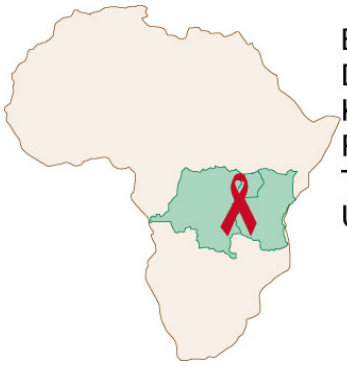

Great Lakes Initiative on AIDS (GLIA)

UNHCR
The UN Refugee Agency

Behavioural Surveillance Surveys Among Refugees and Surrounding Host Population

Kakuma, Kenya

November 2004

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Last, but not least, our warmest thanks to the communities which directly or indirectly contributed to the success of this project. The results of this BSS should significantly increase the knowledge base for HIV/AIDS behaviour among and between refugees and the surrounding host population in Kakuma, Kenya. This knowledge will be used to reduce the populations' vulnerability to HIV and help them lead productive and satisfying lives.

Contact for information requests: HIV/AIDS Unit, UNHCR hivaids@unhcr.org

Executive Summary

Behavioural surveillance surveys (BSSs) are an integral part of HIV surveillance and help facilitate interpretation of epidemiological and biological data in a specified population. **Two BSSs were undertaken, one in Kakuma Refugee Camp (KRC) among refugees, and in the surrounding area, Kakuma Town amongst host nationals.** The objective of the surveys was to assess behaviour-related indicators to enable the monitoring of trends among and between the two populations. The survey methodology was based on a systematic random sample which enabled households to be identified, from which members who fulfilled selection criteria could be interviewed. A total of 1,666 refugees and 1,675 surrounding host nationals were interviewed.

KRC is inhabited by refugees of Sudanese (who compose the large majority), Somali and Ethiopian origin while, the local host nationals are Kenyans of Turkana ethnic community. **Both refugee and local host populations are transient**: 46% of refugee population had been living in KRC for more than 5 years, 42% had been relocated from Dadaab in 2002, while 12% were new arrivals. Among the locals 50% had always lived in Kakuma, 15% had been residents for 1–5 years and 11.5% had been in area for less than 12 months. Moreover, 21% refugees had been away from home for more than 4 weeks in the 12 months previous to the study compared to 47% of local nationals. **Mobility creates a physical and social separation between a person, his family and his community, and may fracture the moral norms and codes that govern a person's conduct, thus, encouraging high-risk behaviour. There is significant mobility among refugees and surrounding host populations.**

Refugees had better access to education than the surrounding communities. Twenty-five percent (25%) of refugee respondents have no education compared to 73% of local nationals. Furthermore, 52% of refugees had primary education compared to 19% of local nationals. The proportion of male and female refugees who had no education or primary education was the same, suggesting that gender does not influence access to education at the lower levels among refugees. However, refugee males are 2 times more likely to have a higher education (secondary school and university) than females. Males from local population are 4.8 and 5.2 times more likely to have had primary and secondary school education, respectively, than females.

The mean age at first marriage among the **youth (15–24 are group)** was 18 years for refugee males and 17 years fro females, compared with 20 years of age for local males and 18 years for local female. Although the difference between the two communities was not great, early marriage, particularly for girls, greatly intensifies sexual exposure via unprotected sex with an older partner who, by virtue of his age, has elevated risk of being HIV-positive[1]. **The KRC HIV/AIDS task force should actively discourage early marriage and promote education for girls.** UNHCR and implementing partners (IPs) should promote girl's education by providing incentives to adolescent girls (e.g. clothing, body lotion, soap, school lunches and sanitary napkins) and improving school conditions (e.g. separate toilets).

[1] Bruce, Judith and Shelly Clark: 2004. "The implications of early marriages for HIV/AIDS policy," brief based on background paper prepared for the WHO/UNFPA/Population Council Technical Consultation on Married Adolescents. New York; Population Council.

The median age at which male and female refugee youth become sexually active was 16 and 15 years, respectively. Among the local population it was 16 and 17 years. **Equipping youth with negotiation skills and training on life skills is essential in delaying the age at which they start sexual activity.** As knowledge and information is the first line defence system for young people, prevention programmes should be tailored to reach youth in and out of schools. Fifty-nine percent (59%) and 54% of refugee **adolescent (15-19 years)** girls and boys, respectively, have not had sexual intercourse; this is similar to adolescent girls and boys from the local population. The HIV/AIDS country programme in Kenya is aggressively promoting abstinence but the refugee programme is lagging behind in adopting the national initiatives and applying them in the refugee context. "Tume Chill" (translation- we have frozen) a popular national abstinence slogan is not yet promoted in KRC. **Community services IPs should develop culturally sensitive abstinence messages and where appropriate, adopt national initiatives to the refugee context.**

Of the sexually active respondents 43% had a regular sex partner. The mean number of regular sex partners in the last 12 months among female refugees and local females (youth) was 0.9 and 5.8 respectively; among refugee and local males in the same age group was 2.2 and 1.0, respectively. The use of a condom during the last sexual encounter with a regular sex partner was low; 7.2% (95% CI: 2.8–11.5% n=138) among refugee youth, and 6% (CI: 2.9–9.0% n=233) among local youth. Condom use with a regular partner among **adults (25–49 years)** was also relatively low at 6.3% (95% CI: 3.9–8.7% n=394) and 1.8% (95% CI: 0.7–2.8% n=623) among refugees and host nationals, respectively. Over 70% of male refugees did not have protected sex because they trusted their partners; 33% of refugee women did not know what a condom was (compared to 50% of national women); and 33% refugee women disliked condoms. Condom use in marriage or with a regular sexual partner was associated with distrust and infidelity rather than concern for the partner's health in many settings, including refugee camps. **Given the high number of regular partners and the low use of condoms, refugees and nationals face a high risk of heterosexual HIV exposure if partners undertake high risk sex. Community service organisations should hold focus group discussions to garner views about condom use in regular partnership and then provide culturally sensitive interventions on the need for fidelity, condom use in high risk sex situations, and the acceptability of condom use with a regular partner.**

Of the sexually active youth respondent, 35% of the refugees and 26 of the local national population had at least one casual sex partner in the last 12 months. **Condom use was much higher with casual sex partners than with regular partners.** Condom use with a casual partner among this age group ranged from 30% of local males to 42% among refugee females. Among sexually active adults, condom use with a casual partner ranged from 15% among refugee women to 43% among refugee men. **Lower use of condoms during high risk sexual exposure was noted among individuals who had sex under the influence of alcohol** ranging from 14% among host nationals to 32% among refugees. **For those person who continue to have casual sex partners, condom use needs to be increased significantly to reduce the spread of HIV.**

Forced sex increases the risk of HIV transmission because among other factors forced penetration commonly causes abrasions and cuts that allow the virus to cross genital mucosa more easily**.** In this survey 3% and 6% of refugee and host national respondents, respectively, had been forced to have sex during their lifetimes; the vast majority (83%) of rape survivors were women. Contrary to expectations, the prevalence of forced sex among refugee women was 6% compared to 11% among local national women. The perpetrators of forced sex in the refugee community were mainly military officers representing 73%, while other refugees accounted for 16% of assaults. The main perpetrators in the host community were local community men (70%) followed by refugees (24%). None of the victims mentioned a humanitarian worker as a perpetrator. **Forced sex was more common among national women than refugees. Although forced sex among women in these two populations is relatively less common[2] than in many parts of the world,[3] it is still a major issue that needs to be actively and appropriately addressed. UNHCR and IPs need to ensure appropriate protection, care, treatment, and support, including availability of HIV post-exposure prophylaxis, is available to both populations**

Two percent (2%) of refugees and 16% of local nationals had sex while under the influence of alcohol in their lifetime. **By gender, male refugees were 3.1 times more likely to have engaged in sexual intercourse after alcohol intake than refugee women.** Condom use during the last sexual intercourse while under the influence of alcohol was relatively low; 32% among refugees and 14% among locals. **The risk of drinking alcohol followed by sex must be a target of the HIV prevention programmes for both populations; bars and other places where alcohol can be found should be specifically targeted.**

Nine percent (9%) and 2% of local hosts and refugees, respectively, have taken drugs (excluding alcohol). The vast majority of those who had used drugs were men: 139 (19% (95% CI: 16.1–21.8% n=733) local men and 36 (4% (95% CI: 2.7–5.2% n=903) refugee men. The high level of drug use was attributed to the consumption of 'khat'- a local herb that is a mild stimulant, the sale and consumption of which is legal in Kenya. **However, 2% (n=31) of men reported they had shared a syringe with another individual to inject drugs; all were national except 1 refugee male. This was an unexpected finding** as Kakuma is inhabited mainly by Turkana pastoralists, who for the last few years have been seriously affected by drought. Furthermore, the area did not have modern facilities or tourist attractions that are often associated with injecting drug use. **We recommend that the local government administration and humanitarian agencies investigate and establish the extent of injecting drug use.** If it is a problem, appropriate interventions must be established.

Circumcision is prevalent among refugees; fifty-one percent (51%) of refugee men (male circumcision) and 30% of women (female genital mutilation - FGM) are circumcised compared to 6% and 0.3% local men and women, respectively. Among Somali refugees, 95% of the women had undergone FGM. All Somali and Ethiopian male respondents preferred a sexual partner who had been circumcised. This differed significantly from Sudanese refugees,

[2] Note that forced sex may be underreported in either population due to the sensitivity and potential feared consequences of reporting such an act.
[3] WHO multi-country study on women's health and domestic violence against women, 2003, pg. 31. Women ever physically forced to have sex during their lifetime ranged from 3.5% to 46% with a median of 16.4%.

of whom 75% of male and 81% of female Sudanese refugees preferred an uncircumcised sex partner; even if circumcision was safe and affordable, 49% of male and 97% of female Sudanese refugees would be reluctant to undergo such an operation. **The relatively high prevalence of male circumcision among refugees, especially Somali and Ethiopian, may act as a protective factor and reduce transmission among refugees as compared with the surrounding national population.**

Refugees youth have an insufficient understanding of HIV/AIDS. Forty-five percent (45%) of refugee youth were able to identify three prevention methods: (1) abstinence, (2) being faithful and (3) condom use. They also recognized two of the common misconceptions about HIV: (1) that you can contract HIV by sharing food, and (2) that a healthy-looking person cannot be infected. However, 10% of refugees (15-49 years) could not identify prevention methods and accepted the misconceptions, suggesting that there are significant knowledge gaps. **In contrast, the local national community have a limited understanding of HIV/AIDS;** 18% of the local national youth were able to identify three prevention methods and recognized the two misconceptions. **Despite longstanding HIV prevention and education programmes in the refugee camps, many youth still do not have an acceptable understanding of HIV/AIDS. A concerted effort must be made to improve the understanding of HIV/AIDS among the youth in both communities**

The health seeking behaviour of persons who have sexually transmitted infections (STIs) is sub-optimal. Only between 40–50% of male refugees and male local national respondents had sought treatment at a recognised health facility the last time they had an STI. A relatively large proportion, 38% of refugees and 23% of host nationals, sought treatment from the pharmacy. **UNHCR, IPs and the district health authorities must improve their outreach to persons suffering from STIs to ensure they seek appropriate health care for STI treatment; local pharmacies and shops must also be targeted in this endeavour**

Knowledge about the availability of voluntary counselling and testing (VCT) services was high but not universal and it was better among refugees than local nationals. Sixty-four percent (64%) of refugees knew where a person could be tested for HIV compared to 47% of host nationals. By gender, refugee men were 1.3 times more likely to know about VCT services compared refugee women. Of the refugee respondents 26% had been tested for HIV at least once in their lifetime compared to 14% of host nationals. **HIV testing differed by gender, age group and residential status.** The likelihood of 25 to 49-year-old refugees having been tested for HIV was 1.7 times higher than refugees aged 15–24 years. Despite the fact that older persons have had more of an opportunity to go VCT centres than younger persons, **UNHCR and IPs should make a concerted effort to encourage HIV testing towards 15 to 24-year-old refugees by going beyond traditional health care-based VCT services to outreach services such as establishing VCT in youth-friendly health services and vocational training centres.**

Table: Baseline Behavioural Survey indicators

Indicator	Refugee		Local hosts	
	Male	**Female**	**Male**	**Female**
No formal education	10.2%	14.7%	28.9%	44.3%
95% Confidence interval	*8.70-11.7%*	*12.9-16.4%*	*26.7-31.0%*	*41.9-46.7%*
Primary education	28.5%	23.7%	10.8%	8.0%
95% Confidence interval	*26.3-30.6%*	*21.6 - 25.7%*	*9.3-12.3%*	*6.7-9.3%*
Median age of marriage: 15-24 age group	18.2	16.7	19.7	17.6
Median age at first sexual debut: 15-24 age group	16	15	16	17
Unmarried and never had sex: 15-19 age group	55.7%	67.2%	54.1%	75.3%
95% Confidence interval	*50.5-61.2%*	*61.8-72.6%*	*47.4-60.7%*	*69.7-80.9%*
Condom use with a regular partner during last sexual intercourse: 15-24 age group	12.5%	6.0%	2.6%	6.6%
95% Confidence interval	*1.0-23.9%*	*1.5-10.5%*	*-2.4-7.6%*	*3.1-10.0%*
Mean number of regular partners: 15-24 age group	2.2	0.9	1.0	5.8
Condom use with a casual partner; 15-24 age group	35.5%	41.5%	29.5%	41.6%
95% Confidence interval	*29.1-41.8%*	*34.3-50.9%*	*22.3-36.6%*	*30.2- 52.9%*
Ever had a transactional sex partner: 15-24 age group	1.3%	2.3%	3.4%	3.3%
95% Confidence interval	*0.35-2.2%*	*0.9-3.6%*	*1.5-5.2%*	*1.7-4.8%*
Male circumcision and FGM	51.3%	29.9%	5.5%	0.3%
95% Confidence interval	48-54.5%	26.6-33.1%	3.8-7.1%	-0.05-0.6%
Male circumcision and FGM among Somali refugees	97.2%	95%	-	-
95% Confidence interval	95.1-99.2%	92.1-97.5%	-	-
Ever forced to have sex: 15-49 age group	1.4%	5.5%	1.7%	10.7%
95% Confidence interval	*0.6-2.1%*	*3.8-7.1%*	*0.7-2.6%*	8.6-12.8%
Forced sex: 15-24 age group	1.3%	2.1%	0.8%	9.6%
95% Confidence interval	*0.3-2.2%*	*0.8-3.3%*	*-0.08-1.7%*	*6.9-12.2%*
Comprehensive knowledge: 15-24 age group	56.6%	32.3%	23.9%	18.3%
95% Confidence interval	*52.4-60.7%*	*28.1-36.4%*	*19.6-28.1%*	*11.2-17.1%*
Injecting drugs use –ever: 15-49 age group	0.1%	0%	4%	0%
95% Confidence interval	*-0.1-0.3%*	*0%*	*2.7-5.2%*	*0%*
Men who have sex with men	0%	-	0%	-
Ever tested for HIV: 15-24 age group	20.8%	19.5%	5.5%	20.1%
95% Confidence interval	17.3-24.2%	16-23%	3.2-7.7%	16.6-23.5%
Tested for HIV in last 12 months: 15-24 age group	15.2%	16.4%	4.5%	14.6%
95% Confidence interval	12.1-18.2%	13.1-19.6%	2.4-6.5%	11.5-17.6%

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ARV	Anti-retroviral
ART	Anti-Retroviral Therapy
CBR	Community Based Rehabilitation
CDC	Centre for Disease Control and Prevention
COP	Community Outreach Programme
CI	Confidence Interval
DO	District Officer
ECN	Enrolled Community Nurses
GLIA	Great Lakes Initiative on AIDS
HIV	Human Immunodeficiency Virus
IOM	International Organization for Migration
IRC	International Rescue Committee (Kenya)
KMH	Kakuma Mission Hospital
KRC	Kakuma Refugee Camp
LWF	Lutheran World Federation
NAC	National AIDS Council
PHO	Public Health Officer
PLWHA	People Living with HIV/AIDS
STIs	Sexually Transmitted Infections
UNHCR	United Nations High Commissioner for Refugees
VCT	Voluntary Counselling and Testing
WB	World Bank
WFP	World Food Program

Definitions

Regular sex partner: A regular sex partner is defined as a spouse or a partner with whom one lives, has a sexual relationship, and does not pay or exchange a favour for sex.

Casual sex partner: A casual partner is defined as a partner with whom one is not married or cohabitating with, has a sexual relationship, and does not pay or exchange a favour for sex.

Commercial sex: A sexual relationship where money is paid in exchange for sex (paid sex).

Transactional sex: A sexual relationship where money, a gift or favour is provided in exchange for sex (this includes commercial sex).

High-risk sex: Any unprotected sex (i.e. sex without a condom) with any partner other than a regular partner.

Refugee: A refugee is defined as "a person who is outside his/her country of nationality or habitual residence; has a well-founded fear of persecution because of his/her race, religion, nationality, membership in a particular social group or political opinion; and is unable or unwilling to avail himself/herself of the protection of that country, or to return there, for fear of persecution". In this actual survey, refugees are mainly founded in the Kakuma camp where they are settled by UNHCR. However, because of long cohabitation with nationals, and social interaction, a few numbers were found in the surrounding community.

National/Surrounding population: Nationals are defined as people living in the neighbouring host community surrounding the camp, also referred to as local or the local population. Nationals are mostly Kenyans, from the Turkana tribe. They normally live in a 15 kilometres radius, and are likely to attend make use of the facilities existing in the camp. Owing to the social and economic interaction between the two communities, some nationals are living inside Kakuma Refugee Camp.

Knowledge about HIV prevention: Respondents were considered to be knowledgeable about HIV prevention if they correctly identified the three major ways to prevent HIV transmission: (1) abstinence, (2) being faithful to one partner, and (3) condom use.

Misconceptions: Respondents were considered to have misconceptions about HIV/AIDS transmission and prevention if they agreed with one or both of the following two incorrect statements about HIV/AIDS: (1) that HIV can be transmitted by sharing utensils with someone who is HIV positive; (2) that a healthy-looking person cannot be infected with HIV.

Comprehensive knowledge and misconceptions about HIV/AIDS: Respondents were considered to have comprehensive knowledge about HIV/AIDS if they knew about the three HIV/AIDS prevention methods and had no misconception about HIV transmission.

Male to male sex: Any sexual relations between male respondents.

1.0 Introduction

Kakuma Refugee Camp (KRC) was established in 1992 by UNHCR to host refugees from Sudan. It is located 127 kilometres south of Kenya's border with Sudan. It is situated in the Turkana district in an arid and marginal environment where government infrastructure and social services are weak. The area is populated by local pastoralists from the Turkana ethnic group.

The area has since been transformed economically and living conditions improved. In 1993, pastoralists living in the Turkana district started to settle around Kakuma Refugee Camp (KRC) after being driven away from their normal habitat by persistent drought, attracted mainly by the availability of health care, water and relief food. From a sparely populated location with approximately 10,000 to 15,000 people, Kakuma town has grown to host more than 50,000 local nationals.

KRC has shifted from an emergency response situation to a care and maintenance phase. In mid-July 2004 the population in the camp was estimated to be 90,441 refugees. The camp hosts refugees from nine countries and more than forty ethnic groups. Sudanese account for 74.0% of the population, Somalis 21.0% and Ethiopians 3.0%. Despite the ongoing peace initiatives in Sudan and Somalia, new refugees continued to arrive at the camp at an average rate of 413 per month in the first half of 2004.

A significant number of refugees have also been leaving KRC for resettlement in the United States of America (USA). The resettlement program has been targeting Somali Bantus, 3,000 (24.0%) of whom had already been resettled in the United States at the time of the survey.

The influx of refugees and local nationals to Kakuma town is thought to have altered the population dynamics and increased the risk of HIV transmission. In 2003 sentinel surveillance studies indicated that the HIV prevalence rate was 5% and the nearest national sentinel surveillance in Lodwar Town was 18%.

1.2 Institutional environment and HIV response

The refugee population is provided with humanitarian assistance including food through various programmes managed by IRC, LWF, IOM, Don Bosco, etc., under the auspices of UNHCR and WFP.

The IRC is one of the leading agencies working in the camp, especially in the health sector. In 1997, the IRC initiated a reproductive health program, focussing on HIV prevention in the camp and in the surrounding local community[4]. To better respond to the needs of refugees in term of services the program has been focusing on three important and strategic activities: (1) the VCT program, (2) condom distribution, and (3) the Community Based Rehabilitation Program.

- The VCT program: This program runs according to the Ministry of Health (MOH) VCT national guidelines. It provides refugees and surrounding host nationals with voluntary counselling and testing services from two stand alone facilities. Community awareness campaigns have been the key strategy to promoting the VCT in the camp. In terms of outcomes, statistics from the VCT program show that 2,138 clients in 2003 and 2,241 clients in 2004 were counselled and tested for HIV.
- Condom distribution: The major outlets for the promotion of condoms and their distribution are the VCT and Community Outreach Programme (COP). The COP promotes and distributes condoms through peer educators, community health workers and condom dispensers. Other channels of condom distribution are shown in Table 1. In addition, condom dispensers were installed in private and frequently visited areas in offices of NGOs, UNHCR, IOM and government institutions. Table 1 below presents the condom distribution statistics by month and outlet in 2004.

Table 1: Condom distribution by month and outlet in 2004 in Kakuma camp

Month	Condoms Distributed by VCT	Condoms Distributed by Family Planning Clinic	Condoms Distributed by Community Outreach	Condoms Distributed person/month
January	16,066	800	8142	0.8
February	22,272	400	8018	1.0
March	15,988	14	4941	0.7
April	11,307	0	4675	0.5
May	15,330	6	4381	0.6
June	10,848	0	11141	0.7
July	12,163	0	7114	0.6
August	23,324	300	5405	0.9
September	12,964	0	6983	0.6
October	15,469	442	1747	0.6
November	14,030	300	-	-
December	8643	319	-	-
Total	**178,404**	**2,581**	**62,547**	-

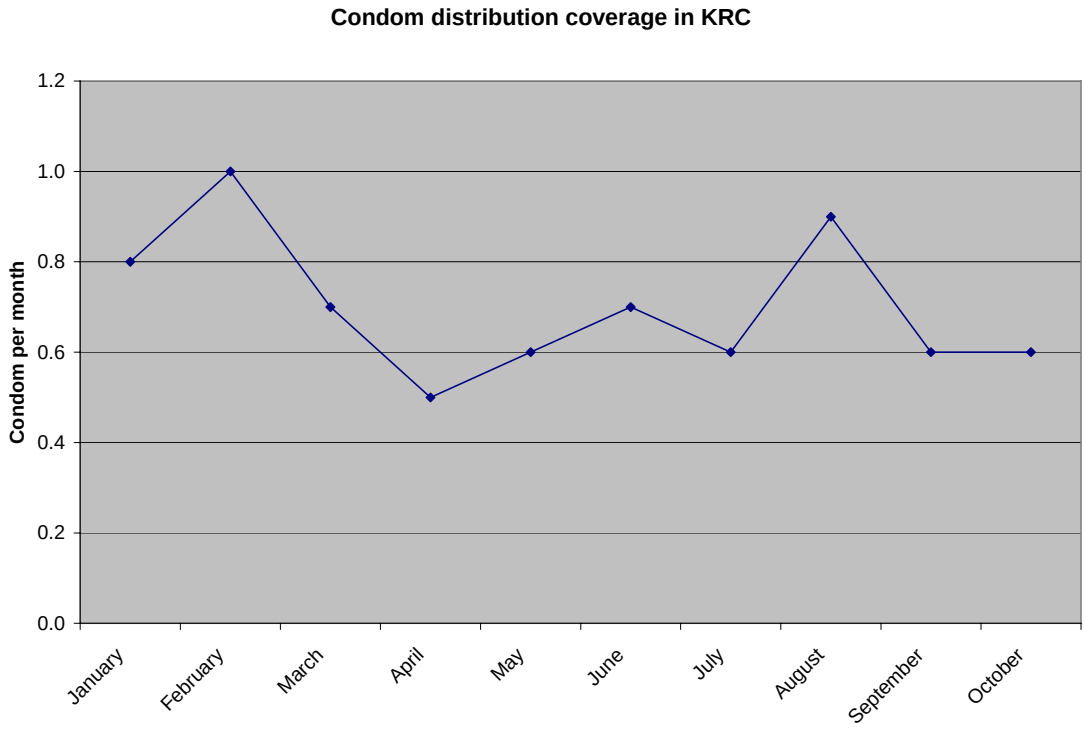
NB: - = missing value
Source: IRC HIV Program 2004

[4] The IRC has estimated that the local population represented 10% of beneficiaries.

A total of 243,532 condoms were distributed in 2004. The average number of condoms distributed per person, per month, ranged from 0.5 to 1.0. The distribution level was below the minimum expected during a post-emergency situation, i.e. one condom per person, per month.

The VCT accounted for 67% of condom distribution in 2004, followed by COP with 26% and family planning with 7%. The trend of distribution is shown in Figure 1. Between March and May 2004 and between September and October 2004 there was a marked increase in the number of condoms distributed.

Figure 1: Condom distribution coverage at Kakuma Refugee Camp for 2004



Source: IRC reproductive health program 2004

Community Based Rehabilitation Program (CBRP): Through CBRP, social assistance is provided to people living with HIV/AIDS (PLWHA) and their families. This programme provides care and support to people who suffer from diverse ailments, such as deafness, physical disabilities, etc. and also aims to reduce the stigma associated with HIV and AIDS. Caregivers are trained to provide medical assistance and to undertake community awareness campaigns with a view to promoting a community social support system. Family members are also involved in an effort to ensure active community participation and sustainability.

The IRC also provides comprehensive reproductive health care that includes Antenatal Care (ANC) services and prevention of mother to child transmission (PMTCT) of HIV. These services are provided in four permanent clinics run by national and refugee health care providers.

Kakuma Mission Hospital (KMH) has established a VCT centre which carries out counselling and testing services for the local population and refugees as well. KMH also provides ant-retroviral treatment (ART) to the local population, as well as to refugees who meet ART treatment criteria.

The IRC outpatient morbidity records estimate that the local population accounts for 10% of outpatient attendances. No official data was collected from the KMH because of institutional requirements and procedural constraints.

1.3 Past behavioral reports

A behavioural surveillance survey was carried out in Kakuma Refugee Camp in 2002 by the IRC, 274 individuals aged 11 to 35 years were interviewed and 123 individuals aged 30–49 years were similarly interviewed.

The survey established that 60.2% of the youth had been sexually active. Among them the majority reported their first experience had been between 15–18 years of age. It was further reported that 45.6% of the sexually active population had had sex with a commercial partner. Only 58.3% had ever used a condom and among those who had had sex with a commercial partner in the last 12 months, only 20.0% reported consistent and regular condom use during transactional sex.

According to the results of this survey, 77.7% of respondents, regardless of gender, had heard of STIs and were able to describe symptom. Knowledge of HIV was good: 96.7% of survey respondents - regardless of gender had heard about HIV and knew how it was transmitted. However, men were more knowledgeable than women. Information about VCT was further reported by 69.2% of the young respondents, 31.6% of whom had been tested for HIV.

The IRC BSS showed that 96.7% of respondents had some sexual experience. The majority of the respondents in 15-24 age bracket had their first sexual experience between 12 and 20 years of age, and 82.5% had been sexually active in the past 12 months. It was also reported that 22% had a non regular sex partner and 17% a commercial sex partner. Surprisingly, 11% of the sexually active male respondents reported a male partner. Despite a high prevalence of high risk sexual behaviours, the use of condoms was very low, only 15.4% of respondents had used a condom the last time they had had sexual intercourse.

2.0 Objectives

The current survey(s) was a cross-sectional observational BSS designed to establish baseline levels of HIV and AIDS related knowledge, attitudes and behaviours. The BSS was undertaken simultaneously in Kakuma Refugee Camp and in the surrounding host community in Kakuma town and its environs.

The specific objectives were:

1. To measure the prevalence of behaviours that are likely to contribute to the spread of HIV among refugees and the local population.
2. To estimate the level of interaction between refugees and the surrounding host population.
3. To improve the understanding of HIV risks and behaviours among the refugee population during displacement cycle.
4. To pilot a customized BSS among refugees and surrounding population incorporating displacement.

2.1 Survey design

The survey(s) was conducted in Kakuma division, an administrative division divided into two areas: Kakuma town where the local population was surveyed and in KRC. The twin surveys were conducted in parallel.

The BSS carried out in the refugee camp was based on a stratified random systematic sample of households within the camp. The target refugee population were 15 to 49-year-olds living in the camp. KRC is divided into three phases: Kakuma I, Kakuma II and Kakuma III. Each phase is divided into zones, blocks and groups. Each ethnic community is hosted in zones or blocks depending on the population size. As such, some zones are inhabited predominantly by Sudanese, Somalis or Ethiopians. All zones, blocks and groups were covered by the survey in accordance with the sampling procedure.

Table 2 following provides an estimate of the target population size (15–49 years) taken from the UNHCR database. This data was based on a card validation exercise conducted by UNHCR in 2004. The male:female ratio was 1.8:1.0. The male:female ratio was 3:1 in 15–24 age group. Unlike most refugee situations, where the vast majority are women and children, in KRC the large number of men was first noted with the arrival of 10,000 boys and girls in 1992 referred to as the 'Lost boys of Sudan.[5] In addition, more young men are thought to have fled and sought asylum in KRC because of fear of being drafted by the warring armies and in search for education opportunities.

[5] http://www.coping.org/wordauthors/lostboys /history.htm: The "lost boys of Sudan". Note: Fleeing violence and bloodshed of Sudan's internal conflict some 33,000 Sudanese boys and girls walked hundreds of miles in search of peace. Emaciated and dehydrated only 10,000 survived the journey – arriving in Kakuma Refugee Camp in 1992. The majority were between the ages of 8-18 years old.

Table 2: Population aged 15–49 yrs by age group and sex (KRC, 2004)

Age	Sex		Male: Female Ratio	Total
	Male	Female		
	4498	1388	3.2	5886
15-19 yrs	22.3%	12.3%		18.7%
	6064	2083	2.9	8147
20-24 yrs	30.0%	18.5%		25.9%
	3925	2205	1.8	6130
25-29 yrs	19.4%	19.6%		19.5%
	2792	2528	1.1	5320
30-34 yrs	13.8%	22.4%		16.9%
	1369	1504	0.9	2873
35-39 yrs	6.8%	13.3%		9.1%
	976	1041	0.9	2017
40-44 yrs	4.8%	9.2%		6.4%
	589	522	1.1	1111
45-49 yrs	2.9%	4.6%		3.5%
	20213	**11271**	**1.8**	**31484**
Total	**100.0%**	**100.0%**		**100%**

Source: UNHCR (Kakuma sub-office 2004)

For the host population survey, a stratified random systematic sample of households was also conducted. The area was stratified by sub-location and village. Within each village a household was systematically selected and sampled. The target for the host population survey was 15 to 49-year-olds living within a 15 kilometres radius of the camp but not in the camp itself.

A rapid assessment to determine the host population in need of drought relief food assistance that was conducted in 2002 by the local government, estimated the population at 24,641 people in 5,332 households. The areas to sample were located with assistance from the District Officer of Kakuma Division and the Chief of the Kakuma Location who knew the area in detail. The Kakuma Host Area was split into three sub-locations based on the administrative divisions, namely, Lopur, Nadapal and Morungole. The sub-location of Tarach was excluded because it was outside the radius to be surveyed.

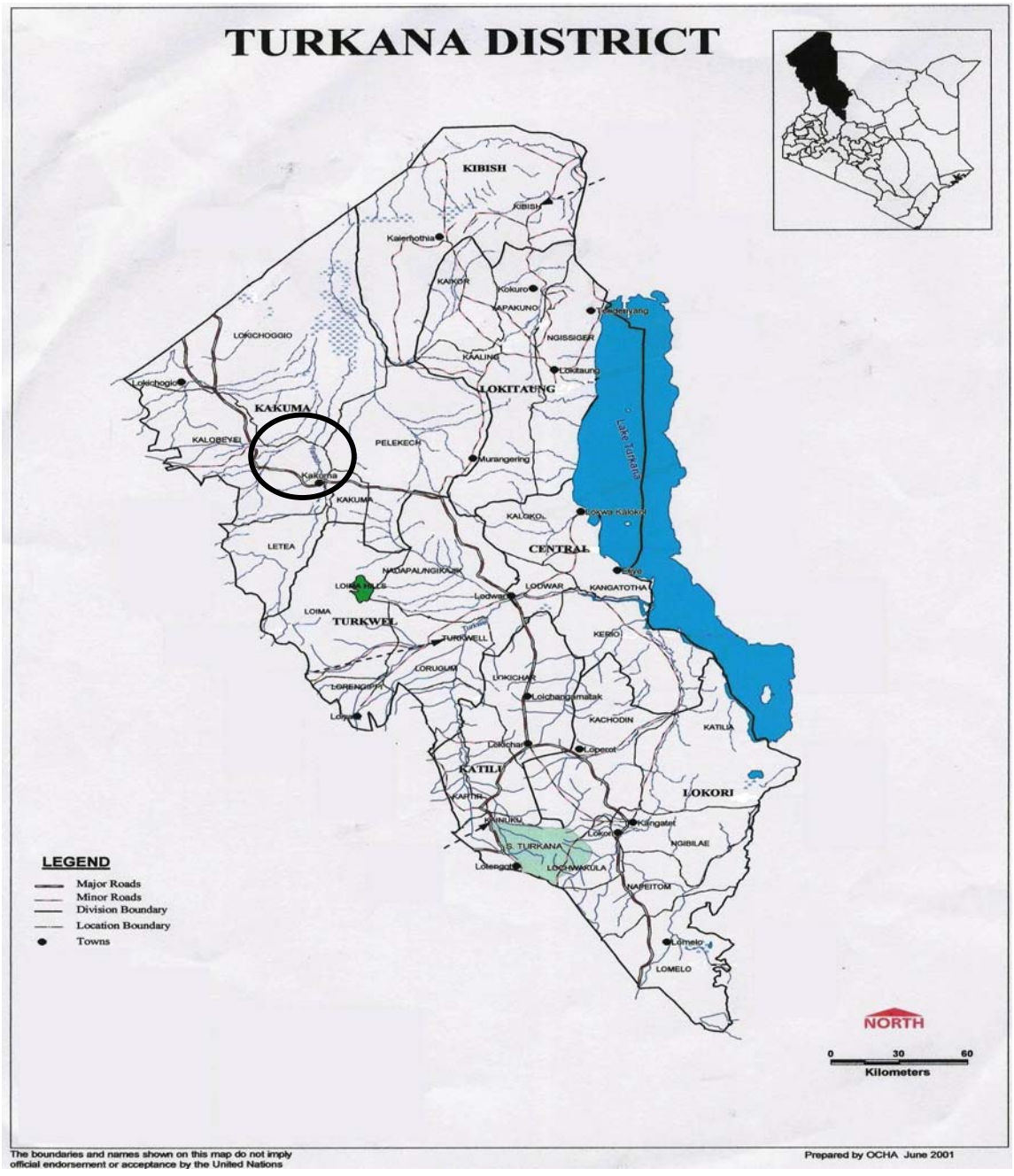
2.2 Mapping and Sampling

To design the sampling procedure, available data were reviewed and analyzed with assistance from a CDC statistician. The data showed an average of 2.3 persons per household in the camp. To check the trustworthiness of this information, a field exercise was conducted. It consisted of a quick evaluation of the population size based on information gathered from community leaders in the KRC, and from village elders in the surrounding population. Basically, the number of households per village and average number of people within a household was ascertained.

In KRC, the results of the exercise were in-line with UNHCR's official data. As for the surrounding population, the figure was less accurate than the results of the census which

provided a map of the area by sub-location, village, household, and family size. Therefore, the latter was used for sampling purposes.

Figure 2: Map of Turkana District, Kenya



2.3 Sample size estimation

In calculating the target sample size we used the estimated prevalence of three behavioural indicators related to HIV/AIDS risks, then assumed an absolute change ranging from 10%. For the Kakuma Refugee Camp, the estimated prevalence of the selected indicators was taken from a previous Knowledge, Attitude and Practice (KAP) survey conducted in July 2002 by Dr. William Bazeyo of Makerere University, Uganda. The indicators were further broken down by gender, age and/or ethnic group whenever possible[6]. As for the host population, no previous survey was available, so the sample size calculations for the camp were used for it.

The sample size was calculated based on Z-test (Appendix I). The formula was taken from the 2000 Behavioural Surveillance Survey Manual created by Family Health International. For the sample size estimates the following parameters were assumed: A two sided Z-test, power = 0.8 and alpha = 0.05.

The three selected indicators for the sample size calculation were: (1) engaging in high-risk sex in the past 12 months; (2) condom use when engaging in last high-risk sex; and (3) seeking treatment among those reporting a sexually transmitted infection in the 12 months preceding the survey. The results of all sample size calculations for the indicators are given in Appendix II.

In the end, a target sample size of 1,548 individuals from 15–49 years of age was chosen for each survey. The sample size was increased to 1,700 individuals to account for a response rate of 91.0%. The sample size was chosen to be able to measure a 10 percentage point change for men 15–24 years of age engaging in high-risk sex. The sampling intervals were 1 in 29 households for KRC, and 1 in 6 households for the host population.

2.4 Sampling methodology

For both the host population and KRC surveys, households were selected within each village/ block or group, using a *random walk method*:

- In each village/location, the number of households to be selected was determined.
- Each community was visited by the field staff who determined the centre of village or group/block with assistance from a community leader.
- A random start was identified, corresponding to the first household to be surveyed.
- The second household was the next household dictated by the sampling interval following the direction that was chosen randomly.
- Once the boundary of the village was reached, the team was asked to turn left systematically, following the same procedure.

At the end of the exercise, all areas in the camp as well as in the host community were covered. Moreover, no replacement policy was applied to avoid biases.

[6] Because the presentation of the results in the KAP survey report was made in an unstandardized format, the results were broken down by age, gender or ethnic group depending on the availability.

Whenever a household was found empty or its members absent, other visits were scheduled, and each respondent was visited three times before the team gave up. In case of the refusal of a household head to participate, the entire family was excluded from the survey, and reported to the supervisor. **As with absence from a household, households that refused to participate were not replaced.** Regarding the individual selection, the instructions were to interview all people aged 15 to 49 in each household.

Because of a missing report sheet, details related to refusal and absence cannot be presented in this text. Although the refusal rate was deemed very low, some difficulties were encountered with refugees, in particular, who complained about the number of ongoing surveys at that time and the lack of feedback after field exercises. We aimed to sample 1700 persons from each population. In the end, we sampled 1646 (96.8%) in the refugee population and 1654 (97.3%) in the local population.

2.5 Questionnaire design

The survey questionnaire was partly composed of the basic standardized sections for BSS, which used the main indicators developed in the FHI BSS manual. Our questionnaire also included a pre-displacement, displacement and post-displacement component specific to refugees and the surrounding host communities. The questionnaire was eighteen pages long, and included a skip pattern which allowed filtering questions depending on the respondent characteristics. It was completed in 20 to 35 minutes per person (see Appendix IV).

The original was in English and was translated into four relevant languages, and then reviewed by professional translators and/or investigators in an effort to avoid biases in the wording.

Translated versions were obtained in:
- Dinka and Juba Arabic for Sudanese;
- Somali for Somali refugees;
- Turkana for the local Turkana population.

Therefore, all interviews were made in local languages except for Ethiopian. Because of the small sampled group in the Ethiopian community and time limitations, the questionnaire was directly translated from English into Ethiopian during the interviews.

2.6 Informed consent

To respond to ethical considerations, informed consent was obtained verbally from the household heads and from the respondents. The study objectives as well as the content of the questionnaire were clearly stated and the consent requested beforehand.

2.7 Field testing and finalizing tools

The translated questionnaires were tested in a pilot survey conducted following a four-day training workshop. The trial test highlighted some insufficiencies in the translations. For example, the Juba Arabic translation had been made in a classic dialect that was not well understood in the camp. Thus, it was retranslated by the investigators themselves to better match the local dialect. The second translation was submitted to UNHCR community-based staff for peer review. In addition, some questions related to the displacement component were removed because of the recall period. There was no back-translation of the questionnaire due to lack of time and the large number of translated versions.

2.8 Selecting and training the field team

Investigators were selected by IPs, UNHCR, the local government authorities and the constituency's AIDS Control Committees (CACC). Half of the interviewers were refugees and half were locals. The majority of the refugee interviewers were community service workers while local host nationals were mostly teachers and unemployed youth.
The recruitment was based on the following:

1. In order to, allow refugees to be interviewed by refugees and locals by locals, 50% of the interviewers were refugees and 50% were locals.
2. The interviewers had to speak at least one language of the four spoken by the target populations.
3. There was a gender balance.
4. Training background/ education.

Because of a lack of qualified candidates, the selection criteria were revised. Forty-one interviewers were trained, 39 of whom were confirmed and dispatched as follow:

Table 3: Staff of the survey[7]

Responsibility	Refugees			Nationals		
	M	F	Total	M	F	Total
Supervisors	1	2	3	2	0	2
Controllers	2	1	3	1	0	1
Investigators	7	8	15	8	7	15

Based on the above considerations, a three-day training was conducted for both refugee and local staff involved in the survey. Key topics discussed during the workshop were:

1. Presentation of the survey.
2. Description of its methodology focusing on sampling procedures, households and individual selection, tracking household members, etc.
3. Review of the questionnaire.
4. Interacting with respondents (introduction, ethical considerations, etc.).
5. Roles and responsibilities of the team members.
6. Role playing.

[7] See job description in Appendix IV

2.9 Data entry

Two data entry clerks were hired in the field and trained after once the survey started. Specific skills were developed on the use of the CSPro software. To make them familiar with CSPro, a template of the questionnaire was provided during the training for practical exercises. About 70 interviews per person per day were entered.

2.10 Quality control and data management

To ensure the quality of data collected, a control mechanism was set up at different levels. At the field level, all questionnaires were reviewed by the investigators and the supervisors before they were handed over to the control team. Moreover, the monitoring team could double check in the field by randomly taking a sample of questionnaires. Therefore, some mistakes could be corrected at the field level.

At the office level, a group of four controllers (one for each language), who could read and write in the relevant language, was established to oversee all questionnaires. They checked to see whether all relevant responses were recorded, inconsistency of responses, etc. When a questionnaire was not properly filled in, it was given back to the supervisor who took adequate measures to ensure that the investigator returned to the household to complete his interview.

At the data entry level, all questionnaires were passed through a template which indicated missing values and inconsistencies in the questionnaires.

3.0 Results

In total 3300 individuals, aged 15–49 years were interviewed. Of these 1646 were refugees and 1654 were from the surrounding host population. Their distribution by age group, sex and residency status (refugee or surrounding host) is shown on Table 4.

Table 4: Population Distribution by Age and Sex

Variables		Camp			Surrounding area		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**
Age group	15-24 years	537 32.6%	483 29.3%	1020 62%	381 23.0%	522 31.5%	903 54.6%
	25-49 years	366 22.2%	260 15.8%	626 38%	352 21.3%	399 24.1%	751 45.4%
	Total	**903**	**743**	**1646**	**733**	**921**	**1654**
Nationality	Kenyan	0	0	0	733 44.3%	921 55.7%	1654 100%
	Somali	252 15.3%	219 13.3%	471 28.6%	0	0	0
	Sudanese	630 38.3%	512 31.1%	1142 69.4%	0	0	0
	Ethiopian	19 1.2%	12 0.7%	31 1.9%	0	0	0
	Other	2 0.1%	0	2 0.1%	0	0	0
	Total	**903**	**743**	**1646**	**733**	**921**	**1654**
Marital status	Married	258 28.6%	372 50.1%	630 38.3%	342 46.7%	612 66.4%	954 57.7%
	Single[8]	510 56.5%	319 42.9%	829 50.4%	371 50.6%	290 31.5%	661 40.0%
	Not married but living with long term partner	135 15.0%	52 7.0%	187 11.4%	20 2.7%	19 2.1%	39 2.4%
	Total	**903 100.0%**	**743 100.0%**	**1646 100.0%**	**733 100.0%**	**921 100.0%**	**1654 100.0%**
Are you a refugee?	Yes	903	743	1646	0	0	0
	No	0	0	0	733	921	1654
Religion	Catholic	221 24.5%	177 23.8%	398 24.2%	499 68.1%	558 60.6%	1057 63.9%
	Protestant	407 45.1%	340 45.8%	747 45.4%	166 22.6%	245 26.6%	411 24.8%
	Moslem	258 28.6%	220 29.6%	478 29.0%	7 1.0%	15 1.6%	22 1.3%
	Other	17 1.9%	6 0.8%	23 1.4%	41 5.6%	59 6.4%	100 6.0%
	No religion	0	0	0	20 2.7%	44 4.8%	64 3.9%
	Total	**903**	**743**	**1646**	**733**	**921**	**1654**
Education	No schooling	168 10.2%	243 14.7%	411 25.0%	478 28.9%	733 44.3%	1211 73.2%
	Primary	470 28.5%	379 23.7%	849 51.6%	179 10.8%	132 8.0%	311 18.8%
	Secondary	239 14.5%	119 7.2%	358 21.7%	69 4.2%	54 3.3%	123 7.4%

[8] Because of an error made by some surveyors in coding on the field, divorcees and widowers were merged into a single

	University	26 1.6%	2 0.1%	28 1.7%	7 0.4%	2 0.1%	9 0.5%
	Total	**903**	**743**	**1646**	**733**	**921**	**1654**
Income generating activity	Unemployed/ inactive	762 84.4%	685 92.2%	1447 87.9%	259 35.3%	678 73.6%	937 56.7%
	Trading	39 4.3%	24 3.2%	63 3.8%	39 5.3%	54 5.9%	93 5.6%
	Pastoralist	4 0.4%	0 0.0	4 0.2%	310 42.3%	25 2.7%	335 20.3%
	Private services	40 4.4%	13 1.7%	53 3.2%	62 8.5%	128 13.9%	190 11.5%
	Public services	41 4.5%	7 0.9%	48 2.9%	39 5.3%	22 2.4%	61 3.7%
	Other	17 1.9%	14 1.9%	31 1.9%	24 3.3%	14 1.5%	38 2.3%
	Total	**903**	**743**	**1646**	**733**	**921**	**1654**

Source: Kakuma BSS data – December 2004

In the refugee sample population, the male to female ratio was 1.2:1.0, whereas UNHCR registration figures show that the male to female ratio is 1.8:1.0. Unlike most refugee situations, where the vast majority are women and children, in KRC the large number of men was first noted with the arrival of 10,000 boys and girls in 1992 referred to as the 'Lost boys of Sudan[9]'. In addition, more young men may have sought asylum at KRC to escape recruitment by warring factions and in search of educational opportunities - given the value attached to education and the limited facilities available in southern Sudan. In contrast, among the surrounding host population survey sample, the male to female ratio was 0.8:1 and was attributed to the fact that being a pastoralist community, the Turkana men were often in the field tending to animals while women and children remained in Kakuma where essential services such as water and health care, among others, were available.

However, selection bias may also have contributed to a higher male involvement as persons who were absent from the household at the time of the interview or who refused to participate were not included in Table 4. We cannot compare Table 4 with Table 2 to know if the huge difference in the male:female ratio among the age groups is due to inaccuracies in UNHCR's population registration or absent persons at the time of the survey. This error will be corrected in future surveys.

3.1 Socio-demographic characteristics

At the time when this BSS was conducted, 20 (1.2%) host nationals were residing in KRC as independent households or members of refugee households, of these 16 (80%) were women. In contrast, 21 refugees were residing within the surrounding population in independent households or as members of host national households, of these 12 (57%) were women. See Table 5 for more details. This interaction is attributed to cross marriages between the two groups.

[9] http://www.coping.org/wordauthors/lostboys /history.htm: The "lost boys of Sudan". Note: Fleeing violence and bloodshed of Sudan's internal conflict some 33,000 Sudanese boys and girls walked hundreds of miles in search of peace. Emaciated and dehydrated only 10,000 survived the journey – arriving in Kakuma Refugee Camp in 1992. The majority were between the ages of 8-18 years old.

Table 5: Refugee and host nationals by gender

	Variables	Camp			Surrounding area		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**
Are you a refugee?	Yes	900 99.6%	746 97.9%	1646 98.8%	9 1.2%	12 1.3%	21 1.3%
	No	4 0.4%	16 2.1%	20 1.2%	733 98.8%	921 98.7%	1654 98.7%
Total		**904 100%**	**762 100%**	**1666 100%**	**742 100%**	**933 100%**	**1675 100%**

However, the 20 local host nationals residing with the refugee population and the 21 refugees living with the local population were excluded from the analysis rather than adding them to the respective groups. Description of the survey sample population is provided in Table 6 below and excludes these 41 refugees and host nationals.

Table 6: Demographic characteristics

Variables		Camp			Surrounding area		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**
Age group	15-24 years	537 32.6%	483 29.3%	1020 62%	381 23.0%	522 31.5%	903 54.6%
	25-49 years	366 22.2%	260 15.8%	626 38%	352 21.3%	399 24.1%	751 45.4%
	Total	**903**	**743**	**1646**	**733**	**921**	**1654**
Nationality	Kenyan	0	0	0	733 44.3%	921 55.7%	1654 100%
	Somali	252 15.3%	219 13.3%	471 28.6%	0	0	0
	Sudanese	630 38.3%	512 31.1%	1142 69.4%	0	0	0
	Ethiopian	19 1.2%	12 0.7%	31 1.9%	0	0	0
	Other	2 0.1%	0	2 0.1%	0	0	0
	Total	**903**	**743**	**1646**	**733**	**921**	**1654**
Marital status	Married	258 28.6%	372 50.1%	630 38.3%	342 46.7%	612 66.4%	954 57.7%
	Single[10]	510 56.5%	319 42.9%	829 50.4%	371 50.6%	290 31.5%	661 40.0%
	Not married but living with long term partner	135 15.0%	52 7.0%	187 11.4%	20 2.7%	19 2.1%	39 2.4%
	Total	**903 100.0%**	**743 100.0%**	**1646 100.0%**	**733 100.0%**	**921 100.0%**	**1654 100.0%**
Are you a refugee?	Yes	903	743	1646	0	0	0
	No	0	0	0	733	921	1654
Religion	Catholic	221 24.5%	177 23.8%	398 24.2%	499 68.1%	558 60.6%	1057 63.9%
	Protestant	407 45.1%	340 45.8%	747 45.4%	166 22.6%	245 26.6%	411 24.8%
	Moslem	258 28.6%	220 29.6%	478 29.0%	7 1.0%	15 1.6%	22 1.3%

[10] Because of an error made by some surveyors in coding in the field, divorcees and widowers were merged into a single category.

Variables		Camp			Surrounding area		
		Male	Female	Total	Male	Female	Total
	Other	17 1.9%	6 0.8%	23 1.4%	41 5.6%	59 6.4%	100 6.0%
	No religion	0	0	0	20 2.7%	44 4.8%	64 3.9%
	Total	903	743	1646	733	921	1654
Education	No schooling	168 10.2%	243 14.7%	411 25.0%	478 28.9%	733 44.3%	1211 73.2%
	Primary	470 28.5%	379 23.7%	849 51.6%	179 10.8%	132 8.0%	311 18.8%
	Secondary	239 14.5%	119 7.2%	358 21.7%	69 4.2%	54 3.3%	123 7.4%
	University	26 1.6%	2 0.1%	28 1.7%	7 0.4%	2 0.1%	9 0.5%
	Total	903	743	1646	733	921	1654
Income-generating activit	Unemployed/ inactive	762 84.4%	685 92.2%	1447 87.9%	259 35.3%	678 73.6%	937 56.7%
	Trading	39 4.3%	24 3.2%	63 3.8%	39 5.3%	54 5.9%	93 5.6%
	Pastoralist	4 0.4%	0 0.0	4 0.2%	310 42.3%	25 2.7%	335 20.3%
	Private services	40 4.4%	13 1.7%	53 3.2%	62 8.5%	128 13.9%	190 11.5%
	Public services	41 4.5%	7 0.9%	48 2.9%	39 5.3%	22 2.4%	61 3.7%
	Other	17 1.9%	14 1.9%	31 1.9%	24 3.3%	14 1.5%	38 2.3%
	Total	**903**	**743**	**1646**	**733**	**921**	**1654**

Of the 3300 respondents, the 15–24 age group accounted for 58.3%. Out of the 1646 refugee sample population, youth accounted for 62.1% and of these 36.2% (537) were male and 29.3% (483) female. The refugee male to female ratio in the survey sample was 1.1:1. In contrast, of 1654 surrounding host nationals were interviewed, out of whom 903 (54.6%) were youth and of the interviewed youth males were 381 whereas females 522. The male to female ratio was 0.7:1.

The vast majority (88.7%) of the surrounding host population respondents were Christians with 63.9% Catholics and 24.8% Protestants. Amongst the refugee respondents 69.5% were Christians, 29% were Muslim and 1.4% had other religious affiliations. Most of the Sudanese refugees were Christians, while most Somalis were Muslims.

Of the total number of respondents, 630 (38.3%) refugees were married compared to 954 (57.7%) of the local hosts. The likelihood of a refugee woman being married was 1.7 and 1.4 for surrounding host women compared to men from their respective communities. The mean age at first marriage among 15 to 24-year-old male refugees was 18.2 years while for female refugees from 11 to 24 years the mean age of marriage was 16.7 years. The mean age at first marriage for 15 to 24-year-olds in the surrounding host population was 19.7 years for males, while for girls between the ages of 11 to 23 years the mean age at first marriage was 17.6 years.

This survey has revealed that refugees had better access to education: of the 1646 refugee respondents 51.6% (95% CI: 49.1–54.0% n= 1646) had primary school education, 21.7%

(95% CI: 19.7–23.6% n= 1646) had secondary education, and 1.7% had a university education. Among the 1654 host nationals only 18.8% (95% CI: 16.9–20.7% n= 1654) had primary education, 7.4% secondary and 0.5% university education. Adult literacy education programmes should be considered as 411 (25% (95% CI: 22.9–27.0% n=1646)) of the refugee respondents and 1211 (73.2% (95% CI: 71.0–75.3% n=1654)) of surrounding host nationals had no formal education.

In the refugee population, the proportion of male and female respondents who had no education or primary was almost the same suggesting that gender did not influence access to lower levels of education. However, for secondary school and university education refugee men were twice as likely to have had a higher education as refugee women. With the surrounding host population, women clearly had limited access to education as local men were 4.8 and 5.2 times, respectively, more likely to have had primary and secondary school than women.

Only 141 (15.5%) and 58 (8.4%) of the male and female refugees were economically active. However, because a significant proportion of respondents were youth attending school or recently out of school, the proportion with income-generating activities is most likely not representative. Furthermore, as refugees received humanitarian assistance, there were limitations inherent in the labour policy that may have prevented them from being employed at a certain level. In the local populations, pastoralism was the main activity for male Turkana: 42.3% of the local respondents and 65.4% of the active population.

3.2 Displacement, mobility and networking between communities

Mobility may create physical and socio-cultural separations between the mobile person, his family and the community at large. It implies the "removal of moral codes that governs one's actions"[11]. To enhance our understanding of the interaction between refugees and the surrounding host populations, a section on mobility was included in the questionnaire.

Both refugees and local respondents were asked how long they had been living in Kakuma, 46% (95% CI: 43.8–48.9%, n: 1646) of refugee had been living in KRC for more than 5 years while 42% (95% CI: 37.5– 44.6%, n: 1646) had been relocated from Dadaab refugee camps in 2002[12], and the rest (12% (95% CI: 10.6–13.7%, n: 1646)) were newly arrived. Among the host nationals only 49.6% (95% CI: 47.2–51.9%, n: 1654) had always lived in Kakuma, 15% (95% CI: 13.3–16.7%, n: 1654) had been residents from between 1–5 years and 11.5% (95% CI: 9.9–13.0%, n: 1654) had been in Kakuma for less than 12 months. See Table 7 for more details. Prior to the establishment of KRC in 1992, Kakuma was a small village with approximately 10,000 to 15,000 inhabitants. However, with the arrival of refugees, the availability of social services, business and employment opportunities, the population of Kakuma rapidly rose to the current estimate of 50,000 people. The inhabitants of Kakuma, the local hosts as well as refugees are highly transient.

[11] FHI, 2001 http://www.fhi.org/en/HIVAIDS/pub/survreports/laosbss.htm

[12] The IOM reported that about 13,000 Somali Bantus were moved from Dadaab to Kakuma in 2002 where they were to be screened for resettlement to United States.

Table 7: Displacement, mobility and networking between communities

		Camp			Surrounding Area		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**
How long have you been living in this place?	<12 months	113 12.5%	64 8.6%	177 10.8%	70 9.6%	121 13.1%	191 11.5%
	1- <5 yrs	417 46.2%	280 37.7%	697 42.3%	127 17.3%	121 13.1%	248 15.0%
	≥5 years	368 40.8%	397 53.4%	765 46.5%	221 30.2%	165 17.9%	386 23.3%
	Always	0 0.0%	0 0.0%	0 0.0%	315 43.0%	505 54.8%	820 49.6%
	Don't know	5 0.6%	2 0.3%	7 0.4%	0 0.0%	9 1.0%	9 0.5%
	Total	**903 100%**	**743 100%**	**1646 100%**	**733 100%**	**921 100%**	**1654 100%**
Have you left home for longer than 4 weeks in the last 12 months	Yes	153 16.9%	186 25.0%	339 20.6%	433 59.1%	342 37.1%	775 46.9%
	No	750 83.1%	557 75.0%	1307 79.4%	300 40.9%	579 62.9%	879 53.1%
	Total	**903 100%**	**743 100%**	**1646 100%**	**733 100%**	**921 100%**	**1654 100%**

While only 339 (20.6% (95% CI: 18.6–22.5% n: 1646)) refugees had been away from home for more than 4 weeks in the 12 months preceding the survey, 775 (46.9% (95% CI: 44.5 – 49.3% n= 1654) of the host nationals had been away from their homes during that same time.. Within the refugee community 25% of refugee women had been away from home compared to 16.9% of the male population, however, more refugee women had been away because of family and school related issues or for health reasons. Of the 55 refugees who had been away from home for health related issues 76.4% (42) were women. Of the 50 refugees who had been absent from home for work or business related ventures 78% (39) were men. This level of mobility is significant given that the Government of Kenya restricts refugee movements outside the camp.

In the surrounding host community 433 (59.1%) of the men had been away from home during the previous 12 months compared 342 (37.1%) women absent during the same time.

With regard to interaction, local host nationals were more likely to visit the refugee camp. 85.6% of respondents regardless of gender reported visiting the camp on a regular basis while only 25.0% of the refugee respondents reported visiting the surrounding population.

Table 8: Displacement, mobility and networking between communities

		Camp			Surrounding Area		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**
Primary reasons for being away from home	Work-related	16 10.5%	8 4.3%	24 7.1%	41 9.5%	14 4.1%	55 7.1%
	Family-related	48 31.4%	67 36.0%	115 33.9%	292 67.4%	242 70.3%	534 68.7%
	School-related	41 26.8%	58 31.2%	99 29.2%	61 14.1%	41 11.9%	102 13.1%
	Health-related	13 8.5%	42 22.6%	55 16.2%	10 2.3%	38 11.0%	48 6.2%
	Business	23 15.0%	3 1.6%	26 7.7%	15 3.5%	4 1.2%	19 2.4%
	Other	12 7.8%	8 4.3%	20 5.9%	14 3.2%	5 1.5%	19 2.4%
	Total	**153** **100.0%**	**186** **100.0%**	**339** **100.0%**	**433** **100.0%**	**344** **100.0%**	**777** **100.0%**
Do you visit the neighbouring community?	Yes	229 25.4	183 24.6	412 25.0%	636 86.8%	779 84.6%	1415 85.6%
	No	674 74.6	560 75.4	1234 75.0%	97 13.2%	142 15.4%	239 14.4%
	Total	**903** **100**	**743** **100**	**1646** **100%**	**733** **100%**	**921** **100%**	**1654** **100%**

Table 32 shows various reasons cited by refugees and locals for visiting the other community. In the refugee group, shopping and health care services were the most important reasons stated by females, while their male counterparts reported entertainment (40.9%) as the first reason for their visit followed by shopping (38.7%). In the local population it was reported that shopping was the most important reason for visits made by both sexes. More females went seeking a job in the camp than males. Furthermore, 39.1% of female Turkana vs. 10.2% of male visited the camp for health care. The fact that more females worked in the camp within refugees households, explained why there were more females interviewed in the KRC (Table 5). A risk factor that needs to be examined and addressed is the fact that many male refugees go to the local community for entertainment purposes.

3.3 Sexual experience

Delaying the first sexual experience is of key importance in the prevention of sexually transmitted infections (STIs) among adolescents, including HIV. In this survey 59.3% (95% CI: 54.0–64.5% n=329) and 54.0% (95% CI: 48.6–59.4% n=324) of refugee 15–19-year-old girls and boys, respectively, had not been initiated into an active sex life. Similarly, over half of adolescent girls (15–19) and boys from the surrounding host population had never had sex (see Table 9).

Table 9: Adolescents (15–19 years) first sexual experience by gender and residential status

	Variables	Camp			Surrounding area		
		Male	Female	Total	Male	Female	Total
Have you ever had sexual intercourse?	Yes	149 46.0%	134 40.7%	283 43.3%	103 46.8%	116 40.4%	219 43.2%
	No	175 54.0%	195 59.3%	370 56.7%	117 53.2%	171 59.6%	288 56.8%
Total		**324 100%**	**329 100%**	**653 100%**	**220 100%**	**287 100%**	**507 100%**

However, at 20–24 years of age approximately three quarters of young people irrespective of gender and residential status had been initiated into an active sexual life.

The median age for the first sexual experience among refugee males and females aged 15–24 years was 16 and 15 years respectively. The range was 7 to 23 years for males and 10 to 24 years for girls. On the other hand, the median age for males and females aged 15–24 in the surrounding community was 16 and 17 years, respectively. The range was 8 to 23 years for boys and 10 to 24 years for the girls. Figure 3 below shows the onset of sexual activity by age among the refugee and host nationals. The proportion of respondents engaged in sexual activity increases with age.

Figure 3: First sexual experience by age among refugees and host nationals

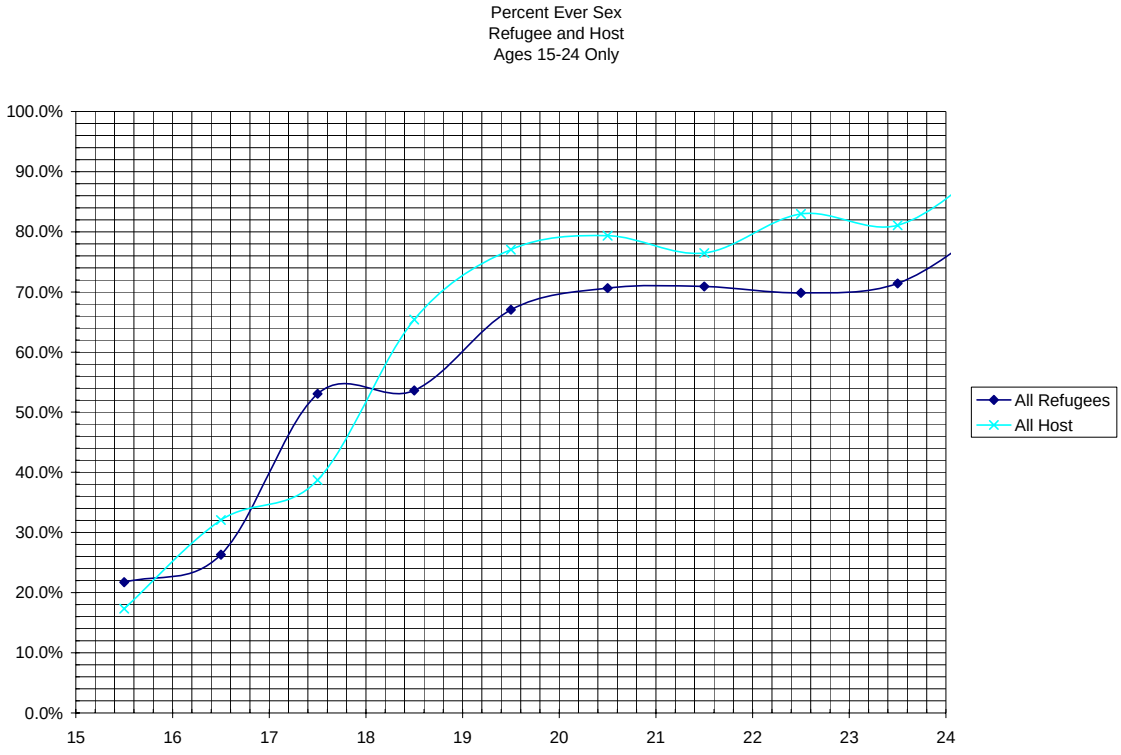


Table 10 below presents data regarding unmarried adolescents and their sexual experience. Out of 290 unmarried adolescent refugee girls 67.2% (95% CI: 61.8–72.6% n=290) had never

had sex and is comparable to 75.3% (95% CI: 69.7–80.9% n=227) of unmarried adolescent girls in the surrounding host community who also were abstinent. However, almost half of adolescent boys in both groups were sexually active.

Table 10: Sexual experience by gender and residential status

Age	Variables	Camp			Local nationals		
		Male	Female	Total	Male	Female	Total
15-19 yrs	Unmarried and never had sex	175 55.7%	195 67.2%	370 61.3%	117 54.1%	171 75.3%	288 65.0%
	Unmarried with sex partner	139 44.3%	95 32.8	234 38.7%	99 45.8%	56 24.6%	155 35.0%
Total		**314 100%**	**290 100%**	**604 100%**	**216 100%**	**227 100%**	**443 100%**

As age increases among the youth, the level of sexual activity similarly increases. Out of the 452 unmarried individuals aged 20–24 years 37.4% (95% CI: 32.9–41.8% n=452) abstained from premarital sex. When compared to the 15–19 years age group sexual activity had increased by 1.7 among the 20 to 24-years-olds. Table 11 shows that sexual activity in the 20–24 age group is higher among the local hosts than in the refugee population and that the difference is significant ($X^2 = 0.001$). In addition, Table 11 demonstrates that from 20–24 years of age there is a marked decline in unmarried youth especially women regardless of whether they are refugees or host national.

Table 11: Sexual experience by age group, gender and residential status

Age	Variables	Camp			Local nationals		
		Male	Female	Total	Male	Female	Total
20-24 yrs	Unmarried and never had sex	82 32.6%	19 7.6%	101 40.2%	33 16.4%	35 17.4%	68 33.8%
	Unmarried with sex partner	106 42.2%	44 17.5%	150 59.8%	97 48.2%	36 18.4%	133 66.1%
Total		**188**	**63**	**251**	**130**	**71**	**201**

Informal discussions in the camp revealed that unmarried youth were likely to have sex despite the conservative environment which prohibits sex outside marriage. Furthermore, in the Somali refugee community sex outside marriage is a serious matter regarded as shameful and a loss of honour to the family or spouse and may lead to forced marriage or divorce, and in some cases even to physical harm.

3.4 Regular sex partner during last 12 months

All respondents who had had sexual intercourse were asked whether they had a regular sex partner. In this context a regular sex partner was defined as a spouse or a partner with whom one lives, has a sexual relationship, and does not pay or exchange a favour for sex. Of the sexually active respondents 42.6% said they had a regular sex partner.

Table 12: Currently had a regular sex partner

	Camp			Local nationals		
Age group	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
15-24	39 7.1%	108 19.8%	147 26.9%	40 12%	197 37.2%	237 27.5%
25-49	201 36.8%	198 36.3%	399 73.0%	293 88%	332 62.8%	625 72.5%
Total	**240 100%**	**306 100%**	**546 100%**	**333 100%**	**529 100%**	**862 100%**

The use of condoms among regular sex partners has been demonstrated to be relatively low in many studies in Africa. In this study, the use of a condom during the last sexual encounter with a regular partner was exceedingly low in the 15-24-year-old age group: 7.2% (95% CI: 2.8%–11.5 n=138) among refugees and 6% (95% CI: 2.9%–9.0% n=233) among host nationals (see Table 13 for more details).

Table 13: Condom use with a regular partner during the last sexual intercourse

		Camp			Local nationals		
15-24 age group		**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Was a condom used with a regular partner during the last sexual intercourse?	Yes	4 12.5%	6 6%	10 7.2%	1 2.6%	13 6.6%	14 6%
	No	28 87.5%	100 94%	128 92.7%	37 98.4%	182 94.6%	219 94%
Total		**32**	**106**	**138**	**38**	**195**	**233**

Even among 25 to 49-year-old age group, the use condoms with a regular sex partner was very low irrespective of gender or residential status. See Table 14 for more details.

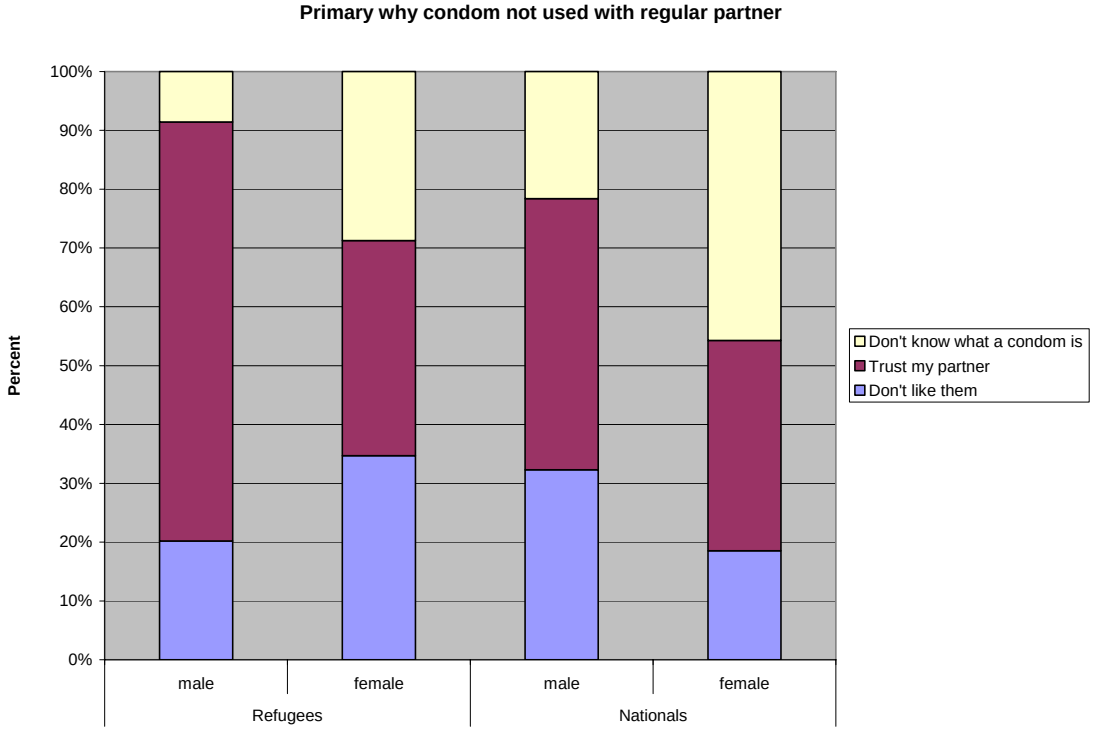
Table 14: Condom use with a regular partner during the last sexual intercourse

		Camp			Local nationals		
25–49 age group		**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Was a condom used with a regular sex partner during the last sexual intercourse?	Yes	22 11.1%	3 1.5%	25 6.3%	6 2%	5 1.5%	11 1.8
	No	175 88.9%	194 97.5%	369 93.7%	287 98%	325 97.5%	612 98.2%
Total		**197 100%**	**197 100%**	**394 100%**	**293 100%**	**333 100%**	**623 100%**

Those who did not use a condom with a regular sex partner during the last sexual intercourse were asked why a condom was not used and the following reasons were cited (see Figure 4). Over 70% of male refugees did not use a condom because they said they trusted their partners while 20% said they disliked using them. Among refugee women a third said they did not

know what a condom was, another third said they disliked them, while the remaining third said they trusted their partners. In the surrounding community 80% of males stated they trusted their partners or disliked using condoms, while almost 50% of females said they did not know what a condom was.

Figure 4: Reasons as to why the condom was not used with a regular partner



The mean number of regular sex partners among refugees and host nationals is shown below:

Refugees	**Male**	**Female**
15–24	2.2	0.9
25–49	1.5	3.6

Host Nationals	**Male**	**Female**
15–24	1.0	5.8
25–49	1.6	3.3

3.5 Casual sex partners

All respondents who had had sex were asked whether they had had sexual intercourse with a person who they were not married to or living with in the previous 12 months. As shown in Table 15 below, 352 (34.5%) refugees and 228 (25.3%) host nationals had had a casual sex partner(s) in the last 12 months. Condom use with a casual sex partner in the 15–24 year age group ranged from 29.5% (95% CI: 22.3–36.6% n=156) among male host nationals to 41.5% (95% CI: 30.2– 52.9% n=72) among refugee women as shown in Table 15 below.

Table 15: Casual sex partner by sex and age group

Age	Variables	Refugees			Locals		
		Male	Female	Total	Male	Female	Total
15-24 age group	Had a casual partner in past 12 months	217	135	352	156	72	228
	Used a condom during sexual intercourse with a non regular partner	77 35.5%	56 41.5%	133 37.8%	46 29.5%	30 41.6%	76 33.3%

In the 25–49 age group, 183 refugees and 99 host nationals had a casual sex partner(s) in the previous 12 months. Condom use with a casual partner ranged from 14.8% (95% CI: 4.6–24.9% n=47) among refugee women to 42.6% (95% CI: 34.3%–50.9% n=136) amongst refugee men as shown in Table 16 below.

Table 16: Casual sex partner sex and age group

Age	Variable	Refugees			Local nationals		
		Male	Female	Total	Male	Female	Total
25-49	Casual partner in past 12 months	136	47	183	76	23	99
	Used condom during sexual intercourse with a non regular partner	58 42.6%	7 14.8%	65 35.5%	19 25%	5 21.7%	24 24.2%

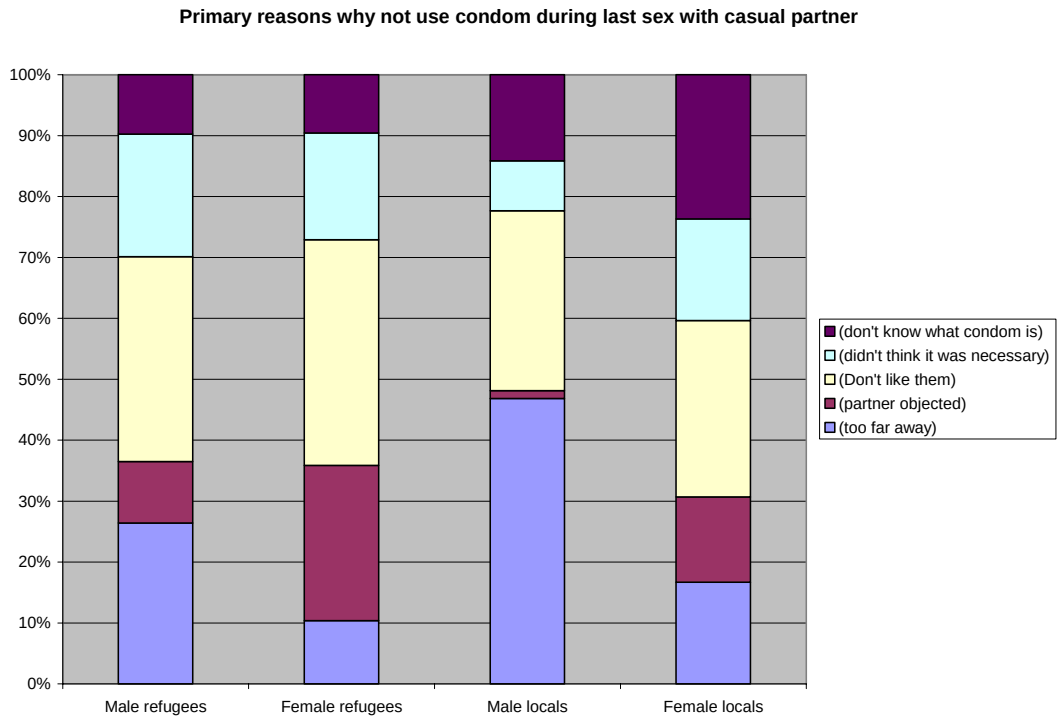
The prevalence of casual sex was higher among male respondents than female ones. There was a statistically significant difference ($X^2 = 19.330$, $p < 0.000$) between men and women in their casual sexual experience in the last 12 months, suggesting that gender is an important factor in all age groups for both refugees and the local population (see Table 45). Between the two populations, the results were quite similar except among males aged 15–24 years.

The majority of the respondents reported one casual partner in the previous 12 months preceding the survey. The median number of casual partners was 1.0 for both young and adult refugees. The numbers of casual sex partners recorded ranged from 0[13] and 12. However, the majority (67.2%) reported one partner only in the previous 12 months. In the local population, the median number of sex partners was the same as it was for refugees. In both group the range was between 0 and 15.

Those who had reported casual sex in the previous 12 months were asked the number of casual partners they had had sex with in the 30 days preceding the survey. The proportion of respondents reporting a casual sex partner was 26.7% for refugees and 9.7% for locals, regardless of gender (see Table 45). This difference is statistically significant ($X^2 = 160.019, p < 0.000$) (see Table 41).

[13] Note that those who reported "0" might have had a casual sex partner but had not had one in the past 12 months.

Figure 5 Reasons why a condom was not used with the last casual sex partner



Regarding the use of condoms, 31.4% of young refugees and 28.9% of adults, regardless of gender, reported the use of a condom the last time they had had a casual sex partner (see Table 45). The chi square test showed a significant gender difference among adults refugees: *($X^2 = 17.020$, $p < 0.000$)*. Male adults in the refugee group were more likely to use a condom than their female counterparts. 37.2% and 10.1%, respectively, reported using a condom during their last sexual encounter with a casual sex partner. Such a situation may be due to women's lack of power during sexual negotiations - 33.5% of female refugees reported a partner's objection to the use of a condom.

The other reasons cited by respondents for not using a condom during the last encounter with a casual sex partner point to the low acceptance of condom use and a lack of HIV/AIDS awareness. 41.6% and 48.7% of male and female refugees, respectively, stated that they "don't like condoms". The prevalence of this attitude in the camp was attributed to socio-cultural and religious beliefs. Group discussions revealed that many of the refugees do not use condoms because of myths and misrepresentation of facts. According to some refugee youths "*some brand names provided in the box are not safe enough; they can give an illness or lead to impotence*". Moreover, despite their relative accessibility, the majority of youths said they had experienced difficulty getting condoms from the distributors[14].

[14] The IRC in its distribution strategy provides refugees with condoms through boxes suspended from a tree.

Other issues raised by refugees during the group discussions emphasized the inadequacies in the distribution strategy.

- There was only one box in the camp which depending on a person's whereabouts could be quite a distance away.
- The distributor sometimes malfunctioned making it difficult to obtain a condom while the individual was usually in a hurry for fear of being seen.
- Shortages have also been noted.

Among the local population, the use of a condom with a casual sex partner was reported among 25.0% of youths and 14.0% of adults, regardless of gender. No significant differences were observed when compared to refugees, except among male adults (X^2 = 19.252, $p<0.000$). According to the survey data, respondents had limited access to condoms, 58.7% of male and 18.4% of female Turkana indicated that the distance to obtain condoms was a limiting factor. In addition, 17.7% of males and 26.2% of females reported a lack of knowledge about condoms. The local population's knowledge about condoms was poor compared to the refugee community. Future interventions in the camp need to focus on awareness raising, increasing condom distribution outlets and on an interactive promotion strategy involving the local population.

3.6 Transactional sex

A very small number of respondents reported to have had sex with a commercial sex partner in their lifetime as shown on Table 17. Indeed, commercial sex was rare among refugees and the surrounding population. However, some differences were noted between youth and adult respondents.

Table 17 Has had sex in exchange for money/gift

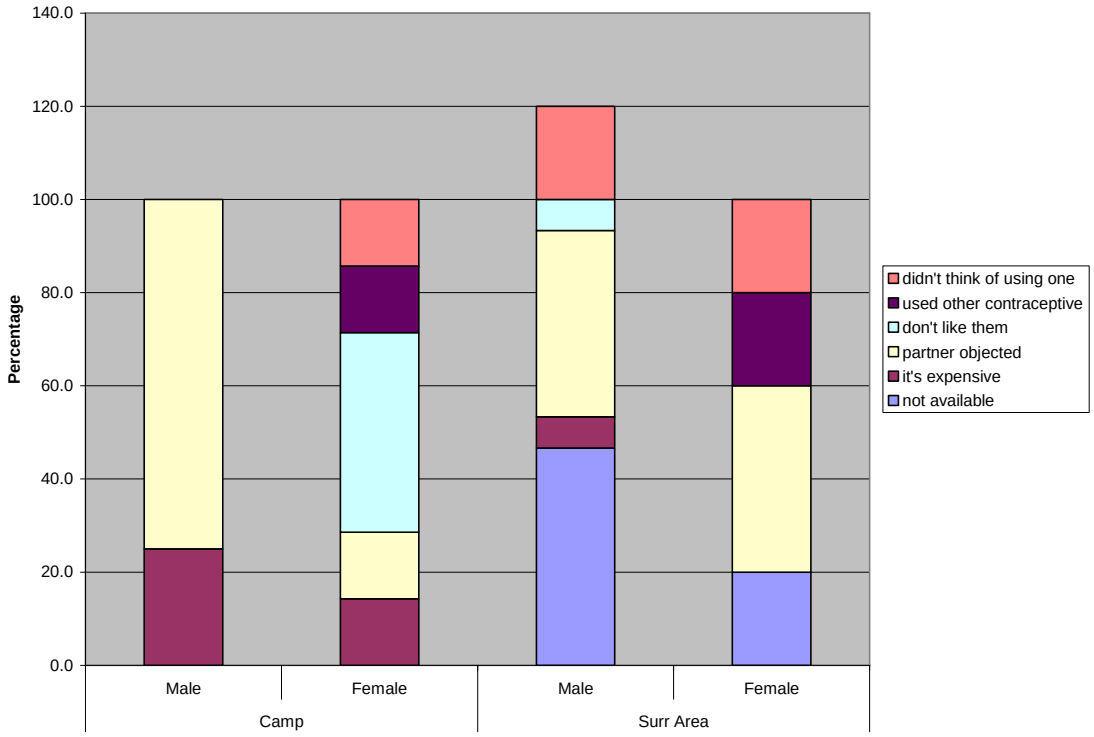
Age group1		Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
15-24 years	Have you ever had sex in exchange for money/ gift?	7	11	18	13	17	30
		1.3%	2.3%	1.8%	3.4%	3.3%	3.3%
25-49 years	Have you ever had sex in exchange for money/ gift?	23	9	32	19	6	25
		6.3%	3.5%	5.1%	5.4%	1.5%	3.3%

The data clearly indicated that in the surrounding population there were more female youths engaged in transactional sex than adult females (X^2 = 8.360, $p \leq 0.004$). The use of a condom with a commercial sex partner was relatively high when compared with a regular sex partner. Respectively, 64.3% and 50.0% of local male and female 15 to 24-year-olds reported having used a condom with their last commercial sex partner. In the 24–49 age group, the proportion was respectively 71.4% and 18.8% of refugees and locals.

Furthermore, it was noted that:

- The use of a condom with a casual sex partner was much higher among male refugees aged 25–49 years than their female counterparts. Respectively 83.3% and 55.6%.
- Male adults in the surrounding population did not use condoms. Only 8.3% had used a condom during their last commercial sex.
- In the youth group, the prevalence of condom use with commercial sex partners was relatively high. Unlike refugees, male locals were less likely to use a condom than their female counterparts.
- This situation reveals the high-risk behaviour of local males with commercial sex partners.

Figure 6: Primary reasons why not using condom with commercial partner



Surprisingly, most of the refugees who reported not using a condom (3 of 4) stated it was because of their partner's objection. This remark was consistent with reasons evoked by female refugees who declared they "don't like condoms" (See Table 47 for details). In the local population, the main reasons given were the partner's objection and the unavailability of condoms. Hence, there is a need to establish a program to address the needs of locals in terms of services and communication - sensitization.

3.7 Forced sex

Out of 1646 refugees respondents 54 (3.3% (95% CI: 2.4–4.1%) had ever been forced to have sex and of these 41 (5.5%) were women and 13 (1.4%) men. Among the 1654 individuals surveyed in the surrounding host population, 101 (6.1% (95% CI: 4.9–7.2%) had ever been forced to have sex, 12 (1.6%) of them were men, and 89 (9.7%) were women.

Table 18: Forced sex by age group, gender and residential status

Age	Variable		Refugees			Locals		
			Male	Female	Total	Male	Female	Total
15-24	Have you ever been forced to have sex?	Yes	7 1.3%	10 2.1%	17 1.7%	3 0.8%	50 9.6%	53 5.9%
		No	530 98.7%	473 97.9%	1003 98.3%	378 99.2%	472 90.4	850 94.1%
25-49	Have you ever been forced to have sex?	Yes	6 1.6%	31 11.9%	37 5.9%	9 2.6%	39 9.8%	48 6.4%
		No	360 98.4%	229 88.1%	589 94.1%	343 97.4%	360 91.2%	703 93.6%

Sexual violence is often directed against females. In this survey 83% of the victims forced to have sex were women. 41 (5.5% (95% CI: 3.8–7.1% n=702) refugee women had been forced to have sex compared to 89 (10.7% (95% CI: 8.6–12.8% n=832) women in the surrounding community suggesting that local women were twice as likely to be victims of forced sex as refugee women.

The main perpetrators of forced sex against refugee women were military officers, accounting for 37 (72.5%) of the incidents, followed by other refugees accounting for 15.7% of incidents. Local accounted for only 5 (9.8%) of the reported sexual violations. Amongst the local women forced to have sex 62 (69.6%) had been coerced by members of their community while refugees had reportedly been responsible for 21 (23.6%) of the assaults.

Table 19: Perpetrators of forced sex by occupation or residential status

Forced sex perpetrators	Refugees		Local host population	
	Male	Female	Male	Female
Refugee	6	8	2	21
Surrounding host member	3	5	10	62
Military	3	37	0	3
UN peacekeeper	0	0	0	0
Humanitarian worker	0	0	0	0
Other	1	1	0	3
Total	**13**	**51**	**12**	**89**

Humanitarian aid workers were not reported to have forced refugees or surrounding host population members to have sex.

3.8 Alcohol and drug use

The number of respondents, regardless of gender, who reported to have had sex while under the influence of alcohol in their lifetime was 28 (2.5% (95% CI: 1.5–3.4% n=1113)) among refugees and 203 (15.9% (95% CI: 13.9%–17.8% n=1278) among the surrounding host population – see Table 20 below

Table 20: Had sex while under the influence of alcohol

Have had sex while under influence of alcohol

		Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
Have you ever had sex while you were under influence of alcohol	Yes	22	6	28	107	96	203
		3.7%	1.2%	2.5%	18.9%	13.5%	15.9%
	No	573	512	1085	460	615	1075
		96.3%	98.8%	97.5%	81.1%	86.5%	84.1%
Total		595	518	1113	567	711	1278
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Host nationals were 6.4 times more likely than refugees to have had sex while under the influence of alcohol. Male refugees were 3.1 times more likely than female refugees to have engaged in sexual intercourse after consuming alcohol. In the surrounding local population the proportion of men and women who had engaged in sex under the influence of alcohol was almost the same. Condom use during sexual intercourse while under the influence of alcohol was low. Of the 28 refugees who reported having had sex while under the influence of alcohol, only 9 (32.15) had protected sex. Whereas, of the 203 surrounding host nationals only 29 (14.1%) had protected sex after consuming alcohol.

All survey respondents were asked whether they had ever used drugs. In this context drugs were described as khat, marijuana, heroine, crack and mandrax. In total, 149 (9% (95% CI: 7.6–10.4% n=1654)) of local respondents said they had used drugs, while only 40 (2.4% (95% CI: 1.6–3.1% n=1646)) refugees had. The vast majority of those who had used drugs were men: 139 (19% (95% CI: 16.1–21.8% n=733) men from the surrounding host community, and 36 (4% (95% CI: 2.7–5.2% n=903) refugee men. The most frequently reported drug used was khat- a locally produced herb that is non-addictive and acts as a mild stimulant, moreover, its sale and consumption is legal in Kenya.

The 189 respondents who reported to have used drugs were asked whether they had ever shared a syringe to inject drugs. Thirty one (1.9% (95% CI: 1.2– 2.5% n=1636)) men reported they had shared a syringe with another individual to inject drugs. Of these 30 (4% (95% CI: 2.5–5.4% n=733) were local men, while only one (0.11% (95% CI: –0.1%–0.3% n=903) was from the refugee community. This was a surprising and unexpected finding as Kakuma town is inhabited mainly by Turkana pastoralists, who for the last couple of years have been seriously effected by drought and famine.

Table 20: Shared syringe with 'neighbour' to inject drugs, by gender and residential status

		Refugees			Local host population		
		Male	Female	Total	Male	Female	Total
Have you ever shared a syringe with another person to inject drugs?	Yes	1 2.9%	0 0%	1 2.6%	30 21.6%	0 0%	30 20.1%
	No	34 97.1	4 100%	38 97.4%	109 78.4%	10 100%	109 79.9%
	Total	35 100%	4 100%	39 100%	139 100%	10 100%	149 100%

However, some discrepancies were found between qualitative and quantitative data. The quantitative survey results showed a very low percent of drug users, while key informants described drug use as wide-spread among young Sudanese and young Somalis.

3.9 Men who had sex with men

According to the results, no male respondents had engaged in male to male sex (see Table 56).

3.10 Circumcision

Geographical epidemiologic studies have suggested that male circumcision is a major protective cofactor in male heterosexual HIV transmission. However, the systematic lack of control of major confounding factors in the studies makes assessing the association between circumcision and HIV transmission very difficult and raises doubt about the validity of the findings. On the other hand, female circumcision is associated with an increased risk of HIV transmission. This survey included questions on male and female circumcision with the aim of mapping levels of male circumcision and female genital mutilation (FGM).

Male circumcision was not actively promoted in the refugee or surrounding host community. However, in some ethnic groups it was a cultural rite of passage from childhood to adulthood. In contrast, FGM was actively discouraged although some ethnic groups did practice it in secret.

This survey showed that circumcision was prevalent in the refugee population. Four hundred and sixty four (51.3% (95% CI: 48–54.5% n=903)) refugee men and 222 (29.9% (95% CI: 26.6–33.1% n=743) refugee women had been circumcised, whereas, in the host population, only 40 (5.5% (95% CI: 3.8–7.1% n=733)) men had been circumcised and 3 (0.3% (95% CI: -0.05–0.6% n=921) local women had undergone FGM. Table 21 presents figures regarding circumcision among refugees by gender and nationality.

Table 21: Circumcision by nationality and gender among refugees in Kakuma camp

Some men and women have been circumcised, have you been circumcised?		Somali		Sudanese		Ethiopians	
		Male	Female	Male	Female	Male	Female
	Yes	245 97.2%	208 95%	198 31.4%	5 1%	19 100%	9 75%
	No	7 2.8%	11 5%	432 68.6	507 99%	0 0%	3 25%
Total		252	219	630	512	19	12

Despite efforts by humanitarian agencies to educate the refugee community with regard to female genital mutilation, among Somali refugees 95% (95% CI: 92.1–97.5% n=219) of female respondents reported that they had been circumcised. FGM is a deeply rooted cultural and religious 'ritual' and is illustrated by the fact that all Somali and Ethiopian male respondents said they preferred a sexual partner who had been circumcised. Among female Somali respondents the median age at which FGM was carried out was 8 years while with boys the median age of circumcision was 6 years.

Unlike Somali refugees, 74.5% of male and 80.5% of female Sudanese respondents preferred an uncircumcised sex partner and if circumcision was safe and affordable 48.8% of male and 96.7% of female Sudanese respondents said they would be reluctant to undergo the operation. Given, the high incidence of FGM among some ethnic groups in KRC, humanitarian relief agencies need to raise the issue with the refugee community and come up with a culturally sensitive and acceptable response.

3.11 HIV knowledge, opinions, attitudes

Over 90% of respondents had heard of AIDS. Respondents from the two population groups had a fair understanding of HIV/AIDS, 460 (45.1% (95% CI: 42–48.1% n=1020) and 165 (18.3% (95% CI: 15.8–20.8% n=903) of refugee and host nationals aged 15–24 years were able to identify the three prevention methods (abstinence, being faithful and condom use) and rejected the two misconceptions about HIV (that you can get HIV from sharing food and that a health-looking person cannot be infected). Approximately 10% of respondents from both groups did not know any HIV prevention methods and accepted all misconceptions (see Table 22 below for more details).

Table 22: Comprehensive knowledge by age group, gender and residential status

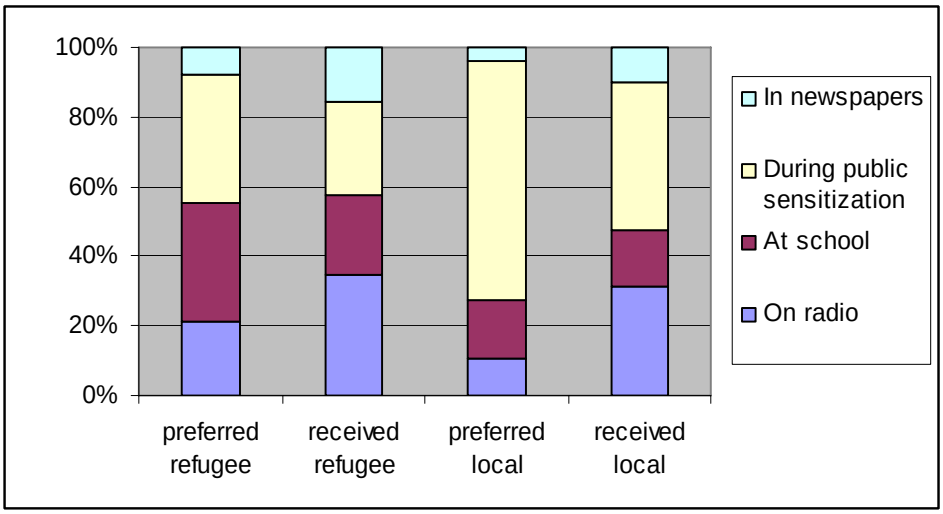
Age group	Knowledge	Refugees			Surrounding host		
		Male	Female	Total	Male	Female	Total
15-24 yrs	Know 0 prevention method & accept all misconceptions	49 9.1%	66 13.7%	115 11.3%	49 12.9%	47 9.0%	96 10.6%
	Know 3 prevention methods and reject 2 misconceptions	304 56.6%	156 32.3%	460 45.1%	91 23.9%	74 14.2%	165 18.3%
	Total	537 100%	483 100%	1020 100%	381 100%	522 100%	903 100%
25-49 yrs	Know 0 prevention method & accept all misconceptions	21 5.7%	22 8.5%	43 6.9%	19 5.4%	33 8.3%	52 6.9%
	Know 3 prevention methods and reject 2 misconceptions	222 60.7%	87 33.5%	309 49.4%	99 28.1%	41 10.3%	140 18.6%
	Total	**366 100%**	**260 100%**	**628 100%**	**352 100%**	**399 100%**	**751 100%**

Overall, male respondents had more comprehensive knowledge. For instance among the 15 to 24-year-old age group 304 (56.6% (95% CI: 52.4–60.7% n=537)) males and 156 (32.3% (95% CI: 28.1%–36.4% n=483) refugees identified the three prevention methods and rejected the two misconceptions. The likelihood of a male refugee youth identifying prevention methods and rejecting misconceptions was 1.75 times greater than refugee women in the same age group, suggesting that men had better access to information and HIV/AIDS services. Similarly, among the 15–24 age group in the host community males were 1.68 times more likely to identify prevention methods and to reject the two misconceptions, once again suggesting that men were more informed about these issues.

However, regardless of gender and age group, refugees were more knowledgeable about HIV/AIDS, for example, the likelihood of a male refugee in the 15–24 age group identifying three prevention methods and rejecting two misconceptions was 2.4 times greater than local males in the same age group. Among 15 to 24-year-old refugee women the likelihood was 2.3 times greater compared to host national women in the same age group. This suggested that refugees had better access to information and education regarding HIV/AIDS.

The fact that refugees had greater knowledge of HIV/AIDS was attributed to prevention programmes implemented by the humanitarian community, namely the IRC and National Council of Churches of Kenya (NCCK). Most refugees cited school education programmes and community-based awareness campaigns as their main sources of information.
The majority of refugees and host nationals preferred to receive HIV/AIDS information from the radio, public awareness campaigns and educational institutions as shown in Figure 7 below.

Figure 7: Comparison between the preferred and actual source of HIV/AIDS information amongst 15 to 24-year-olds



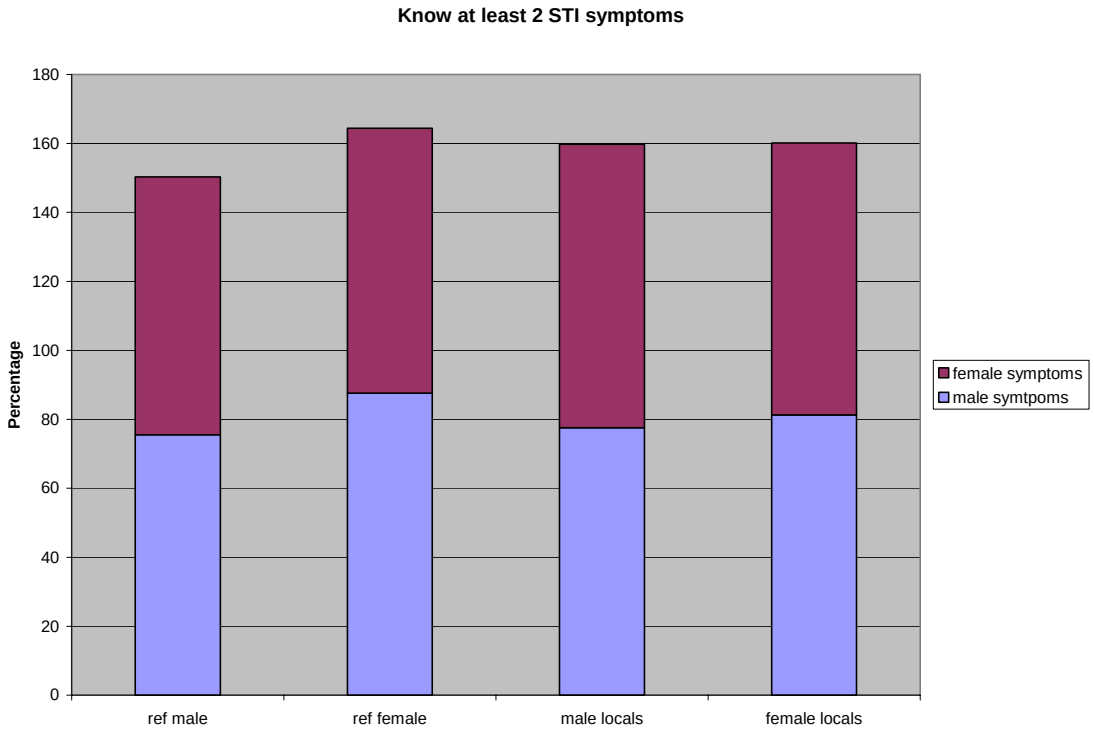
The attitude of the two populations studied towards people living with HIV/AIDS was positive, for instance 73% of refugees and 63.6% of local host respondents reported that they would be willing to care for a male relative who was infected with HIV within their household. Similarly, 76.8% of refugees and 61.5% of local host respondents said they would be willing to care for a female relative infected with HIV.

3.12 Sexually transmitted infections

Knowledge about sexually transmitted infections (STIs) was good, 73.2% of refugees and 65.8% of locals had heard of STIs. Over 80% of refugees and local hosts knew at least two symptoms of STIs regardless of their age or gender as shown in Figure 8 below.

The symptoms for STIs cited by most respondents were burning sensation on urination, abdominal pain, genital discharge and genital sores.

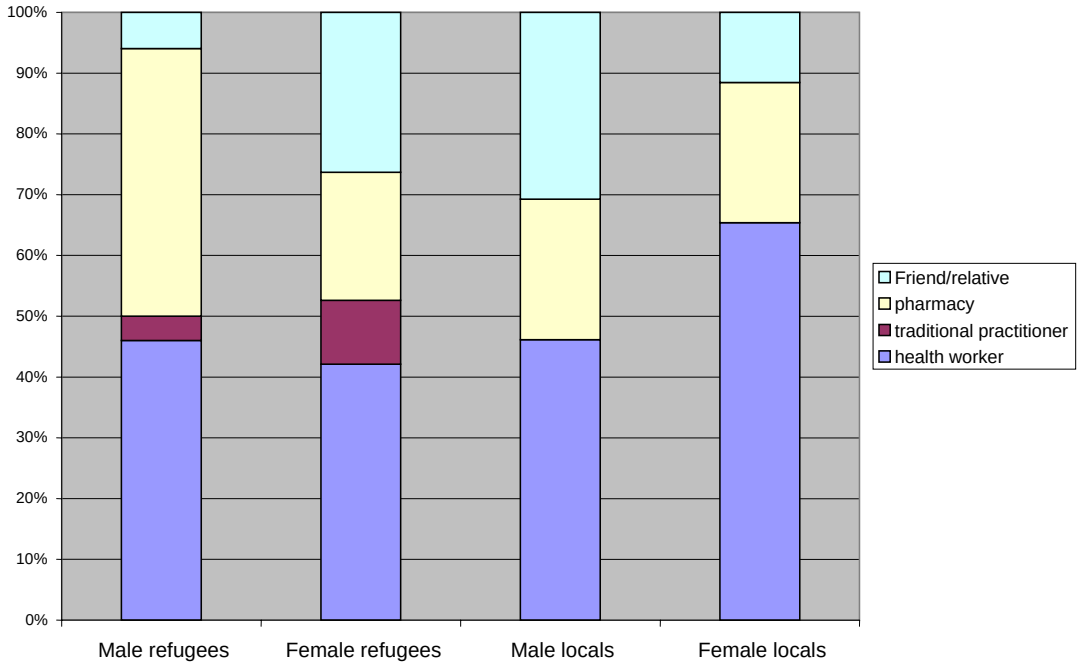
Figure 8: Knowledge of STI symptoms



A small number of respondents had experienced STI symptoms during the previous 12 months - genital discharge and ulcers were the most common symptoms respondents had experienced. Respondents aged 25–49 years, in particular, were more vulnerable than youth.

Seeking treatment for sexually transmitted infections was not wide-spread, only 40–50% of refugees and male host national respondents sought treatment and care from a recognised health facility the last time they had an STI. Approximately 65% of the local host women sought treatment and care from a recognised health facility. A fair proportion - 38% of refugees and 23% of host nationals sought treatment and care for STIs from the pharmacy the last time they had contracted an STI. Friends and relatives were consulted by about 12% of refugees and 18% of local nationals. Figure 9 presents the responses of refugees and locals on having symptoms of a sexually transmitted infection.

Figure 9: Source of STI treatment on recognition of symptom(s)



3.13 Voluntary Counseling and Testing

Voluntary counselling and testing (VCT) was introduced in KRC in June 2002 and in KMH in January 2005. Knowledge of access to VCT services was not universal, 1043 (63.5% (95% CI: 61.1–65.8% n=1646) of the refugee respondents knew where a person could be tested for HIV compared to 777 (47% (95% CI: 44.6–49.4% n=1654) respondents from the surrounding community. Refugee men were 1.3 times more likely to know about VCT services than refugee women. However, in the surrounding community, women respondents were 1.8 times more likely to be aware of the availability VCT than local men.

Table 23: Knowledge about availability of VCT services by gender and residential status

	Variable	Refugees			Local population		
		Male	Female	Total	Male	Female	Total
Do you know where a person can be tested for HIV?	Yes	644 71.3%	399 53.7%	1043 63.4%	273 37.2%	504 54.7%	777 47%
	No	259 28.7%	344 46.3%	603 36.6%	460 62.8%	417 45.3%	877 53%
Total		903 100%	743 100%	1646 100%	733 100%	921 100%	1654 100%

Of 1,646 refugee respondents, 424 (25.8% (95% CI: 23.7–27.8%) had been tested for HIV at least once compared to only 230 (13.9% (95% CI: 12.2%–15.5%) of the host nationals. However, HIV testing differed by gender, age group and residential status. Of 1020 refugees aged 15–24 years, 20.2% (95% CI: 17.7–22.6%) had once in their life been tested for HIV, while among the 627 refugees aged 25–49 some 34.8% (95% CI: 31–38.5%) had been tested for HIV in their life. The likelihood of 25 to 49-year-old refugees having been tested for HIV was 1.72 times more than 15 to 24-year-old refugees, suggesting that the 25 to 49-year-olds had better access to VCT services.

Table 24: Have been tested for HIV by gender and residential status 15–24 year age group

Variable		Camp			Surrounding Community		
		Male	Female	Total	Male	Female	Total
Have been tested for HIV?	Yes	111 20.8%	95 19.5%	206 20.2%	21 5.5%	105 20.1%	126 13.9%
	No	423 79.2%	391 80.5%	814 79.8%	360 94.5%	417 79.1%	777 86%
	Total	**534 100%**	**486 100%**	**1020 100%**	**381 100%**	**522 100%**	**903 100%**

By gender, of the 522 surrounding host women surveyed aged 15–24 years, 105 (20.1% (95% CI: 16.6–23.5%) had been tested for HIV. In contrast, of the 381 local men aged 15–24 years only 21 (5.5% (95% CI: 3.2–7.7%) had ever been tested for HIV. The likelihood of a 15 to 24-year-old local woman being screened for HIV was 3.65 times more than her male counterpart, suggesting that local women had preferential access to HIV services. This was attributed to HIV testing services for the prevention of mother to child transmission (PMTCT).

However, amongst the refugee population, gender was not associated with HIV testing. Of the 486 refugee women aged 15–24 years 19.5% (95% CI: 16–23%) had been tested for HIV, while of 534 refugee men of the same age group 20.8 (95% CI: 17.3–24.2%) had been tested for HIV. The likelihood of a refugee male being tested for HIV was very similar to that of a refugee woman in the same age group. This was attributed to the open-door policy of VCT services, promotion of couple testing in both the VCT and PMTCT programmes, as well as promotion of disclosure of HIV status to a trusted or loved family member.

Table 25: Have been tested for HIV by gender and residential status 25–49 age group

Variable		Camp			Surrounding host		
		Male	Female	Total	Male	Female	Total
Have been tested for HIV	Yes	**128 34.9%**	**90 33.3%**	**218 34.8%**	**32 9%**	**72 18%**	**104 13.8%**
	No	**239 65.1%**	**170 66.6%**	**409 65.2%**	**320 91%**	**327 82%**	**647 86.2%**
	Total	**367 100%**	**260 100%**	**627 100%**	**352 100%**	**399 100%**	**751 100%**

There was no difference in the number refugee or local women in the same age group having been tested for HIV. However, among the male respondents from both groups, those in the 25–49 age group were twice as likely to have been tested for HIV then those in the 15–24 year age group.

Table 26 below shows that among refugee respondents aged 15–24 years 15.3% (95% CI: 13.1–17.4% n=1020) had been tested for HIV in the 12 months preceding the survey. The proportion of young men and women tested was the same suggesting that gender was not influencing access to VCT services in the camp. However, among the surrounding host population, 10.3% (95% CI: 8.3–12.3% n=903) had been tested for HIV in the 12 months preceding the survey. Local women were 3.2 times more likely than their male counterparts to have had an HIV test in the 12 months preceding the survey.

Table 26: HIV tests in 15–24 age group in 12 months preceding survey

Variable		Camp			Local nationals		
Tested in 12 months preceding survery		**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
	Yes	81 15.2%	75 16.4%	156 15.3%	17 4.5%	76 14.6%	93 10.3%
	No	453 84.8%	411 83.6%	864 84.7%	364 95.5%	466 84.4%	893 89.3
	Total	**534 100%**	**486 100%**	**1020 100%**	**381 100%**	**522 100%**	**903 100%**

Table 27 below shows that of 152 refugees in 25–49 age bracket 24.4% (95% CI: 21%–27.7% n=626) had been tested for HIV in the 12 months preceding the survey, compared to 9.2% (95% CI: 7.1%–11.2% n=751) of surrounding host nationals of the same age group. Refugee men aged 25–49 years were 1.8 times more likely to be tested for HIV in the last 12 months preceding the survey than young men aged 15–24 in the same community. Among local national women, 15-49 years old were two times more likely to have been tested for HIV in the last 12 months than local men of the same age group.

Table 27: HIV tests in the 25–49 age group in 12 months preceding survey

Variable		Camp			Local nationals		
Tested in the last 12 months		**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
	Yes	100 27.5%	52 20.0%	152 24.4%	23 6.5%	46 11.5%	69 9.2%
	No	266 62.5%	508 80%	474 75.6%	329 94.5%	353 88.5%	682 91.8%
	Total	**366 100%**	**260 100%**	**626 100%**	**352 100%**	**399 100%**	**751 100%**

Among those who had tested for HIV, 100% regardless of sex and age, had received their HIV results. This was attributed to the rapid HIV screening and immediate disclosure of results. Those who had never tested for HIV were asked whether they would be willing to be tested in the future, the vast majority confirmed they would.

Table 28: BASELINE BEHAVIOURAL SURVEY INDICATORS

Indicator	Refugee		Local hosts	
	Male	**Female**	**Male**	**Female**
No formal education	10.2%	14.7%	28.9%	44.3%
95% Confidence interval	*8.7-11.7%*	*12.9-16.4%*	*26.7-31.0%*	*41.9-46.7%*
Primary education	28.5%	23.7%	10.8%	8.0%
95% Confidence interval	*26.3-30.6%*	*21.6-25.7%*	*9.3-12.3%*	*6.7-9.3%*
Median age of marriage in years: 15-24 age group	18.2	16.7	19.7	17.6
Median age at first sexual debut: 15-24 age group	16	15	16	17
Unmarried and never had sex: 15-19 age group	55.7%	67.2%	54.1%	75.3%
95% Confidence interval	*50.5-61.2%*	*61.8-72.6%*	*47.4-60.7%*	*69.7-80.9%*
Condom use with a regular partner during last sexual intercourse: 15-24 age group	12.5%	6.0%	2.6%	6.6%
95% Confidence interval	*1.0-23.9%*	*1.5-10.5%*	*-2.4-7.6%*	*3.1-10.0%*
Mean number of regular partners: 15-24 age group	2.2	0.9	1.0	5.8
Condom use with a casual partner; 15-24 age group	35.5%	41.5%	29.5%	41.6%
95% Confidence interval	*29.1-41.8%*	*34.3-50.9%*	*22.3-36.6%*	*30.2- 52.9%*
Ever had a transactional partner: 15-24 age group	1.3%	2.3%	3.4%	3.3%
95% Confidence interval	*0.35-2.2%*	*0.9-3.6%*	*1.5-5.2%*	*1.7-4.8%*
Male circumcision and FGM	51.3%	29.9%	5.5%	0.3%
95% Confidence interval	*48-54.5%*	*26.6-33.1%*	*3.8-7.1%*	*-0.05-0.6%*
Male circumcision and FGM among Somali refugee	97.2%	95%	-	-
95% Confidence interval	*95.1-99.2%*	*92.1-97.5%*	-	-
Ever forced to have sex: 15-49 age group	1.4%	5.5%	1.7%	10.7%
95% Confidence interval	*0.6-2.1%*	*3.8-7.1%*	*0.7-2.6%*	8.6-12.8%
Forced sex: 15-24 age group	1.3%	2.1%	0.8%	9.6%
95% Confidence interval	*0.3-2.2%*	*0.8-3.3%*	*-0.08-1.7%*	*6.9-12.2%*
Comprehensive knowledge: 15-24 age group	56.6%	32.3%	23.9%	18.3%
95% Confidence interval	*52.4-60.7%*	*28.1-36.4%*	*19.6-28.1%*	*11.2-17.1%*
Injecting drugs use –ever: 15-49 age group	0.1%	0%	4%	0%
95% Confidence interval	*-0.1-0.3%*	*0%*	*2.7-5.2%*	*0%*
Men who have sex with men	0%	-	0%	-
Ever tested for HIV: 15-24 age group	20.8%	19.5%	5.5%	20.1%
95% Confidence interval	*17.3-24.2%*	*16-23%*	*3.2-7.7%*	*16.6-23.5%*
Tested for HIV in last 12 months: 15-24 age group	15.2%	16.4%	4.5%	14.6%
95% Confidence interval	*12.1-18.2%*	*13.1-19.6%*	*2.4-6.5%*	*11.5-17.6%*

4.0 Discussion and Recommendations

This was the first BSS to target refugees as well as the surrounding host population since the KRC was established in 1992. Unlike most refugee situations, where women and children form the bulk of the population, KRC is exceptional in that it has more men than women. UNHCR's card validation exercise in 2004 revealed that the overall male to female ratio was 1.8:1 and among the youth aged 15–24 years the ratio was 3:1. Results from this BSS showed that the overall ratio of male to female respondents was 1.2:1 but, among 20–24 and 25–29 age groups the ratio was 1.4:1 and 1.9:1 respectively. The high proportion of males was first noticed when the camp was established and was prominently highlighted by the arrival 10,000 boys and girls in 1992 – referred to as "the lost boys of Sudan[4]". However, educational and vocational training opportunities at KRC and the fear of being drafted into the armies of warring parties in Sudan, are both thought to be pull factors for young men in recent years.

Accurate and reliable data about the surrounding host population was not readily accessible. However, this BSS reveals the overall ratio of males to females was 0.8:1 within the surrounding host population and the ratio was 0.5:1 and 0.6:1 among 30–34 and 35–40 age groups respectively. The local inhabitants of Kakuma are pastoralists who only recently established manyattas (homesteads) around KRC, having been attracted by social services and job opportunities, following persistent drought in their traditional grazing grounds. The low proportion of men in the surrounding host community was attributed to the search for pastures which obliged men to move from place to place with their animals, leaving women and children behind in the manyattas.

Mobility often creates physical and socio-cultural separation between a mobile person, his family and his community. Moreover, the moral codes and norms that govern a person's conduct may be undermined when he is away from home. The refugee and surrounding host population were transient; only 46% (95% CI: 43.8–48.9% n= 1646) of respondents had been living in KRC for more than 5 years, 42% (95% CI: 37.5–44.6% n=1646) had been relocated from Dadaab refugee camps and 12% (95% CI: 10.6–13.7% n=1646) were newly arrived. In contrast, among the host nationals 49.6% (95% CI: 47.2–51.9% n=1654) had always lived in Kakuma, 15% (95% CI: 13.3–16.7%, n= 1654) had been residents for between 1–5 years and 11.5% (95% CI: 9.9–13.0% n= 1654) had been in Kakuma for less than 12 months. In addition, 339 (20.6%) refugees had been away from home for more than four weeks in the last 12 months compared to 775 (46.9%) host nationals who had been away for more than four weeks in the last 12 months.

The interaction between the local population and refugees was significant, 85.6% of the local host respondents, regardless of gender, visited the camp on a regular basis, while 25% of refugee respondents visited the surrounding population. For refugees the visits were believed

[4] http://www.coping.org/wordauthors/lostboys /history.htm: The "lost boys of Sudan". Note: Fleeing violence and bloodshed of Sudan's internal conflict some 33,000 Sudanese boys and girls walked hundreds of miles in search of peace. Emaciated and dehydrated only 10,000 survived the journey – arriving in Kakuma Refugee Camp in 1992. The majority were 8-18 years old.

to have been for recreational and work related reasons, while for the surrounding population it was thought that the search for health care services, water, etc. had brought them to the refugee camp.

This survey revealed that refugees had better access to education, only 411 (25% (95% CI: 22.9–27.0% n=1646)) refugee respondents had no education compared with 1211 (73.2% (95% CI: 71.0%–75.3% n=1654) of local host respondents. Of the total refugee respondents 51.6% (95% CI: 49.1–54.0% n= 1646) had primary education while only 18.8% (95% CI: 16.9–20.7% n= 1654) of the local respondents had such. Until 2002, access to primary education in Kenya was limited by school fees especially among the drought stricken pastoralists in the Kakuma area. On the other hand, humanitarian organisations in KRC provided free education and encouraged enrolment through primary school feeding programmes. In the refugee group, 10.2% of male and 14.5% female respondents aged 15-24 year had no education while 28.5% of refugee male and 23.7% of female respondents aged 25-49 had primary education. The proportion of refugee men and women with no education or primary education was the same among refugees, suggesting gender did not influence access to lower levels of education. However, with regard to secondary school and university education refugee men were two times more likely to have had higher education than refugee women. Local men were 4.8 and 5.2 times more likely to have had a primary and secondary school education than local women.

The mean age at first marriage among 15 to 24-year-old male refugees was 18.2 years while for females in that age group it was 16.7 years, ranging from 11 to 24 years. On the other hand, the mean age at first marriage for 15 to 24-year-old males from the surrounding host population was 19.7 years while for girls it was 17.6 years, ranging from 11 to 23 years. It was established that girls who married before the age of 18 faced a greater risk of HIV infection. Marriage greatly raised exposure via unprotected sex, which was often with an older partner who by virtue of his age had an elevated risk of being HIV-positive[16]. The KRC HIV/AIDS taskforce should actively discourage early marriage and promote girls education. UNHCR and IPs should encourage adolescent girls to continue schooling and provide incentives such as clothing, body lotions, soap, sanitary napkins, etc. In addition school conditions should be improved by providing boarding facilities and separate toilet facilities. UNHCR and IPs should seek dialogue with opinion leaders and sensitize the community about the dangers of early marriage.

Young people between the ages of 15–24 are at the crossroads of HIV infection and control – globally and account for half of all new HIV cases, therefore, they represent the greatest hope for turning the tide against HIV. Delaying the first sexual experience is of key importance in the prevention of sexually transmitted infections (STIs) such as HIV among adolescents. In this survey 59.3% (95% CI: 54–64.5% n=329) and 54.0% (95% CI: 48.6–59.4% n=324) of adolescent (15–19) refugee girls and boys, respectively, had not been initiated into an active sexual life. Similarly, over half of adolescent girls and boys from the local host population had never had sex. Kenya is aggressively promoting sexual abstinence, but the refugee

[16] Bruce, Judith and Shelly Clark: 2004. "The implications of early marriages for HIV/AIDS policy," brief based on background paper prepared for the WHO/UNFPA/Population Council Technical Consultation on Married Adolescents. New York; Population Council.

programme lags behind in the adoption the national initiatives and in their application in the refugee context. “Tume Chill” (we have frozen) a popular national abstinence slogan had not yet been promoted in KRC. Community service NGOs should develop culturally sensitive abstinence messages and where appropriate adopt and modify national initiatives and apply them to the refugee context.

In this twin survey the median age of the first sexual experience among 15 to 24-year-old refugees was 16 for males and 15 for females, ranging from 7 to 23 years for males and 10 to 24 years for females. In the surrounding population the median age for the first sexual experience for males aged 15–24 was 16 years and for females it was 17 years. It ranged from 8 to 23 years for males and 10 to 24 years for females. Over 45 quantitative studies in sub-Saharan Africa on age differences between females 15–19 years and their sexual partners show that male partners are often six or more years older.[12] As knowledge is the first line of defence for young people, the refugee HIV prevention programmes should be tailored to reach youth in and outside of schools. Equipping youths with negotiation skills and training in life skills is essential. In addition, community based programmes need to target men in an effort to change prevailing norms and beliefs that could be increasing the risk of HIV transmission.

At 20–24 years of age approximately three quarters of all individuals surveyed had been initiated into an active sex life. Most young people had become sexually active in their teens, many before their 15th birthday.[17] Studies show that adolescents who begin sexual activity early are likely to have more sex partners and therefore have an elevated risk of exposure to HIV. [2]

Sexually active respondents were asked whether they had had a regular sex partner, and 42.6% reported that they had in the previous 12 months. The mean number of regular partners in the previous 12 months among refugee and local females in the 15–24 age group was 0.9 and 5.8 respectively. While among refugee males and host national males in 15-24 age group, the mean number of partners was 2.2 and 1.0 respectively. The use of a condom during the last sexual encounter with a regular partner was exceedingly low: 7.2% among refugees and 6% among host nationals aged 15–24 years. In the 25–49 year age group, condom use with a regular partner was also low: 6.3% (95% CI: 3.9–8.7% n=394) among refugees and 1.8% (95% CI: 0.7–2.8% n=623) among host nationals.

Those who had unprotected sex with a regular partner during the last sexual act were asked why a condom was not used. Over 70% of male refugees responded that they had not had protected sex because they trusted their partners, a third of refugee women did not know what a condom was, and another third disliked condoms. Almost 50% of host national women did not know what a condom was. Condom use in marriage or with a regular sex partner was associated with distrust and infidelity rather than concern for the partner’s health in many settings including refugee camps. Given, the high number of regular partners and the

[17] http/www.unaids.org/bangkok2004/GAR2004_html/GAR2004_07.en.htm: Focus. HIV and young people: The threats for today’s youth

infrequent use of condoms, young people face an exceedingly high risk of exposure to HIV. Community service organizations should hold focus group discussions with young people to gather their views about condom use in a regular relationship and establish culturally sensitive and youth friendly interventions.

Of the sexually active respondents between 15–24 years of age 352 (34.5%) refugees and 228 (25.3%) host nationals had had a casual sex partner(s) in the previous 12 months. Condom use with a casual partner among 15–24 year olds ranged from 29.5% (95% CI: 22.3–36.6% n=156) among local men to 41.5% (95% CI: 30.2– 52.9% n=72) among refugee women. In the 25–49 age group, condom use with a casual partner ranged from 14.8% (95% CI: 4.6%–24.9% n=47) among refugee women to 42.6% (95% CI: 34.3–50.9% n=136) among refugee men. The low use of condoms during high-risk sexual exposure was noted among individuals under the influence of alcohol, ranging from 14.1% among host nationals to 32.1% among refugees. The main reasons advanced for not using a condom was: trust in his/her partner, dislike of condoms, did not know what a condom was and condoms were not accessible. Condom outlets for the local population were limited, in addition approximately 15% and 25% of male and female local nationals had not heard about condoms. NGOs working with refugee communities and local host populations need to intensify promotion of condoms, undertake focus group discussions to learn about misconceptions and myths associated with condoms and come up with strategies to dispel them, increase condom distribution outlets especially through peer educators.

Violent or forced sex increases the risk of HIV transmission because among other factors forced penetration commonly causes abrasions and cuts that allow the virus to more easily cross genital mucosa. Of the refugee respondents 3.3% (95% CI: 2.4–4.1% n=1646) had been forced to have sex, of these 37 women and 17 men. Some 6.1% (95% CI: 4.9–7.2% n=1654) of host respondents had been forced to have sex and of these 6 were men and 95 were women. Sexual violence is often directed against women and in this survey 83% of the victims were women. Some 5.5% (95% CI: 3.8–7.1% n=702) of refugee women compared to 10.7% (CI: 8.6%–12.8% n=832) of local host women had been forced to have sex, suggesting that women from the local host community were twice as likely to have been forced to have sex. Unless forced sex is associated with violence, it is often not reported to the local authority. Those cases that had come to the attention of community leaders were often settled by the perpetrator marrying the survivor or paying compensation to the family. Once traditionally settled and owing to fear of stigma, victims may have underreported the incidents forced sex.

For victims of forced sex in the refugee community, the main perpetrators were military officers who accounted for 72.5% of incidents, while other refugees accounted for 15.7%. The main perpetrators in the host community were local men who accounted for 69.6% while 23.6% of the local women had been raped by refugees. No victim reported a humanitarian worker as the perpetrator.

Only 2.5% (95% CI: 1.5–3.4% n=1113) of refugees and 15.9% (95% CI: 13.9–17.8% n=1278) of local hosts had had sex while under the influence of alcohol. Male refugees were 3.1 times more likely to have engaged in sexual intercourse after consuming alcohol. Among the surrounding host nationals the proportion of men and women who had engaged in sex

under the influence of alcohol was almost the same. Condom use during the last sexual intercourse while under the influence of alcohol was low: 32% among refugees and 14.1% among local hosts. The consumption of alcohol was a major problem in KRC and within the local population

Nine percent (95% CI: 7.6–10.4% n=1654) and 2.4% (95% CI: 1.6–3.1% n=1646) of local hosts and refugees had reportedly taken drugs, and the vast majority of those who had used drugs were men: 139 (19% (95% CI: 16.1–21.8% n=733)) men from the surrounding host community and 36 (4% (95% CI: 2.7–5.2% n=903) refugee men. The most frequently reported use of drugs was khat - a locally produced herb that is non-addictive and acts as a mild stimulant. The sale and consumption of khat is legal in Kenya.

The 189 respondents reported to have used drugs were asked whether they had ever shared a syringe to inject drugs. Thirty one (1.9% (95% CI: 1.2– 2.5% n=1636)) men reported they had shared a syringe with another individual to inject drugs. Of these 30 (4% (95% CI: 2.5– 5.4% n=733) were local men and remaining one (0.11% (95% CI: -0.1%–32.5% n=903) was a man from the refugee community. This was a surprising and unexpected finding as Kakuma town is inhabited mainly by Turkana pastoralists, who for the last couple of years have been seriously effected by drought and famine. We recommend that local government administration and humanitarian agencies providing assistance investigate and ascertain whether intravenous drug use exists and if necessary establish culturally sensitive programmes to address the problem.

Ecologic epidemiologic studies have suggested that male circumcision is a major protective factor against heterosexual HIV transmission while female genital mutilation (FGM) is associated with increased risk. Male circumcision is not promoted in KRC, but some ethnic communities practice it as a rite of passage or a religious obligation. In contrast, FGM is actively discouraged. The findings show that circumcision is prevalent among refugees; 51.3% (95% CI: 48–54.5% n=903) of men and 29.9% (95% CI: 26.6%–33.1% n=743) of women had been circumcised, whereas in the host population male circumcision was 5.5% (95% CI: 3.8%–7.1% n=733) and FGM 0.3% (95% CI: -0.05%–0.6% n=921). Among Somali refugees over 95% (95% CI: 92.1–97.5% n=219) of the women had been circumcised. FGM is a cultural and religious ‘ritual’ and this is illustrated by the fact that all Somali and Ethiopian male respondents said they preferred a sexual partner who had been circumcised. The median age at which FGM was conducted was 8 years. Unlike Somalis, 74.5% of male and 80.5% of female Sudanese preferred an uncircumcised sex partner. Even if circumcision was safe and affordable 48.8% of male and 96.7% of female Sudanese respondents said they would be reluctant to undergo the operation. Given, the very high frequency of FGM among some Somalis, humanitarian relief agencies should discuss the issue with the refugee community and come up with a culturally sensitive and acceptable intervention.

Over 90% of respondents had heard of AIDS. Refugees had a fair understanding of HIV/AIDS as 45.1% (95% CI: 42–48.1% n=1020) of those aged 15–24 years identified the three prevention methods (abstinence, being faithful and condom use) and rejected the two misconceptions about HIV transmission (that you can get HIV by sharing food and that a healthy-looking person cannot be infected). In contrast, respondents from the surrounding

community aged 15–24 years did not have a comprehensive understanding of HIV/AIDS: only 18.3% (95% CI: 15.8–20.8% n=903) identified the three prevention methods and rejected the two misconceptions. In addition, 10% of respondents in both groups did not know any of the HIV prevention methods and accepted all misconceptions. The likelihood of a refugee a man identifying prevention methods and rejecting misconceptions in the 15-24 age group was 1.75 times greater than that of a refugee woman, suggesting that men had better access to information. Similarly, in the same age group in the host community males were 1.68 times more likely to identify prevention methods and reject two misconceptions than their female counterparts, suggesting once more that men had preferential access to information.

However, although refugees had a slightly higher level of knowledge than locals a large number of who could not identify prevention methods and accepted the misconceptions, indicating that there were significant knowledge gaps. It appears that women were not adequately reached by information, education and communication programmes. To address such information gaps in the Kakuma Refugee Camp, community based interventions should be revised accordingly and strengthened. In particular, emphasis should be placed on increasing activities to reach youths through youth centres, vocational training institutions and HIV programmes in schools. Women should be reached which HIV/AIDS information through the institutions they frequent such as reproductive health clinics, outpatient and paediatric units, supplementary feeding programmes, etc. In addition, women's groups, SGBV community response structures, traditional birth attendants, etc. should be sensitized and equipped with appropriate information to be shared with women. A special category of peer educators should be trained and assisted to reach women who are at home through a door-to-door community-based initiative.

Seeking treatment for sexually transmitted infections was limited, only 40–50% of refugees and male host national respondents sought treatment from a recognised health facility the last time they had a sexually transmitted infection. A fair proportion, 38% of refugees and 23% of locals sought treatment at the pharmacy. Community-based education programmes enabling beneficiaries to recognise STIs are essential and should be accompanied by information about treatment and recognised facilities.

Voluntary counselling and testing (VCT) was introduced in Kakuma Refugee Camp in June 2002 and in Kakuma Mission Hospital in January 2005. Knowledge about the availability of VCT services was not widespread, only 63.5% (95% CI: 61.1– 65.8% n=1646) of refugees knew where a person could be tested for HIV compared to 47% (95% CI: 44.6–49.4% n=1654) among the surrounding host community respondents. Refugee men were 1.3 times more likely to know about VCT services compared to refugee women.

Of the refugee respondents 25.8% (95% CI: 23.7–27.8%) had at one time been tested for HIV compared to only 13.9% (95% CI: 12.2–15.5%) host nationals. However, HIV testing differed by gender, age group and residential status.

Among refugees aged 15–24 years, 20.2% (95% CI: 17.7–22.6% n=534) had been tested at least once for HIV, while among refugee adults aged 25–49 years 34.8% (95% CI: 31–38.5%

n=627) had been tested for HIV. The likelihood of 25 to 49-year-old refugees having been tested for HIV was 1.72 times more than the younger age group under study, suggesting that youth had sub-optimal access to VCT services. These findings suggest that traditional health care based VCT services are not accessible to young people. Outreach services, stand alone VCT services in youth and vocational training centres should be explored.

The likelihood of a 15–24-year-old local woman being screened for HIV was 3.65 times more than a local male from the same age group, suggesting that local women had preferential access to HIV services. This was attributed to the HIV testing in the prevention of mother to child transmission (PMTCT) at the refugee camp which is accessible to local women.

5.0 APPENDICES

Appendix I: Sample Size Equation

$$n = D\frac{\left[Z_{1-\alpha}\sqrt{2\bar{P}(1-\bar{P})} + Z_{1-\beta}\sqrt{P_1(1-P_1)+P_2(1-P_2)}\right]^2}{(P_2 - P_1)^2}$$

D = Design Effect

P1 = Estimated proportion from first survey at time 1

P2 = Estimated proportion from follow - up survey at time 2

$$P = \frac{(P1+P2)}{2}$$

$Z_{1-\alpha} = z-$ score corresponding to desired level of significance

$Z_{1-\beta} = z-$ score corresponding to desired level of power

Source : FHI Behavioral Surveillance Surveys Manual : Guidelines for Repeated Behavioral Surveys in Populations at Risk for HIV, 2000, pp 45 - 48

Appendix II Sample Size Calculations

Table 29: Sample size estimate (Based on indicators' prevalence reported by KAP survey 2001)

	Indicators	Percent having attribute	Current	Target	
	Description	Proportion of Total Population	Proportion (p1)	Proportion Time 2 (p2)	n
1.	Percent engaging in higher Risk Sex	1	0.6	0.5	387
	sample sizes needed adjusted for prevalence in population	387			
	95% CI +/_	4.88%			
2.	Percent engaging in higher Risk Sex **Males ONLY**	0.5	0.6	0.5	387
	sample sizes needed adjusted for prevalence in population	774			
	95% CI +/_	4.88%			
3.	Percent engaging in higher Risk Sex **YOUNG Males ONLY**	0.25	0.6	0.5	387
	sample sizes needed adjusted for prevalence in population	1548			
	95% CI +/_	4.88%			
4.	Percent engaging in higher Risk Sex **Somalis ONLY**	0.204	0.6	0.5	387
	sample sizes needed adjusted for prevalence in population	1897			
	95% CI +/_	4.88%			
5.	Condom Use at last Higher Risk Sex	0.4	0.4	0.5	387
	sample sizes needed adjusted for prevalence in population	967			
	95% CI +/_	4.88%			
6.	Condom Use at last Higher Risk Sex **MALES ONLY**	0.3	0.4	0.5	387
	sample sizes needed adjusted for prevalence in population	1934			
	95% CI +/_	3.99%			
7.	Sought treatment at workplace clinic or private hospital	0.106	0.33	0.48	167
	sample sizes needed adjusted for prevalence in population	1573			
	95% CI +/_	7.14%			

Appendix III: STIs among refugees and locals in Kakuma, Kenya 2004

Table 30: STI prevalence among refugees 2004

	Jan	Feb	Mar	Ap	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Uds	140	155	199	226	68	75	82	83	80	56	67	56	1287
VDs	256	231	309	376	157	357	229	210	202	148	156	180	2811
Gus	31	47	43	41	32	29	35	47	37	23	26	27	418
PID	69	105	168	66	54	84	83	68	48	40	69	67	921
OTHERS	0	0	8		95	58	46	37	6	6	9	6	271
TOTAL	**496**	**538**	**727**	**709**	**406**	**603**	**475**	**445**	**373**	**273**	**327**	**336**	**5708**

Table 31: STI cases among locals enrolled in IRC program 2004

KENYANS 2004	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
UDs	19	22	27	16	12	12	15	14	4	12	7	12	172
VDs	16	26	15	12	16	17	14	9	8	10	15	8	166
GUS	7	9	4	9	7	2	4	9	5	2	1	8	67
PID	0	7	3	6	7	0	2	2	2	5	4	1	39
OTHERS	0	0	0	0	3	4	0	0	0	0	2	3	12
TOTAL	**42**	**64**	**49**	**43**	**45**	**35**	**35**	**34**	**19**	**29**	**29**	**32**	**456**

Appendix IV: Role and responsibilities of the staff in the survey

The supervisor:

It is the responsibility of the supervisor to introduce himself and his staff to community leaders of the location they have to visit.

- As a team leader, the supervisor has to inform community leaders and household heads about the survey.
- Provide his team with questionnaires and logistic to facilitate the work

The supervisors had also technical responsibilities such as:

- Select the households to be surveyed following the methodology they were teach on,
- Assign each member of his team a household to be interviewed,
- Make sure that the interviews were conducted acceptably, (confidentiality, etc.)
- Ensure the quality of the data collected in each questionnaire (accuracy and adequacy)
- Monitor the field work in progress and report all problems to the Consultant
- Participate to weekly evaluations conducted by the Consultant

Investigators:

- The investigator must work under the supervision of his team leader
- Follow the instructions given by the supervisors
- Make sure that only eligible people are interviewed
- Request for consent from respondents before conducting the interview
- collect data from respondents and fill out the questionnaires appropriately
- review each questionnaire after interview before he/she exits the household
- report all absences, refusal and missing respondents to the supervisor
- participate to weekly evaluations conducted by the Consultant

Controllers:

Unlike the supervisor, the controllers stay at the office. Their responsibilities aimed at:

- Thoroughly reviewing all questionnaires to ensure that all forms were completed and filled out correctly
- Checking the consistency of the data recorded in the questionnaires
- Giving daily feedbacks to the supervisors and team members
- They are the intermediate level between the field team and the data entry staff

Appendix V: Additional data tables

Table 32: primary reasons for visiting the neighbouring community

Variables	Refugees		Surrounding population	
	Male	Female	Male	Female
1_Shopping market	87 38.7	148 81.3	470 73.8	644 82.8
2_Health care	16 7.1	62 34.1	65 10.2	304 39.1
3_School	23 10.2	18 9.9	11 1.7	18 2.3
4_Job	41 18.2	6 3.3	86 13.5	230 29.6
5_Entertainment	92 40.9	7 3.8	213 33.4	24 3.1
6_Food	9 4.0	9 4.9	152 23.9	214 27.5
7_Visit relative/friend	42 18.7	10 5.5	117 18.4	30 3.9
8_Other	6 2.7	6 3.3	3 0.5	4 0.5

Table 33: Has had sexual intercourse, by age group and gender

Have you ever had sexual intercourse? * Sex of the respondent * Age group2 Crosstabulation

Age group			Camp			Surr Area		
			Male	Female	Total	Male	Female	Total
15-19	Have you ever had sexual intercourse?	Yes	149	134	283	103	116	219
			46.0%	40.7%	43.3%	46.8%	40.4%	43.2%
		No	175	195	370	117	171	288
			54.0%	59.3%	56.7%	53.2%	59.6%	56.8%
	Total		324	329	653	220	287	507
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
20-24	Have you ever had sexual intercourse?	Yes	131	135	266	128	200	328
			61.5%	87.7%	72.5%	79.5%	85.1%	82.8%
		No	82	19	101	33	35	68
			38.5%	12.3%	27.5%	20.5%	14.9%	17.2%
	Total		213	154	367	161	235	396
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 34: Has never had sex: Significance test between refugees and hosts

Age group		Never had sex
15-19	Mann-Whitney U	165298.500
	Wilcoxon W	378829.500
	Z	-.049
	Asymp. Sig. (2-tailed)	.961
20-24	Mann-Whitney U	65146.000
	Wilcoxon W	143752.000
	Z	-3.437
	Asymp. Sig. (2-tailed)	.001

a. Grouping variable: camp/surrounding area

Table 35: Unmarried with sex partner: Significance test between refugees and hosts

Age group	Sex of respondent		Unmarried with a sex partner
15-19	Male	Mann-Whitney U	35344.000
		Wilcoxon W	59654.000
		Z	-.190
		Asymp. Sig. (2-tailed)	.849
	Female	Mann-Whitney U	47064.500
		Wilcoxon W	101349.500
		Z	-.078
		Asymp. Sig. (2-tailed)	.937
20-24	Male	Mann-Whitney U	14060.000
		Wilcoxon W	27101.000
		Z	-3.730
		Asymp. Sig. (2-tailed)	.000
	Female	Mann-Whitney U	17632.500
		Wilcoxon W	29567.500
		Z	-.712
		Asymp. Sig. (2-tailed)	.467

a. Grouping variable: camp/surrounding area

Table 36: Unmarried with sex partner: Significance test between males and females

Camp/Surr	age group		Unmarried with a sex partner
Camp	15-19	Mann-Whitney U	50495.500
		Wilcoxon W	103145.500
		Z	-1.355
		Asymp. Sig. (2-tailed)	.176
	20-24	Mann-Whitney U	12110.500
		Wilcoxon W	24045.500
		Z	-5.530
		Asymp. Sig. (2-tailed)	.000
Surrounding area	15-19	Mann-Whitney U	29549.500
		Wilcoxon W	53859.500
		Z	-1.440
		Asymp. Sig. (2-tailed)	.150
	20-24	Mann-Whitney U	17857.500
		Wilcoxon W	55587.500
		Z	-1450
		Asymp. Sig. (2-tailed)	.147

a. Grouping variable: sex of the respondent

Table 37: Regular sex partner: comparison between gender

Chi-Square Tests

CAMP/SURROUDING AREA	Age group1		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Camp	15-24 years	Pearson Chi-Square	46.991[b]	1	.000		
		Continuity Correction [a]	45.775	1	.000		
		Likelihood Ratio	48.224	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	46.944	1	.000		
		N of Valid Cases	1020				
	25-49 years	Pearson Chi-Square	29.660[c]	1	.000		
		Continuity Correction [a]	28.748	1	.000		
		Likelihood Ratio	30.475	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	29.612	1	.000		
		N of Valid Cases	626				
Surr Area	15-24 years	Pearson Chi-Square	84.431[d]	1	.000		
		Continuity Correction [a]	83.029	1	.000		
		Likelihood Ratio	91.661	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	84.337	1	.000		
		N of Valid Cases	903				
	25-49 years	Pearson Chi-Square	.000[e]	1	.991		
		Continuity Correction [a]	.000	1	1.000		
		Likelihood Ratio	.000	1	.991		
		Fisher's Exact Test				1.000	.535
		Linear-by-Linear Association	.000	1	.991		
		N of Valid Cases	751				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 69.61.

c. 0 cells (.0%) have expected count less than 5. The minimum expected count is 94.28.

d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 100.00.

e. 0 cells (.0%) have expected count less than 5. The minimum expected count is 59.06.

Table 38: Regular sex partner: comparison between refugees and local

Chi-Square Tests

Sex of the respondent	Age group1		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Male	15-24 years	Pearson Chi-Square	2.968[b]	1	.085		
		Continuity Correction[a]	2.570	1	.109		
		Likelihood Ratio	2.927	1	.087		
		Fisher's Exact Test				.095	.055
		Linear-by-Linear Association	2.964	1	.085		
		N of Valid Cases	918				
	25-49 years	Pearson Chi-Square	67.047[c]	1	.000		
		Continuity Correction[a]	65.734	1	.000		
		Likelihood Ratio	69.185	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	66.953	1	.000		
		N of Valid Cases	718				
Female	15-24 years	Pearson Chi-Square	28.071[d]	1	.000		
		Continuity Correction[a]	27.348	1	.000		
		Likelihood Ratio	28.413	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	28.043	1	.000		
		N of Valid Cases	1005				
	25-49 years	Pearson Chi-Square	4.976[e]	1	.026		
		Continuity Correction[a]	4.538	1	.033		
		Likelihood Ratio	4.904	1	.027		
		Fisher's Exact Test				.027	.017
		Linear-by-Linear Association	4.968	1	.026		
		N of Valid Cases	659				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 32.79.

c. 0 cells (.0%) have expected count less than 5. The minimum expected count is 109.82.

d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 146.58.

e. 0 cells (.0%) have expected count less than 5. The minimum expected count is 50.90.

Table 39: Condom use with regular partner: last sex

COndom use with regular partner (last sex)

Age group1			Camp			Surr Area		
			Male	Female	Total	Male	Female	Total
15-24 years	Was a condom used	Yes	4	6	10	1	13	14
			12.5%	5.7%	7.2%	2.6%	6.7%	6.0%
		No	28	100	128	37	182	219
			87.5%	94.3%	92.8%	97.4%	93.3%	94.0%
	Total		32	106	138	38	195	233
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
25-49 years	Was a condom used	Yes	22	3	25	6	5	11
			11.2%	1.5%	6.3%	2.0%	1.5%	1.8%
		No	175	194	369	287	325	612
			88.8%	98.5%	93.7%	98.0%	98.5%	98.2%
	Total		197	197	394	293	330	623
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 40: Casual sex partner: comparison male and female, within age groups

Chi-Square tests

CAMP/SURROUDING AREA	Age group1		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Camp	15-24 years	Pearson Chi-Square	19.330[b]	1	.000		
		Continuity Correction[a]	18.753	1	.000		
		Likelihood Ratio	19.484	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	19.311	1	.000		
		N of Valid Cases	1020				
	25-49 years	Pearson Chi-Square	26.755[c]	1	.000		
		Continuity Correction[a]	25.840	1	.000		
		Likelihood Ratio	27.793	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	26.712	1	.000		
		N of Valid Cases	626				
Surr Area	15-24 years	Pearson Chi-Square	86.028[d]	1	.000		
		Continuity Correction[a]	84.596	1	.000		
		Likelihood Ratio	86.036	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	85.933	1	.000		
		N of Valid Cases	903				
	25-49 years	Pearson Chi-Square	40.930[e]	1	.000		
		Continuity Correction[a]	39.559	1	.000		
		Likelihood Ratio	42.368	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	40.876	1	.000		
		N of Valid Cases	751				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 165.26.

c. 0 cells (.0%) have expected count less than 5. The minimum expected count is 76.01.

d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 96.20.

e. 0 cells (.0%) have expected count less than 5. The minimum expected count is 46.40.

Table 41: Casual partner: comparison between refugees and hosts

Chi-Square Tests

Sex of the respondent	Age group1		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Male	15-24 years	Pearson Chi-Square	.026[b]	1	.871		
		Continuity Correction[a]	.009	1	.925		
		Likelihood Ratio	.026	1	.871		
		Fisher's Exact Test				.892	.462
		Linear-by-Linear Association	.026	1	.871		
		N of Valid Cases	918				
	25-49 years	Pearson Chi-Square	20.898[c]	1	.000		
		Continuity Correction[a]	20.156	1	.000		
		Likelihood Ratio	21.130	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	20.869	1	.000		
		N of Valid Cases	718				
Female	15-24 years	Pearson Chi-Square	28.412[d]	1	.000		
		Continuity Correction[a]	27.582	1	.000		
		Likelihood Ratio	28.664	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	28.384	1	.000		
		N of Valid Cases	1005				
	25-49 years	Pearson Chi-Square	25.137[e]	1	.000		
		Continuity Correction[a]	23.857	1	.000		
		Likelihood Ratio	24.561	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	25.099	1	.000		
		N of Valid Cases	659				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 154.81.

c. 0 cells (.0%) have expected count less than 5. The minimum expected count is 103.93.

d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 98.04.

e. 0 cells (.0%) have expected count less than 5. The minimum expected count is 27.62.

Table 42: Had a casual sex partner in the previous 30 days

have had an occasional sex partner in the last 30 days?

		Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
have you ever had an occasional sex partner in the last 30 days?	Yes	272	168	440	107	54	161
		30.1%	22.6%	26.7%	14.6%	5.9%	9.7%
	No	631	575	1206	626	867	1493
		69.9%	77.4%	73.3%	85.4%	94.1%	90.3%
Total		903	743	1646	733	921	1654
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 43: Had a casual sex partner in the last 30 days (by site)

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	160.019[b]	1	.000		
Continuity Correction[a]	158.880	1	.000		
Likelihood Ratio	165.182	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	159.971	1	.000		
N of Valid Cases	3300				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 299.77.

Note: no disaggregating for this test because of insufficient power.

Table 44: Condom use with casual partner

Condom use during last sex with casual partner

			Camp			Surr Area		
Age group1			Male	Female	Total	Male	Female	Total
15-24 years	Was a condom used during the last time you had sex with the lastest non reg partner	Yes	77	56	133	46	30	76
			32.6%	29.8%	31.4%	23.7%	27.3%	25.0%
		No	159	132	291	148	80	228
			67.4%	70.2%	68.6%	76.3%	72.7%	75.0%
	Total		236	188	424	194	110	304
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
25-49 years	Was a condom used during the last time you had sex with the lastest non reg partner	Yes	58	7	65	19	5	24
			37.2%	10.1%	28.9%	14.3%	13.2%	14.0%
		No	98	62	160	114	33	147
			62.8%	89.9%	71.1%	85.7%	86.8%	86.0%
	Total		156	69	225	133	38	171
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 45: Test for significant difference

Chi-Square Tests

CAMP/SURROUDING AREA	Age group1		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Camp	15-24 years	Pearson Chi-Square	.392 [b]	1	.531		
		Continuity Correction[a]	.271	1	.603		
		Likelihood Ratio	.393	1	.531		
		Fisher's Exact Test				.598	.302
		Linear-by-Linear Association	.391	1	.532		
		N of Valid Cases	424				
	25-49 years	Pearson Chi-Square	17.020 [c]	1	.000		
		Continuity Correction[a]	15.730	1	.000		
		Likelihood Ratio	19.330	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	16.944	1	.000		
		N of Valid Cases	225				
Surr Area	15-24 years	Pearson Chi-Square	.475 [d]	1	.491		
		Continuity Correction[a]	.304	1	.581		
		Likelihood Ratio	.471	1	.492		
		Fisher's Exact Test				.494	.289
		Linear-by-Linear Association	.473	1	.491		
		N of Valid Cases	304				
	25-49 years	Pearson Chi-Square	.031 [e]	1	.860		
		Continuity Correction[a]	.000	1	1.000		
		Likelihood Ratio	.032	1	.859		
		Fisher's Exact Test				1.000	.549
		Linear-by-Linear Association	.031	1	.860		
		N of Valid Cases	171				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 58.97.

c. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.93.

d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 27.50.

e. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.33.

Table 46: Condom use with casual sex partner: Comparison between refugees and hosts

Chi-Square Tests

Sex of the respondent	Age group1		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Male	15-24 years	Pearson Chi-Square	4.144[b]	1	.042		
		Continuity Correction [a]	3.719	1	.054		
		Likelihood Ratio	4.183	1	.041		
		Fisher's Exact Test				.043	.027
		Linear-by-Linear Association	4.135	1	.042		
		N of Valid Cases	430				
	25-49 years	Pearson Chi-Square	19.252[c]	1	.000		
		Continuity Correction [a]	18.099	1	.000		
		Likelihood Ratio	20.075	1	.000		
		Fisher's Exact Test				.000	.000
		Linear-by-Linear Association	19.186	1	.000		
		N of Valid Cases	289				
Female	15-24 years	Pearson Chi-Square	.214[d]	1	.644		
		Continuity Correction [a]	.109	1	.742		
		Likelihood Ratio	.215	1	.643		
		Fisher's Exact Test				.692	.372
		Linear-by-Linear Association	.213	1	.644		
		N of Valid Cases	298				
	25-49 years	Pearson Chi-Square	.223[e]	1	.636		
		Continuity Correction [a]	.023	1	.879		
		Likelihood Ratio	.219	1	.640		
		Fisher's Exact Test				.751	.430
		Linear-by-Linear Association	.221	1	.638		
		N of Valid Cases	107				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 55.49.

c. 0 cells (.0%) have expected count less than 5. The minimum expected count is 35.44.

d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 31.74.

e. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.26.

Table 47: Primary reason why a condom was not used during sex with most recent casual partner

		Camp		Surr Area	
		Male	Female	Male	Female
Why a condom not used during last sex with non regular P?	(too far away)	84	26	149	19
		32.7	13.6	58.7	18.4
	(it's expensive)	3	4	11	
		1.2	2.1	4.3	
	(partner objected)	32	64	4	16
		12.5	33.5	1.6	15.5
	(Don't like them)	107	93	94	33
		41.6	48.7	37.0	32.0
	(used other contraceptive)	6	5	1	
		2.3	2.6	.4	
	(didn't think it was necessary)	64	44	26	19
		24.9	23.0	10.2	18.4
	(didn't think of it)	12	11	20	9
		4.7	5.8	7.9	8.7
	(don't know what condom is)	31	24	45	27
		12.1	12.6	17.7	26.2
	partner (unplanned sex)	1			
		.4			
	(other)	3	4	4	6
		1.2	2.1	1.6	5.8
	99_Don't know				

Table 48: Had transactional sex

		Camp			Surr Area		
Age group1		Male	Female	Total	Male	Female	Total
15-24 years	Have you ever had sex in exchange for money/ gift?	7	11	18	13	17	30
		1.3%	2.3%	1.8%	3.4%	3.3%	3.3%
25-49 years	Have you ever had sex in exchange for money/ gift?	23	9	32	19	6	25
		6.3%	3.5%	5.1%	5.4%	1.5%	3.3%

Table 49: Sex in exchange for money: Chi-Square Tests between age group

CAMP/SURROUDI	Sex of the responde		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Camp	Male	Pearson Chi-Square	7.138[b]	1	.008		
		Continuity Correction[a]	6.170	1	.013		
		Likelihood Ratio	7.572	1	.006		
		Fisher's Exact Test				.008	.006
		Linear-by-Linear Association	7.126	1	.008		
		N of Valid Cases	595				
	Female	Pearson Chi-Square	.079[c]	1	.779		
		Continuity Correction[a]	.003	1	.959		
		Likelihood Ratio	.079	1	.779		
		Fisher's Exact Test				.823	.480
		Linear-by-Linear Association	.078	1	.780		
		N of Valid Cases	518				
Surr Area	Male	Pearson Chi-Square	.000[d]	1	.989		
		Continuity Correction[a]	.000	1	1.000		
		Likelihood Ratio	.000	1	.989		
		Fisher's Exact Test				1.000	.572
		Linear-by-Linear Association	.000	1	.989		
		N of Valid Cases	567				
	Female	Pearson Chi-Square	8.360[e]	1	.004		
		Continuity Correction[a]	7.172	1	.007		
		Likelihood Ratio	8.494	1	.004		
		Fisher's Exact Test				.005	.004
		Linear-by-Linear Association	8.348	1	.004		
		N of Valid Cases	711				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.12.

d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.04.

e. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.22.

Table 50: Condom use during the last sexual intercourse with a transactional partner

	Age group1	Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
Was a condom used during the last time you had sex in exchange for money	15-24 years	3	6	9	3	8	11
		60.0%	66.7%	64.3%	37.5%	57.1%	50.0%
	25-49 years	10	5	15	1	2	3
		83.3%	55.6%	71.4%	8.3%	50.0%	18.8%

Table 51: Primary reasons why a condom not used with commercial partner

		Camp		Surr Area	
		Male	Female	Male	Female
Why a condom not used during last sex in exchange gor gift/m	(not available)			7	1
				46.7	20.0
	(Too far away)				
	(it's expensive)	1	1	1	
		25.0	14.3	6.7	
	(partner objected)	3	1	6	2
		75.0	14.3	40.0	40.0
	(don't like them)		3	1	
			42.9	6.7	
	(used other contraceptive)		1		1
			14.3		20.0
	(didn't think of using one)		1	3	1
			14.3	20.0	20.0
	(don't know what condom is)			3	
				20.0	
	(unplanned sex)			2	
				13.3	
	(other)				

Table 52: Had sex while under the influence of alcohol

Have had sex while under influence of alcohol

		Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
Have you ever had sex while you were under influence of alcohol	Yes	22	6	28	107	96	203
		3.7%	1.2%	2.5%	18.9%	13.5%	15.9%
	No	573	512	1085	460	615	1075
		96.3%	98.8%	97.5%	81.1%	86.5%	84.1%
Total		595	518	1113	567	711	1278
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 53: Condom use during the last sexual act under the influence of alcohol

Condom use at last sex while under influence of alcohol

		Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
Was a condom used during the last time you had sex after taken	Yes	8	1	9	23	6	29
		36.4%	16.7%	32.1%	21.5%	6.3%	14.3%
	No	14	5	19	84	90	174
		63.6%	83.3%	67.9%	78.5%	93.8%	85.7%
Total		22	6	28	107	96	203
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 54: Ever used drugs by gender and nationality

Have you ever taken drugs (ever)

		Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
Have you ever taken drugs (such as miraa, bangi, heroine, cr	Yes	36	4	40	139	10	149
		4.0%	.5%	2.4%	19.0%	1.1%	9.0%
	No	867	739	1606	594	911	1505
		96.0%	99.5%	97.6%	81.0%	98.9%	91.0%
Total		903	743	1646	733	921	1654
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 55: Ever shared a syringe other people to inject drugs

Have you ever shared syringe with other people/neighbours who consume drug

		Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
Have you ever shared syringe with other people/neighbours who consume drug	Yes	1		1	30		30
		2.9%		2.6%	21.6%		20.1%
	No	34	4	38	109	10	119
		97.1%	100.0%	97.4%	78.4%	100.0%	79.9%
Total		35	4	39	139	10	149
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 56: Male to male sex

Have had a male to male sex

		Camp		Surr Area	
		Male	Total	Male	Total
Have you ever had a male sexual partner?	No	895	895	723	723
		100.0%	100.0%	100.0%	100.0%
Total		895	895	723	723
		100.0%	100.0%	100.0%	100.0%

Table 57: Male and female (FGM) circumcision by gender and nationality

	What is your curre	Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
Some men and women have be circumcised, ha you been circ	Somali	245	208	453			
		98.0%	95.0%	96.6%			
	Sudanese	198	5	203			
		31.9%	1.0%	18.0%			
	Ethiopian	19	9	28			
		100.0%	75.0%	90.3%			
	Eritrean	2		2			
		100.0%		100.0%			
	Kenyan				40	3	43
					5.5%	.3%	2.6%

Table 58: HIV knowledge by gender and nationality

Have ever heard of HIV or a disease called AIDS?

Age group1			Camp			Surr Area		
			Male	Female	Total	Male	Female	Total
15-24 years	Have you ever heard of HIV or a disease called AIDS?	Yes	487	423	910	332	485	817
			90.7%	87.6%	89.2%	87.1%	92.9%	90.5%
		No	50	60	110	49	37	86
			9.3%	12.4%	10.8%	12.9%	7.1%	9.5%
	Total		537	483	1020	381	522	903
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
25-49 years	Have you ever heard of HIV or a disease called AIDS?	Yes	345	239	584	335	379	714
			94.3%	91.9%	93.3%	95.2%	95.0%	95.1%
		No	21	21	42	17	20	37
			5.7%	8.1%	6.7%	4.8%	5.0%	4.9%
	Total		366	260	626	352	399	751
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 58:

Chi-Square Tests between refugees and locals

Sex of the respondent		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Male	Pearson Chi-Square	407.218[b]	1	.000		
	Continuity Correction[a]	405.045	1	.000		
	Likelihood Ratio	466.383	1	.000		
	Fisher's Exact Test				.000	.000
	Linear-by-Linear Association	406.967	1	.000		
	N of Valid Cases	1622				
Female	Pearson Chi-Square	308.805[c]	1	.000		
	Continuity Correction[a]	306.275	1	.000		
	Likelihood Ratio	373.473	1	.000		
	Fisher's Exact Test				.000	.000
	Linear-by-Linear Association	308.619	1	.000		
	N of Valid Cases	1657				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 227.14.

c. 0 cells (.0%) have expected count less than 5. The minimum expected count is 100.21.

Table 60: Knowledge about HIV prevention methods

Know n prevention methods (composite of abstinence, be faithful and use condom)

Age group1			Camp			Surr Area		
			Male	Female	Total	Male	Female	Total
15-24 years	Know n prevention methods	0	51	79	130	84	97	181
			9.5%	16.4%	12.7%	22.0%	18.6%	20.0%
		Knows 1 prevention method	10	28	38	34	94	128
			1.9%	5.8%	3.7%	8.9%	18.0%	14.2%
		know 2 prevention methods	60	63	123	93	225	318
			11.2%	13.0%	12.1%	24.4%	43.1%	35.2%
		know 3 prevention methods	416	313	729	1[illegible]	[illegible]06	276
			77.5%	64.8%	71.5%	44.6%	20.3%	30.6%
	Total		537	483	1020	381	522	903
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
25-49 years	Know n prevention methods	0	21	22	43	55	75	130
			5.7%	8.5%	6.9%	15.6%	18.8%	17.3%
		Knows 1 prevention method	10	24	34	36	72	108
			2.7%	9.2%	5.4%	10.2%	18.0%	14.4%
		know 2 prevention methods	41	58	99	87	180	267
			11.2%	22.3%	15.8%	24.7%	45.1%	35.6%
		know 3 prevention methods	294	156	450	174	72	246
			80.3%	60.0%	71.9%	49.4%	18.0%	32.8%
	Total		366	260	626	352	399	751
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 61: Comprehensive knowledge on HIV by gender and nationality

Has a comprehensive knowledge toward HIV/ AIDS

Age group1			Camp			Surr Area		
			Male	Female	Total	Male	Female	Total
15-24 years	QHIVKNOW	Know 0 prevention method & accept all misconceptions	49	66	115	49	47	96
			9.1%	13.7%	11.3%	12.9%	9.0%	10.6%
		Know 3 and reject 2	304	156	460	91	74	165
			56.6%	32.3%	45.1%	23.9%	14.2%	18.3%
	Total		537	483	1020	381	522	903
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
25-49 years	QHIVKNOW	Know 0 prevention method & accept all misconceptions	21	22	43	19	33	52
			5.7%	8.5%	6.9%	5.4%	8.3%	6.9%
		Know 3 and reject 2	222	87	309	99	41	140
			60.7%	33.5%	49.4%	28.1%	10.3%	18.6%
	Total		366	260	626	352	399	751
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 62: Knowledge, Misconceptions and Attitudes

	Camp			Surrounding area		
	Male N = 537	Female N = 483	Total N = 1020	Male N = 381	Female N = 522	Total N = 903
Knowledge						
abstain from sex	467 87.0	343 71.0	810 79.4	252 66.1	365 69.9	617 68.3
Be faithful	474 88.3	396 82.0	870 85.3	282 74.0	358 68.6	640 70.9
Use condom	437 81.4	354 73.3	791 77.5	196 51.4	139 26.6	335 37.1
Sharing needles	474 88.3	408 84.5	882 86.5	304 79.8	458 87.7	762 84.4
MTCT	297 55.3	225 46.6	522 51.2	229 60.1	336 64.4	565 62.6
Misconception						
Share utensils	42 7.8	49 10.1	91 8.9	96 25.2	102 19.5	198 21.9
Health looking person is infected	162 30.2	241 49.9	403 39.5	123 32.3	183 35.1	306 33.9
Comprehensive knowledge on HIV *	304 56.6	156 32.3	460 45.1	91 23.9	74 14.2	165 18.3
Attitudes						
Family secret	301 56.1	205 42.4	506 49.6	25 6.6	74 14.2	99 11.0
Infected person & work	337 62.8	224 46.4	561 55.0	185 48.6	180 34.5	365 40.4
Household care for male relative	449 83.6	342 70.8	791 77.5	252 66.1	305 58.4	557 61.7
Household care for female relative	448 83.4	335 69.4	783 76.8	251 65.9	304 58.2	555 61.5
Condom for adolescents	440 81.9	360 74.5	800 78.4	311 81.6	348 66.7	659 73.0

Table 63: General knowledge, opinions & attitudes towards HIV/AIDS among adults respondents

	Camp			Surrounding area		
Knowledge	Male (N = 366	Female (N = 260	Total (N = 626)	Male (N = 352)	Female (N = 399)	Total (N = 751)
Abstain from sex	323 88.3%	191 73.5%	514 82.1%	255 72.4%	268 67.2%	523 69.6%
be faithful	344 94.0%	231 88.8%	575 91.9%	285 81.0%	273 68.4%	558 74.3%
Use condom	323 88.3%	191 73.5%	514 82.1%	255 72.4%	268 67.2%	523 69.6%
sharing needles	330 90.2%	229 88.1%	559 89.3%	313 88.9%	346 86.7%	659 87.7%
MTCT	205 56.0%	153 58.8%	358 57.2%	272 77.3%	277 69.4%	549 73.1%
Misconception						
Sharing utensils	26 7.1%	28 10.8%	54 8.6%	98 27.8%	99 24.8%	197 26.2%
Health looking person	82	98	180	80	144	224
	22.4%	37.7%	28.8%	22.7%	36.1%	29.8%
Comprehensive knowledge on HIV	222 60.7%	87 33.5%	309 49.4%	99 28.1%	41 10.3%	140 18.6%
Attitudes						
Family secret	170 46.4%	102 39.2%	272 43.5%	20 5.7%	33 8.3%	53 7.1%
Hhold care for male relative	299 81.7%	160 61.5%	459 73.3%	239 67.9%	239 59.9%	478 63.6%
Hhold car for female relative	299 81.7%	171 65.8%	470 75.1%	242 68.8%	239 59.9%	481 64.0%
Condom for adolescents	295 80.6%	186 71.5%	481 76.8%	314 89.2%	249 62.4%	563 75.0%
Infected person & work	227 62.0%	115 44.2%	342 54.6%	192 54.5%	148 37.1%	340 45.3%

Table 64: Information about STIs

have you heard about STI

		Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
Apart from ADIS, have you heard about other diseases that ca	Yes	593 65.7%	488 65.9%	1081 65.8%	589 80.4%	618 67.5%	1207 73.2%
	No	309 34.3%	253 34.1%	562 34.2%	144 19.6%	297 32.5%	441 26.8%
Total		902 100.0%	741 100.0%	1643 100.0%	733 100.0%	915 100.0%	1648 100.0%

Table 65: Knowledge about STI symptoms

	Refugee			Surrounding host		
	Male	Female	Total	Male	Female	Total
Know at least 2 STI symptoms among male	**86.3%**	**84.5%**	**85.5%**	**83.1%**	**86.1%**	**89.5%**
Know at least 2 STI symptoms among male	**85.5%**	**81.1%**	**83.6%**	**83.2%**	**88.2%**	**80.7%**

Table 66: Knowledge where to get a HIV test

		Camp			Surrounding area		
		Male	Female	Total	Male	Female	Total
Do you know where a person can get tested for HIV?	**Yes**	**644 71.3%**	**399 53.7%**	**1043 63.4%**	**273 37.2%**	**504 54.7%**	**777 47.0%**
	No	**259 28.7%**	**344 46.3%**	**603 36.6%**	**460 62.8%**	**417 45.3%**	**877 53.0%**
Total		**903 100%**	**743 100%**	**1646 100%**	**733 100%**	**921 100%**	**1654 100%**

Table 67: Forced sex by gender and population

Have you ever been forced to have sex? * Sex of the respondent Crosstabulation

		Camp			Surr Area		
		Male	Female	Total	Male	Female	Total
Have you ever been forced to have sex?	Yes	13 2.2%	41 7.9%	54 4.9%	12 2.1%	89 12.5%	101 7.9%
	No	582 97.8%	477 92.1%	1059 95.1%	555 97.9%	622 87.5%	1177 92.1%
Total		595 100.0%	518 100.0%	1113 100.0%	567 100.0%	711 100.0%	1278 100.0%

Table 68: Perpetrators of forced sex by gender

		Camp		Surr Area	
		Male	Female	Male	Female
Who forced you to have sex?	(Refugee)	6	8	2	21
	(Person from local community)	3	5	10	62
	(Military)	3	27		3
	(UN peacekeeper)				
	Humanitarian worker)				
	6_Other	1	1		3
	99_Don't know				

Appendix VI: Questionnaire

BEHAVIOURAL SURVEILLANCE SURVEY FOR GREAT LAKES INITIATIVE AGAINST AIDS (GLIA)

Serial number of questionnaire |___|___|___|___|

CONSENT FORM

Hello Sir/ Madam,

My name is ……I am an interviewer, working to fight against HIV/AIDS with the GOK, IRC, NCCK, UNHCR and GOK in Kakuma.

We would like to know the behaviours and practices associated with the spread of HIV/AIDS in your community.

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 not that your name will not be recorded in the questionnaire, and any detail 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 accurate information that will help us to develop effective activities to fight HIV spread.

The interview does take some time 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
COUNTRY .....|___|
REGION/ PROVINCE .....|___|___|
CAMP/ SURROUNDING AREA (Camp = 1, Surrounding area = 2) .....|___|
NAME OF CAMP/ SURR AREA .....|___|___|
URBAN/ RURAL (Urban = 1, Rural = 2) .....|___|
SERIAL NUMBER OF HOUSEHOLD .....|___|___|

NAME AND CODE OF INTERVIEWER

_____ |____|____|

CONTROL			
	CONTROL ON FIELD LEVEL	CONTROL IN CENTRAL OFFICE	DATA ENTRY CLERK
NAME	----------|__|	----------|__|	----------|__|
DATE	----------	----------	----------
REMARKS			

Start of interview: __/__/ h

N°	**Age (yrs)**	**Gender** 1. Male 2. Female	**Relationship to the head of household** 1. Household Head 2. Spouse 3. Son/ Daughter 4. Father/ Mother 5. Brother/ Sister 6. Other relative	**Visit 1**	**Visit 2**	**Visit 3**
				1 = Refusal 2 = Individual not eligible 3 = Questionnaire completed 4 = Questionnaire partly completed 5 = Household member absent 6 = Others (Specify) ***(for each household member record the correct answer)***		

SECTION I: BACKGROUND CHARACTERISTICS (24 questions)

N°	QUESTIONS	ANSWERS	SKIP
101.	Record sex of the respondent	1 = Male 2 = Female |___|	
102.	In what month and year were you born?	**MONTH** |___|___| 99 = MONTH UNKNOWN **YEAR** |___|___| 99 = YEAR UNKNOWN	
103.	How old were you at your last birthday? (Record age in years) COMPARE WITH Q102 AND CORRECT Q102 IF NECESSARY	|___|___| 99 = DON'T KNOW	
104.	In which country were you born?	1 = Kenya 2 = Somali 3 = Sudan 4 = Ethiopia 5 = Congo (DRC) |___| 6 = Burundi 7 = Eritrea 8 = Other (Specify) _____	
105.	What is your current nationality?	1 = Kenyan 2 = Somali 3 = Sudanese 4 = Ethiopian 5 = Congolese (DRC) |___| 6 = Burundian 7 = Eritrean 8 = Other (Specify) _____	
106.	Are you a refugee?	1 = Yes 2 = No |___|	
107.	What is your religion?	1 = Catholic 2 = Protestant 3 = Moslem |___| 4 = Other (Specify) _____	
108.	Have you ever attended school? (Different from literacy program)	1 = Yes 2 = No |___|	IF 2 GO TO 110
109.	What is the highest level/grade/form you completed?	1 = Primary 2 = College 3 = Secondary |___| 4 = High school 5 = University	

N°	QUESTIONS	ANSWERS	SKIP
110.	How easy is it for you to read a paper written in i. Turkana? ii. Juba Arabic iii. Somali? iv. Swahili? ***(Hold up a paper written in each language)*** ***CIRCLE ONE FOR EACH QUESTION***	1 = Easy 2 = Difficult 3 = Do not read at all 1 2 3 1 2 3 1 2 3 1 2 3	
111.	Do you have any income generating activity?	1 = Yes 2 = No |___|	IF 2 GO TO 113
112.	In what sector do you earn a living? ***(Record the principal sector)***	1 = Agriculture 2 = Trading 3 = Pastoralism 4 = Transport |___| 5 = Fishing 6 = Crafts 7 = Private services 8 = Public services 9. = Other (Specify) _____	
113.	How long have you been living in this place?	1 = Always 2 = Less than 6 months 3 = Between 6-12 months 4 = 1-2 years |___|___| 5 = 2-5 years 6 = 5 years or more 99 = Don't Know	
114.	In the last 12 months have you been away from this place for longer than one month or more?	1 = Yes 2 = No |___|___|	IF 2 > 116
115.	Why were you away from this place for longer than a month?	1 = Work-related 2 = Family-related 3 = Political reasons 4 = Military-related |___| 5 = School-related 6 = In jail 7 = Health-related 8 = Business 9 = Other (specify) _____	
116.	Do you visit the neighbouring community (camp or surrounding community?	1 = Yes 2 = No |___|	IF 2 GO TO 119
117.	How often do you go to the camp/surrounding community to visit?	1 = Never 2 = Less than once a month 3 = Once a month |___| 4 = Many times in a month	

N°	QUESTIONS	ANSWERS	SKIP
118.	Why do you visit the refugees/ host community? ***Record all answers given***	1 = Shopping/ Market |___| 2 = Health care |___| 3 = School |___| 4 = Job (formal/informal) |___| 5 = Entertainment |___| 6 = Food |___| 7 = Visit relative/friend |___| 8 = Business 9 = Other (specify) _____ |___|	
119.	Have you ever been married?	1 = Yes 2 = No |___|___|	IF 2 GO TO 121
120.	How old were you when you first married?	Age in years 99 = Don't Know |___|___|	
121.	What is your current relationship status?	1 = Married 2 = Single 3 = Divorced |___| 4 = Widow/ Widower 5 = Not married but living with a long term partner	IF ≠ 1 GO TO 123
122.	Are you in a monogamous or polygamous marriage?	1 = Monogamous 2 = Polygamous |___|	
123.	Have you ever been involved in any official or unofficial military activities?	1 = Yes 2 = No |___|	IF 2 GO TO 201
124.	How long were you involved in military activities?	1 = Less than 6 months 2 = > 6 to 12 months 3 = > 1 to 2 years |___| 4 = >2 to 4 years 5 = > 4 years	

SECTION II: MALE and FEMALE CONDOMS (8 questions)

N°	QUESTIONS	ANSWERS	SKIP
201.	Have you ever heard of condoms?	1 = Yes 2 = No |___|	IF 2 GO TO 301
202.	What do you think condoms are used for? (RECORD ALL ANSWERS GIVEN)	1 = Protects against STI/HIV/AIDS |___| 2 = Prevents pregnancy |___| 3 = Family Planning |___| 4 = Other (Specify) _____ |___| 99 = Don't know |___|	

N°	QUESTIONS	ANSWERS	SKIP
203.	Where can you/a person get condom from? **(RECORD ALL ANSWERS GIVEN)**	1 = Pharmacy |___| 2 = Health facility |___| 3 = At the market |___| 4 = From my friends |___| 5 = At the shop |___| 6 = Community health worker |___| 7 = Other (Specify) _____ |___| 99 = Don't know |___|	
204.	How easy is it to obtain a condom from this place?	1 = Easy 2 = Difficult |___| 3 = It depends	IF 1 GO TO 206
205.	What are the constraints to obtaining a condom? ***Record all answers given***	1 = Too far away (geographical access) |____| 2 = It's expensive |____| 3 = Inappropriate working arrangement |____| 4 = Not available |____| 5 = Fear of being seen |____| 6 = Health worker's attitude |____| 7 = Other (specify) _____ |____| 99 = Don't know |____|	
206.	Have you ever heard of a female condom?	1 = Yes 2 = No |___|	IF 2, GO TO Q301
207.	How easy is it to get a female condom?	1 = Easy 2 = Difficult |___| 3 = It depends	
208.	Would you/your partner be willing to use female condom if available?	1 = Yes 2 = No |___|___| 99 = Don't know	

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

N°	QUESTIONS	ANSWERS	SKIP
	A. REGULAR PARTNERS		
301.	Have you ever had sexual intercourse?	1 = Yes 2 = No |___|	IF 2 THEN GO TO Q338
302.	At what age did you first have sexual intercourse?	Age in years 99 = Don't know |___|___|	
303.	IS RESPONDENT CURRENTLY MARRIED OR LIVING WITH A PARTNER WITH WHOM HE/SHE HAS A SEXUAL RELATIONSHIP? **CHECK ANSWER TO Q121**	1 = Yes 2 = No |___|	
304.	Have you ever had a regular (sexual) partner?	1 = Yes	IF 2 GO TO Q312

N°	QUESTIONS	ANSWERS	SKIP
	(A regular sexual partner is defined as spouse or live-in sexual partner)	2 = No |___|	
305.	What is the nationality of your last/ current regular partner?	1 = Kenyan 2 = Somali 3 = Sudanese 4 = Ethiopian |___| 5 = Congolese (RDC) 6 = Burundian 7 = Eritrean 8 = Other (Specify) _____	
306.	How old was/is your last/ current regular partner?	Age in years 99 = Don't know |___|___|	
307.	Was a condom used during the LAST TIME you had sex with your last/ current regular partner?	1 = Yes |___| 2 = No	IF 2 GO TO Q309
308.	Who suggested the use of a condom?	1 = My partner 2 = Myself |___| 3 = Joint decision	GO TO 310
309.	Why was a condom not used during the last time you had sex with your last/ current regular partner? ***Record all answers given***	1 = Not available |___| 2 = Too expensive |___| 3 = Partner objected |___| 4 = Don't like them |___| 5 = Used other contraceptive |___| 6 = I trust my partner |___| 7 = Didn't think of it |___| 8 = Don't know what condom is |___| 9 = Other (Specify) _____ |___| 99 = Don't know |___|	
310.	How many regular partners did you have in last the 12 months (or since you arrive in this place, if less than 12 months)? **REFUGEE ONLY**	Provide Number If none, state 0 |___|___| 99 = Don't know	
311.	How many regular partners did you have sex with during the last 12 months (or since you arrive in this place, if less than 12 months)? **NATIONAL ONLY**	Provide Number If none, state 0 |___|___| 99 = Don't know	
	B. NON REGULAR (CASUAL) PARTNERS		
312.	Have you ever had sex with a non regular partner? **(A non regular partner is defined as any sexual partner different from the one with whom one live and who you did not pay for sex)**	1 = Yes |___| 2 = No	IF 2 GO TO Q322
313.	What is the nationality of your last/current non regular partner?	1 = Kenyan 2 = Somali 3 = Sudanese 4 = Ethiopian |___|___|	

N°	QUESTIONS	ANSWERS	SKIP
		5 = Congolese (DRC) 6 = Burundian 7 = Eritrean 8 = Other (Specify) _____ 99 = Don't know	
314.	What is the marital status of your last/current non regular partner?	1 = Married 2 = Single 3 = Divorced |___|___| 4 = Widow/widower 5 = Other (Specify) _____ 99 = Don't know	
315.	What is the profession of your last non regular partner?	1 = Student 2 = unemployed 3 = Driver/ Truck driver |___|___| 4 = Housemaid 5 = Traders 6 = Pastoralist 7 = Farmer 8 = military/ security forces 9 = Commercial sex workers 10 = Humanitarian agent 11 = Other (Specify) 99 = Don't know	
316.	How many non regular partners did you have sex with during the last 12 months (or since you arrived here if <12 months)? **REFUGEE ONLY**	Provide Number If none, state 0 |___|___| 99 = Don't know	
317.	How many non regular partners did you have sex with during the last 12 months (or since you arrived here, if less than 12 months)? **NATIONAL ONLY**	Provide Number If none, state 0 |___|___| 99 = Don't know	
318.	How many non regular partners did you have sex with during the last 30 days?	Provide Number If none, state 0 |___|___| 99 = Don't know	
319.	Was a condom used during the last time you had sex with a (the latest) non regular partner?	1 = Yes 2 = No	IF 2 GO TO Q321
320.	Who suggested the use of a condom?	1 = My partner 2 = Myself |___| 3 = Joint decision	GO TO 322
321.	Why was a condom not used during the last time you had sex with a non regular partner? ***Record all answers given***	1 = Not available |___| 2 = Too expensive |___| 3 = Partner objected |___| 4 = Don't like them |___| 5 = Used other contraceptive |___| 6 = Didn't think it was necessary |___|	

N°	QUESTIONS	ANSWERS	SKIP
		7 = Didn't think of it |___| 8 = Don't know what condom is |___| 9 = Unplanned sex |___| 10 = Other (Specify) _____ |___| 99 = Don't know |___|	
C. OTHER			
322.	Have you ever had sex in exchange for money/ gift?	1 = Yes 2 = No |___|	IF 2 GO TO Q331
323.	During which period did you have sex in exchange for money/ gift? ***Record all given answers*** **REFUGEE ONLY**	1 = Before displacement 2 = During displacement |___| 3 = After displacement	
324.	During which period did you have sex in exchange for money/ gift? ***Record all given answers*** **NATIONAL ONLY**	1 = Before refugees arrived 2 = After refugees arrived |___|	
325.	How many persons did you have sex with during the last 30 days in exchange for money/ gift?	Provide Number If none, state 0 |___|___| 99 = Don't know	IF 0 GO TO Q331
326.	Who did you have sex with in exchange for money/ gift?	1 = Refugee |___| 2 = Person from local community |___| 3 = Military |___| 4 = UN peacekeeper |___| 5 = Humanitarian worker |___| 6 = Other (Specify) |___| 99 = Don't know |___|___|	
327.	When was the last time you had sex in exchange for money/ gift?	1 = less than one month 2 = 1 – 3 months 3 = >3 – 6 months |___| 4 = >6 – 12 months 5 = More than 1 year 99 = Don't know	
328.	Was a condom used during the last time you had sex in exchange for money/ gift?	1 = Yes 2 = No |___|	IF 2 GO TO Q330
329.	Who suggested the use of a condom?	1 = The partner 2 = Myself |___| 3 = Joint decision	GO TO Q331
330.	Why was a condom not used during the last time you had sex in exchange for money/ gift? ***Record all answers given***	1 = Not available |___| 2 = Too expensive |___| 3 = Partner objected |___| 4 = Don't like them |___| 5 = Used other contraceptive |___|	

N°	QUESTIONS	ANSWERS	SKIP
		6 = Trust my partner |___| 7 = Didn't think of using one |___| 8 = Don't know what condom is |___| 9 = Unplanned sex |___| 10 = Other (Specify) _____ |___| 99 = Don't know |___|	
331.	Have you ever been forced to have sex?	1 = Yes |___| 2 = No	IF 2 GO TO 336
332.	How many times during the past year were you forced to have sex?	Provide Number |___| 99 = Don't know	
333.	During which period were you forced to have sex? **REFUGEE ONLY**	1 = Before displacement 2 = During displacement |___| 3 = After displacement	
334.	During which period were you forced to have sex? **NATIONAL ONLY**	1 = Before refugees arrived 2 = After refugees arrived |___|	
335.	Who forced you to have sex?	1 = Refugee |___| 2 = Person from local community |___| 3 = Military/ militias/ Other security forces |___| 4 = UN peacekeeper |___| 5 = Humanitarian worker |___| 6 = Other (Specify) |___| 99 = Don't know |___|___|	
336.	Have you ever had sex while you were under the influence of alcohol?	1 = Yes 2 = No |___|	IF 2 GO TO Q338
337.	Was a condom used during the last time you had sex after taking alcohol?	1 = Yes 2 = No |___|	
338.	Have you ever taken drugs (such as miraa, bangi, heroine, crack, madrax…)? **(DO NOT CONSIDER DRUG INJECTED FOR MEDICAL TREATMENT OF AN ILLNESS)**	1 = Yes 2 = No |___|	IF 2 GO TO Q341
339.	People can take drug in various ways, in which way have you taken? ***Record all answers given***	1 = Inhalation |___| 2 = Injection |___| 3 = Smoking |___| 4 = Chewing |___| 5 = Orally |___| 6 = Other (Specify) _____ |___|	
340.	Have you ever shared syringe with other people/neighbours who consume drugs? **(DO NOT CONSIDER DRUG INJECTED FOR MEDICAL TREATMENT OF AN ILLNESS)**	1 = Yes 2 = No |___|	
341.	(IF A **MALE** RESPONDENT, ASK): Have you ever had a male sexual partner?	1 = Yes 2 = No |___|	IF 2 GO TO Q401

N°	QUESTIONS	ANSWERS	SKIP
342.	When did you first have sexual relationship with a male partner? **(REFUGEE ONLY)**	1 = Before displacement 2 = During displacement |___| 3 = After displacement	
343.	When did you first have sexual relationship with a male partner? **(NATIONAL ONLY)**	1 = Before refugee arrived 2 = After refugee arrived |___|	
344.	How often did/ do you have sex with a male partner?	1 = Often 2 = Sometimes |___| 3 = Occasionally or rarely	
345.	Was a condom used during the last time you had sex with a male partner?	1 = Yes |___| 2 = No	IF 1 GO TO Q401
346.	Why didn't you and your male partner use a condom the last time you had sex?	1 = Not available |___| 2 = Too expensive |___| 3 = Partner objected |___| 4 = Don't like them |___| 5 = Don't know what condom is |___| 6 = I trusted my partner |___| 7 = Didn't think of it |___| 8 = Unplanned sex |___| 9 = Other (Specify) _____ |___| 99 = Don't know |___|	

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

N°	QUESTIONS	ANSWERS	SKIP
401.	Have you ever heard of HIV or a disease called AIDS?	1 = Yes 2 = No |___|	IF 2 GO TO 501
402.	From where do you usually hear about HIV/AIDS? ***Record all answers given***	1 = Radio |___| 2 = TV/ Video |___| 3 = Newspaper |___| 4 = VCT/ Health facility/ |___| 5 = Friend |___| 6 = Poster/pamphlet |___| 7 = Brother/Sister |___| 8 = Community health worker |___| 9 = School |___| 10 = Others (specify) _____ |___| 99 = Don't know |___|	
403.	Do you think there are more cases of HIV/AIDS in your community or the surrounding local community? **REFUGEE ONLY**	1 = My (refugee) community 2 = Surrounding local community |___|___| 99= Don't know	

N°	QUESTIONS	ANSWERS	SKIP
404.	Do you think there are more cases of HIV/AIDS in your community or the refugee community? **NATIONAL ONLY**	1 = My (surrounding local) community 2 = Refugee community |___|___| 99= Don't know	
405.	Do you know anyone who has died of AIDS in your community?	1 = Yes 2 = No |___| 99 = Don't know	
406.	How can a person get AIDS? **(RECORD ALL GIVEN ANSWERS)**	1 = Through sexual intercourse |___| 2 = Having sexual intercourse with multiple partners |___| 3 = Having sex with prostitutes |___| 4 = Not using condom during casual sex |___| 5 = Through homosexual contact |___| 6 = Blood transfusion |___| 7 = Kissing |___| 8 = Mosquito bites |___| 9 = Sharing sharp objects like razor blades |___| 10 = Sharing unspecialized/ reusing needles |___| 11 = Mother to unborn child |___| 12 = Sharing toilets |___| 13 = Sharing eating utensils |___| 14 = Other (specify) _____ |___| 99 = Don't know |___|	
407.	Is there any thing a person can do to avoid getting HIV/ AIDS or the virus that causes AIDS?	1 = Yes 2 = No |___| 99 = Don't know	IF ≠ 1 GO TO 409
408.	What can a person do? (RECORD ALL ANSWERS GIVEN)	1 = Abstain from sex |___| 2 = Use condom |___| 3 = Limit sex to one partner/ Stay faithful to one partner |___| 4 = Limit number of sexual partner |___| 5 = Avoid sex with prostitutes |___| 6 = Avoid sex with person who have many partners |___| 7 = Avoid sex with men having sex with men |___| 8 = Avoid sex with person who inject drug intravenous |___| 9 = Avoid blood transfusion |___| 10 = Avoid injection |___| 11 = Avoid sharing razors/ blades |___| 12 = Avoid kissing |___| 13 = Avoid mosquito bites |___| 14 = Seek protection from traditional practitioners |___| 15 = Other (specify) _____ |___| 99 = Don't know |___|	

N°	QUESTIONS	ANSWERS	SKIP
409.	Can people protect themselves from HIV infection by staying faithful to one uninfected faithful sex partner?	1 = Yes |___|___| 2 = No 99 = Don't know	
410.	Can people protect themselves from HIV infection by using a condom correctly every time they have sex?	1 = Yes |___|___| 2 = No 99 = Don't know	
411.	Can people protect themselves from HIV infection by abstaining from sex?	1 = Yes |___|___| 2 = No 99 = Don't know	
412.	Can people get infected with HIV by sharing eating utensils with someone who is infected?	1 = Yes |___|___| 2 = No 99 = Don't know	
413.	Can a person get infected by HIV by taking injections with a needle that was already used by someone else?	1 = Yes |___|___| 2 = No 99 = Don't know	
414.	Is it possible for a healthy-looking person to have the AIDS virus?	1 = Yes |___|___| 2 = No 99 = Don't know	
415.	Can a pregnant woman with HIV/AIDS, transmit the virus to her unborn child during pregnancy?	1 = Yes |___|___| 2 = No 99 = Don't know	IF 2, GO TO 417
416.	What can a pregnant woman with HIV/AIDS do to reduce the risk of transmitting HIV to her unborn child (RECORD ALL ANSWERS GIVEN)	1 = Take Medications (antiretroviral) |___| 2 = See a health worker |___| 3 = See traditional healer |___| 4 = Other (specify) _____ |___| 99 = Don't know |___|	
417.	Can a pregnant woman with HIV/AIDS transmit the virus to her baby during delivery?	1 = Yes |___| 2 = No 99 = Don't know	
418.	Can a woman with HIV/AIDS transmit the virus to her baby during breastfeeding?	1 = Yes |___|___| 2 = No 99 = Don't know	
419.	Where would you like us to talk about HIV/AIDS? **(RECORD ALL ANSWERS GIVEN)**	1 = On radio |___| 2 = At school |___| 3 = During public sensitization |___| 4 = In newspapers |___| 5 = Other (specify) _____ |___|	
420.	If a member of your community got infected with the virus that causes AIDS, would you want it to remain a secret?	1 = Yes (keep it secret) 2 = No |___|___| 99 = Don't know	

N°	QUESTIONS	ANSWERS	SKIP
421.	If a member of your family got infected with the virus that causes AIDS, would you want it to remain a secret?	1 = Yes (keep it secret) 2 = No |___|___| 99 = Don't know	
422.	If a female relative of yours became sick with the virus that causes AIDS, would you be willing to care for her in your own household?	1 = Yes 2 = No |___|___| 99 = Don't know	
423.	If a male relative of yours became sick with the virus that causes AIDS, would you be willing to care for him in your own household?	1 = Yes 2 = No |___|___| 99 = Don't know	
424.	If a person got infected with the virus that causes AIDS, should he/ she be allowed to stay in his/her work place?	1 = Yes 2 = No |___|___| 99 = Don't know	
425.	Should young adolescents be taught on how to use condoms?	1 = Yes 2 = No |___|___| 99 = Don't know	

SECTION V: SEXUALLY TRANSMITTED INFECTIONS (13 questions)

N°	QUESTIONS	ANSWERS	SKIP
501.	Apart from AIDS, have you heard about other diseases that can be transmitted through sexual intercourse?	1 = Yes 2 = No |___|___|	IF 2 GO TO 508
502.	If a man has a sexually transmitted disease, what symptoms might he have? **(RECORD ALL ANSWERS GIVEN)**	1 = Abdominal pain |___| 2 = Genital discharge/ Dripping |___| 3 = Foul smelling discharge |___| 4 = Burning sensation on urination |___| 5 = Redness/ Inflammation in genital area |___| 6 = Genital sores/ Ulcers |___| 7 = Genital warts to be revised |___| 8 = Genital itching |___| 9 = Blood in urine |___| 10 = Loss of weight |___| 11 = Impotence |___| 12 = Other (Specify) _____ |___| 99 = Don't know |___|	
503.	If a woman has a sexually transmitted disease, what symptoms might she have? **(RECORD ALL ANSWERS GIVEN)**	1 = Abdominal pain |___| 2 = Genital discharge/ Dripping |___| 3 = Foul smelling discharge |___| 4 = Burning pain on urination |___| 5 = Redness/ Inflammation in genital area |___| 6 = Swelling in genital area |___| 7 = Genital sores/ Ulcers |___|	

		8 = Genital warts |___| 9 = Genital itching |___| 10 = Blood in urine |___| 11 = Loss of weight |___| 12 = Hard to get pregnant/ Have a child |___| 13 = Other (Specify) _____ |___| 99 = Don't know |___|	
504.	Did you have any of the following sexual infection during the last 12 months? **(Please note that if answer is yes in a or b only, you ask 505)**	Yes No a. Genital discharge? 1 2 b. genital sore/ ulcers? 1 2	IF ANSWER IS 2 (IN A AND B) GO TO 508
505.	During the last time you had a sexually transmitted infection, did you seek for treatment?	1 = Yes 2 = No |___|___|	IF 2 GO TO 508
506.	During the last time you had a sexually transmitted infection; did you do one of the following? **ANSWER EACH QUESTION**	Y N Seek treatment/ advice from a health worker 1 2 Seek treatment from a traditional practitioner 1 2 Seek treatment/ buy medicine at the pharmacy 1 2 Seek advice from a friend/ relative 1 2	
507.	During the last time you had a sexually transmitted infection did you inform your sexual partner(s)?	1 = Yes (all of them) 2 = No |___| 3 = Some of them, not all	
508.	Some men and women have been circumcised, have you been circumcised?	1 = Yes 2 = No |___|___|	IF 2 GO TO 511
509.	At what age were you circumcised?	|___|___| 99 = Don't know/ don't remember |	
510.	What is the main reason you were circumcised for?	1 = Tradition/ religion 2 = Health/ Hygiene 3 = Sexual satisfaction |___|___| 4 = Other (Specify) 99 = Don't know	
511.	If you could choose, would you prefer a sexual partner who was circumcised or not circumcised?	1 = Circumcised 2 = Not circumcised |___| 3 = Don't know/ no preference	
512.	Would you be interested in getting circumcised if it was affordable and safe?	1 = Yes 2 = No |___|___| 99 = Don't know	

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

N°	QUESTIONS	ANSWERS	SKIP
601.	Do you know a place where a person can be tested for HIV?	1 = Yes |___| 2 = No	IF 2 GO TO Q606
602.	Where can a person get an HIV test? **(RECORD ALL ANSWERS GIVEN)**	**Public sector** 1 = Hospital |___| 2 = Health facility government |___| 3 = Clinic/ family planning |___| 4 = Mobile Clinic |___| 5 = Other (Specify) _____ |___| **Private Sector** 6 = Private hospital/ Clinic |___| 7 = Pharmacy |___| 8 = Private medical doctor |___| 9 = Mobile clinic |___| 10 = Traditional healer |___| 11 = Other (Specify) _____ |___|	
603.	Do you know where a person can receive HIV Voluntary Counselling Test (VCT)?	1 = Yes 2 = No |___|___| 99 = Don't know	IF ≠ 1 GO TO Q606
604.	Do VCT services exist locally and/or in the camp?	1 = Locally 2 = In refugee camp |___|___| 3 = In both sites 99 = Don't know	
605.	Where did you learn that such services exist?	1 = School |___| 2 = Health services |___| 3 = Presentations |___| 4 = Posters |___| 5 = Community health workers |___| 6 = Sign post/ board |___| 7 = Other Specify _____	
606.	Have you ever been tested for HIV? ***(State that you do not want to know the result of the test)***	1 = Yes |___| 2 = No	IF 2 GO TO Q610
607.	When was the last time you were tested for HIV?	1 = Less than 1 month ago 2 = Between 1-6 months ago 3 = Between 6 to 12 months ago |___|___| 4 = Between 1-2 years ago 5 = More than 2 years ago 99 = Don't know	
608.	Did you obtain the result of the test?	1 = Yes 2 = No |___|___| 99 = Don't know/can't remember	IF 1 GO TO Q610

N°	QUESTIONS	ANSWERS	SKIP
609.	Why didn't you receive the test result?	1 = Sure of not being infected 2 = Afraid for the result 3 = Don't believe in its confidentiality |___| 4 = Forgot it 5 = Other (Specify) 99 = Don't know |___|___|	
610.	Would you go for a test in the future?	1 = Yes 2 = No |___|___| 99 = Don't know/not sure	IF 1 Q612
611.	Why don't you want to go for a test?	1 = Sure of not being infected 2 = Afraid for the result 3 = Afraid for the blood taking |___|___| 4 = (Afraid for) catching an infection 5 = Fear of stigmatization 6 = Its expensiveness 7 = Other (Specify) _____ 99 = Don't know	
612.	Is the test accessible to all?	1 = Yes 2 = No |___|___| 99 = Don't know/	IF ≠ 2, FINISH
613.	Who have difficulties getting to the VCT?	1 = Boys 2 = Girls 3 = Women |___|___| 4 = Men |___|___| 5 = Old persons 6 = Refugees 7 = Other (Specify) _____ 99 = Don't know/	FINISH

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

End of the interview: __/__/ h