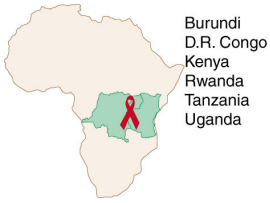

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Changing regional trends in HIV-related behaviours in refugee camps and surrounding communities

KENYA, TANZANIA, AND UGANDA

April 2011

Acknowledgments

We would like to thank the residents of the participating camps and the surrounding villages, who in interviews for these surveys patiently volunteered their time and trusted us with the most intimate details of their lives. We hope that the findings of this regional assessment will contribute to informing the ongoing HIV prevention efforts in the region and improving the lives of those infected and affected by HIV/AIDS.

We would also like to thank colleagues in the UNHCR country offices and partner NGOs for their help in facilitating data collection.

The surveys were implemented under the direction of UNHCR. Funding was provided by GLIA through a grant by the World Bank.

This regional report was the product of the efforts and contributions of the large group of individuals listed below; with many sincere apologies for any one whose name was inadvertently omitted.

Name	Title	Role
Dr Maysoon (Mison) Dahab	Principal Investigator	Authored regional report, developed the standard follow-up survey protocol, and provided technical guidance to implementation and analysis of follow-up surveys.
Kenya: Cheikh Tidiana Toure (baseline), Professor Charles Nzioka (follow-up) Tanzania: Dr Elizabeth Rowley (baseline), Ms Aimee Rose (follow-up) Uganda: Ms. Sara Hersey (baseline), Ms Tabitha Kibuka (follow-up)	Country Principal investigators	Supervised data collection, conducted analysis and authored report at country level
Dr Marian Schilperoord and Dr Njogu Patterson	UNHCR project supervisors and Co-Principal Investigators	Supervised the overall project and provided technical and administrative guidance throughout the process
UNHCR: Dr Paul Speigel and Dr Maxwell Omondi Kenya: Steve Oyugi Tanzania: Dr G.R. Somi Uganda: Michael Muyonga	Co-Principal Investigators	Provided technical support during protocol development and data collection, report writing

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AIDS	Acquired immunodeficiency syndrome
ANC	Antenatal clinic
BCC	Behavioural change communication
BSS	Behavioural Surveillance Survey
EPI	Expanded Programme of Immunization
GLIA	Great Lakes Initiative on HIV/AIDS
HH	Household
HIV	Human immunodeficiency virus
IGAD	Inter-Governmental Authority on Development
IRAPP	IGAD Regional HIV/AIDS Partnership Programme
MOH	Ministry of Health
PMTCT	Prevention from mother to child transmission of HIV
PPS	Probability proportionate to size
PSU	Primary sampling unit
SNAP	Sudan National AIDS Programme
SRC	Sudanese Red Crescent Society
SRS	Systematic Random Sampling
SSU	Secondary sampling unit
STI	Sexually transmitted infection
UNHCR	United Nations High Commissioner for Refugees
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
VCT	Voluntary counselling and testing
95% CI	95% confidence interval

EXECUTIVE SUMMARY

I. Introduction

Periodic behavioural surveillance surveys (BSSs) capture trends in behaviours and informs the planning and adjusting of HIV prevention programmes. This is especially in conflict affected populations, where despite insufficient evidence, assertions are often made that refugees have a higher prevalence of HIV, spread HIV infection in surrounding communities, and that conflict and forced displacement lead to increased sexual risk behaviours.

In recent years under the auspices of the Great Lakes Initiative on HIV/AIDS (GLIA), baseline BSSs were conducted in 2004/2005 and follow-up surveys (2010) in GLIA supported refugee camps and surrounding communities in Kenya, Tanzania, and Uganda. To our knowledge this report provides the first regional analysis of trends in sexual risk behaviours over time among refugees and their surrounding host communities.

II. Regional report objectives

In this regional report we aim to compare the changes in key HIV-related indicators across refugee and surrounding community sites in Kenya, Tanzania, and Uganda.

Specific objectives

1) Examine changes between baseline and follow-up in core knowledge, behavioural and service delivery indicators, among refugees and surrounding host populations
2) Describe age, gender and site-specific patterns in the prevalence of indicators
3) Examine the association between high risk sexual behaviours, recent displacement, and frequent interaction with neighbouring community

III. Methodology

Setting

We conducted cross sectional HIV behavioural surveys in Kenya, Tanzania and Uganda at two time points. Baseline surveys were conducted in 2004/2005, and follow-up surveys in 2010. In each country at least two sub-surveys were conducted. One was among refugee camp residents, and the second among surrounding community residents. In this report we analysed data from seven sites. These were: Kakuma refugee camp and Kakuma surrounding town in Kenya, Kyangwali camp and Hoima surrounding villages in Uganda, Ex-Lugufu camp residents (now living in Nyarugusu camp) and Lugufu surrounding villages in Tanzania. In Tanzania we also analysed data from Lukole town which, until 2009, was the surrounding community for the now closed Lukole refugee camp.

Population

Participants had to be living (sleeping and sharing meals) in a selected household for more than two weeks. They also had to be between the ages of 15-49. In Uganda participants between 15-59 years

were sampled, but in this regional report the analysis in Uganda was restricted to 15-49 year olds to allow comparison with the other sites.

Sample selection

In the Tanzanian refugee camp, both at baseline and follow-up, participants were selected using systematic random sampling (SRS). In the remaining sites two-stage cluster sampling was used.

Questionnaire

The survey questionnaires were standardised to the extent possible based on the BSS questionnaire in the "Manual for Conducting HIV Behavioural Surveillance Surveys among Displaced Populations and their Surrounding Communities". The questionnaire broadly included questions on: Sexual history; condom use; HIV knowledge and attitudes; access to services; population displacement and current population movement; as well as interactions between the displaced and surrounding communities.

Analysis

Descriptive data analysis was performed using Stata 10 software (Stata, Corp., College Station, Texas, USA). At follow-up, we also conducted a sensitivity analysis in Kenya and Uganda refugee camps to examine the effect of new arrivals (since the baseline survey) on the overall estimates of change.

Data presentation

Change in the prevalence of each key indicator between baseline and follow-up was calculated in two forms. Firstly, absolute magnitude of change (follow-up prevalence-baseline prevalence), and secondly, change relative to baseline (absolute change/follow-up prevalence). The findings below highlight magnitude and direction of change over time relative to the baseline prevalence.

IV. Study profile

Across the seven sites analysed in this report we sampled 7,266 participants at baseline and 6,046 participants at follow-up. The proportion of females sampled increased between baseline and follow-up in all but one site. The increase ranged from a low of 1.6% in Lukole town to a high of 9.6% in Kenya camp. Median age increased in five of seven sites (increase ranging from 1 to 3 years). In all sites there was influx of new residents since the baseline surveys were conducted approximately five years ago. New arrivals in the camps tended to be ethnically different from older residents, but were ethnically similar (i.e. country nationals) in the surrounding communities.

V. Main findings

Change in core indicators over time

SEXUAL DEBUT

Abstinence among never married 15-24 year olds increased in five of seven sites at follow-up. The increase relative to baseline ranged from 8.5 in Kenya surrounding community to 27.9 in Kenya camp. Young-age sex (before 15 years) tended to decrease among females and among 20-24 year old males, but to increase among 15-19 year old males.

RISKY SEXUAL PARTNERSHIPS IN THE PAST 12 MONTHS

Multiple, casual and transactional sexual partnerships decreased drastically between baseline and follow-up in most sites. The decrease in multiple sexual partnerships relative to baseline ranged from 38.3% in the Tanzania camp to 63.8% in the Tanzania surrounding community. The relative decrease in casual sex ranged from 27.1% in Uganda camp to 87.4 % in Kenya camp. Finally, the relative decrease from baseline in transactional sex ranged from 14.3% in Tanzania camp to 62.8% in the Tanzania surrounding community.

CONDOM USE AT LAST SEX WITH CASUAL AND TRANSACTIONAL PARTNERS IN THE PAST 12 MONTHS

Condom use with the last casual sex partner decreased in all sites, except in the Uganda camp. The relative decrease from baseline ranged from 14.8% in the Tanzania camp to 171.7% in the Kenyan surrounding community. There was no clear trend in the change observed in condom use with last transactional partner, for which prevalence decreased in four sites of the seven sites surveyed.

FORCED SEX

Forced sex increased in Lukole town (0.7% at baseline to 4.4% at follow-up). Forced sex decreased in the remaining six sites, with the decrease relative to baseline ranging from 12.5% to 91.7%. Despite this overall decrease, among 15-24 year olds in the Uganda and Tanzania refugee camps forced sex increased from baseline as compared to 25-49 year olds

HIV TESTING IN THE PAST 12 MONTHS

Dramatic increases in HIV testing in the past 12 months were reported across all sites. The absolute increase from baseline ranged from 21.6% in Lukole town to 40.3% in the Kenya surrounding community. This represented a dramatic increase relative to baseline (135.0% in Lukole town to 2878.6% in Kenya surrounding community).

COMPREHENSIVE KNOWLEDGE AND ACCEPTING ATTITUDES

Comprehensive knowledge increased in all sites, with the increase relative to baseline ranging from 18.4% in the Uganda camp to 99.4% in the Tanzania surrounding community. By contrast, accepting attitudes towards people living with HIV/AIDS decreased in five of seven sites. The decrease relative to baseline ranged from 4.4% in Uganda camp to 75.5% in Lukole town.

Sensitivity analysis in Uganda and Kenya camps

The differences between baseline and follow-up observed in the sensitivity analysis (which excluded residents living in the camp for less than five years) were similar in direction, if not in magnitude, to the changes observed in the primary analysis for all indicators except abstinence among never-married youths. Abstinence in the primary analysis in Kenya camp had increased, and in Uganda had remained relatively unchanged. However, when newer arrivals were excluded in the sensitivity analysis abstinence decreased in both sites.

Trends in prevalence by gender and age-group

SEX BEFORE 15 YEARS OF AGE

15-19 year olds tended to report a higher prevalence of young-age sex compared to 20-24 year olds. There was no gender pattern in prevalence of young-age sex.

RISKY SEXUAL PARTNERSHIPS

Males reported higher prevalence of multiple, casual and transactional sex compared to females. Multiple sexual partnerships were higher among 25-49 year olds, but casual sex was higher among 15-24 year olds.

HIV TESTING

HIV testing in the past 12 months was higher among females compared to males. Among males, 25-49 year olds reported higher rates of testing compared to 15-24 year olds.

COMPREHENSIVE KNOWLEDGE

The prevalence of comprehensive knowledge was higher among males compared to females. There was no difference between 15-24 year olds and 25-49 year olds.

Trends in prevalence by type of site

Abstinence among never-married youths was higher among refugees than surrounding community residents, except in Tanzania. Among never-married youths who were sexually active, young-age sex (before 15 years) was more common among refugee males than males in the surrounding community.

Reported multiple sexual and casual sexual partnerships were lower among refugees in Kenya and Uganda than among their counterparts in the surrounding community. However, in the Tanzanian refugee camp multiple, casual and transactional sexual partnerships were higher among refugees than among surrounding community participants.

Finally, HIV testing was higher among refugee males than among surrounding community males, but there was no clear trend in testing among females in camps compared to those in the surrounding community.

Association between risky sexual partnerships, recent displacement and interaction with neighbouring community

Those who visited the neighbouring community at least once a month consistently reported higher levels of risky sexual behaviours as compared to those who visited the neighbouring community less frequently. In the refugee camps in Uganda and Kenya older residents tended to visit the neighbouring community more often and perhaps not surprisingly also reported higher levels of risky sex than newer arrivals.

Interestingly, in the Kenyan and Ugandan surrounding communities older residents, despite interacting with the neighbouring community more frequently, reported lower levels of risky sexual partnerships than newer arrivals.

VI. Implications for HIV prevalence and prevention

Risky sexual partnerships

Risky sexual partnerships decreased dramatically between baseline and follow-up; while abstinence among youths and condom use with non-regular partners had increased. These trends are very promising especially in terms of potentially contributing to lowering HIV prevalence. However, our survey data cannot be used to determine the extent to which HIV prevention efforts contributed to behaviour change, or to indicate which specific activities were most effective. Other reasons for the observed behavioural improvements include changes in population structure over time, and improved comprehensive knowledge over time such that participants at follow-up may have been less inclined to report risky behaviours in order to provide socially desirable responses.

Young-age sexual debut

Young-age sex tended to be higher among 15-19 year olds males. This indicates that among young males, despite increasing abstinence and decreasing risky sexual partnerships, the risk of engaging in young-age sex is increasing. Youth focused HIV prevention activities should prioritize promoting the delay of young-age sex among 15-19 year old males.

Comprehensive HIV Knowledge, risky sexual partnerships and gender

Males were more likely to engage in risky sexual behaviours than females. This was despite reporting a higher prevalence of comprehensive knowledge. HIV prevention interventions should be designed based on behaviour change models that take into account not only improving HIV knowledge, but also addressing environment factors and motivations to achieve behaviour change. HIV prevention interventions also require more targeted efforts directed at reducing risky sexual behaviours, especially early sexual debut and casual sex among boys and young men, and reducing multiple partnerships among adult men.

Camp-specific trends in prevalence

Refugees, and especially new arrivals among them, had lower levels of risky sexual behaviours than surrounding community residents in Kenya and Uganda. However, the opposite was true in Tanzania. It is therefore important to avoid making generalizations about the relationship between refugee status and the levels of risky sexual behaviours, especially considering that the prevalence of risky sexual behaviours (like the prevalence of HIV) may depend on several factors, including risk in the community of origin and level of interaction with neighbouring community. However, our findings do suggest that refugees cannot be assumed without appropriate data, as is often the case currently, to have higher levels of risky sexual behaviours than their counterparts in the neighbouring community.

Association between risky sexual partnerships and recent displacement

HIV prevention activities among mobile residents who more frequently visit the neighbouring community should be stepped up in order to respond to their increased levels of behavioural risk. Moreover, given the constant influx of new arrivals into both camp and surrounding communities it is important to carry out periodic needs assessment among new arrivals to ascertain HIV behavioural risk and specific HIV prevention needs, which may well be different from those of older residents.

DIRECTION AND MAGNITUDE OF CHANGE, RELATIVE TO BASELINE, IN THE PREVALENCE OF CORE INDICATORS, AMONG 15-49 YEAR OLDS

Indicator	Absolute % change between baseline and follow-up							Relative % change between baseline and follow-up						
	Kenya		Uganda		Tanzania			Kenya		Uganda		Tanzania		
	Camp	Surr	Camp	Surr	Camp	Surr	Lukole	Camp	Surr	Camp	Surr	Camp	Surr	Lukole
Young men and women aged 15-24 who have had sexual intercourse before the age of 15	-2.5%	3.1%	0.5%	-3.3%	-3.5%	-2.1%	3.2%	-27.8%	75.6%	10.6%	-33.7%	-13.5%	-32.8%	94.1%
Never married young people aged 15-24 who have never had sex	15.5%	4.7%	-0.1%	5.0%	6.7%	9.6%	-15.8%	27.9%	8.5%	-0.1%	8.0%	20.9%	17.2%	-21.0%
More than one sexual partner in the past 12 months	-6.3%	-4.9%	-5.9%	-6.3%	-12.5%	-14.3%	-8.6%	-52.9%	-42.2%	-58.4%	-38.7%	-38.3%	-63.8%	-47.3%
Sex with a non-regular partner(s) in the last 12 months	-28.4%	-13.5%	-1.3%	1.2%	-15.8%	-10.6%	-7.2%	-87.4%	-65.9%	-27.1%	15.0%	-47.6%	-52.2%	-47.1%
Condom use at last sex with a non-regular partners in the last 12 months	36.4%	36.4%	-8.1%	13.1%	4.9%	12.5%	25.0%	117.0%	171.7%	-25.8%	60.6%	14.8%	50.8%	105.9%
Sex with a transactional partner(s) in the last 12 months	-0.3%	-0.4%	-0.3%	-1.8%	-2.0%	-2.7%	-3.3%	-23.1%	-25.0%	-27.3%	-51.4%	-14.3%	-62.8%	-53.2%
Condom use at last sex with transactional partners in the last 12 months	-1.4%	-0.7%	-33.9%	12.5%	-30.0%	24.2%	15.9%	-2.0%	-1.7%	-54.2%	41.1%	-75.0%	56.9%	41.8%
Women forced to have sex in the past 12 months	-4.3%	-7.2%	-0.2%	-2.2%	-0.8%	-1.3%	3.7%	-82.7%	-78.3%	-12.5%	-91.7%	-25.0%	-86.7%	528.6%
Received an HIV test in the past 12 months and know the results	33.5%	40.3%	23.5%	24.1%	29.7%	34.1%	21.6%	1155.2%	2878.6%	219.6%	301.3%	165.0%	299.1%	135.0%
Had an STI symptom and sought treatment in the past 12 months	-	-	16.5%	10.7%	-	-	-	-	-	35.1%	20.9%	-	-	-
Comprehensive correct knowledge of HIV/AIDS	-	-	5.4%	23.0%	25.0%	31.1%	10.2%	-	-	18.4%	87.8%	93.3%	99.4%	21.3%
Accepting attitudes towards PLHIV	-25.0%	-27.4%	-0.9%	24.0%	2.6%	-15.2%	-21.9%	-71.2%	-47.1%	-4.4%	198.3%	22.0%	-60.6%	-75.5%
Residing in current community for 12 months or less	2.0%	-2.2%	14.7%	-15.5%	22.0%	-2.3%	5.9%	18.2%*	-19.1%	257.9%	-80.7%	2750.0%*	-33.8%	134.1%
Away from home 1 month or more in the past 12 months	-3.8%	-23.4%	3.2%	0.1%	-7.9%	2.8%	6.2%	-18.4%	-50.1%	32.0%	1.0%	-35.3%	17.0%	50.8%
Visiting the neighbouring community one or more times per month	8.6%	16.8%	-7.1%	7.2%	11.3%	24.4%	14.4%	42.6%	42.9%	-26.7%	29.6%	68.5%	108.0%	33.3%

-Data not available at either baseline or follow-up

* In Kenya camp mostly older residents were sampled in order to maintain comparability with baseline. In Tanzania camp only sampled ex-Lugufu residents who by definition all lived in current community for less than 12 months.

1. INTRODUCTION

1.1 HIV in conflict-affected settings

Sub-Saharan Africa remains the region most heavily affected by HIV worldwide. In 2009 an estimated 1.8 million [1.6 million-2.0 million] people were newly infected with HIV, bringing to 22.4 million the number of people living with HIV (1). In this region the nature of the epidemic varies greatly from country to country, though overall HIV prevalence is thought to have stabilized and in some settings may be declining (2). According to the 2010 global AIDS report, the estimated 1.8 million people who became infected in 2009 was considerably less than the estimated 2.2 million people in sub-Saharan Africa newly infected with HIV in 2001 (1). In addition to decreased HIV incidence there is also some evidence of increased safe sexual behaviour among young people in Sub-Saharan Africa (1). The declining trend in HIV prevalence in Sub-Saharan Africa is thought to reflect a combination of factors, including the impact of HIV prevention efforts and the natural course of HIV epidemics (1).

1.2 HIV behavioural survey rationale

HIV sentinel surveillance, the traditional cornerstone of tracking HIV prevalence, becomes less sensitive as an HIV epidemic matures and stabilizes. Periodic behavioural surveillance surveys (BSSs) capture trends in behaviour; information important to planning and adjusting HIV prevention programmes. This is especially in conflict affected populations, where despite insufficient evidence, assertions are often made that refugees have a higher prevalence of HIV, that they spread HIV infection in surrounding communities, and that conflict and forced displacement lead to increased sexual risk behaviours. To our knowledge there is currently no published information on temporal trends in sexual risk behaviours among conflict affected populations and surrounding host communities.

1.3 Regional report objectives

The Great Lakes Initiative on HIV/AIDS (GLIA) project, through a World Bank grant, funded the conduct of baseline BSSs (2004/2005) and follow-up surveys (2010) in GLIA supported refugee camps and surrounding communities in Kenya, Tanzania, and Uganda. The objective of each BSS was to estimate the current prevalence of key HIV-related behaviours and to describe interactions between refugees and surrounding host populations. This information is presented in two reports, baseline and follow-up, for each country. **In this regional report we aim to compare the changes in key HIV-related indicators across refugee and surrounding community sites in Kenya, Tanzania, and Uganda.**

1.3.1 Specific objectives

4) Examine changes between baseline and follow-up in core knowledge, behavioural and service delivery indicators.

5) Describe age, gender and site-specific patterns in the prevalence of key indicators

6) Examine the association between high risk sexual behaviours, recent displacement, and frequent interaction with neighbouring community

2. SETTING

The refugee camps and surrounding host communities, in which the follow-up BSSs were conducted in 2010, were selected from among those surveyed at baseline in 2004/2005 (Table 1).

Population changes in refugee camps mandated changes in survey setting at the follow-up. Specifically, in Uganda, the baseline surveys were conducted in two refugee camps and their surrounding host communities (Kyangwali camp and Nakivale camps). Kyangwali camp and its surrounding community were included in the follow-up survey *(henceforth referred to as the Uganda camp and Uganda surrounding community respectively).* However, Nakivale camp was excluded from the follow-up survey as it has been selected to be surveyed as part of the upcoming National AIDS Indicator Survey.

In Kenya's Kakuma camp, since the baseline survey, 30,000 refugees were repatriated to South Sudan and 13,000 Somali refugees were transferred into the camp from Dadaab refugee camp. In order to account for this population change the survey population was stratified into two. The first population to be surveyed was the Kakuma refugees living in the camp since 2004. This provided data to be compared to that of baseline and is presented in this report. The second population was the new refugee arrivals (data presented in a separate country report). *Kakuma camp and Kakuma town will henceforth be referred to as Kenya camp and Kenya surrounding community.*

In Tanzania, the baseline surveys were conducted in two refugee camps, Lugufu and Lukole. Lugufu camp was closed in 2009, with part of the population returning to DRC and 23,000 people transferred to Nyarugusu camp in Kasulu district. Thus, the follow-up survey was conducted in Nyargusu camp. Using systematic random sampling the ex-Lugufu camp residents, now living in Nyargusu, were sampled in order to improve comparison to baseline (a sub-survey among non ex-Lugufu residents in Nyarugusu camp was conducted and the findings presented in a separate country BSS report). Considering the recent closure of Lugufu camp, the Lugufu surrounding community, included in the baseline survey, was also included in the follow-up survey in order to track behaviour changes over time. *Lugufu camp and surrounding community will henceforth be referred to as Tanzania camp and Tanzania surrounding community.*

In 2007 Lukole camp was closed and the population repatriated to Burundi. A follow-up survey in the Lukole camp was not possible. However, a follow-up survey was conducted in Lukole town and the findings were compared to baseline in this report.

TABLE 1: SELECTED CHARACTERISTICS OF SURVEYED POPULATIONS, AT BASELINE AND FOLLOW-UP

Characteristics	Kenya				Uganda				Tanzania					
	Camp		Surrounding		Camp		Surrounding		Camp[1]		Surrounding		Lukole town[2]	
	Base	F.U.	Base	F.U.	Base	F.U.	Base	F.U.	Base	F.U.	Base	F.U.	Base	F.U.
Year of Data collection	2004	2010	2004	2010	2006	2010	2006	2010	2005	2010	2005	2010	2005	2010
Place	Kakuma camp (established 1992)		Kakuma town		Kyangwali camp (established 1960s)		Hoima villages		Lugufu camp (established 1997)	Nyarugusu (among ex-Lugufu residents)	Lugufu villages (Uvinza and Kazuramimba)		Lukole villages (Nyamahwa and Kasulo)	
Population size	90,441	22,668	50,000	52,835	18,098	22,668	28,142	52,835	94,417	22,742	Not available	38,233	19,220	36,728
Main refugee nationalities	1. Sudan 2. Somalia	1. Somalia 2. Sudan			1. Sudan 2. DRC 3. Uganda	1. DRC 2. Sudan 3. Uganda			1. DRC	1. DRC				
National HIV prevalence	5.0% (3)	6.2% (4)	5.0% (3)	6.2% (4)	6.7%(5)	6.5%(1)	6.7%(5)	6.5%(1)	8.4%(6)	5.7%(7)	8.4%(6)	5.7%(7)	8.4%(6)	5.7%(7)

[1] Lugufu camp closed in 2009 and refugees transferred to Nyarugusu camp. The follow-up survey was conducted in Nyarugusu camp but among ex-Lugufu residents

[2] Lukole is the surrounding community for Lukole camp. Lukole camp closed in 2007 and refugees repatriated to Burundi

3. METHODS

3.1 Population

Participants had to be living (sleeping and sharing meals) in a selected household for more than two weeks. They also had to be between the ages of 15-49 years. In Uganda participants between 15-59 years were included in the survey to be in line with the national guidelines. However for the purposes of this report, the analysis in Uganda was restricted to 15-49 year olds to allow comparison with the other sites.

At follow-up, in Kenya and Tanzania refugee camps sampling was limited to participants present in the camp at the time of the original survey. In Kenya this meant sampling older camp residents, while in Tanzania this meant sampling new arrivals into Nyarugusu camp from the now closed Lugufu camp, in which the original survey was conducted.

3.2 Sample size calculation

The unadjusted sample size per strata was calculated to enable the detection of a 15% change at follow-up in the 15-24 year old strata, for two main variables: condom use with last non-regular partner and comprehensive knowledge of HIV. Where cluster sampling was used the sample size was adjusted upwards by a factor of two to account for clustering effect.

3.3 Sample selection

Detailed sampling procedures are described in Annex 1. In Tanzania camp, both at baseline and follow-up, participants were selected using systematic random sampling (SRS) (Annex 1). In the remaining sites two-stage cluster sampling was used (Annex 1). In the baseline survey in Kenya the sampling procedures were not very clearly described, but were indicative of a cluster sampling approach.

3.4 Questionnaire

The survey questionnaires were developed based on a modified version of the BSS questionnaire in the "Manual for Conducting HIV Behavioural Surveillance Surveys among Displaced Populations and their Surrounding Communities" (UNHCR, et al., 2008) (originally based on the Family Health International BSS guidelines). It included pre-displacement, displacement and post displacement modules specific to refugees and displaced persons as well as questions on interaction between refugees and surrounding host population. Broadly, this information included the following:

- Descriptive information including age, nationality, education, religion, marital status, military activity, employment, and alcohol and drug use
- Population displacement and current population movement, as well as interactions between the displaced and surrounding communities
- Sexual history, recent sexual partnerships, and condom use
- Gender and sexually-based violence

- Co-factors for HIV transmission including circumcision and symptoms of STIs
- Knowledge, opinions and attitude towards HIV, HIV testing

3.4.1 Questionnaire adaption

In each country the standard questionnaire was adapted before finalization to include additional questions relevant to the specific country context. The questionnaire was then translated into the most common local languages and pre-tested in communities adjacent to those of the study population.

3.4.2 Core indicators

In 2005 and 2006, a group of international epidemiologists and program managers considered what indicators would be most appropriate as measures of HIV risk in displaced populations and their surrounding communities. The group selected a number of globally recognized indicators measuring sexual behaviour, HIV testing, STI health facility utilization, and knowledge, attitudes and misconceptions as the standards for BSS in these populations. In addition, they defined several important indicators specific to displacement situations. The 17 core BSS indicators are listed and defined fully in Annex 3.

NON-CALCULABLE CORE INDICATORS

It is important to note that knowledge about HIV and measuring HIV risk is always changing and that the 17 core indicators were agreed upon in 2005/2006 after the baseline surveys were conducted. As a result, four out of the 17 core indicators were not calculable at baseline for every site, because some of the questions necessary were not asked in the baseline questionnaires. Thus, for these indicators the change between baseline and follow-up could not be ascertained for all or some sites. Table 2 shows the four indicators not fully calculable at baseline, their definition, why and where they were not calculable.

TABLE 2: CORE INDICATORS NOT CALCULABLE AT BASELINE

Indicator	Definition	Missing question at baseline	Countries where indicator is not calculable at baseline
More than one sexual partner and reported using a condom during last sexual intercourse	Reported sex with more than one partner in the past 12 months and used a condom during last sex	Used a condom during last sex?	All
Reached by an HIV prevention programme in the past 12 months	Percent of men and women aged 15-49 who knew where they could receive and HIV test and had been given condoms in the past 12 months	Given condoms in the past 12 months?	All
Had an STI symptom and sought treatment in the past 12 months	Percent of men and women aged 15–49 who report an STI symptom in the last 12 months and went to a public or private health facility as their FIRST recourse for Treatment	First place for STI treatment was public or private health facility	Kenya and Tanzania
Comprehensive correct knowledge of HIV/AIDS	Percent of men and women who responded correctly to all 5 questions: 1)Using condoms; 2)Limiting sex to one faithful, uninfected partner can prevent HIV sexual transmission; 3) Mosquitoes; 4) Sharing food with an infected person don't transmit HIV; 5) A healthy-looking person can transmit HIV	Can mosquitoes transmit HIV?	Kenya

3.5 Data analysis

3.5.1 Primary analysis

Descriptive data analysis was performed on Stata 10 software (Stata, Corp., College Station, Texas, USA). For the baseline surveys despite the cluster sampling approach, data on cluster allocation was not collected, and thus 95% confidence intervals (CIs) could not be accurately calculated. For follow-up surveys using cluster sampling, the estimates of prevalence and corresponding 95% CIs were calculated using cluster survey analysis to account for design effect.

3.5.2 Sensitivity analysis

Given the population change in the refugee camps between baseline and follow-up we attempted to sample participants who were resident in the camp during the original survey. In Tanzania we were able to do this successfully using the UNHCR data base of ex-Lugufu refugees, such that 98.3% of participants were from the original Lugufu camp. However, in Kenya and Uganda camps, despite our best efforts the follow-up sample still included newer arrivals likely not present in the camp at baseline. In order to address this limitation at follow-up we conducted a sensitivity analysis in which we excluded participants who had lived in the Uganda and Kenya camps for less than five years. In this way we aimed to investigate whether the overall changes observed in the primary analysis would persist in either direction or magnitude in the sensitivity analysis.

3.6 Ethical considerations

Ethics approval were sought and obtained from the appropriate governmental regulatory body in each country. Verbal informed consent was obtained from each participant. Participation was strictly voluntary.

4. RESULTS

4.1 Response

In Tanzania non-response in the camp decreased from 11% at baseline to 5% at follow-up. However, non-response in the surrounding community and in Lukole town increased at follow-up (9 to 14% and 1.1 to 9%, respectively) (Annex 4). In Kenya and Uganda at baseline non-response data were not fully reported in the country reports. However at follow-up non-response in Kenya was 6.1% in the camp and 1.4% in the surrounding community. In Uganda, non-response was 11.4% in the camp and 10.1% in the surrounding community (Annex 4).

4.2 Socio-demographic characteristics

Table 3 shows the differences in key demographic characteristics between the participants sampled at baseline and those at follow-up in each site. The proportion of females increased at follow-up in all but one site. The increase ranged from a low of 1.6% in Lukole town to a high of 9.6% in Kenya camp (Table 3). By contrast in the Kenya surrounding community, the proportion of females decreased by 8.3% between baseline and follow-up (Table 3).

The age structure of the follow-up samples was also different compared to baseline, with the median age increasing in five of seven sites (increase ranging from 1 to 3 years), but decreasing by 2 years (28 years at baseline compared to 26 years at follow-up) in the Ugandan surrounding community (Table 3).

In all sites there was influx of new residents since the baseline surveys were conducted approximately five years ago (Table 3). However, in the surrounding communities the new arrivals tended to be ethnically similar to the old residents (i.e. country nationals) (Annex 5). However in the camps, which experienced the highest level of new arrivals (63.1% and 41.0% of those sampled in Uganda and Kenya respectively) the new arrivals were ethnically different from those resident in the camp for more than five years. In Uganda the new arrivals were largely Congolese refugees, while in Kenya the new arrivals were mostly Bantu Somalis. In both sites the new arrivals took the place of repatriated Sudanese refugees (Annex 5). In Tanzania the camp sample at follow-up was very comparable to that at baseline because almost all participants sampled were new arrivals from Lugufu camp in which the original baseline survey was conducted.

Illiteracy and unemployment was higher at follow-up compared to baseline (Table 3). Unemployment and illiteracy tended to higher among females than males (data not shown).

The prevalence of marriage tended to be higher at baseline compared to follow-up, while the prevalence of polygamous marriage tended to decrease at follow-up (Annex 5). Age at first marriage ranged between 18 and 20 years and tended to remain stable between baseline and follow-up. Similarly, age at first sex remained unchanged in five of seven sites (ranging from a low of 16 to a high of 19 at follow-up) (Annex 5).

TABLE 3: AGE AND GENDER BREAKDOWN AT BASELINE AND FOLLOW-UP, BY COUNTRY AND SITE AMONG 15-49 YEAR OLDS

Characteristics	**Kenya**				**Uganda**				**Tanzania**					
	Camp		**Surrounding**		**Camp**		**Surrounding**		**Camp**		**Surrounding**		**Lukole town**	
	Base *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*
Female gender	45.5 - 759/1669	55.1 (50.6-59.4) 440/980	55.8 - 937/1680	46.5 (43.2-49.8) 389/837	50.2 - 376/755	57.0 (54.4-59.6) 372/865	50.2 - 324/650	54.7 (52.1-57.3) 464/848	53.6 (42.9-50.0) 410/765	56.3 (52.2-60.3) 328/583	59.0 - 548/929	58.5 (55.3-61.6) 597/1021	54.5 - 446/818	52.9 (51.0-54.8) 472/892
Age														
15-24	62.0 - 034/1669	56.8 (52.7-60.9) 557/980	54.8 - 921/1680	47.9 (44.2-51.7) 401/837	45.7 - 344/755	33.1 (20.0-36.30) 286/865	39.4 - 256/650	34.3 (30.0-38.9) 291/848	44.8 (41.3-48.4) 343/765	44.3 (40.2- 48.3) 258/583	37.6 - 349/929	44.3 (39.5- 49.2) 452/1021	40.1 - 328/818	35.8 (32.3- 39.4) 319/892
15-19	39.6 - 661/1669	30.4 (27.1-34.0) 298/980	30.7 - 516/1680	26.6 (23.6-29.9) 223/837	37.2 - 205/755	16.0 (13.2-19.2) 138/865	18.6 - 121/650	16.4 (13.4-19.8) 139/848	59.5 (54.3-64.7) 204/343	58.9 (52.8- 65.0) 152/258	49.0 - 171/349	54.0 (48.5- 59.3) 244/452	53.4 - 328/818	42.6 (37.6- 47.8) 136/319
20-24	22.4 - 373/1669	27.4 (22.6-30.6) 259/980	24.1 - 405/1680	21.3 (18.3-24.5) 178/837	18.4 - 139/755	17.1 (14.8-19.7) 148/865	20.8 - 135/650	17.9 (14.8-21.6) 152/848	40.5 (35.3-45.7) 139/343	41.1 (35.0- 47.1) 106/258	51.0 - 178/349	46.0 (40.7- 51.5) 208/452	46.7 - 328/818	57.4 (52.2- 62.4) 183/319
25-49	38.1 - 635/1669	43.2 (39.1-47.3) 423/980	45.2 - 759/1680	52.1 (48.3-55.8) 436/837	54.4 - 411/755	66.9 (63.8-70.0) 579/865	60.6 - 394/650	65.7 (61.1-70.0) 557/848	55.2 (51.6-58.7) 422/765	55.7 (51.7- 59.8) 325/583	62.4 - 580/929	55.7 (50.8- 60.5) 569/1021	60.0 - 328/818	64.2 (60.6- 67.8) 573/892
Median age **IQR**	21 18-29	23 19-30	24 18-32	25 19-32	25 19-33	28 22-36	28 21-35	28 22-36	25 19-33	26 19-35	28 21-35	26 20-35	27 20-35	28 22-36
Living in current community for 5 years or less	53.2 - 888/1669	41.0 (52.4-64.1) 572/980	26.8 - 448/1671	17.3 (13.9-21.4) 145/837	54.8 - 412/752	63.1 - 546/865	56.9 - 367/645	32.7 - 276/844	20.7 (17.8-23.6) 156/755	98.3 (97.2-99.3) 573/583	22.1 - 202/914	23.4 (20.8-26.0) 239/1021	17.0 - 138/813	25.9 (23.0-28.8) 231/892
No education	25.5 - 425/1669	30.8 (26.1-37.0) 302/980	72.7 - 1221/1680	45.0 (39.6-50.7) 377/837	23.9 - 180/752	39.8 (34.6-43.1) 334/862	32.8 - 212/646	24.3 (19.8-29.5) 206/847	14.7 (12.2-17.2) 112/763	9.9 (7.5- 12.4) 58/583	14.9 - 138/926	16.2 (13.3- 19.6) 165/1021	28.3 - 231/817	25.3 (21.7- 29.3) 226/892
Illiterate (can't read or write easily)	0.4 - 6/1669	35.5 (30.1-41.4) 348/980	0.5 - 9/1680	55.3 (49.2-61.2) 463/837	7.3 - 55/755	48.4 (43.6-53.3) 419/865	24.2 - 157/650	34.4 (30.0-39.2) 292/848	18.6 (2.9-5.8) 142/765	19.9 (16.6- 23.1) 116/583	15.8 - 147/929	23.5 (19.9- 27.6) 240/1021	35.5 - 290/818	39.6 (34.5- 44.9) 353/892
Unemployed	87.6 - 1462/1669	88.1 (85.1-90.5) 863/980	57.3 - 962/1680	76.7 (72.1-80.7) 642/837	90.3 - 677/750	80.8 (77.2-84.0) 699/865	94.0 - 610/649	92.3 (8.6-94.4) 782/847	83.5 (80.8-86.1) 636/762	93.8 (91.9-95.8) 547/583	48.6 - 448/922	84.3 (76.9-89.7) 861/1021	23.0 - 187/813	93.6 (92.0-94.9) 835/892

4.3 Change in core indicators over time

The following section describes the change in core indicators between baseline and follow-up. Table 4 shows the absolute direction and magnitude of change in core indicators as well as the change relative to baseline. Change relative to baseline was calculated by subtracting the prevalence at baseline from the prevalence at follow-up and dividing by the prevalence at follow-up. Table 5 shows the prevalence of each indicator at baseline and follow-up for each site.

4.3.1 Early sexual debut

The percentage of youth who reported having had sex before the age of 15 decreased in four of the seven sites (Table 4). By contrast, the prevalence of reported abstinence among never married 15-24 year olds increased between baseline and follow-up in five sites. The increase ranged from 8.5 in the Kenyan community to 27.8 in Kenya camp (Table 4).

4.3.2 Risky sexual partnerships in the past 12 months

Overall, the prevalence of reported multiple, non-regular and transactional sexual partnerships among 15-49 year olds decreased consistently and dramatically between baseline and follow-up (Table 4). The decrease in multiple partnerships relative to baseline ranged between 38.3% in the Tanzania camp to 63.8% in the Tanzania surrounding community; while the decrease in non-regular sex ranged from 27.1% in the Uganda camp to 87.4% in the Kenya camp. Lastly, the decrease in transactional sex ranged between 14.3% in the Tanzania camp to 62.8% in the Tanzania surrounding community (Table 4).

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Annex 8 shows the prevalence of risky sexual partnerships in each site disaggregated by age and gender. The decreasing trends in risky sexual partnerships persisted across different age and gender sub-groups. The highest prevalence of multiple partnerships at baseline was 32.6% in the Tanzanian camp, but the highest prevalence at follow-up was 20.1% in the Tanzania camp.

The prevalence of non-regular sex ranged from a high of 33.2% at baseline (Tanzanian camp) to a high of 17.4% at follow-up (Tanzanian camp) (Table 5, Annex 8). Finally, relative to the non-regular sex, the prevalence of transactional sex was low in most sites (ranging from a high of 6.2% at baseline to a high of to 2.9% at follow-up, both in Lukole town). The only exception was in the Tanzanian refugee camp where transactional sex was relatively higher than in other sites (14.0% at baseline and 12.0% at follow-up) (Table 5, Annex 8).

4.3.3 Condom use with risky sexual partners in the past 12 months

Overall reported condom use at last sex with a non-regular partner increased between baseline and follow-up in all sites, except in the Ugandan refugee camp where condom use decreased from 31.4% at baseline to 23.2% at follow-up (Table 4, Table 5, Annex 8). By contrast, the proportion of participants who had engaged in transactional sex in the past 12 months and used a condom with last transactional partner seemed to decrease between baseline and follow-up in all sites (Table 4).

However, the survey estimates for condom use with transactional partner should be interpreted with caution as they may not be very precise indicators of condom use in the general population of interest. This is because the denominator of the estimate (number of persons who had a transactional partner in the past 12 months) was low in most sites. For example in Uganda at follow-up only seven participants reported that they had had a transactional sex partner the past 12 months, among whom two (28.6%) had used a condom. This resulted in a very wide confidence interval for this estimate (95% CI: 5.2-74.6). Similarly wide confidence intervals for condom use with last transactional partner were observed at follow-up in other sites (Table 5, Annex 8).

4.3.4 Forced sex

Forced sex increased only in Lukole town from 0.7% at baseline to 4.4% at follow-up (Table 4). In the remaining six sites, the prevalence decrease relative to baseline ranged from a high of 9.2% at baseline (Kenyan surrounding community) to a high of 2.9% at follow-up (Lukole town) (Table 5, Annex 8).

4.3.5 HIV knowledge and attitudes

Comprehensive correct HIV knowledge increased between baseline and follow-up, increase ranging between 8.4% in the Ugandan camp and 99.4% in the Tanzanian surrounding community. Despite increases in Knowledge accepting attitudes towards people with HIV tended to decrease over time, with the decrease ranging between 4.4% in the Ugandan camp to 75.5% in Lukole town.

4.3.6 HIV testing

HIV testing increased dramatically relative to baseline. The increase ranged between 135.0% in Lukole town to 2878.6% in Kenya surrounding community.

4.3.7 Mobility and interaction with neighbouring community

The proportion of participants reporting being away from home for more than one month or more in the past year decreased in only three of the seven sites (Kenya camp and surrounds and Tanzania camp) (Table 4).

In all the surrounding communities the proportion who reported visiting the refugee camp at least once a month in the last year increased between baseline and follow-up. In the camps in Kenya and Uganda the prevalence of refugee participants reporting visiting the surrounding community regularly also increased, but to a lesser degree than surrounding community members. In Kenya the prevalence of refugee participants visiting the community had decreased. The main reasons for visiting the neighbouring community were trade and shopping (Annex 7). Non-economic reasons for visiting the neighbouring community were accessing health care and visiting friends and/or relatives (Annex 7).

Frequent visitation to the neighbouring community (at least once a month) was higher among those residents living in the site for >1 year as compared to new arrivals (data not shown).

TABLE 4: DIRECTION AND MAGNITUDE OF CHANGE, RELATIVE TO BASELINE, IN THE PREVALENCE OF CORE INDICATORS, AMONG 15-49 YEAR OLDS

Indicator	Absolute % change between baseline and follow-up							Relative % change between baseline and follow-up						
	Kenya		Uganda		Tanzania			Kenya		Uganda		Tanzania		
	Camp	Surr	Camp	Surr	Camp	Surr	Lukole	Camp	Surr	Camp	Surr	Camp	Surr	Lukole
Young men and women aged 15-24 who have had sexual intercourse before the age of 15	-2.5%	3.1%	0.5%	-3.3%	-3.5%	-2.1%	3.2%	-27.8%	75.6%	10.6%	-33.7%	-13.5%	-32.8%	94.1%
Never married young people aged 15-24 who have never had sex	15.5%	4.7%	-0.1%	5.0%	6.7%	9.6%	-15.8%	27.9%	8.5%	-0.1%	8.0%	20.9%	17.2%	-21.0%
More than one sexual partner in the past 12 months	-6.3%	-4.9%	-5.9%	-6.3%	-12.5%	-14.3%	-8.6%	-52.9%	-42.2%	-58.4%	-38.7%	-38.3%	-63.8%	-47.3%
Sex with a non-regular partner(s) in the last 12 months	-28.4%	-13.5%	-1.3%	1.2%	-15.8%	-10.6%	-7.2%	-87.4%	-65.9%	-27.1%	15.0%	-47.6%	-52.2%	-47.1%
Condom use at last sex with a non-regular partners in the last 12 months	36.4%	36.4%	-8.1%	13.1%	4.9%	12.5%	25.0%	117.0%	171.7%	-25.8%	60.6%	14.8%	50.8%	105.9%
Sex with a transactional partner(s) in the last 12 months	-0.3%	-0.4%	-0.3%	-1.8%	-2.0%	-2.7%	-3.3%	-23.1%	-25.0%	-27.3%	-51.4%	-14.3%	-62.8%	-53.2%
Condom use at last sex with transactional partners in the last 12 months	-1.4%	-0.7%	-33.9%	12.5%	-30.0%	24.2%	15.9%	-2.0%	-1.7%	-54.2%	41.1%	-75.0%	56.9%	41.8%
Women forced to have sex in the past 12 months	-4.3%	-7.2%	-0.2%	-2.2%	-0.8%	-1.3%	3.7%	-82.7%	-78.3%	-12.5%	-91.7%	-25.0%	-86.7%	528.6%
Received an HIV test in the past 12 months and know the results	33.5%	40.3%	23.5%	24.1%	29.7%	34.1%	21.6%	1155.2%	2878.6%	219.6%	301.3%	165.0%	299.1%	135.0%
Had an STI symptom and sought treatment in the past 12 months	-	-	16.5%	10.7%	-	-	-	-	-	35.1%	20.9%	-	-	-
Comprehensive correct knowledge of HIV/AIDS	-	-	5.4%	23.0%	25.0%	31.1%	10.2%	-	-	18.4%	87.8%	93.3%	99.4%	21.3%
Accepting attitudes towards PLHIV	-25.0%	-27.4%	-0.9%	24.0%	2.6%	-15.2%	-21.9%	-71.2%	-47.1%	-4.4%	198.3%	22.0%	-60.6%	-75.5%
Residing in current community for 12 months or less	2.0%	-2.2%	14.7%	-15.5%	22.0%	-2.3%	5.9%	18.2%*	-19.1%	257.9%	-80.7%	2750.0%*	-33.8%	134.1%
Away from home 1 month or more in the past 12 months	-3.8%	-23.4%	3.2%	0.1%	-7.9%	2.8%	6.2%	-18.4%	-50.1%	32.0%	1.0%	-35.3%	17.0%	50.8%
Visiting the neighbouring community one or more times per month	8.6%	16.8%	-7.1%	7.2%	11.3%	24.4%	14.4%	42.6%	42.9%	-26.7%	29.6%	68.5%	108.0%	33.3%

-Data not available at either baseline or follow-up

* In Kenya camp mostly older residents were sampled in order to maintain comparability with baseline. In Tanzania camp only sampled ex-Lugufu residents who by definition all lived in current community for less than 12 months.

TABLE 5: PREVALENCE OF CORE INDICATORS BY COUNTRY AND SITE, AT BASELINE AND FOLLOW-UP

Indicator	Kenya				Uganda				Tanzania					
	Camp base	Camp F.U.	Surr base	Surr F.U.	Camp base	Camp F.U.	Surr base	Surr F.U.	Camp base	Camp F.U.	Surr base	Surr F.U.	Lukole base	Lukole F.U.
	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N
Young men and women aged 15-24 who have had sexual intercourse before the age of 15	9.0 - 93/1034	6.5 (4.3-9.6) 36/557	4.1 - 38/921	7.2 (4.7-11.0) 29/401	4.7 - 16/344	5.2 (3.3-8.2) 15/286	9.8 - 25/256	6.5 (3.7-11.3) 19/291	25.9 (20.9-30.9) 78/301	22.4 (16.3-26.3) 55/258	6.4 - 21/327	4.3 (2.6-7.1) 16/374	3.4 - 11/328	6.6 (4.0 – 10.8) 21/319
Never married young people aged 15-24 who have never had sex	55.5 - 478/862	71.0 (65.2-76.3) 299/421	55.4 - 363/655	60.1 (53.2-66.7) 181/301	78.4 - 167/213	78.3 (70.9 -84.2) 101/129	62.8 - 76/121	62.6 (52.8-47.2) 49/131	32.1 (26.0-38.3) 72/224	38.8 (30.8-46.7) 57/147	55.7 - 113/203	67.8 (59.6-75.0) 200/295	75.4 - 147/195	59.6 (31.6 – 49.9) 84/141
More than one sexual partner in the past 12 months	11.9 - 198/1669	5.6 (4.2-7.4) 55/980	11.6 - 1941680	6.7 (5.3-3.4) 56/837	10.1 - 76/755	4.2 (3.1-5.6) 36/865	16.3 - 106/650	10.0 (7.9-12.7) 85/848	32.6 (29.2-35.9) 249/765	20.1 (16.8-23.3) 117/583	22.4 - 208/929	8.1 (6.2-10.6) 75/921	18.2 - 149/818	9.6 (88.1 – 92.3) 86/892
More than one sexual partner and reported using a condom during last sexual intercourse	-	29.1 (18.5-42.6) 16/55	-	30.4 (19.5-44.0) 17/56	-	-	-	-	-	17.1 (10.1-24.0) 20/117	-	21.3 (14.4-30.4) 16/75	-	15.1 (8.1 – 26.5) 13/86
Sex with a non-regular partner(s) in the last 12 months	32.5 - 542/1669	4.1 (2.6-6.3) 40/980	20.5 - 345/1680	7.0 (5.2-9.5) 59/837	4.8 - 36/755	3.5 (2.6-4.7) 30/865	8.0 - 52/650	9.2 (7.0-11.9) 78/848	33.2 (29.9-36.5) 254/765	17.4 (14.3-20.4) 101/582	20.3 - 189/929	9.7 (7.7-12.1) 89/921	15.3 - 125/818	8.1 (6.2 – 10.5) 72/892
Condom use at last sex with a non-regular partners in the last 12 months	31.1 - 167/537	67.5 (45.3-83.9) 27/40	21.2 - 72/340	57.6 (45.0-69.4) 34/59	31.4 - 11/35	23.3 (11.4 -41.9) 7/30	21.6 - 11/51	34.7 (24.6-46.4) 26/75	33.1 (27.3-38.8) 86/260	38.0 (28.3-47.7) 38/100	24.6 - 47/191	37.1 (27.6-47.7) 33/89	23.6 - 29/123	48.6 (37.3 – 60.0) 35/72
Sex with a transactional partner(s) in the last 12 months	1.3 - 21/1669	1.0 (0.6-1.9) 10/980	1.6 - 27/1680	1.2 (0.6-2.2) 10/837	1.1 - 8/755	0.8 (0.4-1.8) 7/865	3.5 - 23/650	1.7 (1.0-2.8) 14/848	14.0 (11.5-16.4) 107/765	12.0 (9.4-14.7) 70/583	4.3 - 40/929	1.6 (1.0-2.7) 15/921	6.2 - 51/818	2.9 (1.8 – 4.7) 26/892
Condom use at last sex with transactional partners in the last 12 months	71.4 - 15/21	70.0 (28.7-93.1) 7/10	40.7 - 11/27	40.0 (14.0-73.2) 4/10	62.5 - 5/8	28.6 (5.2-74.6) 2/7	30.4 - 7/23	42.9 (15.4-75.5) 6/14	40.0 (30.5-49.5) 42/105	10.0 (2.8-17.2) 7/70	42.5 - 17/40	66.7 (37.6-86.9) 10/15	38.0 - 19/50	53.9 (34.2 – 72.4) 14/26
Women forced to have sex in the past 12 months	5.2 - 39/759	0.9 (0.4-2.1) 5/540	9.2 - 86/937	2.0 (0.9-4.2) 9/448	1.6 - 6/379	1.4 (0.6-3.2) 7/493	2.4 - 8/326	0.2 (0.0-1.6) 1/464	3.2 (0.1-4.9) 13/410	2.4 (0.8-4.1) 8/328	1.5 - 8/548	0.2 (0.03-1.6) 1/470	0.7 - 3/446	4.4 (2.7 – 7.1) 21/472
Received an HIV test in the past 12 months and know the results	2.9 - 48/1669	36.4 (31.4-41.8) 357/980	1.4 - 24/1680	41.7 (37.0-46.6) 349/837	10.7 - 81/755	34.2 (31.0 -37.6) 296/865	8.0 - 52/650	32.1 (27.7-36.8) 272/848	18.0 (15.3-20.8) 138/765	47.7 (43.6-51.8) 278/583	11.4 - 106/929	45.5 (41.7-49.3) 419/921	16.0 - 131/818	37.6 (32.0 – 43.5) 335/892
Reached by an HIV prevention programme in the past 12 months*	-	11.9 (8.7-16.2) 117/980	-	13.5 (9.8-18.3) 113/837	61.2 - 462/755	-	54.0 - 351/650	-	-	18.4 (15.2-21.5) 107/583	-	5.9 (4.3-8.0) 54/921	-	10.1 (7.6 – 13.3) 90/892
Had an STI symptom and sought treatment in the past 12 months	-	51.8 (39.2-64.1) 29/56	-	63.6 (34.9-85.1) 7/11	47.0 - 31/66	63.5 (51.8 -73.8) 47/74	51.2 - 43/84	61.9 (51.5-71.3) 78/126	-	75.0 (56.3-93.7) 18/24	-	42.5% (27.6- 58.9) 17/40	-	59.6 (42.2 – 74.8) 28/47
Comprehensive correct knowledge of HIV/AIDS	-	31.7 (27.99-35.7) 311/980	-	38.0 (33.8-42.4) 318/837	29.4 - 222/755	34.8 (31.1 -38.6) 301/865	26.2 - 170/650	49.2 (45.0-53.3) 417/848	26.8 (23.7 - 29.9) 205/765	51.8 (47.7-55.9) 302/583	31.3 (28.3- 34.3) 291/929	62.4 (57.6-67.0) 575/921	47.9 - 392/818	58.1 (53.7 – 62.4) 518/892
Accepting attitudes towards PLHIV	35.1 - 539/1518	10.1 (7.9-12.8) 93/923	58.2 - 904/1554	30.8 (26.6-35.4) 230/746	20.6 - 137/666	19.7 (16.7 -23.1) 168/853	12.1 - 70/577	36.1 (32.1-40.3) 300/832	11.8 (9.2-14.3) 71/604	14.4 (11.5-17.3) 82/569	25.1 - 223/888	9.9 (7.8-12.5) 91/919	29.0 (25.8 – 32.3) 220/758	7.1 (5.3 – 9.6) 63/883
Residing in current community for 12 months or less	11.0 - 183/1669	13.0 (9.2-17.9) 127/980	11.5 - 193/1680	9.3 (7.0-12.3) 78/837	5.7 - 43/755	20.4 (16.0 -25.5) 176/865	19.2 - 125/650	3.7 (2.4-5.5) 31/848	0.8 (0.2-1.4) 6/765	22.8 (19.4-26.2) 133/583	6.8 - 63/929	4.5 (2.9-6.8) 41/921	4.4 (3.0 – 5.8) 36/818	10.3 (7.8 – 13.4) 92/892
Away from home 1 month or more in the past 12 months	20.6 - 344/1669	16.8 (14.0-19.9) 164/979	46.7 - 784/1680	23.3 (19.5-27.6) 195/642	10.0 - 75/753	13.2 (10.4 -16.6) 114/865	10.2 - 66/648	10.3 (8.1-12.9 87/848	22.4 (19.4-25.3) 171/764	14.5 (11.6-17.4) 84/580	16.5 - 153/927	19.3 (15.3-24.1) 178/921	12.2 (10.0 – 14.5) 99/811	18.4 (14.9 – 22.5) 164/892
Visiting the neighbouring community one or more times per month	20.2 - 337/1669	28.8 (25.2-32.7) 282/980	39.2 - 659/1680	56.0 (51.9-60.1) 469/837	26.6 - 201/755	19.5 (16.5 -23.0) 169/865	24.3 - 158/650	31.5 (27.2-36.2) 267/848	16.5 (13.8-19.1) 126/765	27.8 (24.1-31.4) 162/583	22.6 (19.9-25.3) 210/929	47.0 (42.1-52.0) 433/921	43.2 (39.8 – 46.6) 353/818	57.6 (52.1 – 63.0) 514/892

*95% CIs were not calculated at baseline in Uganda and Kenya and in Tanzania surrounding community because cluster allocation data was not available and therefore 95% CIs could not be adjusted appropriate for cluster design

4.3.8 Change in core indicators in the sensitivity analysis

As mentioned in the previous section, in all three camps surveyed there were significant changes in the population between baseline and follow-up. In both Kenya and Uganda camps, there was a repatriation of Sudanese refugees and an influx of newly arrived refugees (Somali refugee in Kenya and Congolese refugees in Uganda). Tanzania's Lugufu camp, in which the baseline survey was conducted, was closed in 2008 and residents moved to Nyarugusu camp. Our challenge in the follow-up survey was to, the extent possible, sample refugees who were resident in the camp at the time of the baseline survey. In Kenya and Uganda this meant sampling refugees who were resident in the camp for at least five years, while in Tanzania this meant sampling refugees who had just only recently moved into Nyarugusu camp from Lugufu camp where the baseline survey was conducted.

In Tanzania we were able, using UNHCR registration lists, to sample only ex-Lugufu residents. However, despite our best efforts in Kenya and Uganda a large proportion of the sampled participants reported that they had lived in the camp for five years or less (63.1% in Uganda and 41.0% in Kenya) meaning that they were less likely to have been resident in the camp at the time of the original survey. As newer arrivals might be different from those living in the camps originally, we conducted a sensitivity analysis in which we excluded those who have been living in the camp for less than five years. This sub-sample was then compared to the baseline in order to examine if and how the trends in change observed above in the primary analysis would change.

Annex 9 shows the difference in socio-demographic characteristics between the primary and the sensitivity analysis samples. ***In the sensitivity analysis, new arrivals were defined as those who had lived in the camp for less than five years.*** Both samples were similar in terms of age, gender and employment levels. However, the two samples where different in terms of their ethnic make-ups. In Kenya the sensitivity analysis (excluding those who had lived in the camp for five years of less) compared to the larger primary sample (including newer arrivals since baseline) had more Sudanese (44.3% and 34.5% respectively), more Ethiopians (4.9% and 6.9% respectively), but less Somalis (32.4% and 39.1% respectively). In Uganda, the sensitivity sample compared to the primary sample had more Sudanese (21.0% and 11.0% respectively), but markedly less Congolese (75.0% and 35.7% respectively).

The comparison in terms of the prevalence of core indicators between the primary and sensitivity analysis is presented in Table 6. For most of the core indicators the direction of change between baseline and follow-up was similar in the sensitivity analysis to that described in the primary analysis (Table 6). However, in Uganda the direction and magnitude of change of three indicators (abstinence among youth, sex with transactional partner, and being away from home) was different in the sensitivity analysis as compared to the primary analysis (Table 6).

TABLE 6: COMPARISON RELATIVE DIRECTION AND MAGNITUDE OF CHANGE SINCE BASELINE, IN UGANDA AND KENYA REFUGEE CAMPS IN PRIMARY AND SENSITIVITY ANALYSIS (EXCLUDING PARTICIPANTS LIVING IN THE CAMP FOR LESS THAN FIVE YEARS)

Indicator	Relative % Change between baseline and follow-up			
	Kenya Camp		Uganda Camp	
	Primary analysis	Sensitivity analysis	Primary analysis	Sensitivity analysis
Young men and women aged 15-24 who have had sexual intercourse before the age of 15	-27.8%	-1.1%	10.6%	2.1%
Never married young people aged 15-24 who have never had sex	27.9%	-41.8%	-0.1%	-3.3%
More than one sexual partner in the past 12 months	-52.9%	-44.5%	-58.4%	-53.5%
Sex with a non-regular partner(s) in the last 12 months	-87.4%	-80.9%	-27.1%	-35.4%
Sex with a transactional partner(s) in the last 12 months	-23.1%	0.0%	-27.3%	-45.5%
Women forced to have sex in the past 12 months	-82.7%	-86.5%	-12.5%	-31.3%
Received an HIV test in the past 12 months and know the results	1155.2%	1182.8%	219.6%	225.2%
Had an STI symptom and sought treatment in the past 12 months	-	-	35.1%	44.0%
Comprehensive correct knowledge of HIV/AIDS	-	-	18.4%	47.3%
Accepting attitudes towards PLHIV	-71.2%	-68.9%	-4.4%	-4.9%
Away from home 1 month or more in the past 12 months	-18.4%	1.0%	32.0%	104.0%
Visiting the neighbouring community one or more times per month	42.6%	60.9%	-26.7%	-17.7%

-Data not available at baseline

4.4 Trends in prevalence by gender, age-group and type of site

This section describes key indicators relating to sexual behaviour, HIV knowledge, and access to HIV testing, disaggregated by gender (males and females) and age groups (youths and adults). For each indicator we present a figure showing prevalence among males and among females, within each gender breakdown we also show the prevalence among youths and adults. The aim of this section is to make appropriate comparisons within similar age and gender groups (e.g. comparing 15-19 year old females at baseline to 15-19 year old females at follow-up). This is in order to tease out potential age and gender-specific trends, not otherwise apparent when only examining overall aggregated data.

We therefore make three main comparisons for each indicator. Firstly, we compare the direction and magnitude of change over time for each age and gender sub-group. This is in order to determine whether sub-groups changes are consistent with the overall changes described in the previous section. Secondly, we examine gender and age-specific trends in prevalence (i.e. examining whether prevalence is higher or lower among females compared to males and among youths compared to adults). Thirdly, we compare the change observed in the refugee camps to that observed in their surrounding communities.

4.4.1 Early sexual debut

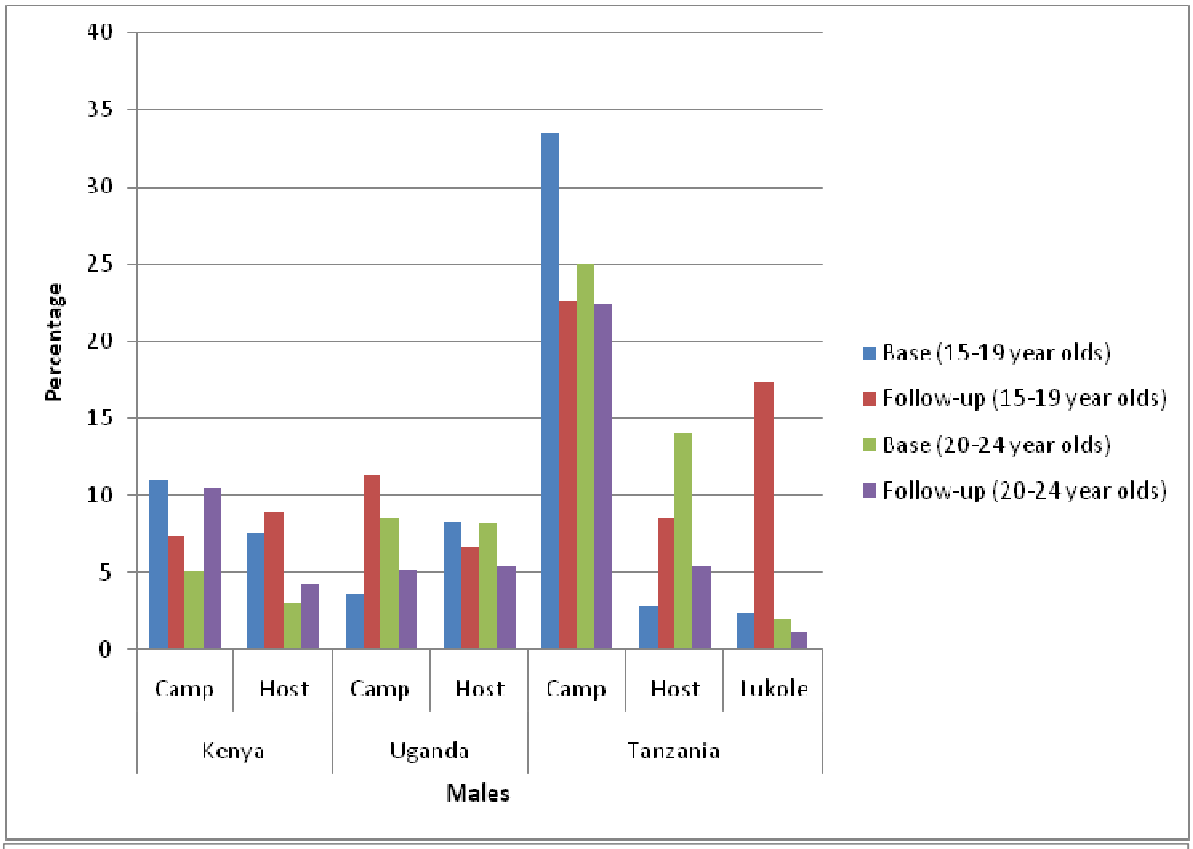
PREVALENCE OF SEX BEFORE THE AGE OF 15 AMONG 15-24 YEAR OLDS

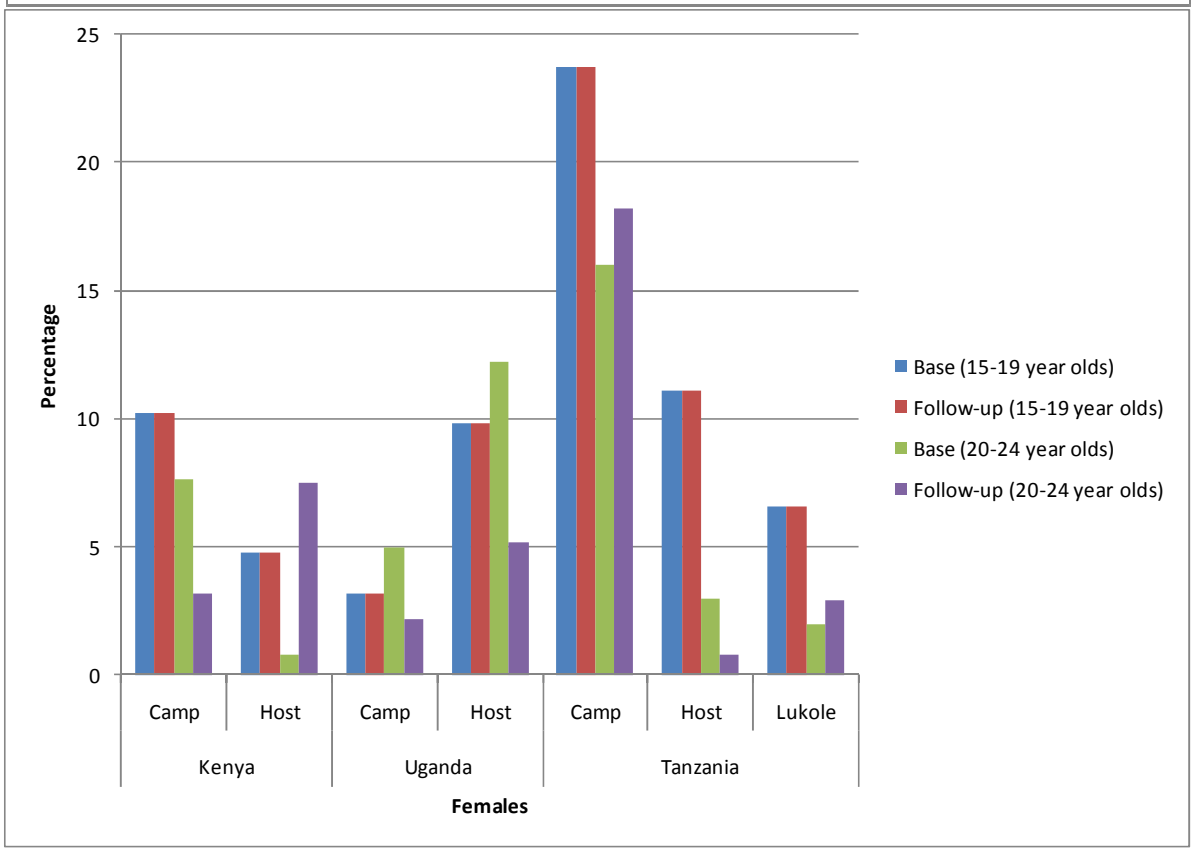
Figure 1 shows the prevalence of sex before the age of 15, among 15-19 year olds and 20-24 year olds by gender. The prevalence of sex at a young age tended to decrease, between baseline and follow-up, among 15-24 year old females and among 20-24 year old males. By contrast, among 15-19 year old males, prevalence increased in four of the seven sites (Figure 1).

Sex at a young age tended to be higher among 15-19 year olds than among 15-24 year olds. Though there was no clear difference in trend between males and females (Figure 1).

When comparing participants in camps to their counterparts in the surrounding communities, both at baseline and follow-up refugee males reported a higher prevalence of early sex than males in the surrounding community. Among females the trend was less clear. In Tanzania, both refugee females and males had a higher prevalence of reported early sex than surrounding community females. However, in Uganda (both at baseline and follow-up) and in Kenya (at follow-up) female refugees had lower prevalence of early sex than their surrounding community counterparts (Figure 1).

FIGURE 1: PREVALENCE OF SEX BEFORE THE AGE OF 15 AT BASELINE AND FOLLOW-UP, AMONG 15-19 AND 20-24 YEAR OLD MALES AND FEMALES



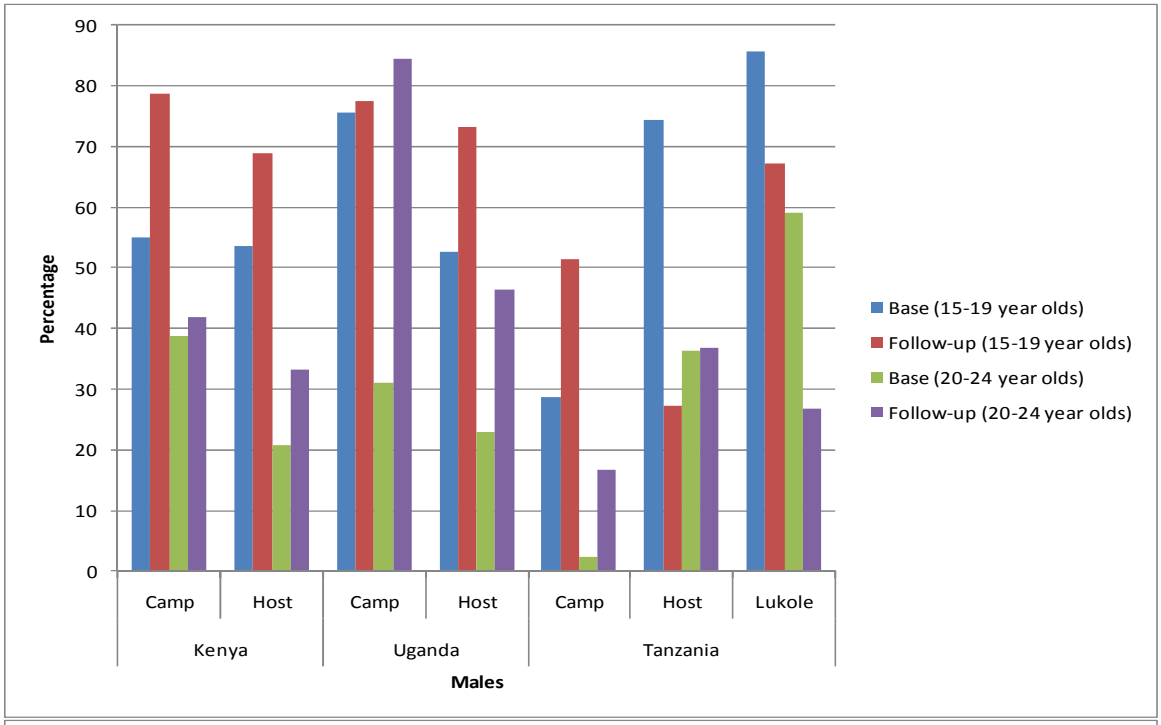


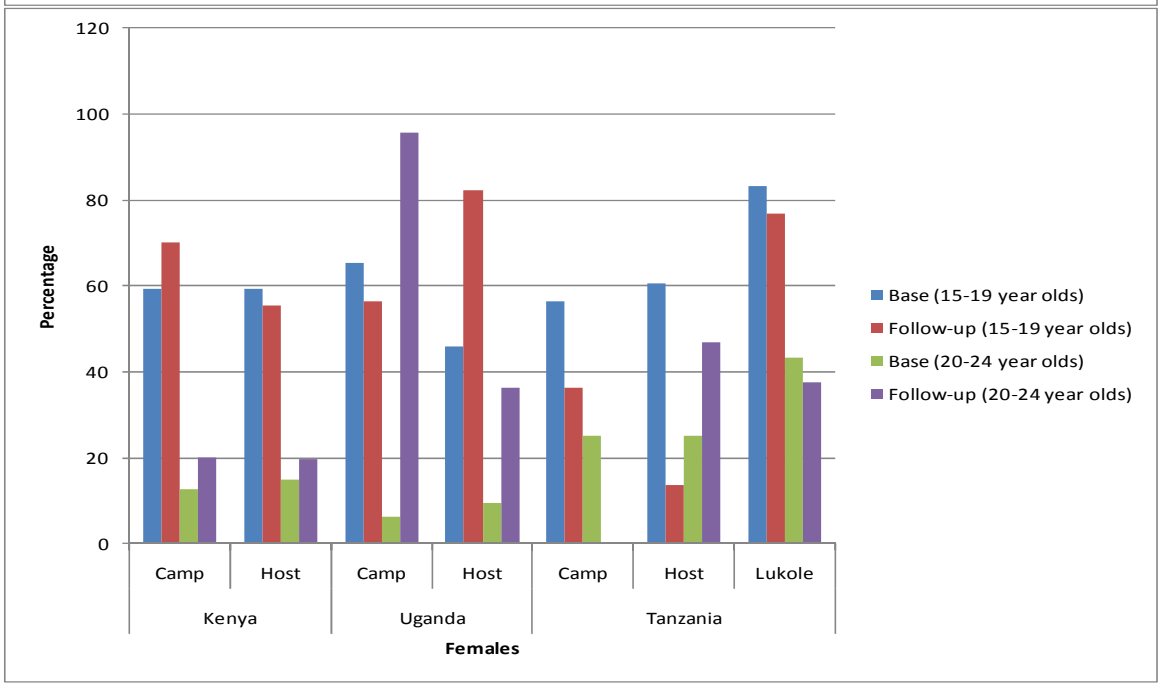
ABSTINENCE AMONG NEVER MARRIED 15-24 YEAR OLDS

The prevalence of reported abstinence increased among never married males aged 15-24 years (except in Tanzania surrounding communities) and among 20-24 year olds females (except in the Tanzanian refugee camp). However, abstinence levels decreased among 15-19 year old females between baseline and follow-up (Figure 2).

In Uganda and Kenya abstinence was not lower among refugees as compared to those in surrounding communities (Figure 2). Not surprisingly, abstinence among participants aged 20-24 years regardless of gender, was much lower than among 15-19 year olds (Figure 2).

FIGURE 2: ABSTINENCE AT BASELINE AND FOLLOW-UP, AMONG NEVER MARRIED 15-19 AND 20-24 YEAR OLD MALES AND FEMALES





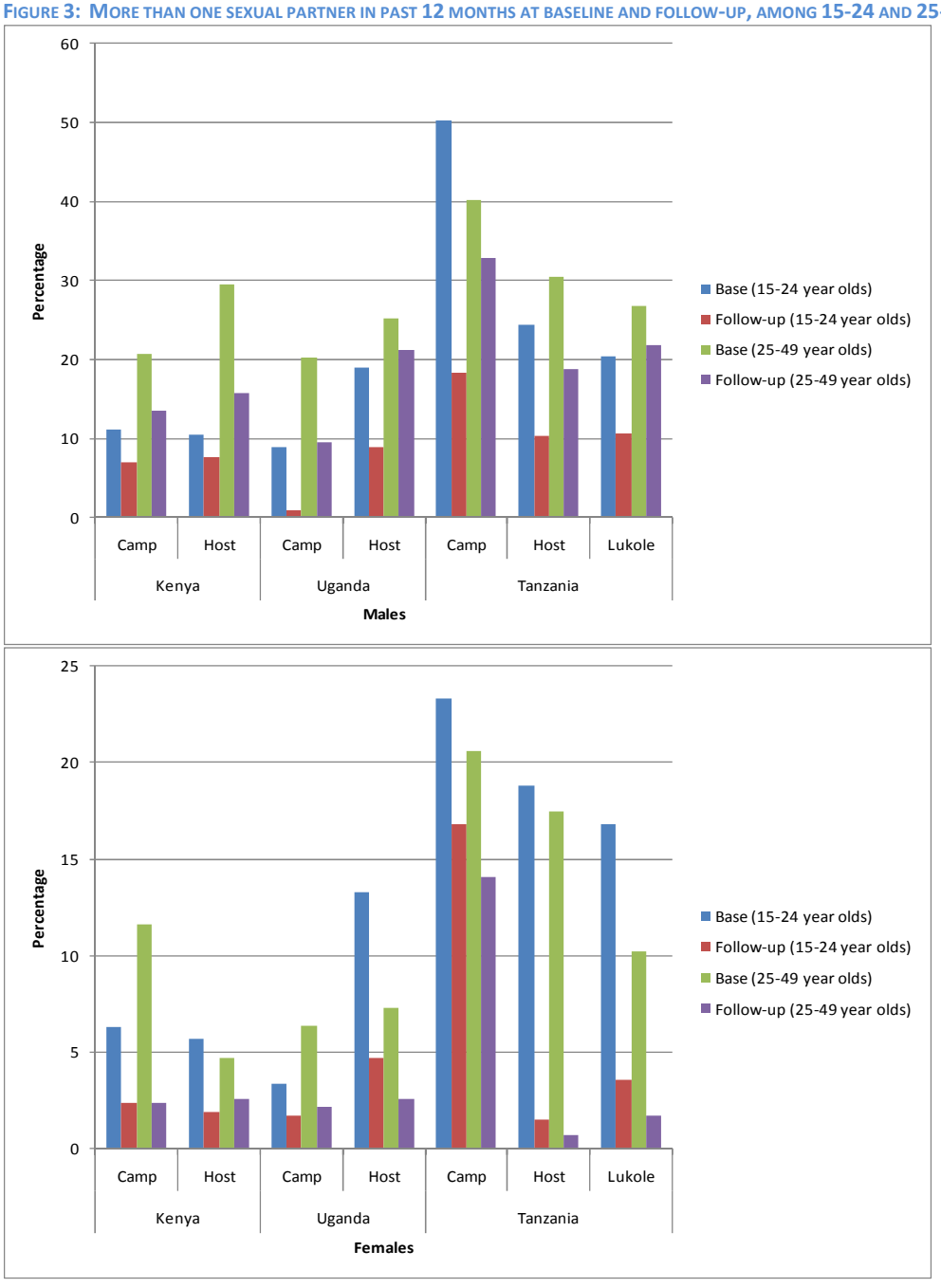
4.4.2 High risk sexual partnerships in the past 12 months

MULTIPLE PARTNERS

The prevalence of reported multiple sexual partnerships decreased between baseline and follow-up across all sites regardless of gender and age group (Figure 3).

The prevalence of multiple partnerships among refugees in Kenya and Uganda was not higher than in that in the surrounding community. By contrast, Tanzanian refugees consistently reported higher levels of multiple partnerships than counterparts in the surrounding community (Figure 3). Females consistently reported lower prevalence of multiple partnerships than men in their age group. At follow-up, 25-49 year olds males tended to have a higher prevalence of multiple partnerships than 15-24 year old males (Figure 3).

FIGURE 3: MORE THAN ONE SEXUAL PARTNER IN PAST 12 MONTHS AT BASELINE AND FOLLOW-UP, AMONG 15-24 AND 25-49 YEAR OLDS



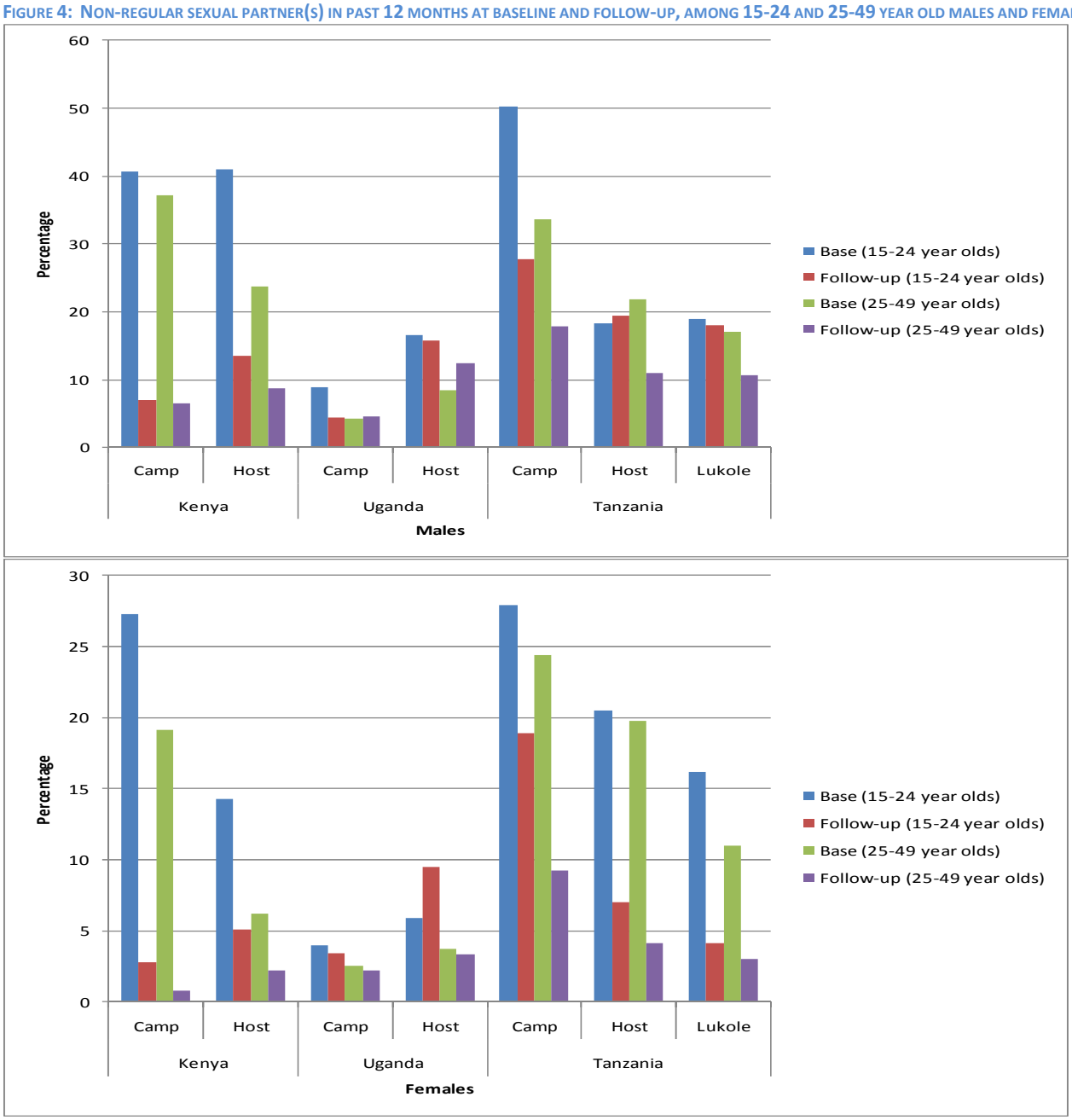
NON-REGULAR SEXUAL PARTNERSHIPS

Reported non-regular sex decreased dramatically between baseline and follow-up. This occurred across sites regardless of age or gender (Figure 4). However in Tanzania, despite these large decreases, follow-up levels of non-regular sex remained elevated as compared to Uganda and Kenya. This was owing to the very high levels of casual sex recorded at baseline in Tanzanian sites (Figure 4).

Non-regular sex tended to be higher among males compared to females, as well as higher among 15-24 year olds as compared to 25-49 year olds (Figure 4).

When comparing refugee camps to their surrounding communities, the prevalence of non-regular sex among refugees in Tanzania was higher than that in the surrounding community. At follow-up in Kenya and similarly in Uganda (both at baseline and follow-up), refugees seemed to have lower prevalence than participants from the surrounding community (Figure 4).

FIGURE 4: NON-REGULAR SEXUAL PARTNER(S) IN PAST 12 MONTHS AT BASELINE AND FOLLOW-UP, AMONG 15-24 AND 25-49 YEAR OLD MALES AND FEMALES



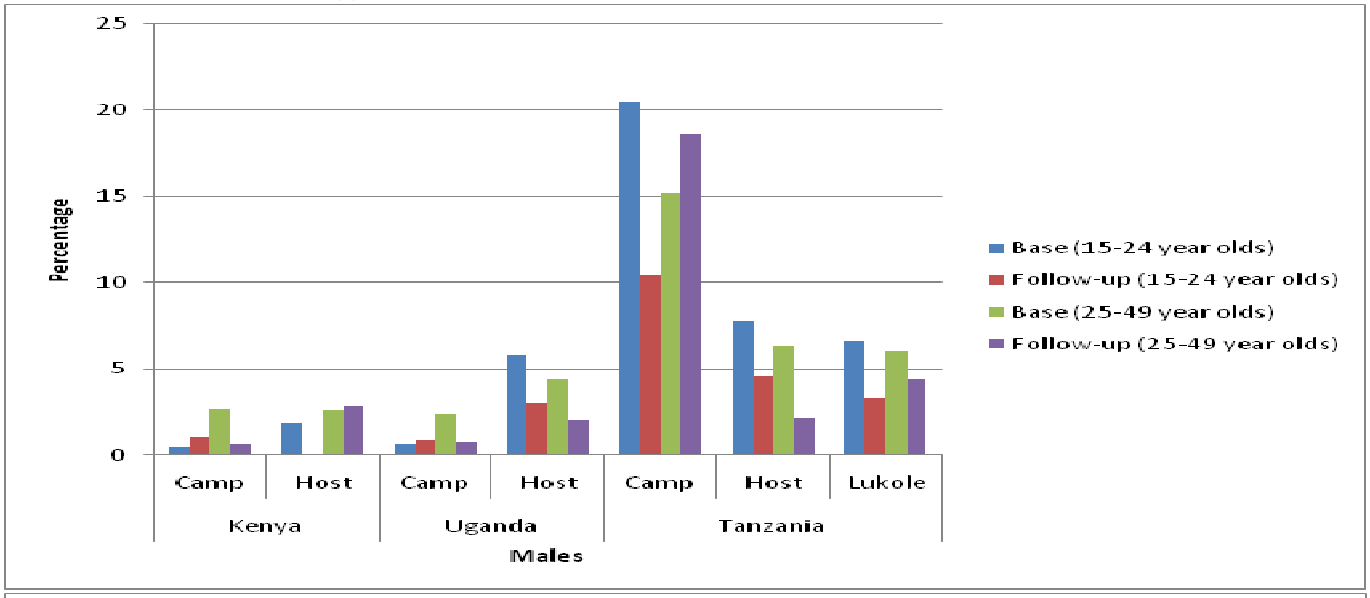
TRANSACTIONAL SEX

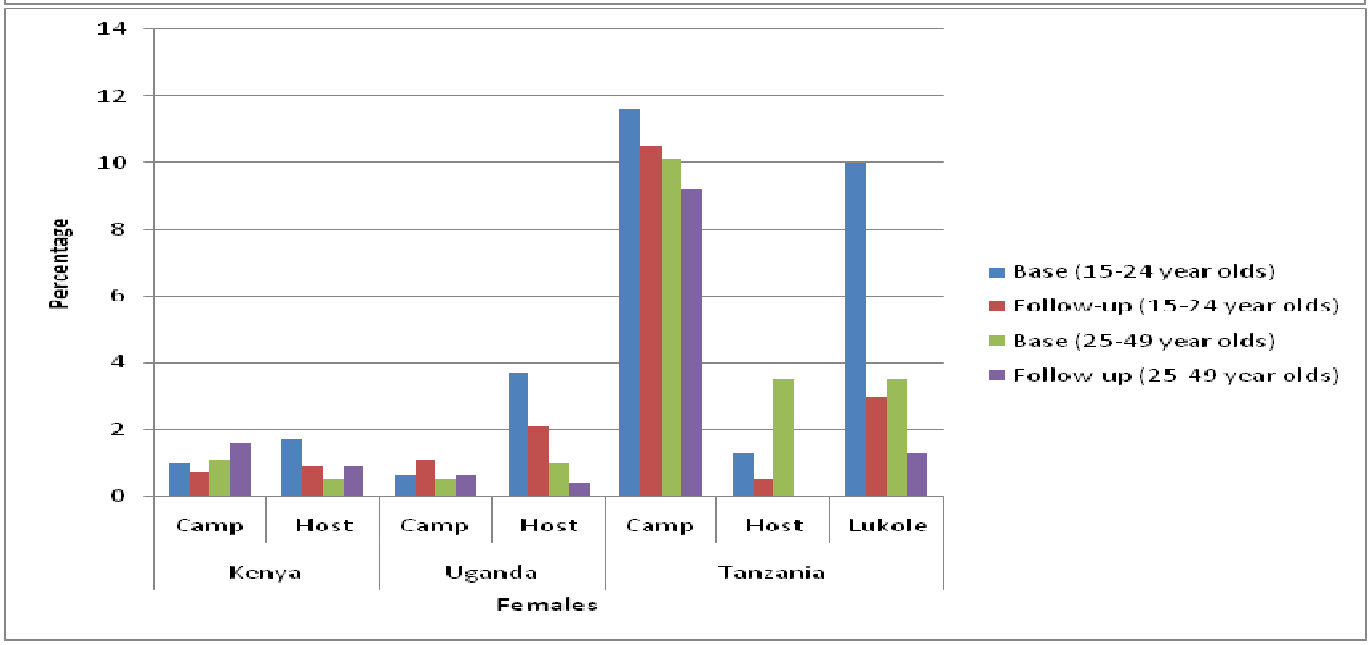
When comparing between baseline and follow-up, reports of transactional sex tended to decrease over time (Figure 5). However, the trend was less obvious among 25-49 year old females among whom an increase in transactional sex was reported in three of the seven sites

Reported transactional sex was lower among females as compared to males (Figure 5). Generally the prevalence was less than 10% among males and less 4% among females, except in the Tanzanian camp where among 25-49 year old males the prevalence reached was 18.6%, and 10.5% among 15-24 year old females.

In Uganda, refugees consistently lower prevalence of transactional sex than surrounding community participants (Figure 5). However, the opposite was true in Tanzania where refugees consistently reported higher levels of transactional sex. A consistent trend could not be observed in Kenya (Figure 5).

FIGURE 5: TRANSACTIONAL SEX PARTNER(S) IN PAST 12 MONTHS AT BASELINE AND FOLLOW-UP, AMONG 15-24 AND 25-49 YEAR OLD MALES AND FEMALES





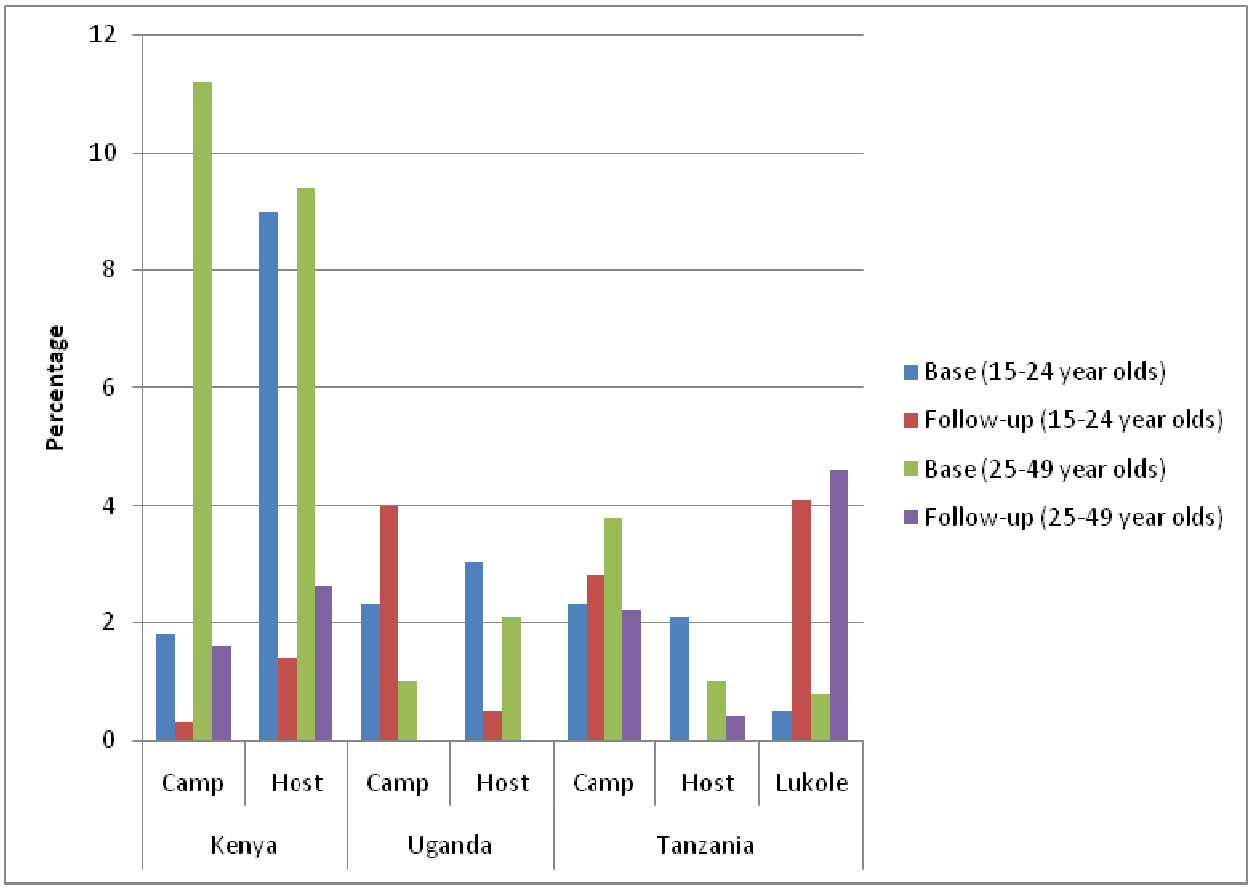
FORCED SEX AMONG FEMALES

The direction of change in the prevalence of forced sex in the past 12 months was similar across sites (Figure 6). In Kenya there was a dramatic decrease in levels of reported forced sex in both the camp and surrounding community, regardless of age. The same was observed in the Ugandan surrounding community. However, among 15-24 year olds in the Ugandan camp and the Tanzanian camp, and among all age groups in the Lukole town, reports of forced sex were higher at follow-up.

In Tanzania forced sex was higher among 15-24 year old refugee participants when compared to 15-24 year old participants from the surrounding community. By contrast in Uganda, 25-49 year old refugee participants reported higher prevalence of forced sex than 25-49 year old surrounding community counterparts. Finally, in Kenya reports of forced sex were lower among refugees than surrounding community participants regardless of age (Figure 6).

The difference between camps and surrounding community in terms of the prevalence of forced sex seemed to be country specific (Figure 6).

FIGURE 6: FORCED SEX IN PAST 12 MONTHS AT BASELINE AND FOLLOW-UP, AMONG 15-24 AND 25-49 YEAR OLD FEMALES



4.4.3 Access to HIV tests and results in the past 12 months

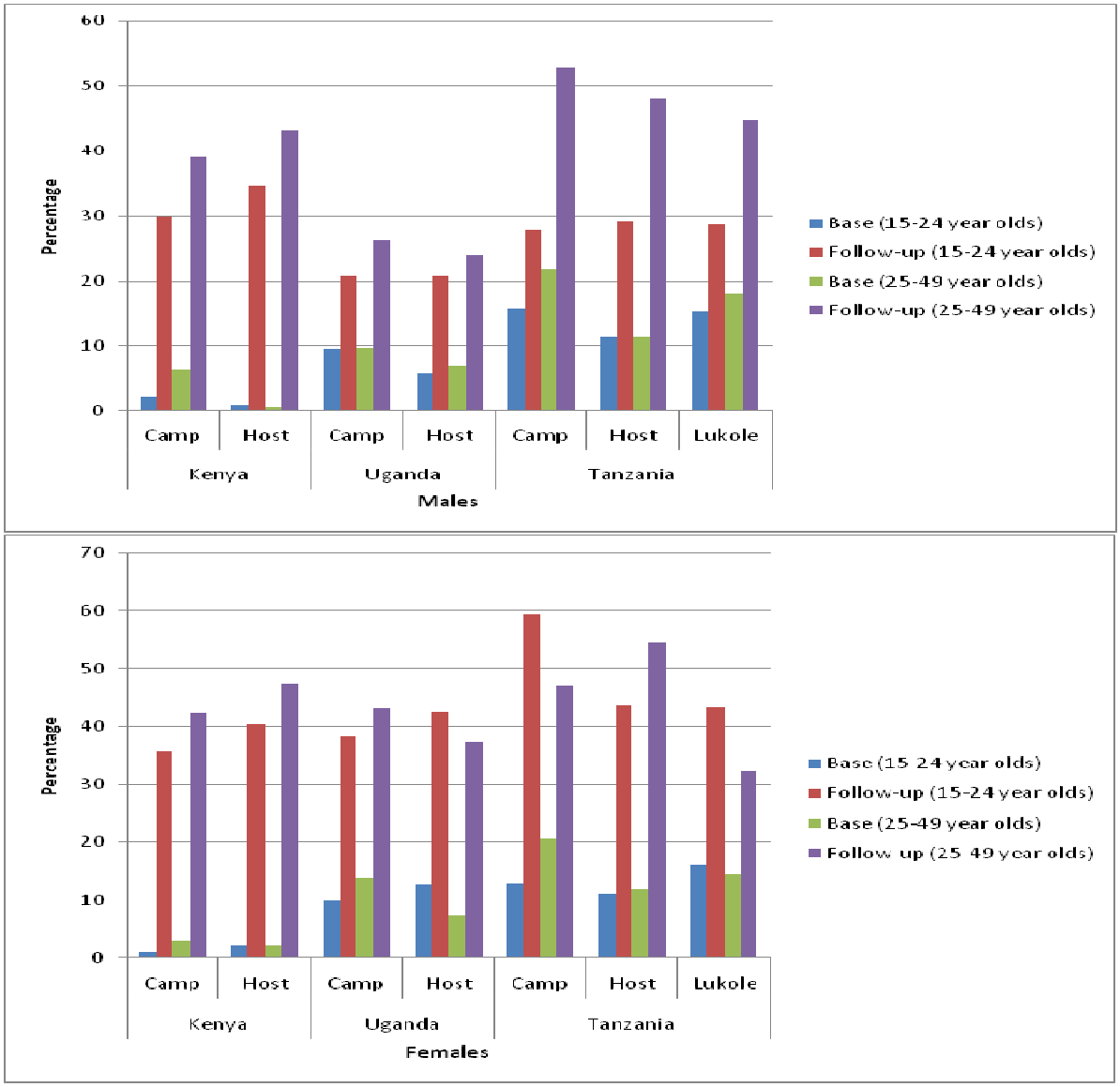
HIV testing increased dramatically between baseline and follow-up regardless of age or gender. At baseline testing levels ranged between 0.6% and 21.7% among males and between 1.0% and 20.6% among females. At baseline however, testing among males ranged between 20.7% and 52.9%, while among females it ranged between 32.3% and 59.4% (Figure 7).

In Kenya and Uganda testing was higher among females than males, while in Tanzania there was not a clear gender trend (Figure 7).

At follow-up, testing levels were lower among 15-24 year olds males when compared with 25-49 year old males. However, there was not a clear age trend among females (Figure 7).

When comparing camps to their surrounding communities, refugee males tended tested at higher rates than males in the surrounding community. There was again no clear trend among females when comparing those living in the camp to their counterparts in the surrounding community (Figure 7).

FIGURE 7: HAD AN HIV TEST AND RECEIVED THE RESULTS IN PAST 12 MONTHS AT BASELINE AND FOLLOW-UP, AMONG 15-24 AND 25-49 YEAR OLD MALES AND FEMALES



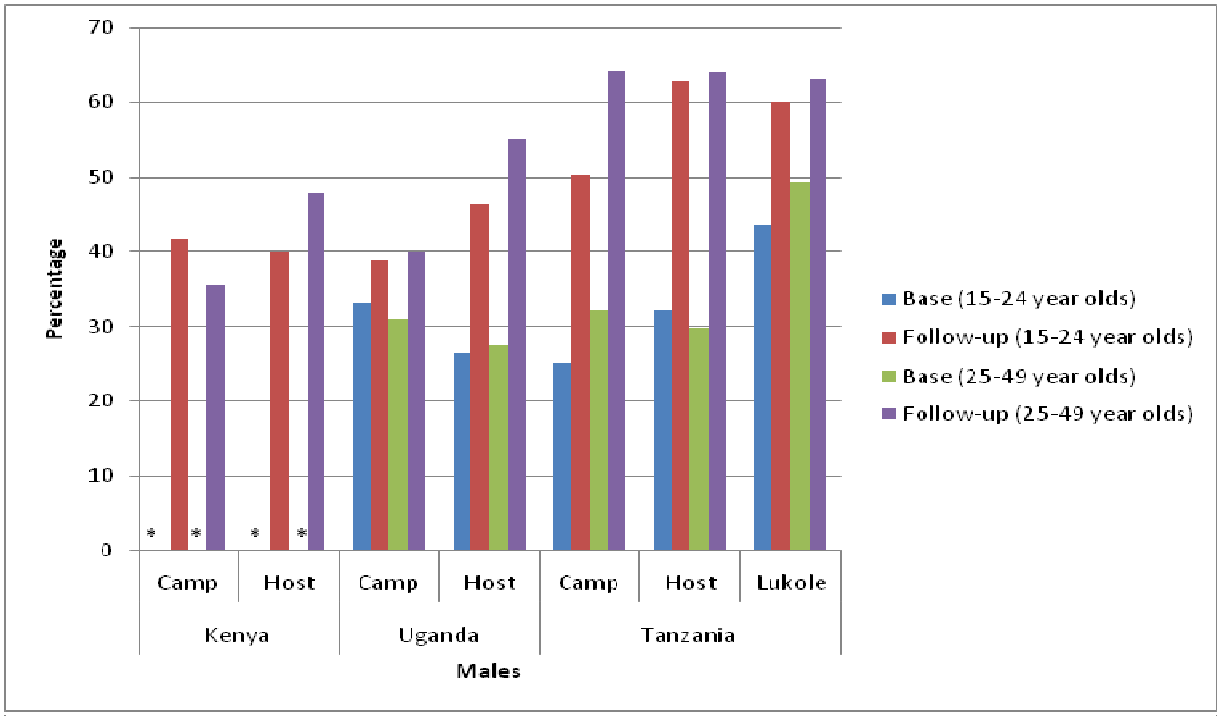
4.4.4 Comprehensive correct knowledge of HIV/AIDS

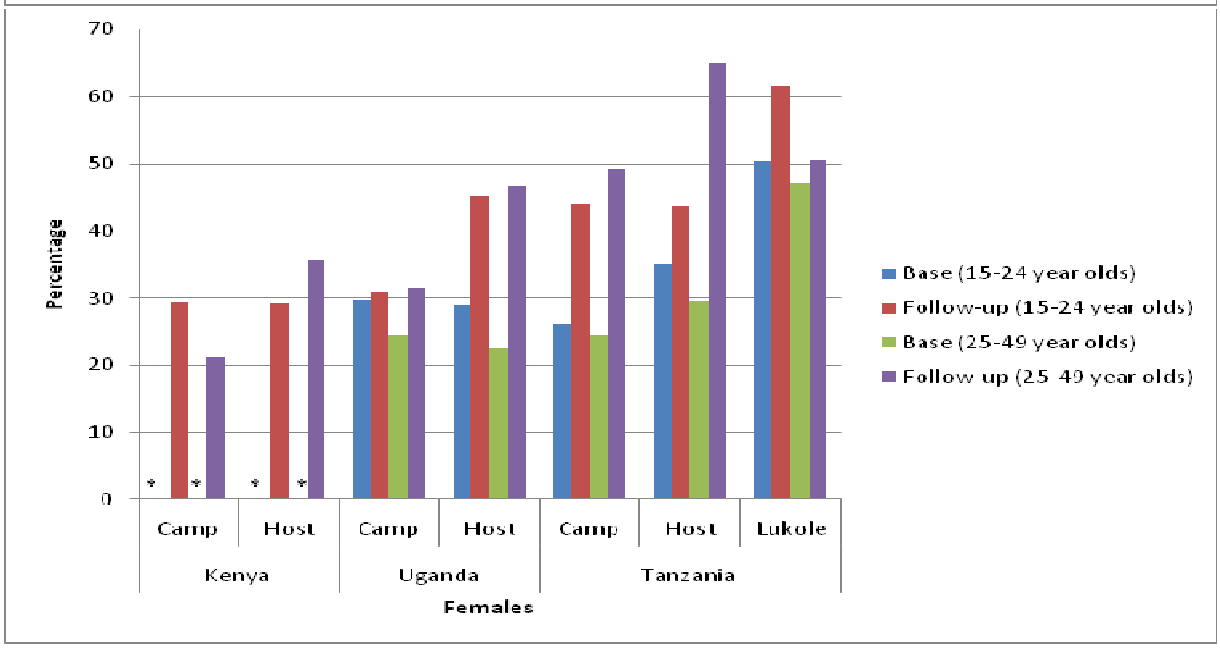
Comprehensive knowledge was higher at follow-up compared to baseline across all sub-groups. Comprehensive knowledge at baseline ranged from a low of 26.2% in the Uganda surrounding community to a high of 47.9% in Lukole town. By contrast, at follow-up it ranged from a low of 34.8% in the Uganda cap to 62.4% in the Tanzania surrounding community (Figure 8).

Males tended to have higher comprehensive knowledge than females (Figure 8).

At follow-up there was no difference between 15-24 year old males and 25-49 year old males. However, among females 15-24 year olds had lower comprehensive knowledge than 25-49 year old females (Figure 8). Thus, young females may have had the lowest comprehensive knowledge compared to the other sub-groups.

FIGURE 8: COMPREHENSIVE CORRECT KNOWLEDGE OF HIV/AIDS AT BASELINE AND FOLLOW-UP, AMONG 15-24 AND 25-49 YEAR OLD MALES AND FEMALES





*Complete data to calculate the composite indicator of comprehensive knowledge were not collected in Kenya baseline BSS

4.5 Association between risky sexual partnerships and neighbouring community interaction

The prevalence of risky sexual partnerships (multiple, non-regular and transactional) was consistently higher among frequent visitors to the neighbouring community than among infrequent visitors (less than once a month) (Figure 9 and Figure 10). Annex 7 shows the main reasons for visiting the neighbouring community.

FIGURE 9: COMPARING THE BASELINE PREVALENCE OF MULTIPLE, CASUAL, AND TRANSACTIONAL SEXUAL PARTNERSHIPS AMONG FREQUENT (ONCE/MONTH OR MORE) VISITORS TO NEIGHBOURING COMMUNITY TO INFREQUENT (<ONCE/MONTH) VISITORS

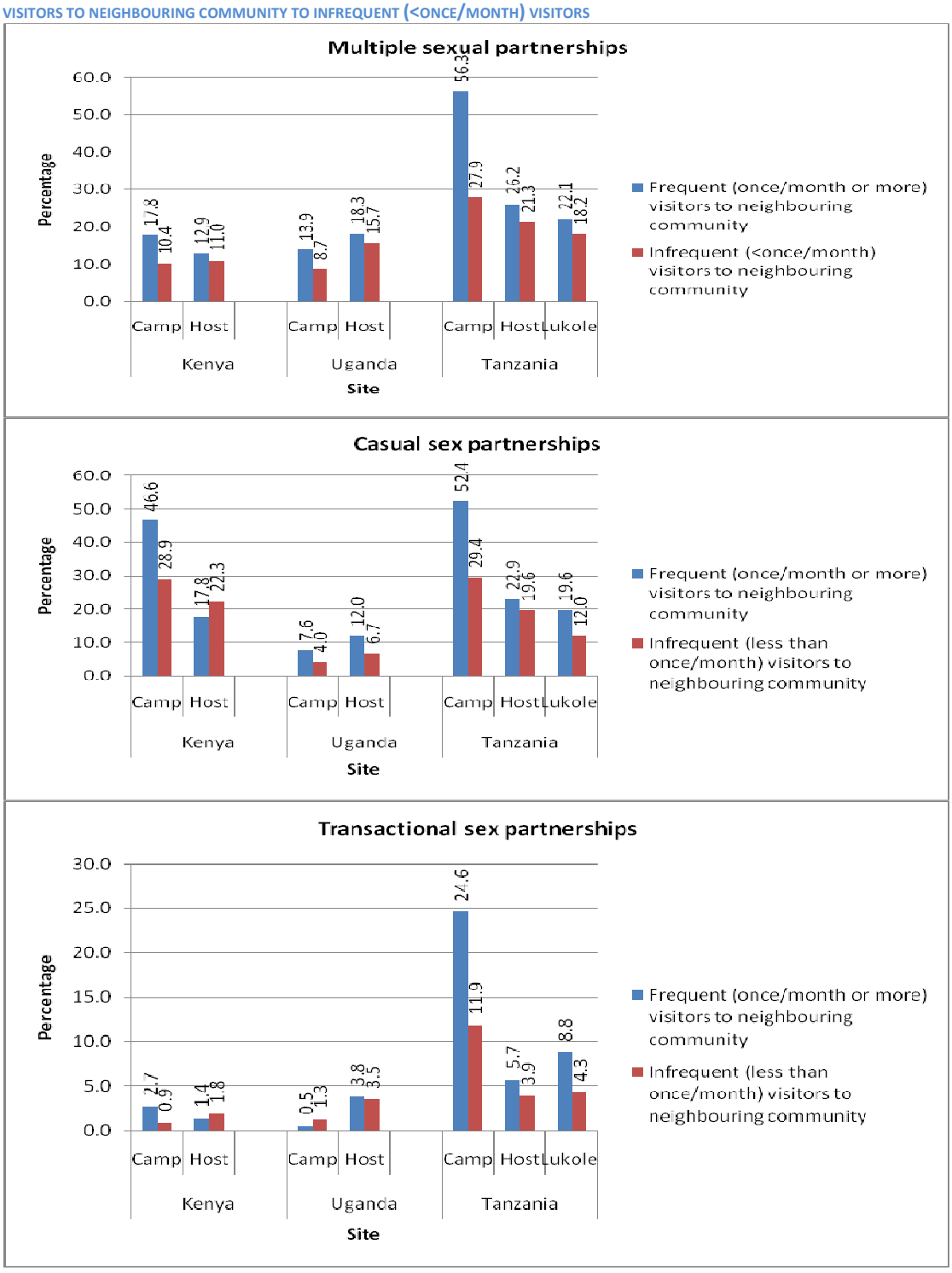
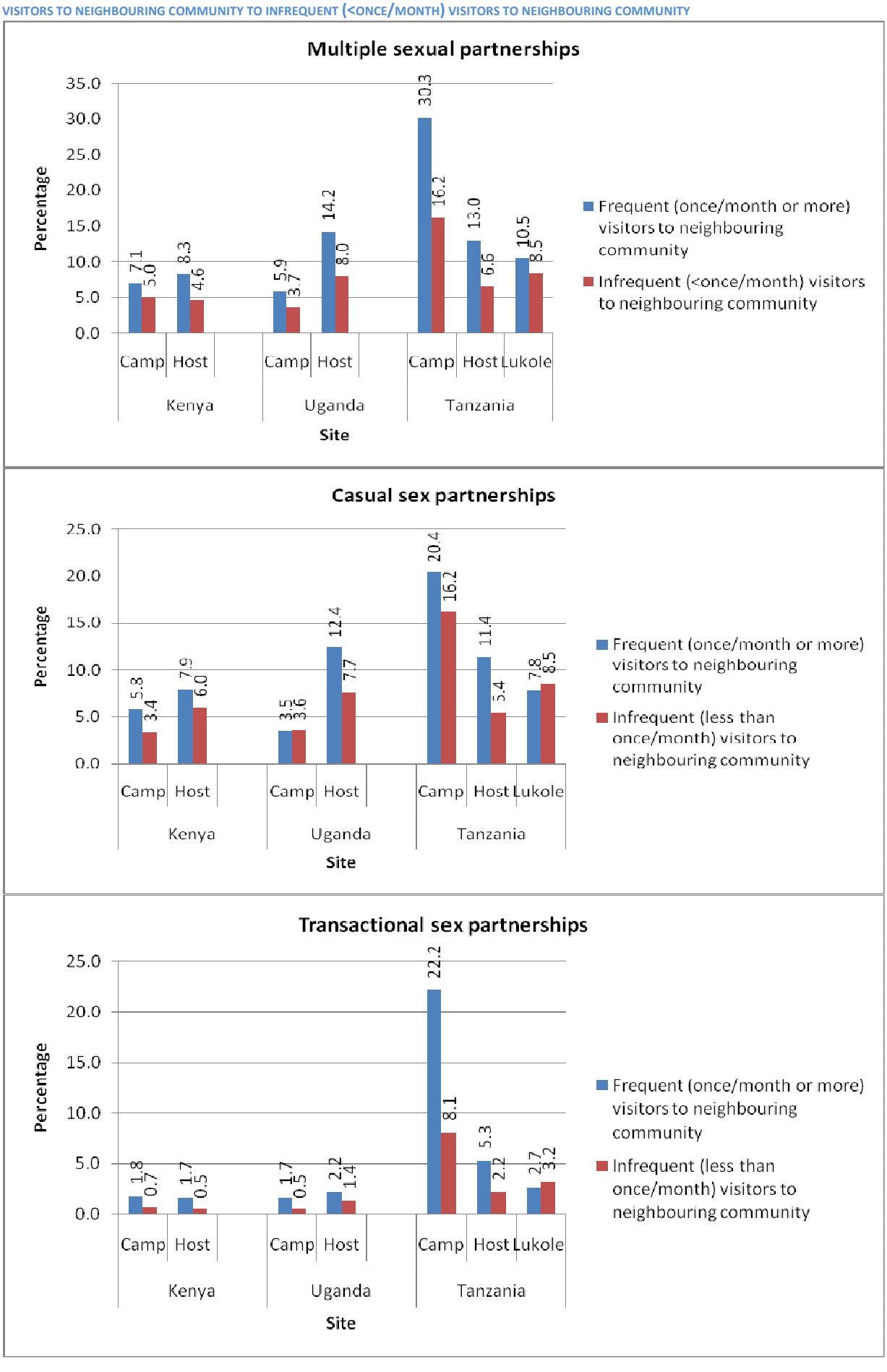


FIGURE 10: COMPARING THE FOLLOW-UP PREVALENCE OF MULTIPLE, CASUAL, AND TRANSACTIONAL SEXUAL PARTNERSHIPS AMONG FREQUENT (ONCE/MONTH OR MORE) VISITORS TO NEIGHBOURING COMMUNITY TO INFREQUENT (<ONCE/MONTH) VISITORS TO NEIGHBOURING COMMUNITY



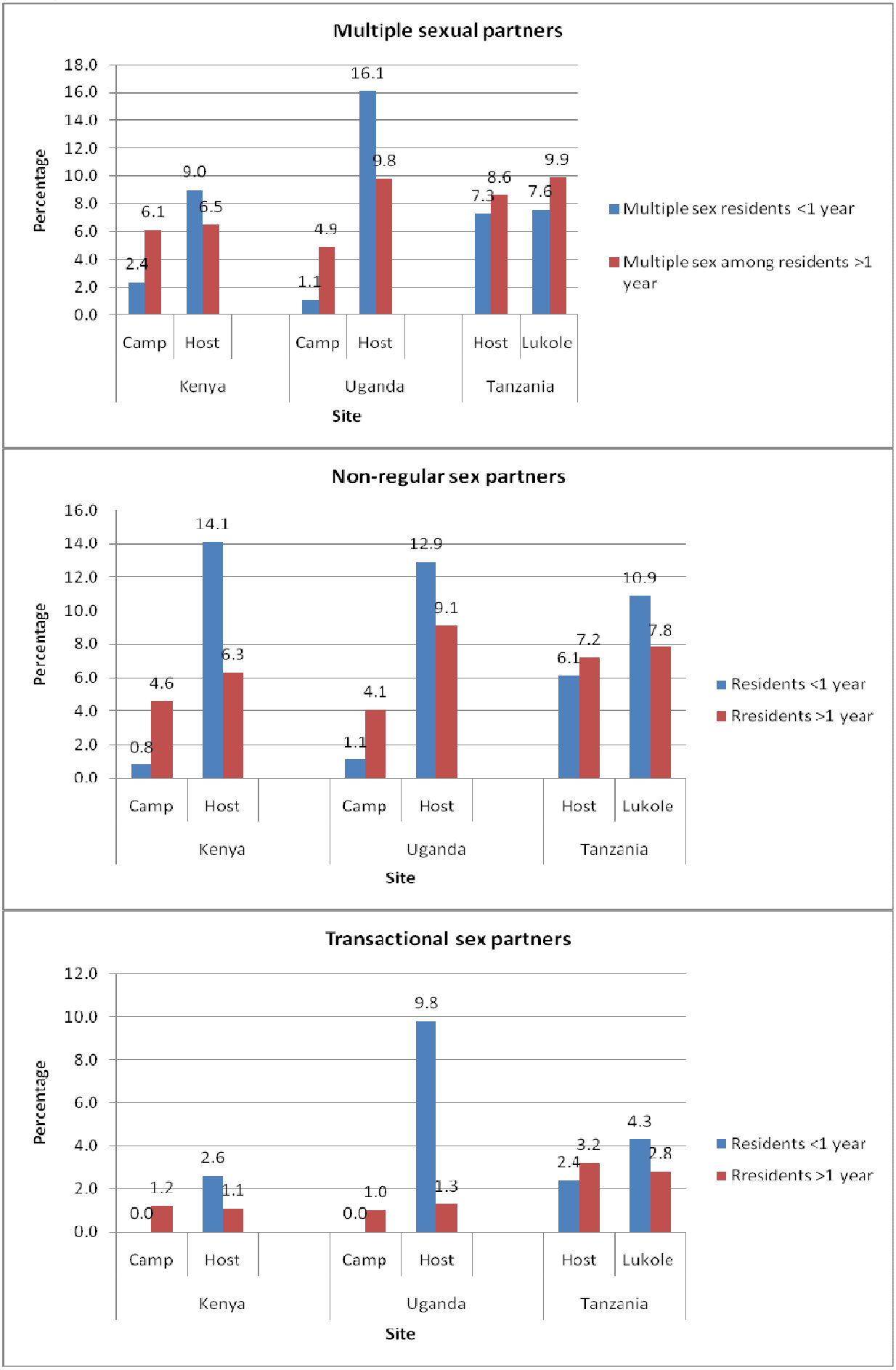
4.6 Association between risky sexual partnerships and recent displacement

Figure 11 compares the follow-up prevalence of multiple, casual, and transactional sex partnerships between new arrivals (living in the community for less than one year) and older residents (living in community for more than one year). Annex 11 shows the same comparison but at baseline. Data from the Tanzania refugee camp was not included because the survey sampled only ex-Lugufu camp residents, almost all of whom were new arrivals into the camp.

At follow-up in the Ugandan and Kenyan refugee camps recent arrivals reported lower levels of multiple, casual and transactional sex when compared to older camp residents (Figure 11). In their surrounding communities however the opposite was observed, with recent arrivals reporting higher levels of risky sexual partnerships compared to older residents (Figure 11). In the Tanzanian national towns the findings were mixed, with newer arrivals having lower risky sexual partnerships in the surrounding community, but higher levels of risky sex in Lukole town (ex-surrounding community to the now closed Lukole camp) (Figure 11).

At baseline, there was no clear association between length of residency and prevalence of risky sexual behaviour, with risky partnerships being higher among new arrivals in three sites (Uganda camp, Uganda surrounds, and Lukole town), but lower in three sites (Kenya camp, Kenya surrounding community, and Tanzania surrounding community) (Annex 11).

FIGURE 11: COMPARING THE PREVALENCE OF MULTIPLE, CASUAL, AND TRANSACTIONAL SEX PARTNERS BETWEEN RECENT ARRIVALS (<1YEAR) AND OLDER RESIDENTS (>1YEAR), AT FOLLOW-UP



5. LIMITATIONS

We identified the following study limitations:

- At follow-up there was an influx of new arrivals, not present at the time of the baseline surveys, in most sites. In Tanzania, using systematic random sampling we were able to select a comparable sample to baseline. However, this was not possible in Uganda and Kenya refugee camps where follow-up samples included new arrivals who had similar age and gender structures, but tended to be ethnically different than older residents. In these two sites, new arrivals may have had a different direction of change in core indicators than older residents. In order to address this limitation in comparability in Kenya and Uganda refugee camps, we conducted a sensitivity analysis in which we excluded newer arrivals (living in the camp <5 years) at follow-up. This allowed us to examine whether or not the overall changes observed in the primary analysis would persist in sensitivity analysis. For the most part the direction, if not the magnitude of change, in the sensitivity analysis was consistent with that observed in the primary analysis.
- Non-response among eligible participants was higher at follow-up in the Tanzanian national town and was not reported in the Uganda and Kenya surveys. It is possible that non-response was higher among sub-groups (e.g. males) with higher prevalence of risky sexual behaviours. However, the extent to which non-response may have affected our findings in Uganda and Kenya cannot be ascertained.

In addition to the above study-specific limitations, our study is also subject to other potential sources of bias, including:

- Response bias (due to purposeful under-reporting of risky behaviour and over-reporting of protective behaviours) may have occurred. In particular under-reporting of non-regular, transactional and anal sex, as well as drug or alcohol use.
- Recall bias, especially as regards to life time experiences. The chances of this bias were minimized by asking questions about behaviour and experiences over the past 12 months whenever appropriate.
- Measurement bias due to differences in questioning among interviewers. Upon inspection of the data we did not find any evident patterns in questionnaire responses according to interviewer team (results not shown). This suggested that there were no major differences in the data collection process among interviewers.

6. SUMMARY OF FINDINGS

6.1 Change in core indicators over time

6.1.1 Early sexual debut among 15-24 year olds

Abstinence among never married 15-24 year olds increased in five of seven sites at follow-up. However in the refugee camps in Kenya and Uganda, when newer arrivals were excluded in the sensitivity analysis abstinence decreased in both sites.

Sex before the age of 15 tended to decrease among females and among 20-24 year old males, but increased among 15-19 year old males in four of seven sites.

6.1.2 Risky sexual partnerships in the past 12 months

Multiple, casual and transactional sexual partnerships decreased in all sites at follow-up. The decrease in multiple sexual partnerships relative to baseline ranged from 38.3% in the Tanzania camp to 63.8% in the Tanzania surrounding community. The relative decrease in casual sex ranged from 27.1% in Uganda camp to 87.4 % in Kenya camp. Finally, the relative decrease from baseline in transactional sex ranged from 14.3% in Tanzania camp to 62.8% in the Tanzania surrounding community.

6.1.3 Condom use at last sex with casual and transactional partners in the past 12 months

Condom use with the last casual sex partner decreased in all sites, except in the Uganda camp. The relative decrease from baseline ranged from 14.8% in Tanzania camp to 171.7% in Kenya surrounding community. There was no clear trend in change in condom use with last transactional partner, with condom use decreasing in four sites but increasing in three.

6.1.4 Forced sex

Overall, forced sex decreased in six sites, with the decrease relative to baseline ranging from 12.5% to 91.7%. However, in the Uganda and Tanzania refugee camps, forced sex increased among 15-24 year olds. Forced sex also increased in Lukole town from 0.7% to 4.4%.

6.1.5 HIV testing in the past 12 months

Large increases in HIV testing in the past 12 months were reported across all sites. The increase relative to baseline ranged from 135.0% in Lukole town to 2878.6% in the Kenya surrounding community.

6.1.6 Comprehensive knowledge and accepting attitudes

Comprehensive knowledge increased in all sites, with the increase relative to baseline ranging from 18.4% in Uganda camp to 99.4% in Tanzania surrounding community. By contrast, accepting attitudes towards people living with HIV/AIDS decreased in five of seven sites. The decrease relative to baseline ranged from 4.4% in Uganda camp to 75.5% in Lukole town.

6.2 Sensitivity analysis in Uganda and Kenya camps

The change observed in the sensitivity analysis (which excluded residents living in the camp for less than five years) was similar in direction, if not in magnitude, to the change observed in the primary analysis for all indicators except abstinence among never-married youths. In the primary analysis, abstinence at follow-up in Kenya camp increased, while it in Uganda it remained relatively unchanged. However, when newer arrivals were excluded in the sensitivity analysis abstinence decreased in both sites.

6.3 Trends in prevalence by gender and age-group

6.3.1 Sex before 15 years of age

There was no clear difference between males and females in terms of the prevalence of sex before the age of 15 among 15-24 year olds. However, 15-19 year olds tended to report a higher prevalence of young-age sex compared to 20-24 year olds.

6.3.2 Risky sexual partnerships

Males reported higher prevalence of multiple, casual and transactional sex compared to females. Multiple sexual partnerships were higher among 25-49 year olds, but casual sex was higher among 15-24 year olds.

6.3.3 HIV testing

HIV testing in the past 12 months was higher among females compared to males. 25-49 year old males reported higher rates of testing compared to 15-24 year old males.

6.3.4 Comprehensive knowledge

The prevalence of comprehensive knowledge was higher among males compared to females. There was no difference between 15-24 year olds and 25-49 year olds.

6.4 Trends in prevalence by type of site

Young age sex was more prevalent among male refugees than among males in their surrounding community. By contrast, abstinence among never-married youths was higher among refugees when compared to their counterparts in their surrounding host community.

Reported multiple sexual and casual sexual partnerships were lower among refugees in Kenya and Uganda than among their counterparts in the surrounding community. However, in the Tanzanian refugee camp multiple, casual and transactional sexual partnerships were higher among refugees than among surrounding community participants.

HIV testing was higher among refugee males than among surrounding community males, but there was no clear trend in testing among females in camps compared to those in the surrounding community.

6.5 Association between risky sexual partnerships, recent displacement and interaction with neighbouring community

Those who visited the neighbouring community at least once a month consistently reported higher levels of risky sexual behaviours as compared to those who visited the neighbouring community less frequently. Older residents (living in the community >1year) at follow-up in Ugandan and Kenyan refugee camps also reported higher levels of risky sexual partnerships compared to recent arrivals. This could partly be explained by the fact that older residents visited the neighbouring community more frequently than new arrivals. Interestingly, older residents in the Kenyan and Ugandan surrounding communities, despite interacting with the neighbouring community more frequently, reported lower levels of risky sexual partnerships than newer arrivals.

7. DISCUSSION

7.1 Factors potentially contributing to changing trends

Overall we observed consistent and dramatic decreases in risky sexual behaviours, whether multiple, non-regular or transactional sexual partnerships. This was coupled with increases in abstinence among youths and condom use with non-regular partners. The same trends were generally observed across age and gender groups. These trends are very promising and consistent with those reported among youths in countries most severely affected by HIV, where multiple partnerships tended to decrease over time (1).

The positive behavioural changes observed overtime may partly be due to the success of HIV prevention efforts. However, it is important to underscore that our findings cannot be used to determine the extent to which HIV prevention efforts contributed to behaviour change, or to indicate which specific activities were most effective. In order to conclude that an intervention was effective, we need to establish a significant association between positive outcomes and exposure to the intervention in question. This causal information can best be gathered by conducting experimental evaluations, and randomised controlled trials of specific HIV prevention activities (9).

In addition to HIV prevention activities it is important to consider other potential reasons for the observed behavioural improvements. One such factor is the change in population over time. In all refugee camps there was an influx of new refugees not present during the baseline surveys. In Tanzania we were able to recruit a sample comparable to baseline using random systematic sampling. However, in the Kenya and Uganda camps we were not able to use systematic random sampling and as such the follow-up samples included some new arrivals likely not present at baseline. In those two sites we therefore conducted a sensitivity analysis in which we compared the overall sample recruited to one which excluded the new arrivals. For the most part the findings from the sensitivity analysis were consistent with those from the primary analysis in the direction of change if not in magnitude. Therefore, though we cannot completely exclude the possible effects of population change on our findings, at least in the Ugandan and Kenyan camps we can cautiously conclude that the direction of change observed was largely similar for older residents as well as new arrivals.

Another potential contributor for the observed improvements is that participants may have been more likely to provide socially desirable responses (i.e. responses which they felt were more correct or ones which they thought the interviewer wanted to hear). The increase in HIV knowledge over time may have had a paradoxical influence on participant responses at follow-up, such that participants who had gained more knowledge about how to prevent HIV may have been more likely to provide say that they engaged in safer sexual behaviour, even if they did not necessarily do so.

7.2 Key changes over time

7.2.1 Sexual debut

Young age-sex (<15 years) was higher among 15-19 year olds than among 15-24 year olds. Young-age sex also tended to increase among 15-19 year old males, but to decrease among all other sub-groups. Thus, despite decreases in risky sexual partnerships and increases in abstinence among unmarried youths, male youths were at highest risk of initiating sex at a young age.

Moreover, in the primary analysis abstinence among never married 15-24 year olds decreased in the Kenya refugee camp and remained relatively unchanged in the Uganda refugee camp. However, when newer arrivals were excluded in the sensitivity analysis, abstinence decreased in both sites. This indicates that the abstinence was higher among new arrivals than among older residents in Kenya and Uganda camps.

7.2.2 Risky sexual partnerships and gender

Non-regular sex was higher among youths, while multiple sexual partnerships were higher among adults.

Moreover, males consistently reported higher levels of risky sexual partnerships than females, both at baseline and follow-up. These findings are consistent with reports from Uganda and Kenya where males were more likely to report engaging in multiple and non-regular sexual partnerships than females (4, 10). However higher levels of risky sexual partnerships does not necessarily indicate higher levels of HIV infection among males than among females. In fact the prevalence of HIV infection is reported to be 3-7 fold higher among adolescent females than among adolescent males (11). Increased risk of HIV infection among women is due to several factors including anatomy and presence of curable STIs (12-14), as well as trans-generational sex with older male partners who are more likely to already be infected with HIV. Trans-generational sex has been sown to increase risk of HIV infection among women almost 7-fold when the age difference is 5-7 years (15-16).

HIV prevention interventions require more targeted efforts directed at reducing risky sexual behaviours, especially early sexual debut and casual sex among boys and young men and multiple partnerships among adult men. This is not only to address the increased behavioural risk among men, but to also reduce the risk of HIV transmission to their female partners.

7.2.3 Comprehensive knowledge

Overall we observed an increase in comprehensive knowledge regardless of age or gender. However, behaviour change models have long suggested that knowledge alone does not always lead to behaviour change. This seems to be the case among males who, despite reporting a higher prevalence of comprehensive knowledge than females, were more likely to report having multiple, casual and transactional sexual partners. HIV prevention activities should be designed based on appropriate behaviour change models which take into account that sexual behaviour is not a static phenomenon,

but is influenced by many factors, including characteristics of the individual as well as their social and economic context (9).

7.2.4 HIV testing

HIV testing rates increased dramatically overtime across all sub-groups. However, despite risky behaviours being higher among males, HIV testing was higher among females, likely because of the strong focus of testing activities in antenatal care settings. Efforts to improve access to HIV testing outside health facilities should be stepped up in order to better reach healthy males who do not regularly attend health facilities.

7.3 Camp-specific trends in prevalence

Refugees reported lower levels of risky sexual partnerships than surrounding community residents in Kenya and Uganda, but not in Tanzania. Abstinence among never-married youths was higher among refugees than among their counterparts in the surrounding community in all three countries. There is thus limited evidence that refugees always have higher levels of risky sexual behaviours than their nationals in the surrounding community. This information lends support to earlier findings by Spiegel et al. which suggest that HIV prevalence is not always elevated among refugees compared to surrounding community residents, in fact the opposite was more often observed (17).

7.4 Association between risky sexual partnerships and mobility

Individual who visited the neighbouring community more frequently (at least once a month) reported higher levels of risky sexual partnerships compared to those who visited the neighbouring community less than once a month.

Interaction with neighbouring community was highest among older residents (living in the community >1year) as compared to new arrivals. This may partially explain the reason why newer refugee arrivals in Kenya and Uganda, who were less likely to interact with the neighbouring community, also reported lower levels of risky sexual behaviours. Interestingly, older residents in the Kenyan and Ugandan surrounding communities, despite interacting with the neighbouring community more frequently, reported lower levels of risky sexual partnerships than newer arrivals. This may be due to the fact that new and old residents are ethnically similar and thus new arrivals may have been more likely to form sexual networks within their own communities.

The main reasons for visiting the neighbouring community, whether to shop, trade, or to work; were economic. Therefore, HIV prevention activities targeting more mobile and higher risk individuals should be carried out in common meeting places such as markets. Moreover, given the constant influx of new arrivals into both camp and surrounding communities it is important to carry out frequent behavioural assessment among new arrivals to ascertain specific HIV prevention needs which may be different from those among older residents.

8. IMPLICATIONS FOR HIV PREVALENCE AND PREVENTION

8.1 Risky sexual behaviours

Risky sexual partnerships decreased dramatically between baseline and follow-up; while abstinence among youths and condom use with non-regular partners increased. These trends are very promising especially in terms of potentially contributing to lowering HIV prevalence. However, our survey data cannot be used to determine the extent to which HIV prevention efforts contributed to behaviour change, or to indicate which specific activities were most effective. Other reasons for the observed behavioural improvements include change in population over time and improved HIV knowledge which could have led some participants to provide socially desirable responses.

8.2 Young-age sexual debut

Young-age sex tended to be higher among 15-19 year olds males. This indicates that among young males, despite increasing abstinence and decreasing risky sexual partnerships, the risk of engaging in young-age sex is increasing. Youth focused HIV prevention activities should prioritize promoting the delay of young-age sex among 15-19 year old males.

8.3 Risky sexual behaviours and gender

Males were more likely to engage in risky sexual behaviours than females, despite reporting a higher prevalence of comprehensive knowledge. HIV prevention interventions require more targeted efforts directed at reducing risky sexual behaviours, especially early sexual debut and casual sex among boys and young men and multiple partnerships among adult men. HIV prevention interventions should be designed based on appropriate behaviour change models that take into account the need to change not only HIV knowledge, but also environment factors and motivations for behaviour change.

8.4 Camp-specific trends in prevalence

Refugees, and new arrivals among them, had lower levels of risky sexual behaviours than surrounding community residents in Kenya and Uganda. However, the opposite was true in Tanzania. It is therefore important to avoid making generalizations about the relationship between refugee status and the levels of risky sexual behaviours, especially considering that the prevalence of risky sexual behaviours (like the prevalence of HIV) may depend on several factors, including risk in the community of origin and level of interaction with neighbouring community. However, our findings do suggest that refugees cannot be assumed without appropriate data, as is often the case currently, to have higher levels of risky sexual behaviours than their counterparts in the surrounding communities.

8.5 Association between risky sexual partnerships and mobility

HIV prevention activities among mobile residents who more frequently visit the neighbouring community should be stepped up in order to respond to increased behavioural risk among these sub-populations. Moreover, given the constant influx of new arrivals into both camp and surrounding communities it is important to carry out frequent needs assessment among new arrivals to ascertain HIV behavioural risk and specific HIV prevention needs, which may well be different from those of older residents.

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10. ANNEXES

ANNEX 1: SAMPLING PROCEDURES

In the Tanzania refugee camp participants were selected using systematic random sampling (SRS) both at baseline and follow-up. Households were selected from this UNHCR database according to a sampling step calculated by dividing the estimated number of households in the camp by the number of household required to recruit the number of 15-24 year olds in the sample. In each household all household members aged 15-49 living and eating in the household for more than two weeks were selected for offer of study participation.

In all other sites both at baseline and follow-up, potential participants were selected using two stage cluster sampling. The primary sampling (PSU) unit was villages. In the first stage, clusters were allocated to PSUs according to probability proportional to size (PPS). In the second stage, households (defined as a group of individuals eating from the same pot for the past two weeks) were selected based on a modified Expanded Programme on Immunization method. At the most central position in the PSU a pen was placed on the ground and spun in a random direction. The team proceeded along this random direction counting the number of households along the way and assigning each a number (e.g. 01-20), until the boundary of the PSU was reached. The household number was written on pieces of paper which were then folded and mixed thoroughly. The number of one of the households was selected randomly. The selected household was the first study household in the cluster. In the selected household the household members were listed by age and gender. In each selected household, all eligible individuals living in the household were asked to participate.

The remaining households in the cluster were selected by a rule of proximity. The interviewers left the household where the interview just concluded and skipped a variable a specific number of houses which ranged from one house in the Kenya baseline survey to four households in the follow-up surveys) until they reach the next selected household.

A household was be considered "abandoned" if neighbour(s) reported that no one has lived there for more than one month or inhabitants had been repatriated. An abandoned household was not replaced.

If any or all of the eligible household members declined to participate no attempt was made to select other individuals to replace them. Individuals who declined participation were recorded as "non-responders". Details of absent potential participants were taken and attempts made to contact them. Those who could not be traced after the third tracing visit in the baseline surveys and the second tracing visit in the follow-up surveys were recorded "absent" and not replaced.

BEHAVIOURAL SURVEILLANCE SURVEY FOR (X CAMP NAME & HOSTING COMMUNITIES), COUNTRY

Cluster number |___|___|

Household serial number (within the cluster) |___|___|___|___|

Participant Identification number (PID) |___|___|___|___|

CONSENT FORM

Hello Sir/ Madam,

My name is .....I am an interviewer from the Ministry of Health. We are conducting a behavioural survey in this community and requesting people to participate. This will help in developing better health services in your community, especially related to HIV/AIDS.

[Ask of the household head for household consent: Your household has been randomly selected and we wish to have permission to interview eligible members of your household. May we proceed? ___Yes ___No]

You've been selected randomly and we wish, with your permission, to interview you.

Be assured that we want to learn from your experience and all the information we collect will be used to help us fight against AIDS in your community, country and region. Some of the questions asked, are of a sensitive nature, but please note that your name will not be recorded in the questionnaire, and any details related to your privacy will be kept confidential. It will not be used in relation to registration, food distribution or any other services.

Your participation in this survey is very important and we rely on you to provide us with accurate information that will help us to develop effective activities to fight HIV spread.

The interview will take approximately __ minutes, but with your cooperation it can be done quickly.

May I have your permission to undertake this interview? Yes ☐ No ☐

If you do not want to participate, why.....

Signature of the interviewer that a verbal consent was obtained:

_____

IDENTIFICATION

A. COUNTRY..... |___|___|

B. REGION/ PROVINCE ..... |___|___|

C. CAMP/ SURROUNDING AREA (Camp = 01, Surrounding area = 02) ..... |___|___|

D. CODE OF CAMP/ SURR AREA ..... |___|___|

E. URBAN/ RURAL (Urban = 01, Rural = 02) ..... |___|___|

F. CLUSTER NUMBER.....|___|___|

G. HOUSEHOLD NUMBER (within a cluster).....|___|___|___|___|

H. PARTIICPANT IDENTIFICATION NUMBER.....|___|___|___|___|___|

N. Date of interview: __/__/ day

O. Start of interview: __/__/ h

SECTION I: BACKGROUND CHARACTERISTICS (36 QUESTIONS)

(Note to interviewer: 99=Don't know, 98=No answer provided)

N°	QUESTIONS	ANSWERS	SKIP
	A. Socio-demographic		
101.	**Record sex of the respondent**	01 = Male 02 = Female |___|___|	
102.	How old are you? **Record age in years**	Record number of years 99 = Don't Know |___|___|	
103.	In which country were you born?	01 = Kenya 02 = Rwanda |___|___| 03 = Uganda 04 = Somalia 05 = Congo (DRC) 06 = Burundi 07 = Sudan 08 = Tanzania 09 = Other (Specify) _____	
104.	What is your current nationality?	01 = Kenyan 02 = Rwandan |___|___| 03 = Ugandan 04 = Somalian 05 = Congolese (DRC) 06 = Burundian 07 = Sudanese 08 = Tanzania 09 = Other (Specify) _____	
105.	Are you currently a refugee?	01 = Yes 02 = No |___|___|	
106.	What is your religion?	01 = Catholic 02 = Protestant 03 = Moslem |___|___| 04 = Other (Specify) _____	
107.	What is the highest level of schooling you have completed? **(different from a literacy program)**	00 = Have never attended school 01= Did not complete primary education 02 = Primary 03 = Secondary |___|___| 04 = College 05 = University	
108.	How easy is it for you to read a paper written in i. Congolese Swahili? ii. Acholi? iii. Kinyarwanda? iv. Runyoro? v. Runyankole? vi. Kiwahili vii. Other language? ***(CIRCLE ONE ANSWER FOR EACH QUESTION)***	03 = Easy 02 = Difficult 01 = Do not read at all 03 02 01 |___|___| 03 02 01 |___|___| 03 02 01 |___|___| 03 02 01 |___|___| 03 02 01 |___|___| 03 02 01 |___|___| 03 02 01 |___|___|	
109.	Do you earn a regular wage or salary?	01 = Yes 02 = No |___|___|	
110.	What is your main source of income? ***(Only one answer is possible. Record the principal income sector.)***	00 = None 01 = Agriculture 02 = Trading 03 = Pastoralism 04 = Transport |___|___| 05 = Fishing 06 = Crafts 07 = Private services 08 = Public services 09 = Humanitarian or development group 10 = Remittance 11 = Other (Specify) _____	

N°	QUESTIONS	ANSWERS	SKIP
111.	How long have you been living in the community where you currently live?	01 = Always 02 = Less than 6 months 03 =6-12 months |___|___| 04 = >1-2 years 5 = >2 - 5 years 6 = Over 5 years 99 = Don't Know	
112.	**Refugees in Kenya (Kakuma) and Tanzania (Nyaragusu) only:** **Cross-check 105 =Yes** Have you relocated from another refugee camp (e.g Dadaab or Lugufu)	01 = Yes 02 = No |___|___|	
113.	**Refugees only: Cross-check 105 =Yes** How long ago did you leave the country where you were born?	Record number of years 99 = Don't Know |___|___|	
114.	**Refugees only: Cross-check 105 =Yes** How many countries have you transited through or lived in since you left your home country, including the country where you currently live?	Record number of countries 99 = Don't Know |___|___|	
115.	In the last 12 months, have you been away from the community where you currently live for one continuous month or more?	01 = Yes 02 = No |___|___|	IF **NO** GO TO **117**
116.	Why were you away from this place for one month or more?	01 = Employment 02 = Trade 03 = Family-related 04 = Political reasons 05 = Military-related |___|___| 06 = School-related 07 = In jail 08 = Health-related 09 = Holiday 10 = Religion-related 11 = Other (specify) _____	
117.	How often do you go to the camp/surrounding community to visit?	00 = Never 01 = Less than once a month 02 = Once a month |___|___| 03 = Many times in a month	IF **NEVER** GO TO **119**
118.	The last time you visited the refugees/ host community, what was your reason? ***Only one answer can be recorded***	01 = Employment 02 = Trade 03 = Shopping/ Market 04 = Health care 05 = School 06 = Entertainment |___|___| 07 = Food 08 = Visit relative/friend 09 = Collect firewood 10 = Attend religious service 11 = Other (specify) _____	
119.	Have you ever been married? (dowry or registered)	01 = Yes 02=No |___|___|	IF **NO** GO TO **123**
120.	How old were you when you first married?	Age in years 99 = Don't Know |___|___|	
121.	What is your marital status?	01 = Married 02 = Divorced/Separated |___|___| 03 = Widow/ Widower	IF **NOT CURRENTLY MARRIED** GO TO **123**
122.	Are you in a monogamous or polygamous marriage?	01 = Monogamous 02 = Polygamous |___|___|	
123.	Are you currently living with your spouse or another sexual partner?	01 = Yes 02 = No |___|___|	
	B. Alcohol and drug use		
124.	In the past 4 weeks, how often have you had drinks containing alcohol?	01 = Everyday 02 = At least once a week |___|___| 03 = At least once a month 04 = Never	
125.	In the past 12 months, have you taken any intoxicating substances? (This can include orally, sniffing, injection, other locally common methods for using substances)	01 = Yes 02 = No |___|___|	IF **NO** GO TO **127**

N°	QUESTIONS	ANSWERS	SKIP
126.	What intoxicating substances have you taken? ***Unprompted question. Record all answers given***	01 = Marijuana |___|___| 02 = Khat/miraa |___|___| 03 = Heroin |___|___| 04 = Opium |___|___| 05 = Amphetamines |___|___| 06 Multi drug combination (cocktail) |___|___| 07 = Drugs/herbs from traditional healer |___|___| 08 = Other (Specify) _____ |___|___|	
127.	In the past 12 months, have you injected any drugs that were not prescribed by a health professional? **Note: A health professional does not include traditional medical practioners**	01 = Yes 02 = No |___|___|	
128.	In the past 12 months, have you used a needle or syringe to inject drugs that had already been used by another person?	01 = Yes 02 = No |___|___|	
	C. Circumcision		
129.	Some men and women have been circumcised, have you been circumcised?	01 = Yes 02 = No |___|___|	IF **NO**, GO TO **131**
130.	At what age were you circumcised?	Record age in years 99 = Don't know |___|___|	
131.	If you could choose, would you prefer a sexual partner who was circumcised or not circumcised?	01 = Circumcised 02 = Not circumcised |___|___| 03 = Don't know/ no preference	
132.	**MEN ONLY** Would you be interested in getting circumcised if it was affordable and safe?	01 = Yes 02 = No |___|___| 99 = Don't know	
	D. Military Activity		
133.	Have you ever been involved in any official or unofficial military, paramilitary or police activities?	01 = Yes 02 = No |___|___|	IF **NO** GO TO **201**
134.	For how long were you involved in military, paramilitary or police activities?	01 = Less than 6 months 02 = 6 to 12 months 03 = >1 to 2 years |___|___| 04 = >2 years to 4 years 05 = >4 years	
135.	Are you currently involved in military, paramilitary or police activities?	01 = Yes 02 = No |___|___|	IF **YES** GO TO **201**
136.	How long ago did you leave your military, paramilitary or police activities?	Record number of years If less than one year, record 00 99 = Don't know |___|___|	

SECTION 2: MALE AND FEMALE CONDOMS (11 QUESTIONS)

N°	QUESTIONS	ANSWERS	SKIP
201.	Have you ever heard of condoms?	01 = Yes 02 = No |___|___|	IF **NO**, GO TO **301**
202.	What do you think condoms are used for? ***(Unprompted question. Record all answers given.)***	01 = Protects against STI/HIV/AIDS |___|___| 02 = Prevents pregnancy |___|___| 03 = Family Planning |___|___| 04 = Other (Specify) _____ 99 = Don't know |___|___|	
203.	Have you ever used a condom?	01 = Yes 02 = No |___|___|	IF **NO**, GO TO **301**
204.	Do you know where you can obtain a condom?	01 = Yes 02 = No |___|___|	IF **NO**, GO TO **208**
205.	Where do you **usually** get condoms? ***Only one answer possible***	01 = Pharmacy 02 = Health facility 03 = At the market 04=From my friends |___|___| 05 = At the shop 06 = Community health worker 07 = Other (Specify) _____ 99 = Don't know	
206.	Can you obtain a condom every time you need one?	01 = Yes 02 = No |___|___|	IF **YES,** GO TO **208**
207.	What is the *main* constraint to obtaining a condom every time you need one?	01 = Too far away (geographical access) 02 = Too expensive	

N°	QUESTIONS	ANSWERS	SKIP
	Only one answer possible	03 = Places not open at convenient hours 04 = Not available |___|___| 05 = Fear of being seen 06 = Health worker's attitude 07 = Other (specify) _____ 99 = Don't know	
208.	Have you ever heard of a female condom?	01 = Yes 02 = No |___|___|	IF **NO**, GO TO **301**
209.	Have you ever used a female condom?	01 = Yes 02 = No |___|___|	
210.	Would you be willing to use a female condom if available?	01 = Yes 02 = No |___|___| 99 = Don't know	
211.	Do you know where you can obtain a female condom?	01 = Yes 02 = No |___|___|	

SECTION 3: SEXUAL HISTORY AND RISK BEHAVIOUR (54 QUESTIONS)

N°	QUESTIONS	ANSWERS	SKIP
	A. SEXUAL ACTIVITY		
301.	Have you ever had sexual intercourse? ***(Sexual intercourse is defined as penetrative, vaginal or anal sex)***	01 = Yes 02 = No |___|___|	IF **NO**, GO TO **334**
302.	At what age did you first have sexual intercourse?	Age in years 99 = Don't know |___|___|	
	B. REGULAR SEX PARTNERS		
303.	In the past 12 months, have you had a regular sex partner? ***(A regular sexual partner is defined as spouse or live-in sexual partner)***	01 = Yes 02 = No |___|___|	IF **No** GO TO **308**
304.	In last the 12 months, how many regular partners did you have sex with?	Record number 98 = No answer |___|___| 99 = Don't know	
305.	What was the nationality of your most recent regular partner?	01 = Kenyan 02 = Rwandan 03 = Ugandan 04 = Somali 05 = Congolese (DRC) |___|___| 06 = Burundian 07 = Sudanese 08= Tanzanian 09 = Other (Specify) _____	
306.	How old was your most recent regular partner?	Record age in years 99 = Don't know |___|___|	
307.	The LAST TIME you had sex with your regular partner, did you use a condom?	01 = Yes 02 = No |___|___| 99 = Don't know	
	C. NON REGULAR PARTNERSHIP		
308.	In the past 12 months, have you had sex with a casual partner? ***(A casual sex partner is defined as any sexual partner different from the one with whom you live or are married to and from whom you did not receive or give money, gifts or favors for sex)***	01 = Yes 02=No |___|___| 98 = No answer 99 = Don't know	IF **No** GO TO **319**
309.	In last the 12 months, how many casual partners did you have sex with?	Record number 98 = No answer |___|___| 99 = Don't know	
310.	What was the nationality of your most recent casual partner?	01 = Kenyan 02 = Rwandan 03 = Ugandan 04 = Somali 05 = Congolese (DRC) |___|___| 06 = Burundian 07 = Sudanese 08 Tanzanian 09 = Other (Specify) _____	
311.	How old was your most recent casual partner?	Record age in years 99 = Don't know |___|___|	
312.	What was the marital status of your most recent casual partner?	01 = Single 02 = Married	

N°	QUESTIONS	ANSWERS	SKIP
		03 = Divorced/Separated |___|___| 04 = Widow/ Widower 99 = Don't know	
313.	What was the profession of your most recent casual partner?	01 = Businessperson 02 = Trader 03 = Student 04 = Driver/ Truck driver |___|___| 05 = Housemaid 06 = Pastoralist 07 = Farmer 08 = Military, paramilitary, police 09 = Commercial sex worker 10 = Humanitarian or development worker 11 = Unemployed 12 = Other (Specify) _____ 99 = Don't know	
314.	The last time you had sex with a casual partner, had you taken any alcohol?	01 = Yes 02 = No |___|___| 99 = Don't know	
315.	The last time you had sex with a casual partner did you use a condom?	01 = Yes 02 = No |___|___| 99 = Don't know	IF **No** GO TO **317**
316.	The last time you had sex with a casual partner, who suggested using a condom?	01 = My partner 02 = Myself |___|___| 03 = Joint decision 99 = Don't know	GO TO **318**
317.	What was the *main* reason you did not use a condom the last time you had sex with a casual partner? ***Record only one answer***	01 = No condoms available 02 = Free condoms not available 03 = Too expensive 04 = Partner objected 05 = Don't like them 06 = Used other contraceptive |___|___| 07 = I trust my partner 08 = Didn't think of using one 09 = Don't know what condom is 10 = Want to have a child 11 = Religious reasons 12 = Unplanned sex 13 = Didn't think it was necessary 14 = Other (Specify) _____ 99 = Don't know	
318.	In the past 12 months, how often did you use a condom with all of your casual sex partners?	01 = Every time |___|___| 02 = Frequently (more than 50% of the time) 03 = Sometimes (less than 50% of the time) 04 = Never 99 = Don't know	
D. TRANSACTIONAL SEX			
319.	Have you ever had sex in exchange for money, a gift or a favor?	01 = Yes 02= No |___|___|	IF **No** GO TO **334**
320.	The last time you exchanged sex, was it for money, a gift or a favor?	01 = Money 02 = Gift |___|___| 03 = Favor 04= More than one thing (eg: Money and gift, money and favor, gift and favor)	
321.	Who was the last person with whom you exchanged sex for money, a gift or a favor? *(Instructions: Was the person a…. [read options]?)*	01 = Refugee 02 = Person from local community 03 = Military, paramilitary, police |___|___| 04 = Humanitarian or development worker 05 = Other (Specify) _____ 99 = Don't know	
322.	**Refugees only : Cross-check 105 =Yes** During which period in your life did you exchange sex for money, a gift or a favor? ***Record all answers***	**A. Before displacement** 01 = Yes |___|___| 02 = No **B. = During displacement** 01 = Yes |___|___| 02 = No **C. = After displacement** 01 = Yes |___|___| 02 = No	
323.	**Nationals only: Cross-check 105=No** During which period in your life did you exchange sex for money, a gift or a favor?	**A. = Before refugees arrived** 01 = Yes |___|___| 02 = No **B. = After refugees arrived** 01 = Yes |___|___|	

N°	QUESTIONS	ANSWERS	SKIP
	Record all answers	02 = No	
324.	In the past 12 months, have you had sex in exchange for money, a gift or a favor?	01 = Yes 02 = No |___|___|	IF **NO** GO TO **334**
325.	In the past 12 months, how many partners did you have sex with in exchange for money, a gift or a favor?	Record number 99 = Don't know |___|___|	
326.	In the past 12 months, the last time you exchanged sex, was it for money, a gift or a favor?	01 = Money 02 = Gift |___|___| 03 = Favor 04= More than one thing (example: Money and gift, money and favor, gift and favor)	
327.	In the past 12 months, who was the last person with whom you exchanged sex for money, a gift or a favor? ***(Instrucitons: Was the person a…. [read options])***	01 = Refugee 02 = Person from local community 03 = Military, paramilitary, police |___|___| 04 = Humanitarian or development worker 05 = Other (Specify) _____ 99 = Don't know	
328.	How old was the last person with whom you exchanged sex for money, a gift or a favor?	Record age in years 99 = Don't know |___|___|	
329.	The last time you exchanged sex for money, a gift or a favor, had you taken any alcohol?	01 = Yes 02 = No 99 = Don't know |___|___|	
330.	The last time you exchanged sex for money, a gift or a favor, did you use a condom?	01 = Yes 02 = No 99 = Don't know |___|___|	IF **NO** GO TO **332**
331.	Who suggested using a condom the last time you exchanged sex for money, a gift or a favor?	01 = My partner 02 = Myself |___|___| 03 = Joint decision 99 = Don't know	GO TO**333**
332.	What was the *main* reason you did not use a condom the last time you exchanged sex for money, a gift or a favor? ***Record only one answer***	01 = No condoms available 02 = Free condoms not available 03 = Too expensive 04 = Partner objected 05 = Don't like them 06 = Used other contraceptive |___|___| 07 = I trust my partner 08 = Didn't think of using one 09 = Don't know what condom is 10 = Want to have a child 11 = Religious reasons 12 = Unplanned sex 13 = Didn't think it was necessary 14 = Other (Specify) _____ 99 = Don't know	
333.	In the past 12 months, how often did you use a condom with all of the people with whom you exchanged sex for money, a gift or a favor?	01 = Every time 02 = Frequently (more than 50% of the time) 03 = Sometimes (less than 50% of the time) 04 = Never |___|___| 99 = Don't know	
	E. FORCED SEX		
334.	Have you ever been forced to have sex against your will?	01 = Yes |___|___| 02 = No	IF **NO**, GO TO **341**
335.	**REFUGEE ONLY : Cross-check 105 =Yes** During which period in your life were you forced to have sex? ***Record all answers***	**A. Before displacement** 01 = Yes |___|___| 02 = No **B. = During displacement** 01 = Yes |___|___| 02 = No **C. = After displacement** 01 = Yes |___|___| 02 = No	
336.	**Nationals only: Cross-check 105=No** During which period in your life were you forced to have sex? ***Record all answers***	**A. = Before refugees arrived** 01 = Yes |___|___| 02 = No **B. = After refugees arrived** 01 = Yes |___|___| 02 = No	
337.	Who forced you to have sex? ***More than one answer can be given. Record all answers***	01 = Regular partner |___|___| 02 = Family member other than regular partner |___|___| 03 = Non-family member |___|___|	IF **REGULAR PARTNER OR OTHER FAMILY MEMBER (1 OR 2)** GO TO **339**
338.	Who among the following non-family members forced you to have sex? ***More than one answer can be given. Record all answers***	01 = Refugee |___|___| 02 = Person from local community |___|___| 03 = Military, paramilitary, police |___|___| 04 = Humanitarian or development worker |___|___| 05 = UN peacekeeper |___|___|	

N°	QUESTIONS	ANSWERS	SKIP
		06 = Other (Specify) _____ |___|___| 99 = Don't know |___|___|	
339.	In the past 12 months, have you been forced to have sex?	01 = Yes 02=No |___|___| 99 = Don't know	IF **NO**, GO TO **341**
340.	In the past 12 months, how many times were you forced to have sex?	Provide Number 99 = Don't know |___|___|	
	F. ANAL SEX		
341.	In the past 12 months, have you had anal sex with a man or a woman? ***(Anal sex included both penetrative and receptive anal intercourse)***	01 = Yes 02=No |___|___| 99 = Don't know	IF **NO**, GO TO **347**
342.	**Women only:** The last time you had anal sex with a man, did your partner use a condom?	01 = Yes 02=No |___|___| 99 = Don't know	
343.	**Men only:** In the past 12 months, have you had anal sex with a man?	01 = Yes 02=No |___|___| 99 = Don't know	IF **NO**, GO TO **345**
344.	**Men only:** The last time you had anal sex with a man, did you or your partner use a condom?	01 = Yes 02=No |___|___| 99 = Don't know	
345.	**Men only:** In the past 12 months, have you had anal sex with a woman?	01 = Yes 02=No |___|___| 99 = Don't know	IF **NO**, GO TO **347**
346.	**Men only:** The last time that you had anal sex with a woman, did you use a condom?	01 = Yes 02=No |___|___| 99 = Don't know	

G. CONCURRENT SEXUAL PARTNERS

I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. [DHS model Jan2010 wording from Macro]

347.	In the last 12 months, have you had sexual intercourse?	01=yes 02=No ..... |___|___| 03=Never had sexual intercourse			IF **NO OR NEVER HAD SEXUAL INTERCOURSE** GO TO 401
348.	In the last 12 months, when was the **last** time you had sexual intercourse?	Days ago ..... |___|___| Weeks ago ..... |___|___| Months ago ..... |___|___|			
	To the interviewer: Now ask all questions concerning this LAST sexual partner first	**Continue in this column and finish all questions on this last partner, before asking about the second-to-last partner**	**Continue in this column and finish all questions on this second-to-last partner, before asking about the third-to-last partner**		
		LAST SEXUAL PARTNER (a)	**SECOND-TO-LAST SEXUAL PARTNER (aa)**	**THIRD-TO-LAST SEXUAL PARTNER (aaa)**	
349.	When was the last time you had sexual intercourse with this person?		aa. Days ago |___|___| bb. Weeks ago |___|___| cc. Months ago |___|___|	aaa. Days ago |___|___| bbb. Weeks ago |___|___| ccc. Months ago |___|___|	
350.	The last time you had sexual intercourse (with this second/ third person), was a condom used?	01 =yes 02 =no |___|___|	01 =yes 02 =no |___|___|	01 =yes 02 =no |___|___|	->IF **02**, GO TO NEXT QUESTION DOWN THE COLUMN
351.	In the last 12 months, was a condom used every time you had sexual intercourse with this person?	01 =yes 02 =no |___|___|	01 =yes 02 =no |___|___|	01 =yes 02 =no |___|___|	
352.	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND/GIRLFRIEND: Were you living together as if married? IF YES, circle 2 IF NO, circle 3	01=HUSBAND/WIFE 02=LIVE-IN PARTNER |___|___| 03=BOY/GIRL-FRIEND NOT LIVIING WITH RESPONDENT 04=CASUAL ACQUAINTANCE 05=PROSTITUTE 06=OTHER (specify) _____	01=HUSBAND/WIFE 02=LIVE-IN PARTNE |___|___| 03=BOY/GIRL-FRIEND NOT LIVIING WITH RESPONDENT 04=CASUAL ACQUAINTANCE 05=PROSTITUTE 06=OTHER (specify) _____	01=HUSBAND/WIFE 02=LIVE-IN PARTNER|___|___| 03=BOY/GIRL-FRIEND NOT LIVIING WITH RESPONDENT 04=CASUAL ACQUAINTANCE 05=PROSTITUTE 06=OTHER (specify) _____	
353.	How long ago did you first have sexual intercourse with this (second/third) person?	a. Days ago |___|___| b. Weeks ago |___|___| c. Months ago |___|___| d. Years ago |___|___|	aa. Days ago |___|___| bb. Weeks ago |___|___| cc. Months ago |___|___| dd. Years ago |___|___|	aaa. Days ago |___|___| bbb. Weeks ago |___|___| ccc. Months ago |___|___| ddd. Years ago |___|___|	
354.	How many times during the last 12 months did you have sexual intercourse with this person?	Number of times |___|___|	Number of times |___|___|	Number of times |___|___|	

SECTION 4: SEXUALLY TRANSMITTED INFECTIONS (9 QUESTIONS)

N°	QUESTIONS	ANSWERS	SKIP
401.	Have you ever heard about diseases that can be transmitted through sexual intercourse?	01 = Yes 02 = No	
402.	In the past 12 months, have you had an sexually transmitted disease (STI)?	01 = Yes 02 = No 99= Don't know |___|___|	
403.	In the past 12 months, have you had any unusual genital discharge?	01 = Yes 02 = No 99= Don't know |___|___|	
404.	In the past 12 months, have you had any genital ulcers or sores?	01 = Yes 02 = No 99= Don't know |___|___|	IF **NO** TO ALL OF **402 AND 403 AND 404** GO TO **501**
405.	During the last time you had genital discharge OR ulcer OR sore OR a STI, did you seek treatment?	01 = Yes 02 = No 99= Don't know |___|___|	IF **NO** GO TO **407**
406.	Where was the FIRST place that you went for treatment? ***Only one answer possible***	01 = Public health centre 02 = Private health centre 03 = Traditional healer/doctor/ practitioner |___|___| 04 = Pharmacy 05 = Friend or relative 06 = Other (specify) _____	
407.	During the last time you had genital discharge OR ulcer OR sore OR a STI did you inform your sexual partner(s)?	01 = Yes, all of them 02 = Some of them, not all |___|___| 03 = No, none of them 04=I didn't have a sexual partner during that period (including those who never had sex)	**IF NO SEXUAL PARTNERS (4) THEN SKIP TO 501**
408.	During the last time, you had genital discharge OR ulcer OR sore OR a STI did you have sexual intercourse with ANY of your sexual partner(s)? *(Instruction: **With ANY** sexual partner(s) refers to regular, casual, and transactional sex)*	01 = Yes 02 = No |___|___|	**IF NO THEN SKIP TO 501**
409.	If yes, during this last time, did you use a condom with your partner(s) until the symptoms resolved/cleared?	01 = Yes 02 = No |___|___|	

SECTION 5: KNOWLEDGE, OPINIONS, AND ATTITUDES TOWARDS HIV/AIDS (17 QUESTIONS)

N°	QUESTIONS	ANSWERS	SKIP
501.	Have you ever heard of HIV or a disease called AIDS?	01 = Yes 02 = No |___|___|	IF **NO**, GO TO **617**
502.	Can people protect themselves from HIV infection by staying faithful to one uninfected faithful sex partner?	01 = Yes 02 = No 99 = Don't know |___|___|	
503.	Can people protect themselves from HIV infection by using a condom correctly every time they have sex?	01 = Yes 02 = No 99 = Don't know |___|___|	
504.	Can people protect themselves from HIV infection by abstaining from sex?	01 = Yes 02 = No 99 = Don't know |___|___|	
505.	Can people get infected with HIV through a mosquito bite?	01 = Yes 02 = No 99 = Don't know |___|___|	
506.	Can people get infected with HIV by having anal sex with a male partner and not using a condom?	01 = Yes 02 = No 99 = Don't know |___|___|	
507.	Can a person get infected by HIV by getting injected with a needle that was already used by someone else?	01 = Yes 02 = No 99 = Don't know |___|___|	
508.	Can people get infected with HIV by sharing food with someone who is infected?	01 = Yes 02 = No 99 = Don't know |___|___|	
509.	Is it possible for a healthy-looking person to have HIV, the virus that causes AIDS?	01 = Yes 02 = No 99 = Don't know |___|___|	
510.	Can a pregnant woman with HIV/AIDS, transmit the virus to her unborn child during pregnancy or delivery?	01 = Yes 02 = No 99 = Don't know |___|___|	
511.	Can a woman with HIV/AIDS transmit the virus to her baby during breastfeeding?	01 = Yes 02 = No 99 = Don't know |___|___|	
512.	If a member of your family got infected with the virus that causes AIDS, would you want it to remain a secret?	01 = Yes 02 = No 99 = Don't know |___|___|	
513.	If a relative of yours became sick with the virus that causes AIDS, would you be willing to care for him in your own household?	01 = Yes 02 = No 99 = Don't know |___|___|	
514.	If a teacher was infected with the virus that causes AIDS, should he/ she be allowed to continue teaching?	01 = Yes 02 = No 99 = Don't know |___|___|	
515.	Would you buy fresh vegetables from a shopkeeper who was infected with the virus that causes AIDS?	01 = Yes 02 = No 99 = Don't know |___|___|	
516.	Should young adolescents be taught how to use condoms? (Between 12-17 years)	01 = Yes 02 = No 99 = Don't know |___|___|	
517.	What are the chances that you might get infected with HIV?	01 = High chance 02 = Moderate chance 03 = No chance 04 = Already infected with HIV 99 = Don't know |___|___|	

SECTION 6: EXPOSURE AND ACCESS TO INTERVENTIONS (22 QUESTIONS)

N°	QUESTIONS	ANSWERS	SKIP
601.	In the past 12 months, have you received information on HIV/AIDS?	01 = Yes 02 = No |___|___|	IF **NO**, GO TO **603**
602.	In the past 12 months, from what sources have you received information on HIV/AIDS? ***Unprompted question. Record all answers given***	***Mass media*** 01 = Radio |___|___| 02 = TV/ Video |___|___| 03 = Newspaper |___|___| 04 = Poster/pamphlet |___|___| ***Health services*** 05 = Health facility |___|___| 06 = VCT centre |___|___| 07 = ANC/PMTCT centre |___|___| ***People*** 08 = Community health worker |___|___| 09 = Friend |___|___| 10 = Family member |___|___| 11 = Person living with HIV/AIDS |___|___| 12 = Peer outreach worker/Peer educator |___|___| ***Other place***s 13 = School |___|___| 14 = Place of worship |___|___| 15 = Public meeting |___|___| 16=Youth centres/clubs |___|___| 17 = Others (specify) _____ |___|___|	
603.	From what sources would you *prefer* to receive information on HIV/AIDS? ***Unprompted question. Record all answers given***	***Mass media*** 01 = Radio |___|___| 02 = TV/ Video |___|___| 03 = Newspaper |___|___| 04 = Poster/pamphlet |___|___| ***Health services*** 05 = Health facility |___|___| 06 = VCT centre |___|___| 07 = ANC/MTCT centre |___|___| ***People*** 08 = Community health worker |___|___| 09 = Friend |___|___| 10 = Family member |___|___| 11 = Person living with HIV/AIDS |___|___| 12 = Peer outreach worker/peer educator |___|___| ***Other place***s 13 = School |___|___| 14 = Place of worship |___|___| 15 = Public meeting |___|___| 16= Youth centres/clubs |___|___| 17 = Others (specify) _____ |___|___|	
604.	Do you know a place where a person can be tested for HIV?	01 = Yes 02 = No |___|___|	IF **NO**, GO TO **606**
605.	Where can a person be tested for HIV?	01 = In local community 02 = In refugee camp |___|___| 3 = In both sites 4= Outside of both the local community and refugee camp 99 = Don't know	
606.	I do not want to know the results, but have you ever been tested for HIV? ***(State that you do not want to know the test result)***	01 = Yes 02 = No |___|___| 99 = Don't know	IF **NO OR DON'T KNOW**, GO TO **613**
607.	When was the last time you were tested for HIV?	01 = In the past 12 months 02 = >1year-2 years ago 03 = >2 years or more years ago |___|___| 99 = Don't know	
608.	The last time you were tested for HIV did you: yourself ask for the test or was it offered to you and you accepted or was it required?	01 = I asked for the test 02 = It was offered and I accepted |___|___| 03 = It was required 99 = Don't know	
609.	The last time you were tested for HIV did you receive any counselling?	01 = Yes 02 = No |___|___| 99 = Don't know	
610.	The last time you were tested for HIV, where did you go to get tested? ***Only one answer possible.***	**Public sector** 01 = Hospital |___|___| 02 = Health facility government 03 =Health post or dispensary 04 = Outreach/Mobile Clinic **Private Sector** 05 = Private hospital/ Clinic 06 = Pharmacy 07 = Private medical doctor 08 = Mobile clinic 09 = Traditional healer 10= Stand alone VCT centre 11 = Other (Specify) _____	
611.	I do not want to know the result, but, the last time you were tested for HIV did you obtain the result of the test? ***(Restate that you do not want to know the test result)***	01 = Yes 02 = No |___|___| 99 = Don't know	
612.	I do not want to know the result, but, the last time you were tested for HIV and obtained the result, did you share the result with your partner(s)? ***(Restate that you do not want to know the test result)***	01 = Yes 02 = No |___|___| 03= I have never had a sexual partner	
613.	If a person is sick with HIV/AIDS is there a place in this camp or in the surrounding community where this person can get treatment?	01 = Yes 02 = No, there is no place to get treatment 03 =Don't know if there is place to get treatment |___|___|	IF **NO** SKIP TO **615**

N°	QUESTIONS	ANSWERS	SKIP
614.	From where can you get this treatment? ***Unprompted question. Record all answers given***	01 =Public sector Health facility |___|___| 02 = Private health facility |___|___| 03 = NGO health facility |___|___| 04 =Faith based organization |___|___| 05 = Traditional healer |___|___| 06 = Religious leader |___|___| 07 = Other (Specify) _____ |___|___|	
615.	Would you go for an HIV test in the future?	01 = Yes 02 = No |___|___| 99 = Don't know	IF **YES**, GO TO **617**
616.	What is the *primary* reason you don't want to go for a test? ***Only one answer possible***	01 = Don't know where to go for a test 02 = Sure of not being infected 03 = Afraid of the result 04 = Afraid of the blood taking |___|___| 05 = (Afraid of) catching an infection 06 = Fear of stigmatisation 07 = Don't think testing is confidential 08 = Too expensive 09 = Other (Specify) _____ 99 = Don't know	
	PMTCT		
617.	**Women only** Have you been pregnant in the past 4 years?	01 = Yes 02 = No |___|___|	IF **NO**, GO TO **621**
618.	**Women only** The last time you were pregnant did you go to an ante-natal clinic?	01 = Yes 02 = No |___|___| 99 = Don't know	
619.	I don't want to know the result, but, last time you were pregnant, were you offered a HIV test in the antenatal clinic	01 = Yes 02 = No |___|___| 99 = Don't know	IF **NO**, SKIP TO **621**
620.	I don't want to know the result, but, the last time you were tested for HIV when you were pregnant did you obtain the result of the test?	01 = Yes 02 = No |___|___| 99 = Don't know	IF **NO**, SKIP TO **621**
621.	The last time you were tested for HIV when you were pregnant, was you partner also offered a test in the antenatal clinic?	01 = Yes 02 = No |___|___| 99 = Don't know	
	FAMILY PLANNING		
622.	Are you currently doing something or using any method to delay or avoid getting pregnant?	1 = Yes 2 = No |___|___| 99 = Don't know	
623.	Which method are you using? ***(choose all that applies)***	01=Female sterilization |___|___| 02=Male sterilization |___|___| 03=Pill |___|___| 04=IUD |___|___| 05=Injectables |___|___| 06=Implants |___|___| 07=Condom |___|___| 08=Female condom |___|___| 09=Diaphragm |___|___| 10=Foam Jelly |___|___| 11=Lactational amenorrhoea method |___|___| 12=Rhythm method |___|___| 13=Withdrawal |___|___| 14= Other (Specify) _____ |___|___|	

End of the interview: __/__/ h /__/__/ min

ANNEX 3: CORE INDICATORS

Indicator name	Definition	Denominator
Young men and women aged 15-24 who have had sexual intercourse before the age of 15	Percent of men and women aged 15-24 who had sex before the age of 15	Population aged 15-24
Never-married young people aged 15-24 who have never had sex	Percent of men and women aged 15-24 who have never been married and never had sex Reported never had sex	Population aged 15-24 who has never been married
More than one sex partner in the past 12 months among men and women aged 15-49	Percent of men and women aged 15-49 who report having sex with more than one regular, non-regular and/or transaction partners. Composite indicator of people reporting two or past 12 months: (calculated through reported number of partners)	Total population of 15-49 year olds
Women and men aged 15-49 who had more than one sex partner in the past 12 months and reported using a condom during last sexual intercourse	Reported sex with more than one partner in the past 12 months and used a condom during last sex	Total population aged 15-49
Sex with a non−regular partner in the last 12 months among men and women aged 15-49	Percent of men and women aged 15-49 who reported having sex with a non-regular partner in the past 12 month Reported sex with a non-regular partner in the past 12 months	Total population aged 15-49
Condom use at last sex with a non-regular partner among men and women aged 15-49	Percent of men and women who say they used a condom the last time they had sex with a non-regular partner, of those who had sex with a non-regular partner in the last 12 months	Total population aged 15-49 who had a non-regular sex partner in the past 12 month
Sex with a transactional partner in the last 12 months among men and women aged 15-49	Percent of men and women aged 15-49 who reported having sex with a transactional partner in the past 12 month	Total population aged 15-49
Condom use at last sex with a transactional partner among men and women aged 15-49	Percent of men and women who say they used a condom the last time they had sex with a transactional partner, of those who had sex with a transactional partner in the last 12 months Condom use at last sex with a transactional partner	Men and women, aged 15-49 who had a transactional sex partner in the past 12 months
Percent of men and women aged 15-49 received an HIV test in the past 12 months and know their results	Percent of men and women aged 15–49 who have been tested for HIV in the last 12 months and received their test results the last time they were tested	Total population aged 15-49
Percent of men and women aged 15-49 who had an STI symptom in the past 12 months and sought treatment at a health facility	Percent of men and women aged 15–49 who report an STI symptom (genital ulcer or sore, unusual genital discharge) in the last 12 months and went to a public or private health facility as their FIRST recourse for treatment	Total population aged 15-49 with an STI symptom in past 12 months
Percent of men and women aged 15-49 with comprehensive correct knowledge of HIV/AIDS	Percent of men and women who correctly identify two major ways of preventing HIV sexual transmission: Using condoms; Limiting sex to one faithful, uninfected partner AND who reject the two most common misconceptions: Mosquitoes transmit HIV Sharing food with an infected person transmits HIV AND who know that: A healthy-looking person can transmit HIV Composite indicator constructed from the 5 prompted knowledge and misconceptions questions. Person must respond correctly to all 5 questions.	Total population aged 15-49
Percent of men and women aged 15-49 with accepting attitudes towards PLHIV Percent of men and	Women who report that they would be willing to care for a family member sick with AIDS in their own household AND Would buy fresh vegetables from a shopkeeper with HIV AND think a teacher with HIV should be allowed to continue working AND Does not think that it should be kept a secret if a family member had HIV. Composite indicator constructed from the 4 prompted attitudes questions. Person must respond correctly to all 4 questions.	Total population aged 15-49
Percent of women aged 15-49 who were forced to have sex in the past 12 months	Women forced to have sex in past 12 months	Total population of women
Percent of men and women residing in current community for 12 months or less	Percent of men and women aged 15-49 who reporting that they had resided in current community for 12 months or less	Total population aged 15-49
Percent of men and women away from home for four or more weeks in the past 12 months	Away from home for four or more weeks in the past 12 months	Total population aged 15-49
Percent of men and women who visit the surrounding community at least once/month	Visit surrounding community one or more times a month	Total population aged 15-49

ANNEX 4: INDIVIDUAL SURVEY RESPONSE, BY COUNTRY AND LOCATION, AT BASELINE AND FOLLOW-UP

Characteristics	Kenya				Uganda				Tanzania					
	Camp		Surrounding		Camp		Surrounding		Camp		Surrounding		Lukole town	
	Base	F.U.	Base	F.U.	Base	F.U.	Base	F.U.	Base	F.U.	Base	F.U.	Base	F.U.
Total number of individuals eligible for interview	-	1628*	-	849*	-	977		943	760	614	928	1,181	804	983
n (%) of eligible individuals interviewed fully or partially completed	1669 (-)	1528 (93.9%)	1680 (-)	837 (98.6%)	934 (-)	866 (88.6%)	733 (-)	848 (89.9%)	675 (89%)	583 (95%)	843 (91%)	1,021 (86%)	821 (94%)	892 (91%)
n (%) eligible but didn't participate (non-response)	-	100 (6.1%)	-	12 (1.4%)	-	111 (11.4%)	-	95 (10.1%)	85 (11%)	31 (5%)	84 (9%)	160 (14%)	10 (1.1%)	91 (9.0%)
n (%) absent	-	86 (5.3%)	-	7 (0.8%)	75 (8.0%)	107 (11.0%)	16 (2.2%)	70 (7.4%)	78 (10%)	24 (4%)	82 (9%)	157 (13%)	9 (1%)	82 (8.0%)
n (%) refused	-	8 (0.5%)	-	4 (0.4%)	-	3 (0.3%)	-	2 (0.2%)	0	0	1 (0.1%)	1 (0.1%)	1 (0.1%)	3 (0.3%)
n (%) other reasons	-	7 (0.4%)	-	2 (0.2%)	-	1 (0.1%)	-	23 (2.4%)	7 (1%)	7 (1%)	2 (0.2%)	2 (0.2%)	0	6 (1.0%)

-Data not collected or not reported in the country reports

*In Kenya the Total number of eligible individuals includes those who were eligible for the two survey strata 1)old residents (living in the camp since 2004), 2)newer arrivals. However in this regional report data analysed for older residents only.

ANNEX 5: NATIONALITY, MARITAL STATUS, AGE AT FIRST MARRIAGE AND AT FIRST SEX AT BASELINE AND FOLLOW-UP, AMONG 15-49 YEAR OLDS

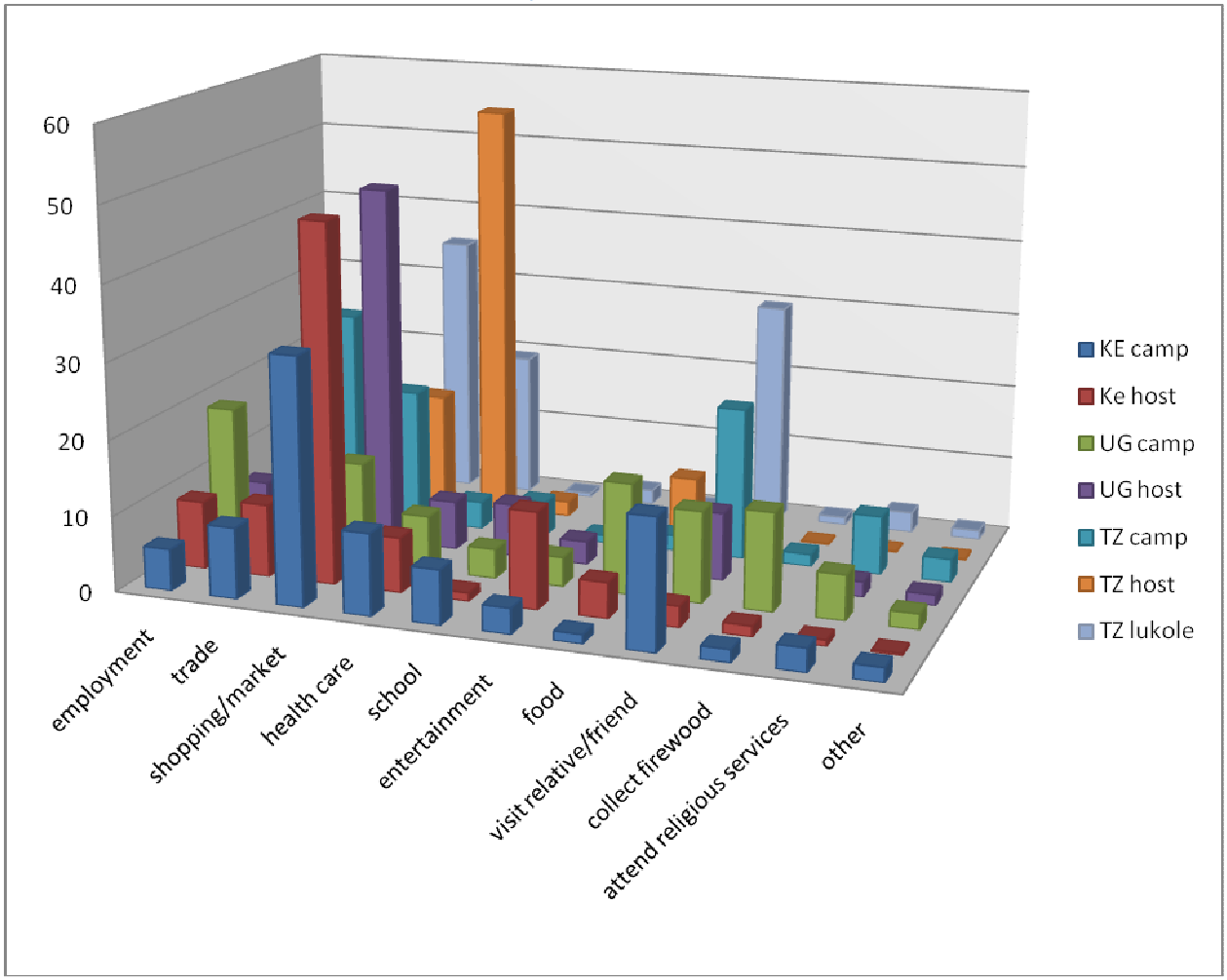
Characteristics	Kenya				Uganda				Tanzania					
	Camp		Surrounding		Camp		Surrounding		Camp		Surrounding		Lukole town	
	Base *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*
Currently a refugee	98.8% - 1649/1669	99.9% (99.2-100.0) 901/902	1.5% - 25/1680	Question skipped	93.1% - 703/755	99.7% (98.9-99.9) 863/866	8.6% - 56/650	0.9% (0.4-2.0) 8/848	98.0 (97.0-99.0) 746/76.1	99.7 (99.2-100.0) 581/583	1.0 - 9/924	1.2 (0.7-2.0) 12/1021	5.7 - 46/812	1.9 (1.1-3.2) 17/892
Birth nationality														
Kenya	0.4 - 7/1669	9.8 (5.0-18.3) 96/980	99.3 - 1660/1680	98.7 (97.2-99.4) 826/837	0.6 - 4/755	0.2 (0.6-0.9) 2/865	0.2 - 1/650	0.1 (0.2-0.9) 1/847	0 - 0/763	0.5 (0-1.1) 3/583	0.4 - 4/928	0.1 (0.01-0.8) 1/1021	0 - 0/817	0 - 0/892
Somalia	28.2 - 481/1669	39.1 (29.2-49.9) 383/980	0.2 - 4/1680	0.6 (0.2-1.7) 5/837	0.3 - 2/755	0.1 (0.2-0.9) 1/865	0.0	0.0	0 - 0/763	0 - 0/583	0 - 0/928	0 - 0/1021	0 - 0/817	0 - 0/892
Sudan	68.2 - 1139/1669	34.5 (24.0-46.7) 338/980	0.3 - 5/1680	0.2 (0.2-0.9) 1/837	57.2 - 432/755	11.0 (5.7-20.1) 5/865	6.3 - 41/650	0.0	0 - 0/763	0 - 0/583	0 - 0/928	0 - 0/1021	0 - 0/817	0 - 0/892
Uganda	0.0	2.9 (1.2-6.7) 28/980	0.0	0.2 (0.2-0.9) 1/837	8.1 - 61/755	1.6 (0.9-2.8) 14/865	90.3 - 587/650	96.3 (94.4-97.6) 816/847	0 - 0/763	0 - 0/583	0.1 - 1/928	0.1 (0.01-0.7) 1/1021	0.4 - 3/817	0.2 (0.1-0.9) 2/892
Rwanda	0.0	1.5 (0.3-8.3) 15/980	0.0	0.2 (0.2-0.9) 1/837	2.6 - 20/755	1.2 (0.5-2.6) 10/865	2.0 - 13/650	1.2 (0.6-2.3) 10/847	0.3 (0-0.6) 2/763	0.3 (0-0.8) 2/583	0 - 0/928	0.1 (0.01-0.7) 1/1021	2.7 - 22/817	1.7 (1.0-2.8) 15/892
Congo (DRC)	0.1 - 2/1669	3.5 (1.6-7.2) 34/980	0.0	0.2 (0.6-0.9) 1/837	31.0 - 234/755	85.7 (76.6-91.6) 741/865	1.2 - 8/650	2.4 (1.3-4.3) 20/847	93.2 (91.4-95.0) 711/763	93.5 (91.5-95.5) 545/583	0.4 - 4/928	0 - 0/1021	0 - 0/817	0 - 0/892
Burundi	0.06 - 1/1669	1.7 (0.8-3.8) 17/980	0.1 - 1/1680	0.2 (0.2-0.9) 1/837	0.3 - 2/755	0.2 (0.3-1.7) 2/865	0.0	0.0	4.1 (2.7-5.5) 31/763	2.4 (1.1-3.6) 14/583	0.1 - 1/928	0 - 0/1021	2.5 - 20/817	1.5 (0.9-2.5) 13/892
Tanzania	0.0	0.0	0.0	0.0	Not an answer choice	0.0	Not an answer choice	0.0	2.4 (1.3-3.4) 18/763	3.3 (1.8-4.7) 19/583	98.9 - 918/928	99.7 (99.1-99.9) 1018/1021	94.5 - 772/817	96.6 (95.1-97.7) 862/892
Ethiopia	0.0	6.9 (3.5-13.3) 68/980	0.0	0.0	Not an answer choice	Not an answer choice	Not an answer choice	Not an answer choice	0 - 0/763	0 - 0/583	0 - 0/928	0 - 0/1021	0 - 0/817	0 - 0/892
Other	0.2 - 3/1669	0.0	0.1 - 1/1680	0.0	0.0	0.0	0.0	0.0	0.1 (0-0.4) 1/763	0 - 0/583	0 - 0/928	0 - 0/1021	0 - 0/817	0 - 0/892
Don't know	0.0	0.1 - 1/980	0.0	0.0	Not an answer choice	0.0	Not an answer choice	0.0						
Ever married	38.6 -	49.5 (4.7-54.3)	57.7 -	54.5 (50.3-58.6)	68.4 -	82.7 -	78.1 -	82.1 (78.5-85.1)	65.7 (62.3-69.0)	71.0 (67.3-74.7)	72.9 -	69.0 (63.7-73.8)	68.8 -	82.0 (78.0-85.3)

Characteris-tics	Kenya				Uganda				Tanzania					
	Camp		Surrounding		Camp		Surrounding		Camp		Surrounding		Lukole town	
	Base *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*	**Base** *% (95% CI) n/N*	**F.U.** *% (95% CI) n/N*
	644/1669	485/980	969/1680	456/837	516/754	714/863	507/649	695/847	501/763	414/583	677/929	704/1021	559/812	731/892
Currently living with spouse or another sexual partner	Not asked at baseline	35.6 (30.9-40.6) 349/980	Not asked at baseline	46.2 (41.1-51.2) 387/837	63.5 - 466/734	70.8 (66.6-74.7) 611/863	67.4 - 432/641	69.1 580/839	60.2 (56.7-63.7) 454/754	51.5 (47.4-55.5) 300/583	65.0 - 601/925	61.6 (55.1-67.7) 629/1021	64.6 - 522/808	71.9 (66.3-76.9) 641/892
Polygamous marriage	20.0 - 110/554	13.4 (9.6-18.5) 50/372	26.4 - 190/720	16.6 (12.3-21.6) 61/368	12.9 - 59/456	5.6 - 36/640	12.6 - 57/451	14.8 (11.1-19.3) 92/623	17.1 (13.5-20.6) 74/433	12.5 (8.9-16.0) 41/329	14.9 - 95/636	13.2 (9.5-18.1) 87/659	30.7 - 161/524	16.5 (13.1-20.7) 112/677
Median age at first marriage in years **IQR**	18 16-21	19 17-22	20 18-22	20 18-23	18 17-20	19 17-21	18 17-20	18 17-20	18 - 16-20	18 - 15-21	20 - 18-23	20 - 18-23	20 - 18-22	19 - 18-22
Median age at first sex **IQR**	17 15-19	17 16-29	18 16-20	18 16-20	18 16-20	18 16-20	15 (17-18)	18 16-20	16 - 15-17	16 - 15-18	18 - 16-20	18 - 16-20	19 - 17-21	18 - 16-20

Annex 6: Co-factors for HIV infection: Military involvement, alcohol and drug use at baseline and follow-up, by country and setting, among 15-49 year olds

Characteristics	Uganda				Kenya				Tanzania					
	Camp		Surrounding		Camp		Surrounding		Camp		Surrounding		Lukole town	
	Base *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*	**Base** *%* *(95% CI)* *n/N*	**F.U.** *%* *(95% CI)* *n/N*
Ever involved in military activities	2.9 - 22/750	2.3 (1.5-3.7) 20/860	3.4 - 22/641	2.0 (1.2-3.3) 17/846	9.6 - 161/1669	3.4 (2.4-5.5) 36/980	10.4 - 175/1680	4.8 (3.2-7.0) 40/837	5.4 - 40/735	2.7 (1.4, 4.1) 16/583	4.3 - 40/925	7.5 (5.6, 10.1) 77/1021	5.9 - 48/812	9.4 (7.6, 11.7) 84/892
Frequency of alcohol use in last 4 weeks														
Everyday	3.9 - 29/750	5.2 - 45/864	6.5 - 42/649	3.5 - 30/847	-	2.2 (1.2-4.0) 22/980	-	7.4 (5.7-9.5) 62/837	1.1 (0.3-1.8) 8/761	0.5 (0-1.1) 3/583	1.7 - 16/924	0.9 (0.4-1.8) 9/1021	12.5 - 101/810	6.1 (4.3-8.5) 54/892
At least once a week	16.1 - 76/750	12.7 - 110/864	16.0 - 104/649	13.3 - 113/847	-	6.3 (4.9-9.4) 67/980	-	12.4 (9.5-16.0) 104/837	4.5 (3.0-5.9) 34/761	7.2 (5.1-9.3) 42/583	5.6 - 52/924	3.8 (2.7-5.3) 39/1021	24.9 - 202/810	32.2 (27.7-37.0) 287/892
At least once a month	3.9 - 29/750	3.0 - 26/864	4.8 - 31/649	4.7 - 40/847	-	2.3 (1.4-4.0) 23/980	-	4.8 (3.4-6.7) 40/837	2.8 (1.6-3.9) 21/761	2.7 (1.4-4.1) 16/583	2.3 - 21/924	2.7 (1.8-4.3) 28/1021	8.4 - 68/810	4.1 (3.2-5.4) 37/892
Never	82.1 - 616/750	78.9 - 682	72.7 - 472/649	78.4 - 664/847	-	88.3 (84.4-91.3) 864/980	-	75.0 (70.3-79.2) 628/837	91.7 (89.8-93.7) 698/761	89.5 (87.0-92.0) 522/583	90.4 - 835/924	92.6 (90.0-94.5) 945/1021	54.2 - 439/810	57.6 (52.1-62.9) 514/892
Used drugs in last 12 months	4.6 - 30/745	0.9 - 8/866	1.9 - 12/643	3.0 - 25/847	-	3.5 (2.5-4.8) 34/980	-	5.6 (3.4-9.2) 47/837	3.2 (1.9-4.4) 24/755	2.1 (0.9-3.2) 12/581	2.2 - 906/924	2.2 (1.2-3.7) 22/1019	3.9 - 32/810	1.5 (0.6-3.3) 13/892

ANNEX 7: REASONS FOR VISITING THE SURROUNDING COMMUNITY, BY SITE



ANNEX 8: PREVALENCE OF CORE INDICATORS BY COUNTRY, SITE, GENDER AND AGE GROUP, AT BASELINE AND FOLLOW-UP

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
KENYA															
Young men and women aged 15-24 who have had sexual intercourse before the age of 15	5.6 - 22/390	3.0 - 16/531	4.1 - 38/921	7.0 (4.0-12.0) 13/185	7.4 (4.3-12.6) 16/216	7.2 (4.7-11.0) 29/401	8.7 - 47/542	9.4 - 46/492	9.0 - 93/1034	8.9 (5.2-14.8) 24/271	4.2 (2.3-7.4) 12/286	6.5 (4.3-9.6) 36/557	12.4 (7.2-20.5) 19/153	5.6 (2.9-10.7) 9/159	8.9 (5.7-13.8) 28/312
15-19	7.5 - 17/226	4.8 - 14/290	6.0 - 31/516	8.9 (4.6-15.5) 10/113	7.3 (3.4-14.8) 8/110	8.1 (4.8-13.3) 18/223	11.0 - 36/328	10.2 - 34/333	10.6 - 70/661	7.3 (3.9-13.3) 10/137	5.0 (2.4-9.9) 8/161	6.0 (3.6-9.9) 18/298	9.5 (4.2-19.7) 7/74	5.2 (2.3-11.3) 5/96	7.1 (3.8-12.6) 12/170
20-24	3.0 - 5/164	0.8 - 2/241	1.7 - 7/405	4.2 (1.0-16.4) 3/72	7.5 (3.2-17.1) 8/106	6.2 (2.9-12.7) 11/178	5.1 - 11/214	7.6 - 12/159	6.2 - 23/373	10.5 (5.2-20.0) 14/134	3.2 (1.3-7.7) 4/125	7.0 (3.9-12.0) 18/259	15.2 (7.2-29.2) 12/79	6.3 (2.4-15.8) 4/63	11.3 (6.1-19.8) 16/142
Never married young people aged 15-24 who have never had sex	43.8 - 155/354	69.1 - 208/301	55.4 - 363/655	61.2 (52.0-69.7) 101/165	58.8 (50.4-66.7) 80/136	60.1 (53.2-66.7) 181/301	51.9 - 263/507	60.6 - 215/355	55.5 - 478/862	65.5 (58.7-71.7) 163/249	79.1 (70.1-85.9) 136/172	71.0 (65.2-76.3) 299/421	60.8 (50.4-70.4) 56/143	77.1 (66.8-85.0) 24/105	32.3 (24.8-40.7) 80/248
15-19	53.5 - 121/226	59.3 - 172/290	56.8 - 293/516	69.0 (59.1-77.5) 78/113	55.5 (46.4-64.1) 61/110	62.3 (55.8-68.5) 139/223	54.9 - 180/328	59.2 - 197/333	57.0 - 377/661	78.8 (69.8-85.7) 108/137	70.2 (62.7-76.7) 113/161	74.2 (68.6-79.0) 221/298	74.3 (59.2-85.2) 55/74	74.0 (64.2-81.8) 71/96	74.1 (66.8-80.3) 126/170
20-24	20.7 - 34/164	14.9 - 36/241	17.3 - 70/405	33.3 (22.2-46.7) 24/72	19.8 (12.9-29.3) 21/106	25.3 (18.3-33.8) 45/178	38.8 - 83/214	12.6 - 20/159	27.6 - 103/373	41.8 (33.0-51.2) 56/134	20.0 (12.4-30.6) 25/125	31.3 (24.5-38.9) 81/259	40.5 (28.4-53.9) 32/79	17.5 (9.3-30.4) 11/63	69.0 (58.6-77.8) 43/142
More than one sexual partner in the past 12 months	19.5 - 145/743	5.2 - 49/932	11.6 - 1941680	11.8 (9.1-15.2) 46/389	2.2 (1.2-4.2) (10/448	6.7 (5.3-3.4) 56/837	12.0 - 136/910	8.2 - 62/759	11.9[a] - 198/1669	9.5 (7.0-12.8) 42/440	2.4 (1.4-4.0) 13/540	5.6 (4.2-7.4) 55/980	11.8 (8.3-16.5)	1.9 (0.9-4.2) 6/307	6.6 (4.6-9.3) 38/578
15-24	10.5 - 41/390	5.7 - 30/531	7.7 - 71/921	7.6 (4.5-12.3) 14/185	1.9 (0.7-4.7) 4/216	4.5 (2.9-6.8) 18/401	11.1 - 60/542	6.3 - 31/492	8.8[a] - 91/1034	7.0 (4.4-10.9) 19/271	2.4 (1.0-5.6) 7/286	4.7 (3.0-7.1) 26/557	9.8 (5.9-15.7) 15/153	1.3 (0.3-5.0) 2/159	5.5 (3.2-9.1) 17/312
15-19	7.1 - 16/226	4.8 - 14/290	5.8 - 30/516	2.7 (0.9-7.9) 3/113	0.0 - 0/110	1.3 (0.4-4.1) 3/223	4.6 - 15/328	3.6 - 12/333	4.1[a] - 27/661	3.6 (1.4-9.4) 5/137	0.6 (0.1-4.8) 1/161	2.0 (0.9-4.6) 6/298	6.8 (2.6-16.7) 5/74	0.0 - 0/96	2.9 (1.1-7.5) 5/170
20-24	15.2 - 25/164	6.6 - 16/241	10.1 - 41/405	15.3 (8.3-26.5) 11/72	3.8 (1.5-9.2) 4/106	8.4 (5.1-13.6) 15/178	21.0 - 45/214	12.0 - 19/159	17.2[a] - 64/373	10.5 (6.3-16.8) 14/134	4.8 (1.9-11.7) 6/125	7.7 (4.7-12.4) 20/259	12.7 (7.1-21.7) 10/79	3.2 (0.7-12.9) 2/63	8.5 (4.6-14.9) 12/142
25-49	29.5 - 104/353	4.7 - 19/406	16.2 - 123/759	15.7 (11.3-21.4) 32/204	2.6 (1.2-5.6) 6/232	8.7 (6.3-12.0) 38/436	20.7 - 7/369	11.6 - 31/267	16.9[a] - 107/635	13.6 (9.1-19.9) 23/169	2.4 (1.1-5.0) 6/254	6.9 (4.7-9.9) 29/423	14.1 (8.7-22.8) 17/118	2.7 (1.0-7.1) 4/148	7.9 (4.9-12.4) 21/266
More than one sexual partner and reported	-	-	-	32.6 (21.1-46.8) 15/46	20.0 (5.4-52.3) 2/10	30.4 (19.5-44.0) 17/56	-	-	-	31.0 (17.9-47.9) 13/42	23.1 (7.8-51.5) 3/13	29.1 (18.5-42.6) 16/55	37.5 (21.3-57.1) 12/32	16.7 (1.9-67.3) 1/6	34.2 (21.2-50.1) 13/38

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
using a condom during last sexual intercourse															
15-24	-	-	-	42.9 (18.8-70.9) 6/14	25.0 (2.5-81.2) 1/4	38.9 (19.1-63.1) 7/11	-	-	-	36.8 (15.8-64.5) 7/19	28.6 (7.9-65.2) 2/7	34.6 (17.4-57.0) 9/26	40.0 (15.6-70.7) 6/15	0.0 - 0/2	35.3 (14.0-64.7) 6/17
15-19	-	-	-	33.3 (0.1-99.7) 1/3	0.0 - 0/0	33.3 (0.1-99.7) 1/3	-	-	-	40.0 (2.7-94.2) 2/5	0.0 - 0/1	33.3 (2.7-90.1) 2/6	40.0 (1.5-96.7) 2/5	0.0 - 0/0	40.0 (1.5-96.7) 2/5
20-24	-	-	-	45.5 (17.5-76.7) 5/11	25.0 (2.3-82.6) 1/4	40.0 (18.2-66.7) 6/15	-	-	-	35.7 (11.6-70.2) 5/14	33.3 (9.3-70.9) 2/6	35.0 (14.9-62.4) 7/20	40.0 (10.3-79.4) 4/10	0.0 - 0/2	33.3 (8.1-74.0) 4/12
25-49	-	-	-	28.1 (14.7-47.0) 9/32	16.7 (1.9-66.9) 1/6	26.3 (13.6-44.5) 10/38	-	-	-	26.1 (12.6 6/23	16.7 (1.9-67.8) 1/6	24.1 (12.6-41.2) 7/29	35.3 (16.6-59.9) 6/17	25.0 (2.4-81.6) 1/4	33.3 (18.1-53.1) 7/21
Sex with a non-regular partner(s) in the last 12 months	32.8 - 244/743	10.8 - 101/937	20.5 - 345/1680	11.1 (7.7-15.7) 43/389	3.6 (2.2-5.7) 16/448	7.0 (5.2-9.5) 59/837	39.2 - 357/910	24.4 - 195/759	32.5 - 542/1669	6.8 (4.3-10.7) 30/440	1.9 (1.0-3.5) 10/540	4.1 (2.6-6.3) 40/980	9.7 (6.2-15.6) 27/271	2.9 (1.5-5.8) 9/307	6.2 (4.0-9.7) 36/578
15-24	41.0 - 160/390	14.3 - 76/531	25.6 - 236/921	13.5 (8.8-20.1) 25/160	5.1 (2.9-8.9) 11/205	9.0 (6.3-12.6) 36/401	40.6 - 220/542	27.3 - 134/492	34.2 - 354/1034	7.0 (3.7-12.9) 19/271	2.8 (1.6-5.0) 8/286	4.8 (2.8-8.1) 27/557	12.4 (6.7-21.8) 19/153	4.4 (2.3-8.3) 7/159	8.3 (4.9-13.8) 26/312
25-49	23.8 - 84/353	6.2 - 25/406	14.4 - 109/759	8.8 (5.0-15.1) 18/204	2.2 (0.9-5.0) 5/232	5.3 (3.2-8.6) 23/436	37.2 - 137/368	19.1 - 51/267	29.6 - 188/635	6.5 (3.0-13.7) 11/169	0.8 (0.2-3.2) 2/254	3.1 (1.5-6.3) 13/423	6.8 (2.5-17.3) 8/118	1.4 (0.3-5.4) 2/148	3.8 (1.5-8.9) 10/266
Condom use at last sex with a non-regular partners in the last 12 months	17.8 - 43/241	29.3 - 29/99	21.2 - 72/340	60.5 (43.7-75.1) 26/43	50.0 (27.3-72.7) 8/16	57.6 (45.0-69.4) 34/59	34.7 - 122/352	24.3 - 45/185	31.1 - 167/537	76.7 (54.0-90.2) 23/30	40.0 (13.3-74.3) 4/10	67.5 (45.3-83.9) 27/40	81.5 (60.0-92.8) 22/27	44.4 (14.9-78.5) 4/9	72.2 (50.4-86.9) 26/36
15-24	20.9 - 33/158	32.4 - 24/74	24.6 - 57/232	44.0 (72.3-62.2) 11/25	54.6 (27.3-79.3) 6/11	47.2 (33.5-61.4) 17/36	32.4 - 70/216	29.9 - 40/134	31.4 - 110/350	79.0 (54.9-92.0) 15/19	25.0 (5.0-68.0) 2/8	63.0 (40.0-81.3) 17/27	79.0 (54.9-92.0) 15/19	28.6 (5.7-72.7) 2/7	65.4 (42.5-82.8) 17/26
25-49	12.1 - 10/83	20 - 5/25	13.9 - 15/108	83.3 (49.6-92.2) 15/18	40.0 (7.9-83.8) 2/5	73.9 (49.5-89.1) 17/23	38.2 - 52/136	9.8 - 5/51	30.5 - 57/187	72.7 (27.2-95.0) 8/11	100.0 - 2/2	76.9 (34.3-95.5) 10/13	87.5 (20.2-99.5) 7/8	100.0 - 2/2	90.0 (27.0-99.5) 9/10
Sex with a transactional partner(s) in the last 12 months	2.2 - 16/743	1.2 - 11/937	1.6 - 27/1680	1.5 (0.7-3.2) 6/389	0.9 (0.3-2.3) 4/448	1.2 (0.6-2.2) 10/837	1.4 - 13/910	1.0 - 8/759	1.3 - 21/1669	0.9 (0.3-2.4) 4/440	1.1 (0.5-2.3) 6/540	1.0 (0.6-1.9) 10/980	1.1 (0.4-3.4) 3/271	1.6 (0.7-3.7) 5/307	1.3 (0.8-2.5) 8/578
15-24	1.8 - 7/390	1.7 - 9/531	1.7 - 16/921	0.0 0/185	0.9 (0.2-3.7) 2/216	0.5 (0.1-2.0) 2/401	0.5 - 3/542	1.0 - 5/492	0.8 - 8/1034	1.1 (0.3-3.4) 3/271	0.7 (0.2-2.8) 2/286	0.9 (0.4-2.1) 5/557	1.3 (0.3-5.2) 2/153	0.6 (0.1-4.7) 1/159	1.0 (0.3-2.9) 3/312
25-49	2.6 -	0.5 -	1.5 -	2.9 (1.4-6.2)	0.9 (0.2-3.5)	1.85 (0.9-3.8)	2.7 -	1.1 -	2.0 -	0.6 (0.1-4.1)	1.6 (0.6-4.1)	1.2 (0.5-2.7)	0.8 (0.1-6.0)	2.7 (1.0-7.0)	1.9 (0.8-4.3)

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
	9/353	2/406	11/759	6/204	2/232	8/436	10/368	3/267	13/635	1/169	4/254	5/423	1/118	4/148	5/266
Condom use at last sex with transactional partners in the last 12 months	18.8 - 3/16	72.7 - 8/11	40.7 - 11/27	33.3 (5.7-80.6) 2/6	50.0 (7.9-92.0) 2/4	40.0 (14.0-73.2) 4/10	69.2 - 9/13	75.0 0 6/8	71.4 - 15/21	100.0 - 4/4	50.0 (12.0-88.1) 3/6	70.0 (28.7-93.1) 7/10	100.0 - 3/3	40.0 (6.2-87.0) 2/5	62.5 (20.8-91.4) 5/8
15-24	28.6 - 2/7	77.8 - 7/9	56.3 - 9/16	0.0 - 0/2	0.0 - 0/0	0.0 - 0/2	33.3 - 1/3	80.0 - 4/5	62.5 - 5/8	100.0 - 3/3	50.0 (1.2-98.8) 1/2	80.0 (11.1-99.2) 4/5	100.0 - 2/2	0.0 - 0/1	66.7 (0.3-99.9) 2/3
25-49	11.1 - 1/9	50.0 - ½	18.2 - 2/11	33.3 (4.8-83.1) 2/6	100.0 - (2/2))	50.0 (16.5-83.5) 4/8	80.0 - 8/10	66.7 - 2/3	76.9 - 10/13	100.0 - 1/1	50.0 (4.3-95.7) 2/4	60.0 (8.1-96.2) 3/5	100.0 - 1/1	50.0 (4.3-95.7) 2/4	60.0 (8.1-96.2) 3/5
Women forced to have sex in the past 12 months	-	9.2 - 86/937	-	-	2.0 (0.9-4.2) 9/448	-	-	5.2 - 39/759	-	-	0.9 (0.4-2.1) 5/540	-		0.7 (0.2-2.5) 2/307	
15-24	-	9.0 - 48/531	-	-	1.4 (0.4-4.3) 3/216	-	-	1.8 - 9/492	-	-	0.3 (0.5-2.6) 1/286	-		0.6 (0.1-4.7) 1/159	
25-49	-	9.4 - 38/406	-	-	2.6 (1.1-5.7) 6/232	-	-	11.2 - 30/267	-	-	1.6 (0.6-3.9) 4/254	-		0.7 (0.1-4.7) 1/148	
Received an HIV test in the past 12 months and know the results	0.7 - 5/743	2.0 - 19/937	1.4 - 24/1680	39.1 (33.2-45.3) 152/389	44.0 (38.8-49.4) 197/448	41.7 (37.0-46.6) 349/837	3.8 - 35/910	1.7 - 13/759	2.9 - 48/1669	33.4 (26.9-40.6) 147/440	38.9 (34.0-44.0) 210/540	36.4 (31.4-41.8) 357/980	36.6 (29.3-46.8) 102/271	36.8 (31.5-42.5) 113/307	37.2 (31.9-42.8) 215/578
15-24	0.8 - 3/390	2.1 11/531	1.5 - 14/921	34.6 (27.4-42.6) 64/185	40.3 (33.4-47.6) 87/216	37.7 (32.3-43.4) 151/401	2.2 - 12/542	1.0 - 5/492	1.6 - 17/1034	29.9 (22.8-38.2) 81/271	35.7 (29.0-43.0) 102/286	32.9 (26.7-39.7) 183/557	37.3 (28.7-46.7) 57/153	35.2 (28.4-42.6) 56/159	36.2 (30.1-42.8) 113/312
15-19	0.4 - 1/226	2.1 - 6/290	1.4 - 7/516	23.0 (15.5-32.8) 26/113	29.1 (20.7-39.2) 32/110	26.0 (20.0-33.0) 58/223	1.8 - 6/328	0.6 - 2/333	1.2 - 8/661	24.1 (15.6-35.3) 33/137	29.8 (23.4-37.1 81/298	27.2 (20.9-34.6) 81/298	28.4 (18.0-41.8) 21/74	29.2 (20.6-39.5) 28/96	28.8 (21.1-38.1) 49/170
20-24	1.2 - 2/164	2.1 - 5/241	1.7 - 7/405	52.8 (42.1-63.3) 38/72	51.9 (41.2-62.4) 55/106	52.2 (44.6-59.8) 93/178	2.8 - 6/214	1.9 - 3/159	2.4 - 9/373	35.8 (28.0-44.5) 48/134	43.2 (31.7-55.5) 54/125	39.4 (31.1-48.3) 102/259	45.6 (34.6-57.0) 36/79	44.4 (35.1-54.2) 28/63	45.1 (37.3-53.1) 64/142
25-49	0.6 - 2/353	2.0 - 8/406	1.4 - 10/759	43.1 (36.7-49.9) 88/204	47.4 (40.3-54.7) 110/232	45.4 (39.7-51.3) 198/436	6.3 - 23/368	3.0 - 8/267	4.9 - 31/635	39.1 (29.4-49.6) 66/169	42.5 (35.8-49.5) 108/254	41.1 (35.4-47.1) 174/423	38.1 (26.5-51.3) 45/118	38.5 (30.7-46.9) 57/148	38.4 (31.8-45.4) 102/266
Reached by an HIV prevention programme in the past 12 months*	-	-	-	17.0 (12.7-22.4) 66/389	10.5 (6.6-16.3) 47/448	13.5 (9.8-18.3) 113/837	-	-	-	16.6 (11.9-22.7) 73/440	8.2 (5.7-11.6) 44/540	11.9 (8.7-16.2) 117/980	20.7 (14.4-28.8) 56/271	9.8 (6.6-14.3) 30/307	14.9 (10.5-20.6) 86/578
15-24	-	-	-	17.3 (12.7-23.2)	9.3 (5.4-15.4)	13.0 (9.3-17.7)	-	-	-	15.5 (10.6-22.1)	9.8 (6.1-15.4)	12.6 (8.8-17.6)	20.3 (12.6-30.9)	10.7 (6.8-16.4)	15.4 (10.3-22.3)

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
				32/185	20/216	52/401				42/271	28/286	70/557	31/153	17/159	48/312
25-49	-	-	-	16.7 (11.0-24.5) 34/204	11.6 (6.7-19.4) 27/232	14.0 (9.5-20.2) 61/436	-	-	-	18.3 (11.5-27.9) 31/169	6.3 (3.9-10.0 16/254	11.1 (7.5-16.2) 47/423	21.2 (13.0-32.5) 25/118	8.8 (5.2-14.4) 13/148	14.3 (9.5-21.0) 38/266
Had an STI symptom and sought treatment in the past 12 months	-	-	-	57.1 (29.6-80.9) 4/7	75 (13.9-98.2) 3/4	63.6 (34.9-85.1) 7/11	-	-	-	43.5 (21.0-69.1) 10/23	576 (42.4-71.4) 19/33	51.8 (39.2-64.1) 29/56	42.9 (20.0-69.3) 9/21	50.0 (28.5-71.5) 8/16	46.0 (27.8-62.3) 17/37
15-24	-	-	-	33.3 (1.9-92.7) 1/3	75.0 (12.4-98.5) 3/4	57.1 (15.0-90.9) 4/7	-	-	-	46.2 (16.9-78.4) 6/13	36.4 (9.2-76.4) 4/11	41.7 (21.8-64.7) 10/24	45.5 (15.1-79.6) 5/11	20.0 (1.8-77.3) 1/5	37.5 (18.4-61.5) 6/16
25-49	-	-	-	75.0 (0.4-100.0) 3/4	0.0 - 0/0	75.0 (0.4-100.0) 3/4	-	-	-	40.0 (12.4-75.9) 4/10	68.2 (47.1-83.8) 15/22	59.4 (38.1-77.7) 19/32	40.0 (11.7-77.0) 4/10	63.6 (34.6-85.3) 7/11	52.4 (25.9-77.6) 11/21
Comprehensive correct knowledge of HIV/AIDS	-	-	-	44.2 (38.5-50.1) 172/389	32.6 (27.6-38.0) 146/448	38.0 (33.8-42.4) 318/837	-	-	-	39.3 (34.3-44.5) 173/440	25.6 (21.2-30.5) 138/540	31.7 (27.99-35.7) 311/980	44.3 (37.6-51.2) 120/271	29.0 (23.5-35.2) 89/307	36.2 (31.2-41.5) 209/578
15-24	-	-	-	40.0 (33.1-47.4) 74/185	29.2 (23.4-35.7) 63/216	34.2 (29.8-38.8) 137/401	-	-	-	41.7 (35.4-48.3) 113/271	29.4 (24.5-35.8) 84/286	35.4 (31.1-39.9) 197/557	47.1 (37.6-56.8) 72/153	34.0 (27.4-41.2) 54/159	40.4 (34.8-46.2) 126/312
25-49	-	-	-	48.0 (40.5-55.7) 98/204	35.8 (29.3-42.8) 83/232	41.5 (36.6-46.6) 181/436	-	-	-	35.5 (27.8-44.1) 60/169	21.3 (15.6-28.2) 54/254	27.0 (21.4-33.4) 114/423	40.7 (31.2-50.9) 48/118	23.7 (15.1-35.1) 35/148	31.2 (23.6-40.0 83/266
Accepting attitudes towards PLHIV	64.4 - 436/677	53.4 - 468/877	58.2 - 904/1554	33.4 (28.7-38.6) 115/344	28.61 (22.8-35.2) 115/402	30.8 (26.6-35.4) 230/746	35.4 - 298/842	35.7 - 241/676	35.1 - 539/1518	14.5 (11.4-18.2) 61/422	6.4 (4.2-9.5) 32/501	10.1 (7.9-12.8) 93/923	13.8 (10.6-17.8) 36/261	8.2 (4.9-13.3) 23/280	10.9 (8.3-14.3) 59/541
15-24	65.1 - 222/341	52.4 - 258/492	57.6 - 480/833	28.0 (21.0-36.6) 45/161	24.5 (18.6-31.5) 46/188	26.1 (21.1-31.8) 91/349	32.5 - 161/495	37.8 - 163/431	35.0 - 324/926	14.1 (10.0-19.4) 36/256	5.3 (2.9-9.4) 14/264	9.6 (6.9-13.2) 50/520	14.4 (9.0-22.3) 21/146	7.6 (3.6-15.3) 11/144	11.0 (7.2-16.5) 32/290
25-49	63.7 - 214/336	54.6 - 210/385	58.8 - 424/721	28.3 (31.4-45.2) 70/183	32.2 (24.9-40.5 69/214	35.0 (29.9-4.5) 139/297	39.5 - 137/347	31.8 - 78/245	36.3 - 215/592	15.1 (10.5-21.2) 25/166	7.6 (4.7-12.0) 18/237	10.7 (7.6-14.9) 43/403	13.0 (7.8-21.0) 15/115	8.8 (5.1-14.7) 12/136	10.8 (7.0-16.3) 27/251
Residing in current community for 12 months or less	9.7 - 72/743	12.9 - 121/937	11.5 - 193/1680	10.0 (7.3-13.6) 39/389	8.7 (6.1-12.2) 39/448	9.3 (7.0-12.3) 78/837	12.5 - 114/910	9.1 - 69/759	11.0 - 183/1669	11.1 (7.7-15.8) 49/440	14.4 (10.0-20.4) 78/540	13.0 (9.2-17.9) 127/980	n.a.	n.a.	n.a.
15-24	11.0 - 43/390	14.1 - 75/531	12.8 - 118/921	9.2 (6.1-13.6) 17/185	12.0 (8.0-17.6) 26/216	10.7 (7.9-14.4) 43/401	13.5 - 73/542	9.4 - 46/492	11.5 - 119/1034	11.4 (8.1-16.0) 31/271	15.0 (10.1-21.7) 43/286	13.3 (9.8-17.8) 74/557	n.a.	n.a.	n.a.
25-49	8.2 - 29/353	11.3 - 46/406	9.9 - 75/759	10.8 (7.0-16.3) 22/204	5.6 (3.1-9.9) 13/232	8.0 (5.2-12.1) 35/436	11.1 - 41/327	8.6 - 23/267	10.1 - 64/635	10.7 (6.0-18.3) 18/169	13.8 (8.1-22.6) 35/254	12.5 (7.6-20.0) 53/423	n.a.	n.a.	n.a.

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Away from home 1 month or more in the past 12 months	59.0 - 438/743	36.9 - 346/937	46.7 - 784/1680	28.8 (23.3-35.0) 112/389	18.5 (14.8-22.9) 83/448	23.3 (19.5-27.6) 195/642	16.8 - 153/910	25.2 - 191/759	20.6 - 344/1669	20.7 (16.5-25.7) 91/440	13.5 (10.5-17.4) 73/539	16.8 (14.0-19.9) 164/979	26.6 (20.3-34.0) 72/271	15.6 (11.3-21.2) 48/307	20.8 (16.4-25.9) 120/578
15-24	53.9 - 210/390	37.5 - 199/531	44.4 - 409/921	26.0 (21.0-31.6) 48/185	19.9 (14.7-26.3) 43/216	22.7 (18.9-27.0) 91/401	10.7 - 58/542	26.4 - 130/492	18.2 - 188/1034	19.9 (14.1-27.4) 54/271	15.4 (10.9-21.3) 44/286	17.6 (13.6-22.4) 98/557	27.5 (18.5-38.8) 42/153	17.0 (10.7-25.9) 27/159	22.1 (16.1-29.6) 69/312
25-49	64.6 - 228/353	36.2 - 147/406	49.4 - 375/759	31.4 (23.2-40.9) 64/204	17.2 (12.7-22.9) 40/232	23.9 (18.9-29.6) 104/436	25.8 - 95/368	22.9 - 61/267	24.6 - 156/635	21.9 (16.4-28.7) 37/169	11.5 (8.4-15.4) 29/253	15.6 (12.6-19.2) 66/422	25.4 (17.9-34.8) 30/118	14.2 (9.8-20.1) 21/148	19.2 (14.9-24.3) 51/266
Visiting the neighbouring community one or more times per month	43.6 - 324/74	35.6 - 335/3	39.2 - 659/1680	57.8 (53.2-62.4) 225/389	54.5 (48.5-60.4) 244/448	56.0 (51.9-60.1) 469/837	18.0 - 164/910	22.8 - 173/759	20.2 - 337/1669	34.1 (28.7-39.9) 150/440	24.4 (21.0-28.3) 132/540	28.8 (25.2-32.7) 282/980	36.5 (30.3-43.2) 99/271	29.0 (24.0—34.6) 89/307	32.5 (28.0-37.4) 188/578
15-24	41.8 - 163/390	36.9 - 196/531	39.0 - 359/921	58.4 (51.0-65.4)	51.4 (43.2-59.5) 111/216	54.6 (49.3-59.8) 219/401	16.1 - 87/542	23.4 - 115/492	19.5 - 202/1034	32.1 (24.9-40.3) 87/271	21.0 (16.8-25.9) 60/286	26.4 (21.8-31.5) 147/557	33.3 (24.4-43.7) 51/153	25.8 (19.9-32.8) 41/159	29.5 (24.1-35.6) 92/312
25-49	45.6 - 161/353	34.2 - 139/406	39.5 - 300/759	57.4 (51.5-63.0) 117/204	57.3 (50.3-64.1) 133/232	57.3 (52.7-61.9) 259/436	20.9 - 77/368	21.7 - 58/267	21.3 - 135/635	37.3 (30.1-44.9) 63/169	28.4 (22.6-34.9) 72/254	31.9 (26.8-37.5) 135/423	40.7 (31.8-50.3) 48/118	32.4 (23.3-43.1) 48/118	36.1 (29.1-43.8) 96/266
UGANDA															
Young men and women aged 15-24 who have had sexual intercourse before the age of 15	8.3 - 10/121	11.1 - 15/135	9.8 - 25/256	5.9 (2.8-12.2) 6/101	6.8 (3.3-13.5) 13/190	6.5 (3.7-11.3) 19/291	5.3 - 9/169	4.0 - 7/175	4.7 - 16/344	8.1 (4.4-14.6) 9/111	3.4 (1.5-7.5) 6/175	5.2 (3.3-8.2) 15/286	7.5 (2.4-21.4) 3/40	3.1 (0.8-12.0) 2/64	4.8 - 5/104
15-19	8.3 - 5/60	9.8 - 6/61	9.1 - 11/121	6.7 (2.2-18.4) 3/45	8.5 (3.6-18.9) 8/94	7.9 (3.8-15.9) 11/139	3.6 - 4/110	3.2 - 3/95	3.4 - 7/205	11.3 (5.4-22.4) 6/53	4.7 (1.8-12.0) 4/85	7.2 (4.2-12.2) 10/138	13.0 (4.5-32.5) 3/23	2.4 (0.315.8) 1/41	6.3 (2.6-14.4) 4/64
20-24	8.2 - 5/61	12.2 - 9/74	10.4 - 14/135	5.4 (1.9-14.5) 3/56	5.2 (2.0-12.5) 8/96	5.3 (2.7-9.9) 8/152	8.5 - 5/59	5.0 - 4/80	6.5 - 9/139	5.2 (1.6-15.1) 3/58	2.2 (0.5-9.0) 2/90	3.4 (1.4-7.9)	0.0 - 0/17	4.3 (0.5-27.3) 1/23	2.5 (0.3-17.5) 1/40
Never married young people aged 15-24 who have never had sex	57.0 - 45/79	73.8 - 31/42	62.8 - 76/121	65.6 (51.6-77.3) 21/61	60.0 (45.4-73.0) 42/70	62.6 (52.8-47.2) 49/131	67.9 - 100/130	80.7 - 67/83	78.4 - 167/213	74.6 (62.9-83.6)	82.3 (69.5-90.4) 51/62	78.3 (70.9-84.2) 101/129	72.4 (53.1-85.9) 21/29	78.8 (60.1-90.1) 26/33	75.8 (65.4-83.9) 47/62
15-19	52.5 - 31/59	45.9 - 28/61	49.2 - 59/120	66.7 (50.8-79.5) 30/45	44.7 (34.1-55.8) 42/94	48.2 (39.8-56.7) 67/139	75.5 - 83/110	65.3 - 62/95	70.7 - 145/205	77.4 (65.9-85.8) 41/53	56.5 (45.7-66.7) 48/85	64.5 (57.2-71.2) 49/138	78.3 (55.5-91.2) 18/23	58.5 (42.3-73.1) 24/41	65.6 (53.79.1) 42/64
20-24	23.0 -	9.5 -	15.6 -	17.9 (10.4-28.9)	2.1 (0.5-7.9)	7.9 (4.6-95.4)	31.0 -	6.3 -	16.7 -	15.5 (8.2-27.5)	4.4 (1.6-11.7)	8.8 (4.9-15.2)	17.7 (6.2-41.2)	8.7 (1.9-31.5)	12.5 (4.5-30.1)

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
	14/61	7/74	21/135	10/56	2/96	140/152	18/58	5/80	23/138	9/58	4/90	13/148	3/17	2/23	5/40
More than one sexual partner in the past 12 months	22.8 - 74/324	9.8 - 32/326	16.3 - 106/650	18.0 (13.8-23.0) 69/384	3.4 (2.1-5.7) 16/464	10.0 (7.9-12.7) 85/848	15.2 - 57/376	5.0 - 19/379	10.1 - 76/755	7.0 (5.0-9.7) 26/372	2.0 (1.1-3.6) 10/493	4.2 (3.1-5.6) 36/865	9.7 (5.8-15.8) 13/134	1.1 (0.3-4.5) 2/185	4.7 (2.9-7.6) 15/319
15-24	19.0 - 23/121	13.3 - 18/135	16.0 - 41/256	8.9 (4.6-16.6) 9/101	4.7 (2.6-8.4) 9/190	6.2 (3.9-9.6) 18/291	8.9 - 15/169	3.4 - 6/175	6.1 - 21/344	0.9 (0.1-6.5) 1/111	1.7 (0.5-5.3) 3/175	1.4 (0.5-3.8) 4/286	2.5 (0.3-18.3) 1/40	1.6 (0.2-11.7) 1/64	1.9 (0.4-8.3) 2/104
15-19	15.0 - 9/60	9.8 - 6/61	12.4 - 15/121	8.9 (3.1-22.7) 4/45	3.2 (1.1-9.0) 3/94	5.0 (2.4-10.1) 7/139	2.7 - 3/110	2.1 - 2/95	2.4 - 5/205	0.0 - 0/0	0.0 - 0/0	0.0 - 0/0	0.0 - 0/23	0.0 - 0/41	0.0 - 0/64
20-24	23.0 - 14/61	16.2 - 12/74	19.3 - 26/135	8.9 (3.5-20.9) 5/56	6.3 (2.8-13.1) 6/96	7.2 (3.7-13.7) 11/152	20.3 - 12/59	5.0 - 4/80	11.5 - 16/139	1.7 (0.2-11.5) 1/58	3.3 (1.0-10.2) 3/90	2.7 (1.0-7.0) 4/148	5.9 (0.6-377) 1/17	4.3 (0.5-29.8) 1/23	5.0 (1.0-21.0) 2/40
25-49	25.1 - 51/203	7.3 - 14/191	16.5 - 65/394	21.2 (15.9-27.7) 60/283	2.6 (1.1-5.7) 7/274	12.0 (9.1-15.8) 67/557	20.3 42/207	6.4 - 13/204	13.4 - 55/411	9.6 (7.0-13.0) 25/261	2.2 (1.1-4.5) 7/318	5.5 (4.2-7.3) 32/579	12.8 (7.6-20.7) 12/94	0.8 (0.1-6.2) 1/121	6.0 (3.7-9.9) 13/215
More than one sexual partner and reported using a condom during last sexual intercourse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sex with a non-regular partner(s) in the last 12 months	11.4 - 37/324	4.6 - 15/326	8.0 - 52/650	13.3 (9.7-17.9) 51/384	5.8 4.1-8.1) 27/464	9.2 (7.0-11.9) 78/848	6.4 - 24/376	3.2 - 12/379	4.8 - 36/755	4.6 (2.9-7.1) 17/372	2.6 (1.6-4.4) 13/493	3.5 (2.6-4.7) 30/865	4.5 (2.0-9.7) 6/134	2.2 (0.6-7.0) 4/185	3.1 (1.6-6.0) 10/319
15-24	16.5 - 20/121	5.9 - 8/135	10.9 - 28/256	15.8 (8.9-26.6) 16/101	9.5 (6.2-14.3) 18/190	11.7 (8.5-15.8) 34/291	8.9 - 15/169	4.0 - 7/175	6.4 - 22/344	4.5 (1.9-10.4) 5/111	3.4 (1.6-7.3) 6/175	3.8 (2.3-6.5) 11/286	2.5 (0.3-17.5) 1/40	4.7 (1.5-13.7) 3/64	3.8 (1.5-9.6) 4/104
25-49	8.4 - 17/203	3.7 - 7/191	6.1 - 24/394	12.4 (8.7-17.3) 35/283	3.3 (1.7-6.1) 9/274	7.9 5.4-11.3) 44/557	4.3 - 9/207	2.5 - 5/204	3.4 - 14/411	4.6 (2.7-7.8) 12/261	2.2 (1.1-4.3) 7/318	3.3 (2.2-4.8) 19/579	5.3 (2.1-12.6) 5/94	0.8 (0.1-6.2) 1/121	2.8 (1.2-6.2) 6/215
Condom use at last sex with a non-regular partners in the last 12 months	25.0 - 9/36	13.3 - 2/15	21.6 - 11/51	42.9 (31.2-55.4) 21/49	19.2 (7.5-41.2) 5/26	34.7 (24.6-46.4) 26/75	41.7 - 10/24	9.1 - 1/11	31.4 - 11/35	29.4 (12.4-55.1) 5/17	15.4 (3.4-48.3) 2/13	23.3 (11.4-41.9) 7/30	50.0 (12.0-88.1) 3/6	25.0 (1.6-87.6) 1/4	40.0 (11.0-78.2) 4/10
15-24	42.1 - 8/19	25.0 - 2/8	37.0 - 10/27	50.0 (32.1-77.9) 7/14	22.2 (7.4-50.4) 4/18	34.4 (20.4-51.8) 11/32	46.7 - 7/15	16.7 - 1/6	38.1 - 8/21	20.0 (1.8-88.3) 1/5	16.7 (1.5-72.1) 1/6	18.2 (3.5-58.0) 2/11	100.0 - 1/1	33.3 (0.6-97.8) 1/3	50.0 (2.5-97.5) 2/4
25-49	5.9 - 1/17	0.0 - 0/7	4.2 - 1/24	40.0 (25.1-57.0) 14/35	12.5 (1.5-57.3) 1/8	34.9 (22.2-50.1) 15/43	33.3 - 3/9	0.0 - 0/5	21.4 - 3/14	33.3 (11.1-66.6) 4/12	14.3 (1.6-63.5) 1/7	26.3 (10.1-53.1) 5/19	40.0 (4.9-89.7) 2/5	0.0 - 0/1	33.3 (4.2-85.2) 2/6

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Sex with a transactional partner(s) in the last 12 months	4.9 - 16/324	2.1 - 7/326	3.5 - 23/650	2.3 (1.2-4.6) 9/384	1.1 (0.5-2.5) 5/464	1.7 (1.0-2.8) 14/848	1.6 - 6/376	0.5 2/379	1.1 - 8/755	0.8 (0.2-3.4) 3/372	0.8 (0.3-2.2) 4/493	0.8 (0.4-1.8) 7/865	0.7 (0.1-5.9) 1/134	0.5 (0.1-4.1) 1/185	0.6 (0.1-2.8) 2/319
15-24	5.8 - 7/121	3.7 - 5/135	4.7 - 12/244	3.0 (0.7-12.2) 3/101	2.1 (0.8-5.5) 4/190	2.4 (1.1-5.4) 7/291	0.6 - 1/169	0.6 - 1/175	0.6 - 2/344	0.9 (0.1-7.5) 1/111	1.1 (0.3-4.6) 2/175	1.0 (0.3-3.3) 3/286	2.5 (0.3-18.3) 1/40	0.0 - 0/64	1.0 (0.1-7.7) 1/104
25-49	4.4 - 9/203	1.0 - 2/191	2.8 - 11/394	2.1 (1.0-4.5) 6/283	0.4 (0.1-2.6) 1/274	1.3 (0.6-2.5) 7/557	2.4 - 5/207	0.5 - 1/204	1.5 - 6/411	0.8 (0.2-3.1) 2/261	0.6 (0.1-2.6) 2/318	0.7 (0.3-1.8) 4/579	0.0 - 0/94	0.8 (0.1-6.2) 1/121	0.5 (0.1-3.6) 1/215
Condom use at last sex with transactional partners in the last 12 months	37.5 - 6/16	14.3 - 1/7	30.4 - 7/23	44.4 (12.3-82.1) 4/9	40.0 (7.6-84.5) 2/5	42.9 (15.4-75.5) 6/14	66.7 - 4/6	50.0 - 1/2	62.5 - 5/8	33.3 (6.4-78.6) 1/3	25.0 (1.3-85.9) 1/4	28.6 (5.2-74.6) 2/7	0.0 -	0.0 -	0.0 - 0/2
15-24	28.6 - 2/7	20.0 - 1/5	25.0 - 3/12	66.7 (3.6-99.1) 2/3	50.0 (5.7-94.4) 2/4	57.1 (11.1-93.5) 4/7	0.0 - 0/1	100.0 - 1/1	50.0 - 1/2	0.0 - 0/1	0.0 - 0/2	0.0 - 0/3	0.0 -	0.0 -	0.0 - 0/1
25-49	44.4 - 4/9	0.0 - 0/2	36.4 - 4/11	33.3 (4.8-83.1) 2/6	0.0 - 0/1	28.6 (4.2-78.5) 2/7	80.0 - 4/5	0.0 - 0/1	66.7 - 4/6	50.0 (0.6-99.5) 1/2	50.0 (0.6-99.6) 1/2	50.0 (2.5-97.5) 2/4	0.0 -	0.0 -	0.0 - 0/1
Women forced to have sex in the past 12 months	-	2.4 - 8/326	-	-	0.2 (0.0-1.6) 1/464	-	-	1.6 - 6/379	-	-	1.4 (0.6-3.2) 7/493	-	-	1.1 (0.3-4.4) 2/185	-
15-24	-	3.0 - 4/135	-	-	0.5 (0.1-3.8) 1/190	-	-	2.3 - 4/175	-	-	4.0 (1.8-8.8) 7/175	-	-	3.1 (0.7-12.5) 2/64	-
25-49	-	2.1 - 4/191	-	-	0.0 - 0/274	-	-	1.0 - 2/204	-	-	0.0 - 0/318	-	-	0.0 - 0/121	-
Received an HIV test in the past 12 months and know the results	6.5 - 21/324	9.5 - 31/326	8.0 - 52/650	23.2 (18.2-29.0) 89/384	39.4 (33.9-45.3) 183/464	32.1 (27.7-36.8) 272/848	9.6 - 36/376	11.9 - 45/379	10.7 - 81/755	24.7 (20.5-29.6) 92/372	41.4 (37.3-45.6) 204/493	34.2 (31.0-37.6) 296/865	26.1 (18.5-35.6) 35/134	41.1 (30.8-52.2) 76/185	34.8 (26.8-43.8) 111/319
15-24	5.8 - 7/121	12.6 - 17/135	9.4 - 24/256	20.8 (12.7-32.2) 21/101	42.6 (33.7-52.1) 81/190	35.1 (27.9-42.9) 102/291	9.5 - 16/169	9.7 - 17/175	9.6 - 33/344	20.7 (14.0-29.5) 23/111	38.3 (31.8-45.2) 67/175	31.5 (25.8-37.8) 90/286	25.0 (15.3-38.2) 10/40	39.1 (25.4-54.7) 25/64	33.7 (23.0-46.3) 35/104
15-19	8.3 - 5/60	14.8 - 9/61	11.6 - 14/121	8.9 (3.7-19.9) 4/45	33.0 (23.1-44.7) 31/94	25.2 (18.5-33.3) 35/139	8.2 - 9/110	9.5 - 9/95	8.8 - 18/205	7.5 (3.0-17.7) 4/53	22.4 (15.6-31.0) 19/85	16.7 (12.0-22.7) 23/138	17.4 (6.7-38.1) 4/23	24.4 (12.8-41.4) 10/41	21.9 (12.8-34.7) 14/64
20-24	3.3 - 2/61	10.8 - 8/74	7.4 - 10/135	30.4 (17.6-47.0) 17/56	52.1 (40.0-63.9) 50/96	44.1 (34.2-54.4) 67/152	11.9 - 7/59	10 - 8/80	10.8 - 15/139	32.8 (21.6-46.3) 19/58	53.3 (43.4-63.0) 48/90	45.3 (36.4-54.2) 67/148	35.3 (19.7-54.9) 6/17	65.2 (40.8-83.6) 15/23	52.5 (35.5-68.9) 21/40
25-49	6.9 -	7.3 -	7.1 -	24.0 (19.0-31.3)	37.2 (31.4-43.5)	30.5 (25.6-35.9)	9.7 -	13.7 -	11.7 -	26.4 (21.2-32.4)	43.1 (38.1-48.2)	35.6 (31.7-39.7)	26.6 (17.9-37.6)	42.2 (30.3-55.0)	35.4 (26.5-45.3)

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
	14/203	14/191	28/394	68/283	102/274	170/557	20/207	28/204	48/411	69/261	137/318	206/579	25/94	51/121	76/215
Reached by an HIV prevention programme in the past 12 months*	52.8 - 171/324	55.2 - 180/326	54.0 - 351/650	-	-	-	60.9 - 229/376	61.5 - 233/379	61.2 - 462/755	-	-	-	-	-	-
15-24	53.7 - 65/121	53.3 - 72/135	53.5 - 137/256	-	-	-	67.5 - 114/169	49.4 - 104/175	63.4 - 218/344	-	-	-	-	-	-
25-49	52.2 - 106/203	56.5 - 108/191	54.3 - 214/394	-	-	-	55.6 - 115/207	63.2 - 129/204	59.4 - 244/411	-	-	-	-	-	-
Had an STI symptom and sought treatment in the past 12 months	38.1 - 16/42	64.3 - 27/42	51.2 - 43/84	59.0 (40.8-75.0) 23/39	63.2 (52.0-73.2) 55/87	61.9 (51.5-71.3) 78/126	33.3 - 11/33	60.6 - 20/33	47.0 - 31/66	68.4 (47.6-83.8) 13/19	61.8 (47.6-74.3) 34/55	63.5 (51.8-73.8) 47/74	66.7 (36.2-87.6) 6/9	68.0 (46.4-83.9) 17/25	67.7 (51.3-80.6) 23//34
15-24	28.6 - 4/14	57.1 - 8/14	42.9 - 12/28	33.3 (12.8-63.1) 3/9	66.7 (43.0-84.1) 18/27	58.3 (40.9-73.9) 21/36	35.3 - 6/17	58.3 - 7/12	44.8 - 13/29	100.0 - 1/1	36.4 (11.9-70.7) 4/11	41.7 (15.7-73.3) 5/12	100.0 - 1/1	50.0 (4.3-95.7) 2/4	60.0 (8.1-96.2) 3/5
25-49	42.9 - 12/28	67.9 - 19/28	55.4 - 31/56	66.7 (45.8-82.6) 20/30	61.7 (49.3-72.7) 37/60	63.3 (52.0-73.4) 57/90	31.3 - 5/16	61.2 - 13/21	48.7 - 18/37	66.7 (43.7-83.7) 12/18	68.2 (50.9-81.6) 30/44	67.7 (53.5-79.3) 42/62	62.5 (26.6-88.5) 5/8	71.4 (43.4-89.1) 15/21	69.0 (48.1-84.2) 20/29
Comprehensive correct knowledge of HIV/AIDS	26.2 - 88/324	25.2 - 82/326	26.2 - 170/650	52.9 (47.6-58.1) 203/384	46.1 (40.8-51.5) 214/464	49.2 (45.0-53.3) 417/848	31.9 - 120/376	26.9 - 102/379	29.4 - 222/755	39.5 (33.9-45.5) 147/372	31.2 (27.3-35.5) 154/493	34.8 (31.1-38.6) 301/865	47.8 (37.3-58.4) 64/134	40.0 (34.3-46.0) 74/185	43.3 (38.0-48.7) 138/319
15-24	26.5 - 32/121	28.9 - 39/135	27.7 - 71/256	46.5 (36.0-57.4) 47/101	45.3 (37.9-52.8) 86/10	45.7 (39.4-52.2) 133/291	33.1 - 56/169	29.7 - 52/175	31.4 - 108/344	38.7 (29.9-48.4- 43/111	30.9 (23.7-39.1) 54/175	33.9 (28.0-40.4) 97/286	42.5 (25.0-62.1) 17/40	42.2 (28.3-57.4) 27/64	42.3 (31.4-54.1) 44/60
25-49	27.6 - 56/203	22.5 - 43/191	25.1 - 99/394	55.1 (48.6-61.5) 156/283	46.7 (40.0-53.6) 128/274	51.0 (45.7-56.3) 284/557	30.9 - 64/207	24.5 - 50/204	27.7 - 114/411	39.9 (32.5-47.6) 104/261	31.5 (26.1-37.3) 100/318	35.2 (30.6-40.2) 204/579	50.0 (37.5-62.5) 47/94	38.8 (30.3-48.1) 47/121	43.7 (36.2-51.6) 94/215
Accepting attitudes towards PLHIV	11.6 - 32/277	12.7 - 38/300	12.1 - 70/577	38.3 (32.8-44.0) 145/379	34.2 (28.9-40.0) 155/453	36.1 (32.1-40.3) 300/832	22.5 - 75/333	18.6 - 62/333	20.6 - 137/666	22.8 (18.4-27.8) 84/369	17.4 (13.8-21.6) 84/484	19.7 (16.7-23.1) 168/853	20.5 (14.7-27.7) 27/132	19.0 (12.8-27.3) 34/179	19.6 (14.7-25.8) 61/311
15-24	2.9 - 3/105	13.0 - 16/123	8.3 - 19/228	24.2 (15.2-36.4) 24/99	30.3 (23.5-38.0) 56/185	28.2 (22.0-35.2) 80/284	24.5 - 37/151	17.2 - 27/157	20.8 - 64/308	18.5 (12.3-26.9) 20/108	18.7 (13.4-25.6) 32/171	18.6 (14.3-24.0) 52/279	18.4 (8.6-35.2) 7/38	18.0 (10.1-30.1) 11/61	18.2 (11.7-27.2) 18/99
25-49	16.9 - 29/172	12.4 - 22/177	14.6 - 51/349	43.2 (37.9-48.7) 121/280	36.9 (31.0-43.3) 99/268	40.1 (36.1-44.4) 220/548	20.9 - 38/182	19.9 - 35/176	20.4 - 73/358	24.5 (19.3-30.7) 64/261	16.6 (12.2-22.2) 52/313	20.2 (16.6-24.4) 116/574	21.3 (13.9-31.2) 20/94	19.5 (11.9-30.2) 23/118	20.3 (14.1-28.4) 43/212
Residing in current community for	23.2 - 75/324	15.3 - 50/326	19.2 - 125/650	3.1 (1.6-5.9) 12/384	4.1 (2.6-6.4) 19/464	3.7 (2.4-5.5) 31/848	5.0 - 19/376	6.3 - 24/379	5.7 - 43/755	19.4 (14.7-25.1) 72/372	21.1 (16.5-26.5) 104/493	20.4 (16.0-25.5) 176/865	n.a.	n.a.	n.a.

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
12 months or less															
15-24	23.1 - 28/121	19.3 - 26/135	21.1 - 54/256	5.0 (2.2-10.6) 5/101	8.4 (4.6-14.2) 16/190	7.2 (4.5-11.3) 21/291	4.7 - 8/169	7.4 - 13/175	6.1 - 21/344	15.3 (9.4-24.0) 17/111	20.0 (13.5-28.7) 35/175	18.2 (12.9-25.0) 52/286	n.a.	n.a.	n.a.
25-49	23.2 - 47/203	12.6 - 24/191	18.0 - 71/394	2.4 (1.2-5.1) 7/283	1.1 (0.3-3.5) 3/274	1.8 (0.9-3.4) 10/557	5.3 - 11/207	5.3 - 11/204	5.3 - 22/411	21.1 (15.8-27.5) 55/261	21.7 (16.9-27.5) 69/318	21.4 (16.8-26.8) 124/579	n.a.	n.a.	n.a.
Away from home 1 month or more in the past 12 months	11.8 - 38/323	8.6 - 28/325	10.2 - 66/648	12.8 (9.5-17.0) 49/384	8.2 (5.8-11.5) 38/464	10.3 (8.1-12.9 87/848	11.5 - 43/375	8.5 - 32/378	10.0 - 75/753	17.7 (12.9-23.9) 66/372	9.7 (7.4-12.7) 48/493	13.2 (10.4-16.6) 114/865	31.3 (21.7-42.9) 42/134	12.4 (8.7-17.4) 23/185	20.4 (15.0-27.0) 65/319
15-24	14.2 - 17/120	10.5 - 14/134	12.2 - 31/254	18.8 (12.3-27.7) 19/101	12.6 (8.1-19.3) 24/190	14.9 (10.6-20.3) 43/291	10.1 - 17/169	10.9 - 19/174	10.5 - 36/343	17.1 (10.0-2.7) 19/111	8.6 (5.4-13.4) 15/175	11.9 (7.6-18.1) 34/286	27.5 (12.3-50.6) 11/40	11.0 (4.8-23.1) 7/64	17.3 (8.0-33.6) 18/104
25-49	10.3 - 21/203	7.3 - 14/191	8.9 - 35/394	10.6 (7.2-15.2) 30/283	5.1 (3.1-8.2) 14/274	7.9 (5.7-10.7) 44/557	12.6 - 26/206	6.4 - 13/204	9.5 - 39/410	18.0 12.5-25.2) 47/261	10.4 (7.2-14.8) 33/318	13.8 (10.5-18.0) 80/579	33.0 (21.5-46.9) 31/94	13.2 (7.9-21.2) 16/121	21.9 (15.6-29.8) 47/215
Visiting the neighbouring community one or more times per month	27.5 - 89/324	21.2 - 69/326	24.3 - 158/650	38.5 (33.3-44.1) 148/384	25.7 (20.5-31.5) 119/464	31.5 (27.2-36.2) 267/848	27.4 - 103/378	25.9 - 98/379	26.6 - 201/755	22.9 (18.4-28.0) 85/372	17.0 (13.7-21.1) 84/493	19.5 (16.5-23.0) 169/865	29.9 (22.0-39.1) 40/134	16.2 (10.6-24.1) 30185	21.9 (16.3-28.9) 70/319
15-24	28.1 - 34/121	25.2 - 34/135	26.6 - 68/256	40.6 (29.0-53.4) 41/101	25.3 (19.1-32.7) 48/190	30.6 (24.0-38.0) 89/291	26.0 - 44/169	22.3 - 39/175	24.1 - 83/344	24.3 (17.6-32.7) 27/111	16.6 (11.0-24.3) 29/175	19.6 (14.8-25.5) 56/286	30.0 (19.0-44.0) 12/40	14.1 (6.8-26.7) 9/64	20.2 (13.6-29.0) 21/104
25-49	27.1 - 55/203	18.3 - 35/191	22.8 - 90/394	37.8 (33.0-42.8) 107/283	25.9 (19.2-33.9) 71/274	32.0 (27.1-37.2) 178/557	28.5 - 59/207	28.9 - 59/204	28.7 118/411	22.2 (16.8-28.8) 58/261	17.3 (13.1-22.5) 55/318	19.5 (15.7-24.0) 113/579	29.8 (20.6-41.0) 28/94	17.4 (10.1-28.1) 21/121	22.8 (15.4-32.4) 49/215
TANZANIA															
Young men and women aged 15-24 who have had sexual intercourse before the age of 15	6.5 - 7/108	6.4 - 14/219	6.4 - 21/327	6.9 (4.0-11.4) 12/175	2.0 (0.8-5.2) 4/199	4.3 (2.6-7.1) 16/374	30.2 (22.8-37.6) 45/149	21.7 (15.1 -28.3) 33/152	25.9 (20.9-30.9) 78/301	22.6 (14.9-30.3) 26/115	20.3 (13.6-26.9) 29/143	22.4 (16.3-26.3) 55/258			
15-19	2.8 - 2/72	11.1 - 11/99	7.6 - 13/171	8.5 (4.0-17.2) 7/82	3.9 (1.2-12.0) 3/78	6.3 (3.2-11.8) 10/160	33.6 (24.6-42.7) 36/107	23.7 (15.2-32.2) 23/97	28.9 (22.7-35.2) 59/204	22.7 (13.1-32.3) 17/75	22.1 (12.7-31.5) 17/77	22.4 (15.7-29.1) 34/118			
20-24	14.0 - 6/43	3.0 - 4/135	5.6 - 10/178	5.4 (2.4-11.7) 5/93	0.8 (0.1-6.1) 1/121	2.8 (1.3-5.9) 6/214	25.0 (14.3-35.7) 16/64	16.0 (7.6-24.4) 12/75	20.1 (13.4-26.8) 28/139	22.5 (9.2-35.8) 9/40	18.2 (8.7-27.7) 12/66	19.8 (12.1-27.5) 21/106			
Never married	65.2	47.8	55.7	63.2	72.2	67.8	21.0	51.9	32.1	42.6	32.1	38.8			

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
young people aged 15-24 who have never had sex	- 60/92	- 53/111	- 113/203	(52.8-72.5) 91/144	(61.3-81.0) 109/151	(59.6-75.0) 200/295	(14.3-27.7) 30/143	(40.9-62.8) 42/81	(26.0-38.3) 72/224	(32.4-52.7) 40/94	(19.3-44.9) 17/53	(30.8-46.7) 57/147			
15-19	74.3 - 52/70	60.6 - 43/71	67.4 - 95/141	73.3 (62.7-81.8) 66/90	82.2 (73.5-88.5) 97/118	78.4 (71.6-83.9) 163/208	28.7 (19.8-37.6) 29/101	56.5 (44.7-68.3) 39/69	40.0 (32.6-47.4) 68/170	51.4 (39.5-63.3) 36/70	36.2 (22.1-50.2) 17/47	45.3 (36.1-54.5) 53/117			
20-24	36.4 - 8/22	25.0 - 10/40	29.0 - 18/62	46.3 (31.6-61.7) 25/54	36.4 (21.3-54.7) 12/33	42.5 (30.6-55.4) 37/87	2.4 (0-7.1) 1/42	25.0 (0-51.0) 3/12	7.4 (0.3-14.5) 4/54	16.7 (0.8-32.6) 4/24	0 - 0/6	13.3 (0.4-26.2) 4/30			
More than one sexual partner in the past 12 months	28.5 - 109/381	18.1 - 99/548	22.4 - 208/929	15.5 (12.1-19.8) 70/451	1.1 (0.4-3.0) 5/470	8.1 (6.2-10.6) 75/921	45.1 (39.9-50.3) 160/355	21.7 (17.7-25.7) 89/410	32.6 (29.2-35.9) 249/765	26.3 (20.9-31.7) 67/255	15.2 (11.3-19.1) 50/328	20.1 (16.8-23.3) 117/583			
15-24	24.4 - 28/115	18.8 - 44/234	20.6 - 72/349	10.3 (6.7-15.5) 18/175	1.5 (0.3-6.3) 3/199	5.6 (3.5-8.9) 21/374	50.3 (42.8-57.8) 86/171	23.3 (16.9-29.6) 40/172	36.7 (31.6-41.9) 126/343	18.3 (11.1-25.4) 21/115	16.8 (10.6-23.0) 24/143	17.4 (12.8-22.1) 45/258			
15-19	18.1 - 13/72	13.1 - 13/99	15.2 - 26/171	7.3 (3.4-15.1) 6/82	1.3 (0.2-9.1) 1/78	4.4 (2.3-8.3) 7/160	43.9 (34.5-53.4) 47/107	24.7 (16.1-33.4) 24/97	34.8 (28.2-41.4) 71/204	13.3 (5.5-21.1) 10/75	15.6 (7.4-23.8) 12/77	14.5 (8.8-20.1) 22/152			
20-24	34.9 - 15/43	23.0 - 31/135	25.8 - 46/178	12.9 (8.3-19.6) 12/93	1.7 (0.2-11.2) 2/121	6.5 (3.9-10.7) 14/214	60.9 (48.9-73.0) 39/64	21.3 (12.0-30.7) 16/75	39.6 (31.4-47.7) 55/139	27.5 (13.3-41.7) 11/40	18.2 (8.7-27.7) 12/66	21.7 (13.7-29.7) 23/106			
25-49	30.5 (24.9-36.0) 81/266	17.5 (13.3-21.7) 55/314	23.5 (20.0-26.9) 136/580	18.8 (14.4-24.3) 52/276	0.7 (0.2-3.0) 2/271	9.5 (7.4-13.1) 54/569	40.2 (33.1-47.3) 74/184	20.6 (15.4-25.7) 49/238	29.2 (24.8-33.5) 123/422	32.9 (25.0-40.7) 46/140	14.1 (9.0-19.1) 26/185	22.2 (17.6-26.7) 72/325			
More than one sexual partner and reported using a condom during last sexual intercourse	-	-	-	20.0 (12.9-29.6) 14/70	40.0 (7.4-84.8) 2/5	21.3 (14.4-30.4) 16/75	-	-	-	19.4 (9.8-29.0) 13/67	14.0 (4.2-23.8) 7/50	17.1 (10.1-24.0) 20/117			
15-24	-	-	-	50.0 (28.4-71.6) 9/18	33.3 (2.1-92.0) 1/3	47.6 (31.1-64.7) 10/21	-	-	-	38.1 (16.2-60.0) 8/21	20.8 (3.8 -37.9) 5/24	28.9 (15.1-42.7) 13/45			
15-19	-	-	-	50.0 (10.4-89.6) 3/6	100 1/1	57.1 (15.1-90.9) 4/7	-	-	-	40.0 (6.0 - 74.0) 4/10	0 0/12	18.2 (6.8-35.7) 4/22			
20-24	-	-	-	50.0 (21.0-79.0) 6/12	0 0/2	42.9 (19.6-69.8) 6/14				36.4 (4.8-67.9) 4/11	41.7 (10.8-72.5) 5/12	39.1 (17.6-60.7) 9/23			
25-49	-	-	-	9.6	50.0	11.1				10.9	7.7	9.7			

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
				(4.1-21.1) 5/52	(4.9-95.0) 1/2	(4.7-24.1) 6/54				(1.6-20.1) 5/46	(0-18.3) 2/26	(2.7-16.7) 7/72			
Sex with a non-regular partner(s) in the last 12 months	20.7 - 79/381	20.1 - 110/548	20.3 - 189/929	14.2 (11.0-18.1) 64/451	5.3 (3.4-8.1) 25/470	9.7 (7.7-12.1) 89/921	41.7 (36.6-46.8) 148/355	25.9 (21.6-30.1) 106/410	33.2 (29.9-36.5) 254/765	22.4 (17.2-27.5) 57/255	13.5 (9.7-17.2) 44/327	17.4 (14.3-20.4) 101/582			
15-24	18.3 - 21/115	20.5 - 48/234	19.8 - 69/349	19.4 (13.5-27.2) 34/175	7.0 (4.0-12.1) 14/199	12.8 (9.3-17.4) 48/374	50.3 (42.8-57.8) 86/171	27.9 (21.2-34.6) 48/172	39.1 (33.9-44.2) 134/343	27.8 (19.6-36.1) 32/115	18.9 (12.4-25.3) 27/143	22.9 (17.7-28.0) 59/258			
25-49	21.8 - 58/266	19.8 - 62/314	20.7 - 120/580	10.9 (8.0-14.7) 30/276	4.1 (2.0-8.1) 11/271	7.5 (5.6-10.0) 41/547	33.7 (26.8-40.5) 62/184	24.4 (18.9-29.8) 58/238	28.4 (24.1-32.7) 120/422	17.9 (11.5-24.2) 25/140	9.2 (5.0-13.5) 17/184	13.0 (9.3-16.6) 42/324			
Condom use at last sex with a non-regular partners in the last 12 months	31.3 - 25/80	19.8 - 22/111	24.6 - 47/191	45.3 (32.8-57.8) 29/64	16.0 (6.3-34.9) 4/25	37.1 (27.6-47.7) 33/89	35.3 (27.6-43.0) 53/150	30.0 (21.4-38.6) 33/110	33.1 (27.3-38.8) 86/260	43.9 (30.7-57.0) 25/57	30.2 (16.2-44.3) 13/43	38.0 (28.3-47.7) 38/100			
15-24	38.1 - 8/21	25.0 - 12/48	29.0 - 20/69	47.1 (32.0-62.7) 16/34	7.1 (1.0-37.9) 1/14	35.4 (22.1-51.4) 17/48	35.2 (25.1-45.3) 31/88	42.0 (28.1-55.9) 21/50	37.7 (29.5-45.8) 52/138	40.6 (23.0-58.3) 13/32	37.0 (18.1-56.0) 10/27	39.0 (26.2-51.8) 23/59			
25-49	28.8 - 17/59	15.9 - 10/63	22.1 - 27/122	43.3 (25.5-63.1) 13/30	27.3 (7.4-63.9) 3/11	39.0 (25.1-55.0) 16/41	35.5 (23.4-47.5) 22/62	20.0 (10.0-30.2) 12/60	27.9 (19.8-35.9) 34/122	48.0 (27.4-68.6) 12/25	18.8 (0-39.1) 3/16	36.6 (21.2-52.0) 15/41			
Sex with a transactional partner(s) in the last 12 months	6.8 - 26/381	2.6 - 14/548	4.3 - 40/929	3.1 (1.8-5.2) 14/451	0.2 (0.03-1.6) 1/470	1.6 (1.0-2.7) 15/921	17.8 (13.8-21.7) 63/355	10.7 (7.7-13.7) 44/410	14.0 (11.5-16.4) 107/765	14.9 (10.5-19.3) 38/255	9.8 (6.5-13.0) 32/328	12.0 (9.4-14.7) 70/583			
15-24	7.8 - 9/115	1.3 - 3/234	3.4 - 12/349	4.6 (2.2-9.1) 8/175	0.5 (0.07-3.7) 1/199	2.4 (1.3-4.6) 9/374	20.5 (14.4-26.5) 35/171	11.6 (6.8-16.4) 20/172	16.0 (12.1-19.9) 55/343	10.4 (4.8-16.1) 12/115	10.5 (5.4-15.6) 15/143	10.5 (6.7-14.2) 27/258			
25-49	6.4 - 17/266	3.5 - 11/314	4.8 - 28/580	2.2 (1.0-4.5) 6/276	0 0/0	1.1 (0.5-2.3) 6/547	15.2 (10.0-20.4) 28/184	10.1 (6.2-13.9) 24/238	12.3 (9.2-15.5) 52/422	18.6 (12.1-25.1) 26/140	9.2 (5.0-13.4) 17/185	13.2 (9.5-16.9) 43/325			
Condom use at last sex with transactional partners in the last 12 months	42.3 - 11/26	42.9 - 6/14	42.5 - 17/40	64.3 (34.6-86.0) 9/14	100 1/1	66.7 (37.6-86.9) 10/15	46.8 (34.2-59.4) 29/62	30.2 (16.3-44.2) 13/43	40.0 (30.5-49.5) 42/105	10.5 (0.5-20.6) 4/38	9.4 (0-19.8) 3/32	10.0 (2.8-17.2) 7/70			
15-24	22.2 - 2/9	33.3 - 1/3	25.0 - 3/12	62.5 (18.7-92.4) 5/8	100 1/1	66.7 (23.3-92.9) 6/9	48.6 (31.6 -65.6) 17/35	35.0 (13.3-56.7) 7/20	43.6 (30.2-57.0) 24/55	8.3 (0-25.5) 1/12	6.7 (0-20.4) 1/15	7.4 (0-18.0) 2/27			
25-49	52.9 -	45.5 -	50.0 -	66.7 (12.5 - 100)	0 0/1	66.7 (14.9-95.8)	44.4 (25.1-63.8)	26.1 (7.5-44.7)	36.0 (22.4-49.6)	11.5 (0-24.4)	11.8 (0-28.0)	11.6 (1.6-21.6)			

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
	9/17	5/11	14/28	4/6		4/6	12/27	6/23	18/50	3/26	2/17	5/43			
Women forced to have sex in the past 12 months	-	1.5 - 8/548	-	-	0.2 (0.03-1.6) 1/470	-	-	3.2 (0.1-4.9) 13/410	-	-	2.4 (0.8-4.1) 8/328	-			
15-24	-	2.1 - 5/234	-	-	0 0/199	-	-	2.3 (0.1-4.6) 4/172	-	-	2.8 (0.1-5.5) 4/143	-			
25-49	-	1.0 - 3/314	-	-	0.4 (0.05-2.8) 1/271	-	-	3.8 (1.4-6.2) 9/238	-	-	2.2 (0.1-4.3) 4/185	-			
Received an HIV test in the past 12 months and know the results	11.3 - 43/381	11.5 - 63/548	11.4 - 106/929	41.0 (36.1-45.7) 184/451	50.0 (45.3-54.7) 235/470	45.5 (41.7-49.3) 419/921	18.9 (14.8-23.0) 67/355	17.3 (13.6-21.0) 71/410	18.0 (15.3-20.8) 138/765	41.6 (35.5-47/6) 106/255	52.4 (47.0-57.9) 172/328	47.7 (43.6-51.8) 278/583			
15-24	11.3 - 13/115	11.1 - 26/234	11.2 - 39/349	29.1 (22.3 - 37.0) 51/175	43.7 (36.6-51.1) 87/199	36.9 (32.1-41.9) 138/374	15.8 (10.3-21.2) 27/171	12.8 (7.8-17.8) 22/172	14.3 (10.6-18.0) 49/343	27.8 (19.6-36.1) 32/115	59.4 (51.3-67.6) 85/143	45.4 (39.2-51.5) 117/258			
15-19	9.7 - 7/72	10.1 - 10/99	10.0 - 17/171	12.2 (6.9-20.6) 10/82	20.5 (13.1-30.7) 16/78	16.3 (11.8-22.0) 26/160	13.1 (6.7-19.5) 14/107	8.3 (2.7-13.8) 8/97	10.8 (6.5-15.1) 22/204	14.7 (6.5-22.8) 11/75	53.3 (41.9-64.6) 41/77	34.3 (26.6-41.8) 52/152			
20-24	14.0 - 6/43	11.9 - 16/135	12.4 - 22/178	44.1 (34.1-54.6) 41/93	58.7 (49.7-67.2) 71/121	52.3 (46.0-58.7) 112/214	20.3 (10.4-30.3) 13/64	18.7 (9.8-27.6) 14/75	19.4 (12.8-26.0) 27/139	52.5 (36.6-68.4) 21/40	66.7 (55.1-78.3) 44/66	61.3 (51.9-70.7) 65/106			
25-49	11.3 - 30/266	11.8 - 37/314	11.6 - 67/580	48.2 (41.4-55.1) 133/276	54.6 (48.2-60.9) 148/271	51.4 (45.8-56.9) 281/547	21.7 (15.8-27.7) 40/184	20.6 (15.4-25.7) 49/238	21.1 (17.2-25.0) 89/422	52.9 (44.5-61.2) 74/140	47.0 (39.8-54.3) 87/185	49.5 (44.1-55.0) 161/325			
Reached by an HIV prevention programme in the past 12 months*	-	-	-	9.3 (6.4-13.3) 42/451	2.5 (1.2-5.3) 12/470	5.9 (4.3-8.0) 54/921	-	-	-	27.8 (22.3-33.4) 71/255	11.0 (7.6-14.4) 36/328	18.4 (15.2-21.5) 107/583			
15-24	-	-	-	5.1 (2.7-9.5) 9/175	3.0 (1.2-7.3) 6/199	4.0 (2.3-6.9) 15/374	-	-	-	29.6 (21.1-38.0) 34/115	11.2 (6.0-16.4) 16/143	19.4 (14.5-24.2) 50/258			
25-49	-	-	-	12.0 (8.1-17.3) 33/276	2.2 (0.9-5.5) 6/271	7.1 (5.0-10.0) 39/547	-	-	-	26.4 (19.1-33.8) 37/140	10.8 (6.3-15.3) 20/185	17.5 (13.4-21.7) 57/325			
Had an STI symptom and sought treatment in the past 12 months	-	-	-	38.5% (17.6- 64.6) 5/13	44.4% (27.9-62.3) 15/27	42.5% (27.6- 58.9) 17/40	-	-	-	75.0 (41.1-100) 6/8	75.0 (51.9-98.1) 12/16	75.0 (56.3-93.7) 18/24			

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
15-24	-	-	-	0 - 0/3	37.5% (11.3 – 73.8) 3/8	27.3% (7.3 – 64.1) 3/11	-	-	-	100 2/2	83.3 (43.9-100) 5/6	87.5 (57.9-100) 7/8			
25-49	-	-	-	50.0% (25.7 – 74.3) 5/10	47.4% (25.8 – 69.9) 9/19	48.3% (31.9 – 65.1) 14/29	-	-	-	66.7 (21.7-100) 4/6	70.0 (37.4-100) 7/10	68.8 (43.2-94.3) 11/16			
Comprehensive correct knowledge of HIV/AIDS	30.5 - 116/381	31.9 - 175/548	31.3 (28.3- 34.3) 291/929	63.6 (57.6-69.3) 287/451	61.3 (55.1-67.1) 288/470	62.4 (57.6-67.0) 575/921	28.7 (24.0-33.4) 102/355	25.1 (20.9-29.3) 103/410	26.8 (23.7 - 29.9) 205/765	58.0 (52.0-64.1) 148/255	47.0 (41.5-52.4) 154/328	51.8 (47.7-55.9) 302/583			
15-24	32.2 - 37/115	35.0 - 82/234	34.1 - 119/349	62.9 (54.2-70.8) 110/175	43.7 (37.0-50.7) 112/199	59.4 (53.7-64.7) 222/374	25.2 (18.6-31.7) 43/171	26.2 (19.6-32.8) 45/172	25.7 (21.0-30.3) 88/343	50.4 (41.2-59.7) 58/115	44.0 (35.9-52.3) 63/143	46.9 (40.8-53.0) 121/258			
25-49	29.7 - 79/266	29.6 - 93/314	29.7 - 172/580	64.1 (56.2-71.3) 177/276	64.9 (57.4-71.8) 176/271	64.5 (58.7-70.0) 363/547	32.1 (24.0-33.4) 59/184	24.4 (20.9-29.3) 58/238	27.7 (23.7-30.0) 117/422	64.3 (56.3-72.3) 90/140	49.2 (41.9-56.4) 91/185	55.7 (50.3-61.1) 181/325			
Accepting attitudes towards PLHIV	24.7 - 91/369	25.4 - 132/519	25.1 - 223/888	12.9 (10.1-16.2) 58/451	7.1 (4.5-10.9) 33/468	9.9 (7.8-12.5) 91/919	13.4 (9.4-17.4) 38/283	10.3 (7.0-13.6) 33/321	11.8 (9.2-14.3) 71/604	11.0 (7.1-15.0) 27/245	17.0 (12.9-21.1) 55/324	14.4 (11.5-17.3) 82/569			
15-24	22.3 - 25/112	25.2 - 57/226	24.3 - 82/338	11.4 (7.2-17.7) 20/175	6.1 (3.2-11.4) 12/197	8.6 (6.0-12.2) 32/372	17.5 (11.1-23.9) 24/137	11.0 (5.7-16.3) 15/136	14.3 (10.1-18.4) 39/273	10.4 (4.5-16.2) 11/106	14.2 (8.4-20.0) 20/141	12.6 (8.4-16.7) 31/247			
25-49	25.7 - 66/257	25.6 - 75/293	25.6 - 141/550	13.8 (10.1-18.6) 38/76	7.7 (4.8-12.4) 21/271	10.8 (8.0-14.4) 59/547	9.6 (4.8-14.4) 14/146	9.7 (5.4-14.0) 18/185	9.7 (6.5-12.9) 32/331	11.5 (6.2-16.9) 16/139	19.1 (13.4-24.9) 35/183	15.8 (11.8-19.8) 51/322			
Residing in current community for 12 months or less	6.0 - 23/381	7.3 - 40/548	6.8 - 63/929	3.8 (2.1-6.7) 17/451	5.1 (3.1-8.3) 24/470	4.5 (2.9-6.8) 41/921	0.3 (0-0.8) 1/355	1.2 (0.2-2.3) 5/410	0.8 (0.2-1.4) 6/765	32.9 (27.1-38.7) 84/255	15.0 (11.1-18.8) 49/328	22.8 (19.4-26.2) 133/583			
15-24	7.8 - 9/115	11.5 - 27/234	10.3 - 36/349	5.1 (2.2-11.7) 9/175	9.0 (5.4-14.9) 18/199	7.2 (4.5-11.5) 27/374	0 0/171	1.7 (0-3.7) 3/172	0.9 (0-1.9) 3/343	33.0 (24.4-41.7) 38/115	14.0 (8.3-19.7) 20/143	22.5 (17.4-27.6) 58/258			
25-49	5.3 - 14/266	4.1 - 13/314	4.7 - 27/580	2.9 (1.3-6.5) 8/276	2.2 (1.0-4.7) 6/271	2.6 (1.3-5.0) 14/547	0.5 (0-1.6) 1/184	0.8 (0-2.0) 2/238	0.7 (0-1.5) 3/422	32.9 (25.0-40.7) 46/140	15.7 (10.4-20.9) 29/185	23.1 (18.5-27.7) 75/325			
Away from home 1 month or more in the past 12 months	19.5 - 74/380	14.4 - 79/547	16.5 - 153/927	24.2 (19.1-30.1) 109/451	14.7 (10.5-20.2) 69/470	19.3 (15.3-24.1) 178/921	33.8 (28.9-38.7) 120/355	12.5 (9.3-15.7) 51/409	22.4 (19.4-25.3) 171/764	20.0 (15.1-24.9) 51/255	10.2 (6.9-13.4) 33/325	14.5 (11.6-17.4) 84/580			
15-24	16.7 - 19/114	16.3 - 38/233	16.4 - 57/347	30.3 (21.9-40.2) 53/175	16.6 (10.8-24.6) 33/199	23.0 (17.4-29.8) 86/374	32.8 (25.7-39.8) 56/171	11.7 (6.9-16.5) 20/171	22.2 (17.8-26.6) 76/342	16.5 (9.7-23.4) 19/115	10.0 (76.6-90.3) 14/140	12.9 (8.8-17.1) 33/255			

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
25-49	20.7 - 55/266	13.1 - 41/314	16.6 - 96/580	20.3 (15.2-26.6) 56/276	13.3 (9.1-18.9) 36/271	16.8 (12.8-21.7) 92/547	34.8 (27.9-41.7) 64/184	13.0 (8.7-17.3) 31/238	22.5 (18.5-26.5) 95/422	22.9 (15.9-29.9) 32/140	10.3 (5.9-14.7) 19/185	15.7 (11.7-19.7) 51/325			
Visiting the neighbouring community one or more times per month	27.6 - 105/381	19.1 - 105/548	22.6 (19.9-25.3) 210/929	53.4 (47.0-59.7) 241/451	40.9 (35.3-46.6) 192/470	47.0 (42.1-52.0) 433/921	23.7 (19.2-28.1) 84/355	10.2 (7.3-13.2) 42/410	16.5 (13.8-19.1) 126/765	33.3 (27.5-18.9) 85/255	23.5 (60.9-72.5) 77/328	27.8 (24.1-31.4) 162/583			
15-24	20.9 - 24/115	17.5 - 41/234	18.6 (14.5-22.7) 65/349	41.7 (32.2-51.9) 73/175	34.2 (28.3-40.6) 68/199	37.7 (31.6-44.2) 141/374	19.9 (13.9-25.9) 34/171	10.5 (5.9-15.1) 18/172	15.2 (11.4-19.0) 52/343	33.9 (25.2-42.6) 39/115	23.1 (16.1-30.0) 33/143	27.9 (22.4-33.4) 72/258			
25-49	30.5 - 81/266	20.4 - 64/314	25.0 - 145/580	60.9 (54.1-67.3) 168/276	45.8 (38.2-53.5) 124/271	53.4 (47.9-58.8) 292/547	27.2 (20.7-33.6) 50/184	10.1 (6.2-13.9) 24/238	17.5 (13.9-21.2) 74/422	32.9 (25.0-40.7) 46/140	23.8 (17.6-30.0) 44/185	27.7 (22.8-32.6) 90/325			
TANZANIA LUKOLE TOWN															
Young men and women who have had sex before 15	2.2 - 3/137	4.2 - 8/191	3.4 - 11/328	8.7 (4.8 – 15.0) 13/150	4.7 (2.2 – 9.9) 8/169	6.6 (4.0 – 10.8) 21/319									
15-19	2.4 - 2/84	6.6 - 6/91	4.6 - 8/175	17.4 (9.8 – 28.9) 12/69	7.5 (3.2 – 16.4) 5/67	12.5 (7.4 – 20.3) 17/136									
20-24	1.9 - 1/53	2.0 - 2/100	2.0 - 3/153	1.2 (16.3 – 8.7) 1/81	2.9 (0.9 – 9.5) 3/102	2.2 (0.8 – 5.9) 4/183									
Never married young people aged 15-24 who have never had sex	79.8 - 79/99	70.8 - 68/96	75.4 - 147/195	54.3 (43.0 – 65.1) 51/94	70.2 (57.4 – 80.5) 33/47	59.6 (31.6 – 49.9) 84/141									
15-19	85.7 - 66/77	83.3 - 55/66	84.6 - 121/143	67.2 (55.0 – 77.4) 43/64	76.9 (64.5 – 86.0) 30/39	70.9 (62.3 – 78.2) 73/103									
20-24	59.1 - 13/22	43.3 - 13/30	50 - 26/52	26.7 (12.4 – 48.3) 8/30	37.5 (11.4 – 73.6) 3/8	29.0 (15.2 – 48.2) 11/38									
More than one sexual partner in the past 12 months	24.5 - 91/372	13.0 - 58/446	18.2 - 149/818	17.9 (14.1 – 22.3) 75/420	2.3 (1.3 – 4.2) 11/472	9.6 (88.1 – 92.3) 86/892									
15-24	20.4 -	16.8 -	18.3 -	10.7 (6.6 – 16.9)	3.6 (1.4 – 8.6)	6.9 (4.5 – 10.3)									

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
	28/137	32/191	60/328	16/150	6/169	22/319									
15-19	11.9 - 10/84	14.3 - 13/91	13.1 - 23/175	5.8 (2.2 – 14.5) 4/69	4.5 (1.4 – 13.4) 3/67	5.1 (2.5 – 10.2) 7/136									
20-24	34.0 - 18/53	19.0 - 19/100	24.2 - 37/153	14.8 (7.6 – 26.8) 12/81	2.9 (0.7 – 11.9) 3/102	8.2 (4.5 – 14.3) 15/183									
25-49	26.8 - 63/235	10.2 - 26/255	18.2 - 89/490	21.9 (17.0 – 27.6) 59/270	1.7 (0.7 – 3.8) 5/303	11.2 (8.6 – 14.3) 64/573									
More than one sexual partner and reported using a condom during last sexual intercourse	-	-	-	16.0 (8.6 – 27.8) 12/75	9.1 (1.1 – 47.3) 1/11	15.1 (8.1 – 26.5) 13/86									
15-24	-	-	-	56.3 (33.4 – 7.8) 9/16	0 0/6	40.9 (20.7 – 64.8) 9/22									
15-19	-	-	-	75.0 (12.4 – 98.5) 3/4	0 0/3	42.9 (9.1 – 85.0) 3/7									
20-24	-	-	-	50.0 (24.5 – 75.5) 6/12	0 0/3	40.0 (16.9 – 68.6) 6/15									
25-49	-	-	-	5.1 (1.6 – 14.8) 3/59	20.0 (2.4 – 72.1) 1/5	6.3 (2.4 – 15.5) 4/64									
Sex with a non-regular partner(s) in the last 12 months	17.7 - 66/372	13.2 - 59/446	15.3 - 125/818	13.3 (9.8 – 17.9) 56/420	3.4 (2.2 – 5.2) 16/472	8.1 (6.2 – 10.5) 72/892									
15-24	19.0 - 26/137	16.2 - 31/191	17.4 - 57/328	18.0 (12.6 – 25.0) 27/150	4.1 (1.8 – 9.1) 7/169	10.7 (7.6 – 14.7) 34/319									
25-49	17.0 - 40/235	11.0 - 28/255	13.9 - 68/490	10.7 (6.9 – 16.4) 29/270	3.0 (1.6 – 5.4) 9/303	6.6 (4.6 – 9.5) 38/573									
Condom use at last sex with a non-regular partners in the	28.1 - 18/64	18.6 - 11/59	23.6 - 29/123	55.4 (41.6 – 68.3) 31/56	25.0 (8.9 – 53.2) 4/16	48.6 (37.3 – 60.0) 35/72									

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
last 12 months															
15-24	32.0 - 8/25	21.9 - 7/32	26.3 - 15/57	63.0 (42.2 – 79.9) 17/27	14.3 (1.6 – 63.5) 1/7	52.9 (35.8 – 69.4) 18/34									
25-49	25.6 - 10/39	14.8 - 4/27	21.2 - 14/66	48.3 (31.7 – 65.2) 14/29	33.3 (10.0 – 69.3) 3/9	44.7 (30.6 – 59.8) 17/38									
Sex with a transactional partner(s) in the last 12 months	6.2 - 23/372	6.3 - 28/446	6.2 - 51/818	4.0 (2.1 – 7.6) 17/420	1.9 (1.0 – 3.8) 9/472	2.9 (1.8 – 4.7) 26/892									
15-24	6.6 - 9/137	10.0 - 19/191	8.5 - 28/328	3.3 (1.2 – 8.9) 5/150	3.0 (1.1 – 8.0) 5/169	3.1 (1.4 – 6.7) 10/319									
25-49	6.0 - 14/235	3.5 - 9/255	4.7 - 23/490	4.4 (2.1 – 9.3) 12/270	1.3 (0.5 – 3.5) 4/303	2.8 (1.5 – 5.1) 16/573									
Condom use at last sex with transactional partners in the last 12 months	39.1 - 9/23	37.0 - 10/27	38.0 - 19/50	58.8 (31.8 – 81.4) 10/17	44.4 (14.0 – 79.7) 4/9	53.9 (34.2 – 72.4) 14/26									
15-24	33.3 - 3/9	38.9 - 7/18	37.0 - 10/27	60.0 (18.8 – 90.7) 3/5	40.0 (4.2 – 91.0) 2/5	50.0 (21.5 – 78.5) 5/10									
25-49	42.9 - 6/14	33.3 - 3/9	39.1 - 9/23	58.3 (24.3 – 86.0) 7/12	50.0 (9.1 – 90.9) 2/4	56.3 (29.0 – 80.2) 9/16									
Women forced to have sex in the past 12 months	-	0.7 - 3/446	-	-	4.4 (2.7 – 7.1) 21/472	-									
15-24	-	0.5 - 1/191	-	-	4.1 (1.7 – 10.0) 7/169	-									
25-49	-	0.8 - 2/255	-	-	4.6 (2.8 – 7.6) 14/303	-									
Received an HIV test in the past 12 months and know the results	17.0 - 63/372	15.3 - 68/446	16.0 - 131/818	39.1 (32.2 – 46.4) 164/420	36.2 (30.5 – 42.4) 171/472	37.6 (32.0 – 43.5) 335/892									
15-24	15.3	16.2	15.9	28.7	43.2	36.4									

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
	(9.3 – 21.4) 21/137	(9.3 – 21.4) 31/191	(11.9 – 19.8) 52/328	(21.5 – 37.0) 43/150	(35.3 – 51.5) 73/169	(29.7 – 43.6) 116/319									
15-19	14.3 - 12/84	13.2 - 12/91	13.7 - 24/175	15.9 (9.3 – 25.9) 11/69	31.3 (21.9 – 42.7) 21/67	23.5 (17.2 – 31.4) 32/136									
20-24	17.0 - 9/53	19.0 - 19/100	18.3 - 28/153	39.5 (28.0 – 52.3) 32/81	51.0 41.0 – 60.9 52/102	45.9 (36.8 – 55.3) 84/183									
25-49	17.9 - 42/235	14.5 - 37/255	16.1 - 79/490	44.8 (36.9 – 53.1) 121/270	32.3 (26.5 – 38.8) 98/303	38.2 (32.4 – 44.4) 219/573									
Reached by an HIV prevention programme in the past 12 months*	-	-	-	14.1 (10.4 – 18.7) 59/420	6.6 (4.1 – 10.4) 31/472	10.1 (7.6 – 13.3) 90/892									
15-24	-	-	-	16.7 (11.7 – 23.2) 25/150	8.3 (4.1 – 16.1) 14/169	12.2 (8.7 – 16.9) 39/319									
25-49	-	-	-	12.6 (8.9 – 17.5) 34/270	5.6 (3.3 – 9.4) 17/303	8.9 (6.5 – 12.1) 51/573									
Had an STI symptom and sought treatment in the past 12 months	-	-	-	66.7 (31.5 – 89.7) 6/9	57.9 (39.2 – 74.6) 22/38	59.6 (42.2 – 74.8) 28/47									
15-24	-	-	-	66.7 (11.7 – 96.8) 2/3	53.3 (26.4 – 78.5) 8/15	55.6 (28.6 – 79.6) 10/18									
25-49	-	-	-	66.7 (24.2 – 92.6) 4/6	60.9 (39.0 – 79.1) 14/23	62.1 (42.9 – 78.1) 18/29									
Comprehensive correct knowledge of HIV/AIDS	47.3 - 176/372	48.4 - 216/446	47.9 - 392/818	62.1 (56.0 – 67.9) 261/420	54.5 (49.3 – 59.5) 257/472	58.1 (53.7 – 62.4) 518 /892									
15-24	43.8 - 60/137	50.3 - 96/191	47.6 - 156/328	60.0 (49.9 – 69.4) 90/150	61.5 (52.4 – 70.0) 104/169	60.8 (53.6 – 67.6) 194/319									
25-49	49.4 - 116/235	47.1 - 120/255	48.2 - 236/490	63.3 (56.8 – 69.4) 171/270	50.5 (44.4 – 56.6) 153/303	56.5 (51.8 – 61.2) 324/573									

Indicator	Surrounding Base			Surrounding F.U.			Camp Base			Camp F.U.			Camp F.U. sensitivity analysis		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Accepting attitudes towards PLHIV	30.1 (25.3 – 34.9) 106/352	28.1 (23.7 – 32.5) 114/406	29.0 (25.8 – 32.3) 220/758	7.9 (4.9 – 12.3) 33/420	6.5 (4.3 – 9.6) 30/463	7.1 (5.3 – 9.6) 63/883									
15-24	29.0 (21.0 – 37.1) 36/124	26.2 (19.6 – 32.8) 45/172	27.4 (22.3 – 32.5) 81/296	7.3 (3.2 – 15.9) 11/150	6.1 (2.7 – 12.9) 10/165	6.7 (3.5 – 12.3) 21/315									
25-49	30.7 (24.7 – 36.7) 70/228	29.5 (23.6 – 35.3) 69/234	30.1 (25.9 – 34.3) 139/462	8.1 (5.3 – 12.2) 22/270	6.7 (4.0 – 11.2) 20/298	7.4 (5.4 – 10.1) 42/568									
Residing in current community for 12 months or less	3.0 (1.2 – 4.7) 11/372	5.6 (3.5 – 7.7) 25/446	4.4 (3.0 – 5.8) 36/818	8.1 (5.4 – 12.0 34/420	12.3 (9.0 – 16.5) 58/472	10.3 (7.8 – 13.4) 92/892									
15-24	3.7 (0.5 – 6.8) 5/137	8.9 (4.8 – 13.0) 17/191	6.7 (4.0 – 9.4) 22/328	9.3 (4.9 – 17.1) 14/150	26.0 (19.4 – 33.9) 44/169	18.2 (13.4 – 24.2) 58/319									
25-49	2.6 (0.5 – 4.6) 6/235	3.1 (1.0 – 5.3) 8/255	2.9 (1.4 – 4.3) 14/490	7.4 (4.8 – 11.2) 20/270	4.6 (2.7 – 7.9) 14/303	5.9 (4.1 – 8.5) 34/573									
Away from home 1 month or more in the past 12 months	13.9 (10.3 – 17.4) 51/368	10.8 (7.9 – 13.7) 48/443	12.2 (10.0 – 14.5) 99/811	21.0 (15.9 – 27.1) 88/420	16.1 (12.3 – 20.9) 76/472	18.4 (14.9 – 22.5) 164/892									
15-24	13.3 (7.6 – 19.1) 18/135	12.7 (7.9 – 17.5) 24/189	13.0 (9.3 – 16.6) 42/324	28.0 (20.1 – 37.5) 42/150	17.2 (11.8 – 24.3) 29/169	22.3 (17.6 – 27.8) 71/319									
25-49	14.2 (9.7 – 18.7) 33/233	9.5 (5.8 – 13.1) 24/254	11.7 (8.8 – 14.6) 57/487	17.0 (12.7 – 22.5) 46/270	15.5 (11.1 – 21.2) 47/303	16.2 (12.5 – 20.8) 93/573									
Visiting the neighbouring community one or more times per month	45.7 (40.6 – 50.8) 170/372	41.0 (36.5 – 45.6) 183/446	43.2 (39.8 – 46.6) 353/818	64.5 (58.6 – 70.0) 271/420	51.5 (44.3 – 58.6) 243/472	57.6 (52.1 – 63.0) 514/892									
15-24	33.6 (25.6 – 41.5) 46/137	38.2 (31.3 – 45.1) 73/191	36.3 (31.1 – 41.5) 119/328	58.7 (49.2 – 67.5) 88/150	40.2 (31.6 – 49.5) 68/169	48.9 (41.9 – 55.9) 156/319									
25-49	52.8 (46.4 – 59.2) 124/235	43.1 (37.0 – 49.2) 110/255	47.8 (43.3 – 52.2) 234/490	67.8 (60.3 – 74.5) 183/270	57.8 (49.7 – 65.5) 175/303	62.5 (56.4 – 68.2) 358/573									

ANNEX 9: SOCIO-DEMOGRAPHIC CHARACTERISTICS IN KENYA AND UGANDA CAMPS AT FOLLOW: COMPARISON OF THE PRIMARY AND THE SENSITIVITY ANALYSIS SAMPLES

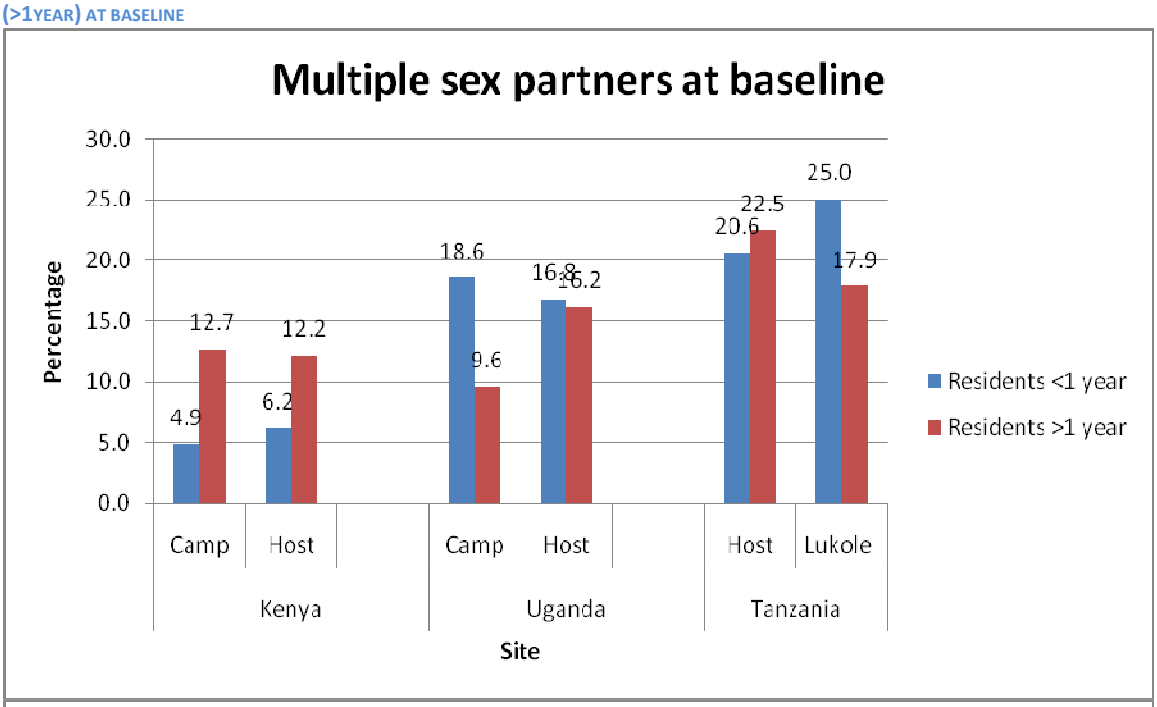
Characteristics	Kenya		Uganda	
	Primary	Sensitivity	Primary	Sensitivity
	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N	% (95% CI) n/N
Female gender	55.1 (50.6-59.4) 440/980	53.1 (48.1-58.1) 307/578	57.0 (54.4-59.6) 372/865	58.0 (54.1-61.8) 134/319
Age				
15-24	56.8 (52.7-60.9) 557/980	54.0 (49.0-58.9) 312/578	33.1 (20.0-36.30) 286/865	32.6 (27.7-37.9) 104/319
15-19	30.4 (27.1-34.0) 298/980	29.4 (25.0-34.2) 170/578	16.0 (13.2-19.2) 138/865	20.1 (16.0-24.9) 64/319
20-24	27.4 (22.6-30.6) 259/980	24.6 (20.6-29.1) 142/578	17.1 (14.8-19.7) 148/865	12.5 (9.7-16.0) 40/139
25-49	43.2 (39.1-47.3) 423/980	46.0 (41.1-51.0) 266/578	66.9 (63.8-70.0) 579/865	67.4 (62.1-72.3) 215/319
Median age	23	24	28	28
IQR	19-30	18-30	22-36	21-36
Illiterate (can't read or write easily)	35.5 (30.1-41.4) 348/980	33.9 (27.1-41.4) 196/578	48.4 (43.6-53.3) 419/865	43.4 (33.4-49.7) 139/320
Unemployed	88.1 (85.1-90.5) 863/980	85.6 (81.3-89.1) 495/578	80.8 (77.2-84.0) 699/865	80.9 (75.1-85.6) 258/319
Birth nationality				
Kenya	9.8 (5.0-18.3) 96/980	12.6 (6.3-23.8) 73/578	0.2 (0.6-0.9) 2/865	0.3 (0.0-2.3) 1/320
Somalia	39.1 (29.2-49.9) 383/980	32.4 (21.5-45.5) 87/578	0.1 (0.2-0.9) 1/865	0.0
Sudan	34.5 (24.0-46.7) 338/980	44.3 (30.7-58.8) 256/578	11.0 (5.7-20.1) 5/865	21.0 (10.0-38.6) 67/320
Uganda	2.9 (1.2-6.7) 28/980	2.4 (0.8-7.5) 14//578	1.6 (0.9-2.8) 14/865	2.5 (1.1-5.7) 8/320
Rwanda	1.5 (0.3-8.3) 15/980	1.7 (0.3-2.4) 5/578	1.2 (0.5-2.6) 10/865	0.9 (0.2-4.2) 3/320
Congo (DRC)	3.5 (1.6-7.2) 34/980	0.9 (0.3-2.4) 5/578	85.7 (76.6-91.6) 741/865	75.0 (56.8-87.3) 240/320
Burundi	1.7 (0.8-3.8) 17/980	0.7 (0.2-2.3) 4/578	0.2 (0.3-1.7) 2/865	0.0
Tanzania	0.0	0.0	0.0	0.0
Ethiopia	6.9 (3.5-13.3) 68/980	4.9 (1.9-11.6) 28/578	Not an answer choice	Not an answer choice
Other	0.0	0.0	0.0	0.0
Don't know	0.1 - 1/980	0.2 (0.01-1.3) 1/578	Not an answer choice	Not an answer choice

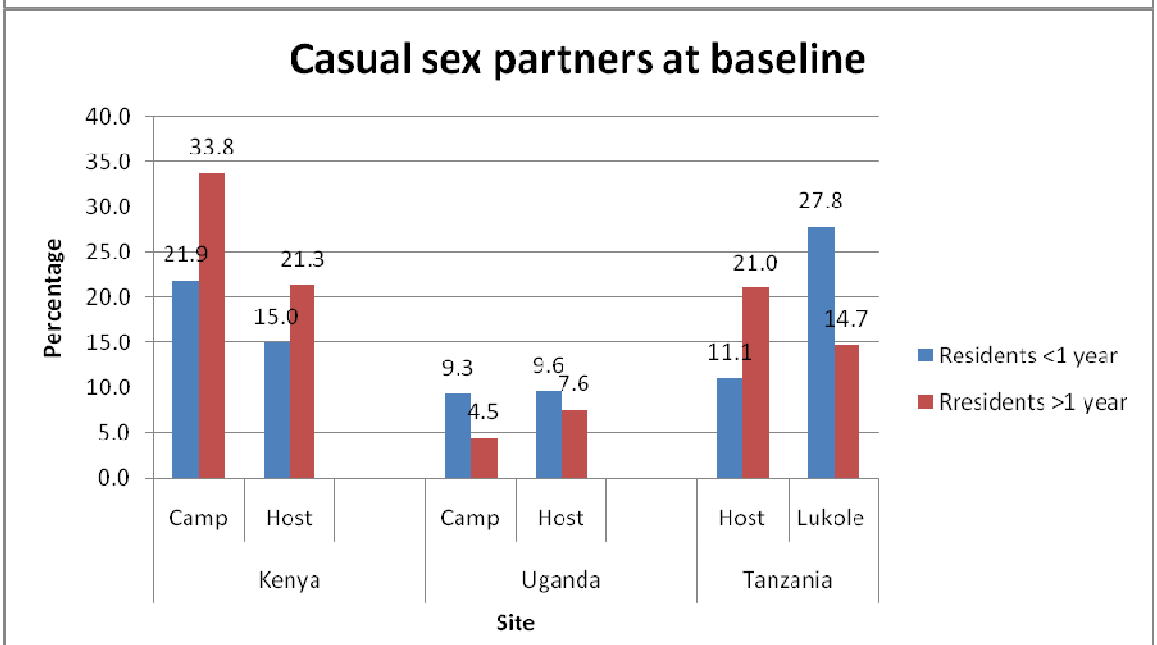
ANNEX 10: COMPARING ABSOLUTE CHANGE SINCE BASELINE IN UGANDA AND KENYA REFUGEE CAMPS IN A PRIMARY ANALYSIS AND SENSITIVITY ANALYSIS (EXCLUDING PARTICIPANTS LIVING IN THE CAMPS FOR LESS THAN FIVE YEARS)

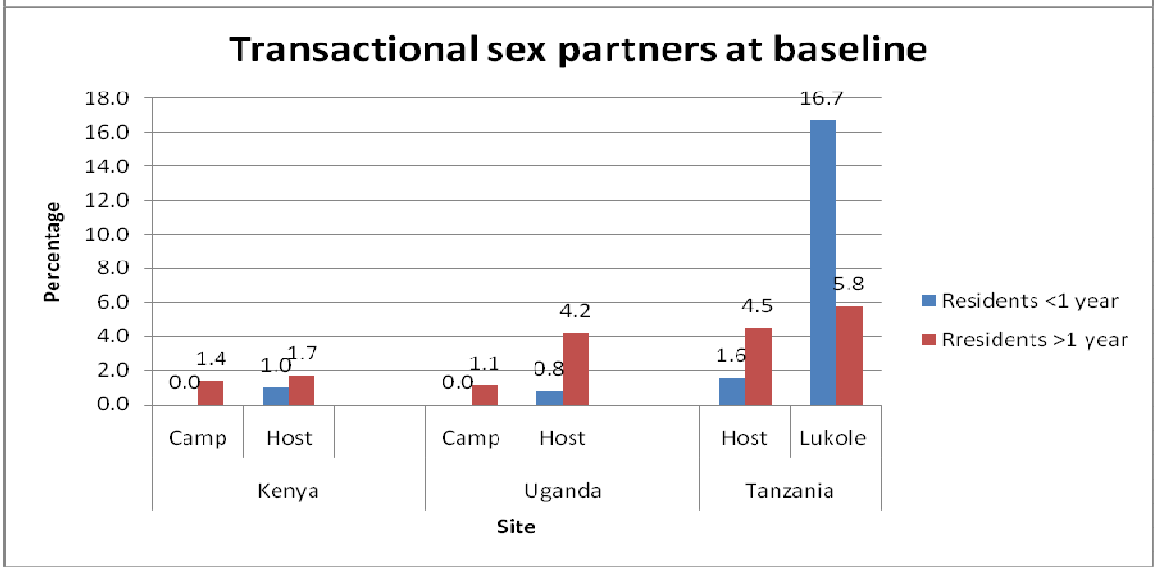
Indicator	Kenya Camp					Uganda Camp				
	Primary analysis			Sensitivity analysis		Primary analysis			Sensitivity analysis	
	%Baseline	%F.U.	%Absolute Change from baseline	%F.U. Sensitivity	%Absolute Change from baseline	%Baseline	%F.U.	% Absolute Change from baseline	%F.U. Sensitivity	% Absolute Change from baseline
Young men and women aged 15-24 who have had sexual intercourse before15	9.0	6.5	-2.5	8.9	-0.1	4.7	5.2	0.1	4.8	0.5
Never married young people aged 15-24 who have never had sex	55.5	71	15.5	32.3	-23.2	78.4	78.3	-2.6	75.8	-0.1
More than one sexual partner in the past 12 months	11.9	5.6	-6.3	6.6	-5.3	10.1	4.2	-5.4	4.7	-5.9
Sex with a non-regular partner(s) in the last 12 months	32.5	4.1	-28.4	6.2	-26.3	4.8	3.5	-1.7	3.1	-1.3
Condom use at last sex with a non-regular partners in the last 12 months	31.1	67.5	36.4	72.2	41.1	31.4	23.3	8.6	40	-8.1
Sex with a transactional partner(s) in the last 12 months	1.3	1.0	-0.3	1.3	0.0	1.1	0.8	-0.5	0.6	-0.3
Condom use at last sex with transactional partners in the last 12 months	71.4	70.0	-1.4	62.5	-8.9	62.5	28.6	-62.5	0.0	-33.9
Women forced to have sex in the past 12 months	5.2	0.9	-4.3	0.7	-4.5	1.6	1.4	-0.5	1.1	-0.2
Received an HIV test in the past 12 months and know the results	2.9	36.4	33.5	37.2	34.3	10.7	34.2	24.1	34.8	23.5
Had an STI symptom and sought treatment in the past 12 months	-	51.8	-	46	-	47.0	63.5	20.7	67.7	16.5
Comprehensive correct knowledge of HIV/AIDS	-	31.7	-	36.2	-	29.4	34.8	13.9	43.3	5.4
Accepting attitudes towards PLHIV	35.1	10.1	-25.0	10.9	-24.2	20.6	19.7	-1.0	19.6	-0.9
Residing in current community for 12 months or less	11	13.0	2.0	n.a.	-	5.7	20.4	-	0.0	14.7
Away from home 1 month or more in the past 12 months	20.6	16.8	-3.8	20.8	0.2	10.0	13.2	10.4	20.4	3.2
Visiting the neighbouring community one or more times per month	20.2	28.8	8.6	32.5	12.3	26.6	19.5	-4.7	21.9	-7.1

-Data not available at either baseline or follow-up

ANNEX 11: COMPARING THE PREVALENCE OF MULTIPLE, CASUAL, AND TRANSACTIONAL SEX PARTNERS BETWEEN RECENT ARRIVALS (<1YEAR) AND OLDER RESIDENTS (>1YEAR) AT BASELINE







Changes in HIV-related indicators in camps and surrounding communities in Kenya, Tanzania and Uganda