex? Mwalitala amupatikishiwapo ukukumana?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/>	If 2 go to 337
332.	When was the last time you were forced to have sex? Nililali mwalekeleshe ukukumana mukupatikishiwa?	1 = less than 1 year ago 2 = 1-2 years ago 3 = 3-5 years ago 4 = more than 5 years ago 6 = I don't know/remember year	
333.	How many times were you forced to have sex? Miku inga intu mwapatikishiwapo ukukumana?	Provide Number <input type="checkbox"/> 99 = Don't know	
334.	During which period were you forced to have sex? Nimunshitanshi ilyo mwapatikishiwapo ukukuma? Nililwa mwali ku Congo nangu ilyo mwaleisa? REFUGEE ONLY	1 = Before displacement 2 = During displacement 3 = After displacement	
335.	During which period were you forced to have sex? Nililali ilyo mwapatikishiwapo ukukumana? SURROUNDING COMMUNITY ONLY	1 = Before refugees arrived 2 = After refugees arrived <input type="checkbox"/> 3 = Other (Specify) _____	
336.	Who forced you to have sex? Nibani abamipatikishe ukukumana nabo?	1 = Refugee <input type="checkbox"/> 2 = Person from local community <input type="checkbox"/> 3 = Military/ militias/ Other security forces <input type="checkbox"/> 4 = UN peacekeeper <input type="checkbox"/> 5 = Humanitarian worker <input type="checkbox"/> 6 = Other (Specify) <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
337.	Have you ever had sex while you were under the influence of alcohol? Bushe mwalibala amukumanapo libe ninshi namukolwa?	1 = Yes 2 = No <input type="checkbox"/>	If 2 go to Q339
338.	Was a condom used during the last time you had sex after taking alcohol? Bushe umuku mwashalikishe ukukumana libeninshi namunwamo ubwalwa bushe mwalibonfyeshe condom?	1 = Yes 2 = No <input type="checkbox"/>	
339.	Have you ever taken drugs (such as miraa, bangi, heroine, crack, Ichamba...)? Bushe mwalitala amubonfyapo imiti iyi kolangeyi/ (DO NOT CONSIDER DRUG INJECTED FOR MEDICAL TREATMENT OF AN ILLNESS)	1 = Yes 2 = No <input type="checkbox"/>	If 2 go to Q341
340.	People can take drug in various ways, in which way have you taken? Abantu kutu babomfya imiti iyi kola munshila iyapusana pusana ngaimwe musangonshi mwabonfyeshamo? Record all answers given	1 = Inhalation <input type="checkbox"/> 2 = Injection <input type="checkbox"/> 3 = Smoking <input type="checkbox"/> 4 = Chewing <input type="checkbox"/> 5 = Orally <input type="checkbox"/> 6 = Other (Specify) _____ <input type="checkbox"/>	
341.	Have you ever shared syringe with other people/neighbours who consume drugs? Bushe mwalitala amubomfyapo inshindano imoine nabanthu nangu abenamupalamano ababomfya imiti iyikola? (DO NOT CONSIDER DRUG INJECTED FOR MEDICAL TREATMENT OF AN ILLNESS)	1 = Yes 2 = No <input type="checkbox"/>	
342.	(IF A MALE RESPONDENT, ASK): Have you ever had a male sexual partner? Bushe mwalikwatapo umutemwikwa umwaume munenu uwo mulala nankwe	1 = Yes 2 = No <input type="checkbox"/>	If 2 go to q401
343.	When did you first have sexual relationship with a male partner? Nililali mwabalilepo ukukumana nomutemwikwa wenu bwaume bwaume? ninshi tamulabutuka? pakubutuka nangu ninshi mwalfika? (REFUGEE ONLY)	1 = Before displacement 2 = During displacement <input type="checkbox"/> 3 = After displacement	
344.	When did you first have sexual relationship with a male partner? Nililali mwabalilepo ukukumana nomutemwikwa wenu bwaume bwaume? nilya imbutushi tashili shaisa nangu nilya shaishile? (SURROUNDING COMMUNITY ONLY)	1 = Before refugee arrived 2 = After refugee arrived <input type="checkbox"/>	
345.	How often did/ do you have sex with a male partner? Bushe mulakumana libililibili no mutemwikwa umwaume?	1 = Often 2 = Sometimes <input type="checkbox"/> 3 = Occasionally or rarely	
346.	Was a condom used during the last time you had sex with a male partner? Bushe mwalibonfyeshe condom ilyo mwakumene nomwaume munenu umuku wakushalikisha?	1 = Yes <input type="checkbox"/> 2 = No	If 1 go to q401
347.	Why didn't you and your male partner use a condom the last time you had sex? Mulandunshi tamwabomfyeshe condom umuku wakushalikisha?	1 = Not available <input type="checkbox"/> 2 = Too expensive <input type="checkbox"/> 3 = Partner objected <input type="checkbox"/>	

N°	QUESTIONS	ANSWERS	SKIP
		4 = Don't like them <input type="checkbox"/> 5 = Don't know what condom is <input type="checkbox"/> 6 = I trusted my partner <input type="checkbox"/> 7 = Didn't think of it <input type="checkbox"/> 8 = Unplanned sex <input type="checkbox"/> 9 = Other (Specify) _____ <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	

SECTION IV: KNOWLEDGE, OPINIONS, and ATTITUDES towards HIV/AIDS (25 questions)

N°	QUESTIONS	ANSWERS	SKIP
401.	Have you ever heard of HIV or a disease called AIDS? Bushe mwalitala amunfwapo pakashishi ka HIV nangu ubulweke bwa AIDS (SIDA)?	1 = Yes 2 = No <input type="checkbox"/>	If 2 go to 501
402.	From where do you usually hear about HIV/AIDS? Nikwisa mwaumfwile pamulandu wa buwele bwa HIV/AIDS? <i>Record all answers given</i>	1 = Radio <input type="checkbox"/> 2 = TV/ Video <input type="checkbox"/> 3 = Newspaper <input type="checkbox"/> 4 = VCT/ Health facility/ <input type="checkbox"/> 5 = Friend <input type="checkbox"/> 6 = Poster/pamphlet <input type="checkbox"/> 7 = Brother/Sister <input type="checkbox"/> 8 = Community health worker <input type="checkbox"/> 9 = School <input type="checkbox"/> 10 = Others (specify) _____ <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
403.	Where do you think there are more cases of HIV/AIDS, in your community or the surrounding local community? Bushe muletantokanya nikwisa uko ubulwele bwa HIV/AIDS wafulila, nimumyenu mucampu nangu nimumishi iyamishinguluka? REFUGEE ONLY	1 = My (refugee) community 2 = Surrounding local community <input type="checkbox"/> 99= Don't know	
404.	Where do you think there are more cases of HIV/AIDS in your community or the refugee community? Bushe muletantokanya nikwisa uko ubulwele bwa HIV/AIDS yafulila, mucampu nangu nimumishi iyamishinguluka? SURROUNDING COMMUNITY ONLY	1 = My (surrounding local) community 2 = Refugee community <input type="checkbox"/> 99= Don't know	
405.	Do you know anyone who has died of AIDS in your community? Bushe mwalishibapo uulionse uwafwa no bulwele bwa AIDS umo mwikala?	1 = Yes 2 = No <input type="checkbox"/> 99 = Don't know	
406.	How can a person get AIDS? Bushe umuntu kuti aambula shani ubulwele bwa AIDS? (RECORD ALL GIVEN ANSWERS WITHOUT PROBING)	1 = Through sexual intercourse <input type="checkbox"/> 2 = Having sexual intercourse with multiple partners <input type="checkbox"/> 3 = Having sex with prostitutes <input type="checkbox"/> 4 = Not using condom during casual sex <input type="checkbox"/> 5 = Through homosexual contact <input type="checkbox"/> 6 = Blood transfusion <input type="checkbox"/> 7 = Kissing <input type="checkbox"/> 8 = Mosquito bites <input type="checkbox"/> 9 = Sharing sharp objects like razor blades <input type="checkbox"/> 10 = Sharing unsterilised/reusing needles <input type="checkbox"/> 11 = Mother to unborn child <input type="checkbox"/> 12 = Sharing toilets <input type="checkbox"/> 13 = Sharing eating utensils <input type="checkbox"/> 14 = Other (specify) _____ <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
407.	Is there any thing a person can do to avoid getting HIV/AIDS or the virus that causes AIDS? Bushe palipo ifyo umuntu engachita pakulesha ukwambula amalwele ya AIDS nangula akashishi akalenga ubulwele bwa AIDS?	1 = Yes 2 = No <input type="checkbox"/> 99 = Don't know	If ≠ 2 go to 409
408.	What can a person do? Ngafinshi ifyo umuntu engachita? (RECORD ALL ANSWERS GIVEN WITHOUT PROBING)	1 = Abstain from sex <input type="checkbox"/> 2 = Use condom <input type="checkbox"/> 3 = Limit sex to one partner/ Stay faithful to one partner <input type="checkbox"/> 4 = Limit number of sexual partner <input type="checkbox"/> 5 = Avoid sex with prostitutes <input type="checkbox"/> 6 = Avoid sex with person who have many partners <input type="checkbox"/> 7 = Avoid sex with men having sex with men <input type="checkbox"/> 8 = Avoid sex with person who inject drug intravenous <input type="checkbox"/> 9 = Avoid blood transfusion <input type="checkbox"/> 10 = Avoid injection <input type="checkbox"/> 11 = Avoid sharing razors/ blades <input type="checkbox"/>	

N°	QUESTIONS	ANSWERS	SKIP
		12 = Avoid kissing <input type="checkbox"/> 13 = Avoid mosquito bites <input type="checkbox"/> 14 = Seek protection from traditional practitioners <input type="checkbox"/> 15 = Other (specify) _____ <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
409.	Can people protect themselves from HIV infection by staying faithful to one uninfected faithful sex partner? Bushe abantu kuti baichingilila abene mukwambula akashishi ka HIV/AIDS mukwikala abaichetekela umo naumo aba ushalwala na untu bakumana nankwe?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
410.	Can people protect themselves from HIV infection by using a condom correctly every time they have sex? Bushe abantu kuti baichingilila kukashishi ka HIV mukubomfya bwino condom cilanshita balekumana?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
411.	Can people protect themselves from HIV infection by abstaining from sex? Bushe abantu kutii baichingilila ku kashishi ka HIV mukukana kumana?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
412.	Can people get infected with HIV by sharing eating utensils with someone who is infected? Bushe abantu kuti ambula akashishi ka HIV mukulila pambale shim oshine no muntu uwakwata akashishi?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
413.	Can a person get infected by HIV by taking injections with a needle that was already used by someone else? Bushe umuntu kuti ambula akashishi ka HIV mukubomfya inshindano iyabofyapo umuntu umbi?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
414.	Is it possible for a healthy-looking person to be infected with HIV, the virus that cause AIDS? Bushe chilli ichayanguka umuntu ulemonka uwabumi ukukwata akashisi ka HIV akaleta AIDS?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
415.	Can a pregnant woman with HIV/AIDS, transmit the virus to her unborn child during pregnancy? Bushe kuti namayo ulinefumo uwakwata akashishi ka HIV aambukishako umwana ushila fyalwa akashishi lintu alipabukulu?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	If 2, go to 417
416.	What can a pregnant woman with HIV/AIDS do to reduce the risk of transmitting HIV to her unborn child (RECORD ALL ANSWERS GIVEN) Finshi namayo engachita ulipabukulu uwakwata akashisi ka HIV/AIDS pakuchefyanya ubusanso bwakwambukisho mwanawakwe ushilafyalwa kukashishi ka HIV?	1 = Take Medications (antiretroviral) <input type="checkbox"/> 2 = See a health worker <input type="checkbox"/> 3 = See traditional healer <input type="checkbox"/> 4 = Other (specify) _____ <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
417.	Can a pregnant woman with HIV/AIDS transmit the virus to her baby during delivery? Bushe namayo uulipabukulu kuti ambukisho mwanawakwe ubulwele bwe HIV/AIDS panshita ya kupapa?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
418.	Can a woman with HIV/AIDS transmit the virus to her baby during breastfeeding? Bushe namayo uulipabukulu kuti ambukisho mwanawakwe ubulwele bwe HIV/AIDS panshita ya kumuyonshya?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
419.	Where would you like us to talk about HIV/AIDS? Nimunshilanshi mwinga temwa ubulwelw bwa HIV/AIDS ukulandilwamo? (RECORD ALL ANSWERS GIVEN)	1 = On radio <input type="checkbox"/> 2 = At school <input type="checkbox"/> 3 = During public sensitization <input type="checkbox"/> 4 = In newspapers <input type="checkbox"/> 5 = Other (specify) _____ <input type="checkbox"/>	
420.	If a member of your community got infected with the virus that causes AIDS, would you want it to remain a secret? Ngachakuti umuntu mumushi mwikala ayambula akashishi akalenga ubulwele bwa HIV/AIDS, kuti mwatemwa yaba ni nkama?	1 = Yes (keep it secret) <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
421.	If a member of your family got infected with the virus that causes AIDS, would you want it to remain a secret? Ngachakuti umuntu uwamulupwa lweni ayambula akashishi kalenga ubulwele bwa AIDS kuti mwatemwa cabe inkama/	1 = Yes (keep it secret) <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	
422.	If a female relative of yours became sick with the virus that causes AIDS, would you be willing to care for her in your own household? Ngachakuti lupwalwenu umukashana alilwele ku kashishi akalenga ubulwee bwa AIDS, bushe kuti mwakabila ukulamutensha mung'anda yenu?	1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 99 = Don't know <input type="checkbox"/>	

N°	QUESTIONS	ANSWERS	SKIP
423.	If a male relative of yours became sick with the virus that causes AIDS, would you be willing to care for him in your own household? Ngachakuti lupwalwenu umulumendo alilwele ku kashishi akalenga ubulwee bwa AIDS, bushe kuti mwakabila ukulamutensha mung'anda yenu?	1 = Yes 2 = No 99 = Don't know	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
424.	If a person got infected with the virus that causes AIDS, should he/ she be allowed to stay in his/her work place? Ngachakuti umuntu alilwele na kashishi akalenga AIDS bushe kuti asuminishiwa ukutwalilila ukwikala panchito?	1 = Yes 2 = No 99 = Don't know	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
425.	Should young adolescents be taught on how to use condoms? Bushe abalumendo nabakashana bafwile ukufundwa ifyakubomfya condom?	1 = Yes 2 = No 99 = Don't know	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

SECTION V: SEXUALLY TRANSMITTED INFECTIONS (13 questions)

N°	QUESTIONS	ANSWERS	SKIP															
501.	Apart from AIDS, have you heard about other diseases that can be transmitted through sexual intercourse? Ukuchila pa bulwele bwa AIDS bushe wali umfwakoo amalwele yambi ayenga ambukila ukupitila mukukumana?	1 = Yes 2 = No	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> If 2 go to 508															
502.	If a man has a sexually transmitted disease, what symptoms might he have? Bushe filangilishi ifyo umwaume engeshibilako nga akwata amalwele ya lwambu? (RECORD ALL ANSWERS GIVEN WITHOUT PROBING)	1 = Abdominal pain 2 = Genital discharge/ Dripping 3 = Foul smelling discharge 4 = Burning sensation on urination 5 = Redness/ Inflammation in genital area 6 = Genital sores/ Ulcers 7 = Genital warts to be revised 8 = Genital itching 9 = Blood in urine 10 = Loss of weight 11 = Impotence 12 = Other (Specify) _____ 99 = Don't know	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
503.	If a woman has a sexually transmitted disease, what symptoms might she have? Bushe filangilishi ifyo umwanakashi engeshibilako nga akwata amalwele ya lwambu? (RECORD ALL ANSWERS GIVEN WITHOUT PROBING)	1 = Abdominal pain 2 = Genital discharge/ Dripping 3 = Foul smelling discharge 4 = Burning pain on urination 5 = Redness/ Inflammation in genital area 6 = Swelling in genital area 7 = Genital sores/ Ulcers 8 = Genital warts 9 = Genital itching 10 = Blood in urine 11 = Loss of weight 12 = Hard to get pregnant/ Have a child 13 = Other (Specify) _____ 99 = Don't know	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
504.	Did you have any of the following sexual infection during the last 12 months? Bushe mwalitala amukwatapo aya amalwele mumwaka wapita? (Please note that if answer is yes in a or b only, you ask 505)	<table style="width: 100%; border: none;"> <tr> <td></td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> </tr> <tr> <td>a. Genital discharge?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>b. genital sore/ ulcers?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </table>		Yes	No	a. Genital discharge?	1	2	b. genital sore/ ulcers?	1	2	If answer is 2 (in a and b) go to 508						
	Yes	No																
a. Genital discharge?	1	2																
b. genital sore/ ulcers?	1	2																
505.	During the last time you had a sexually transmitted infection, did you seek for treatment? Mumuku mwashalikishapo ukukwata amalwele yalwambu mukukumana bushe mwaliile kukundwapwa?	1 = Yes 2 = No	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> If 2 go to 508															
506.	During the last time you had a sexually transmitted infection; did you do one of the following? Munshita yakushalikisha ilyo mwakwete ubulwele bwa lwambu ukupitila mukukumana bushe mwalichitile chimo pali ifi? ANSWER EACH QUESTION	<table style="width: 100%; border: none;"> <tr> <td></td> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td>Seek treatment/ advice from a health worker</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Seek treatment from a traditional practitioner</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Seek treatment/ buy medicine at the pharmacy</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Seek advice from a friend/ relative</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </table>		Y	N	Seek treatment/ advice from a health worker	1	2	Seek treatment from a traditional practitioner	1	2	Seek treatment/ buy medicine at the pharmacy	1	2	Seek advice from a friend/ relative	1	2	
	Y	N																
Seek treatment/ advice from a health worker	1	2																
Seek treatment from a traditional practitioner	1	2																
Seek treatment/ buy medicine at the pharmacy	1	2																
Seek advice from a friend/ relative	1	2																
507.	During the last time you had a sexually transmitted infection did you inform your sexual partner(s)? Umuku mwashalikishe ukukwata amalwele yalwambu ayapitila mukukumana bushe mwalishibisheko umutemwikwa nangu abatemwikwa benu abomukumana	1 = Yes (all of them) 2 = No 3 = Some of them, not all	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															

	nabo?		
508.	Some men and women have been circumcised, have you been circumcised? Abaume bambi na banakashi balisembululwa, bushe ngaimwe mwalisembululwa?	1 = Yes 2 = No	_____
509.	At what age were you circumcised? Mwali ne myaka inga ilyo bamisembulwile?	99 = Don't know/ don't remember	_____
510.	What is the main reason you were circumcised for? Bushe mulandunshi uukalamba uwo mwasembulwile?	1 = Tradition/ religion 2 = Health/ Hygiene 3 = Sexual satisfaction 4 = Prevent genital infections 5 = Other (Specify) _____ 99 = Don't know	_____
511.	If you could choose, would you prefer a sexual partner who was circumcised or not circumcised? Ngachakuti mwalipakusala bushe kuti mwafwaya umutemwikwa uwasembululwa nangu uusha sembululwa?	1 = Circumcised 2 = Not circumcised 3 = Don't know/ no preference	_____
512.	Would you be interested in getting circumcised if it was affordable and safe? Ngachakutula ukusembululwa ngatamuli ubwafya elyo nokukwanisha kuti mwakwanisha bushe kuti mwakabila ukusembululwa?	1 = Yes 2 = No 99 = Don't know	_____

SECTION VI: KNOWLEDGE AND ACCESSIBILITY OF SERVICES (13 questions)

N°	QUESTIONS	ANSWERS	SKIP
601.	Do you know a place where a person can be tested for HIV? Bushe mwalishiba nchende uko umuntu enga pimwa nganakwata akashishi ka AIDS?	1 = Yes 2 = No	_____
602.	Where can a person get an HIV test? Bushe ni kwisa eko umuntu engaya pimisha palwa kashishi ka HIV? (RECORD ALL ANSWERS GIVEN WITHOUT PROBING)	Public sector 1 = Hospital 2 = Health facility government 3 = Clinic/ family planning 4 = Mobile Clinic 5 = Other (Specify) _____ Private Sector 6 = Private hospital/ Clinic 7 = Pharmacy 8 = Private medical doctor 9 = Mobile clinic 10 = Traditional healer 11 = Other (Specify) _____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____
603.	Do you know where a person can receive HIV Voluntary Counselling Test (VCT)? Bushe mwalishibako uko umuntu engapokelela amafundisho ya VCT nokupimwa palwakashishi ka HIV?	1 = Yes 2 = No 99 = Don't know	_____
604.	Do VCT services exist locally and/or in the camp? Bushe imilimo ya VCT munchende mwaikala nangu mu kampu ilasangwa?	1 = Locally 2 = In refugee camp 3 = In both sites 99 = Don't know	_____ 3 =
605.	Where did you learn that such services exist? Bushe nikwisa uko mwasambilile/ukwishiba ukuti iyi milimo ilasangwa?	1 = School 2 = Health services 3 = Presentations 4 = Posters 5 = Community health workers 6 = Sign post/ board 7 = Other (Specify) _____	_____ _____ _____ _____ _____ _____
606.	Have you ever been tested for HIV? Bushe mwalitala mwapimwapalwakashishi ka HIV? <i>(State that you do not want to know the result of the test)</i>	1 = Yes 2 = No	_____
607.	When was the last time you were tested for HIV? Nililali mwashalikishe ukupimwa palwa kashishi ka HIV?	1 = Less than 1 month ago 2 = Between 1-6 months ago 3 = Between 6 to 12 months ago	_____

N°	QUESTIONS	ANSWERS	SKIP
		4 = Between 1-2 years ago 5 = More than 2 years ago 99 = Don't know	
608.	Did you obtain the result of the test? Bushe mwalipokele ubwasuko bwafumine mukupimwa?	1 = Yes 2 = No 99 = Don't know/can't remember	_____
609.	Why didn't you receive the test result? Chinshi tamwapokele ubwasuko panuma yaku pimisha?	1 = Sure of not being infected 2 = Afraid for the result 3 = Don't believe in its confidentiality 4 = Forgot it 5 = Other (Specify) 99 = Don't know	_____
610.	Would you go for a test in the future? Bushe kunshita yakuntashi kuti mwaya mukupimisha?	1 = Yes 2 = No 99 = Don't know/not sure	_____
611.	Why don't you want to go for a test? Bushe ninshi mushifwayila ukuya mukupimisha?	1 = Sure of not being infected 2 = Afraid for the result 3 = Afraid for the blood taking 4 = (Afraid for) catching an infection 5 = Fear of stigmatization 6 = Its expensiveness 7 = Other (Specify) _____ 99 = Don't know	_____
612.	Is the test accessible to all? Bushe uuli onse kuti aya pimisha?	1 = Yes 2 = No 99 = Don't know/	_____
613.	Who have difficulties getting to the VCT? Nibani baba namafya ukuya ku VCT	1 = Boys 2 = Girls 3 = Women 4 = Men 5 = Old persons 6 = Refugees 7 = Other (Specify) _____ 99 = Don't know/	_____

THAT IS THE END OF THE QUESTIONNAIRE, THANK YOU FOR TAKING TIME TO ANSWER TO OUR QUESTIONS, WE APPRECIATE YOUR HELP

End of the interview: __/__/h