HIV and AIDS Behavioural Surveillance Survey

Marratane Refugee Camp, Mozambique

November, 2005

Acknowledgements

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Executive Summary

This report provides detailed results on the HIV and AIDS Behavioural Surveillance Survey (BSS) conducted among refugees 15 to 49 years old in the Marratane camp of Mozambique during November 2005. It provides the basis for effective interventions towards mitigating the spread of HIV in the refugee community and, by extension, its host population.

The BSS in Marratane employed a simple and efficient survey scheme, stratified simple random sampling, made possible by the availability of registration data from the Mozambican refugee administration. Provided with full names, the enumerators made direct contact with every resident refugee who was part of the sample or tried to determine their true residence if they were not available. 900 refugees were sampled from the registration list, which contained 1918 refugees aged 15 to 49 years. 744 individuals in the sample were eligible because they effectively resided in the camp at the time of the survey. The enumerators achieved a near perfect response rate among eligible refugees (99.991%).

The results of the Marratane BSS survey provide a comprehensive picture of sexual behaviour and attitudes related to HIV and AIDS. Where possible, the results are also compared to a previous survey in Kiziba camp in Rwanda, which also hosts Congolese refugees, and a recent survey conducted among the host population in Nampula city.

Marratane camp houses a disproportionate number of older men (58% of respondents were men and 75% of them were 25-49 years old). The skewed nature of the composition of the camp appears to have consequences on relationships and sexual behaviour. Two thirds (62.8%) of male and female refugees are officially married. However, since there are fewer women than men, a higher share of men are effectively living alone than what the statistics on marital status may suggest. About 20% of married respondents did not actually live with a live-in partner, let alone their spouse. The discrepancy between being married and living with ones' spouse suggests that HIV/AIDS interventions will have to anticipate the reunification of spouses.

Another important socio-demographic characteristic of the camp is the high level of education of the refugees. The difference in educational levels between men and women is significant (Pearson F=53.50, p=0.00), which imposes constraints on communicating health messages. Female refugees are effectively less educated than men but even then they enjoy a level of education uncommon in many refugee situations and in their local host community in Mozambique. However, 27% of refugee women have not received formal education or completed primary school compared to 4% of refugee men.

Respondents report having been away from their country of origin on average 5.9 years for men and 7.4 years for women (Wald F=23.58, p=0.00). Nearly half of respondents had stayed in Marratane 3 to 5 years reflecting the camp's recent establishment. A higher proportion of men (23.2%) than women (12.2%) had left the camp for more than one month in the past (Pearson F=28.20, p=0.00), and men visited the surrounding community more frequently (Pearson F=14.74, p=0.00): 55.5% of women never visit the surrounding communities against 41% of men. Men tended to leave the camp in search of work opportunities while women were tasked with shopping, education and health matters.

There are few income-generating activities and patterns of income-generating activity substantially differ between nationalities within the camp (Wald F=3.1883, p=0.00). Given the discrepancy between official registration numbers and actual residents, it is probable that sustainable income-generating activities entail a quasi-permanent residence in Nampula City. The types and extent of income-generating activities have consequences for refugee interaction with the local community and attendance at programs in the camp.

Of teenagers, 45.9% have ever had a sexual relationship, as had 79.2% of young adults. Of unmarried teenage males, 35.7% and 61.4% of unmarried young adult men have had a sex partner in the past twelve months. Rates for sexual partnerships during the previous year were two times as high for unmarried

men than for unmarried women (Pearson F=25.04, p=0.00). Sexual partnerships in the past year are equally frequent between married and unmarried younger men but much less frequent among unmarried younger women than married younger women.

Most refugees had heard of condoms (89.7%) and knowledge levels increase with age. However, women were less aware of condoms than men (Pearson F=59.31, p=0.00). Reported use of condoms is also low; only 30% of sexually active respondents had ever used a condom, including 38.2% of men and 16% of women (Pearson F=60.20, p=0.00). The fact that condoms are essentially known to prevent HIV/AIDS rather than as contraceptives may be contributing to low condom use. Moreover, 37.7% of respondents are currently in regular sexual partnerships where condom use is particularly low (6.4%). Finally, there is little agreement between regular partners on why they do not regularly use condoms, which may indicate that condom use is not discussed between partners.

Detailed information was obtained on the sexual behaviour of respondents with regular, non-regular and transactional partners. Among younger men and women (aged 15-24), few men (12.1%) and women (30%) were in a regular relationship during the past 12 months (Pearson F=10.80, p=0.00). Among older men and women (25-49 years), 49% of men and 41% of women were currently in a regular relationship (Pearson F=9.25, p=0.00).

Men reported three times more involvement in non-regular sexual partnerships than women (Pearson F=29.79, p=0.00) and 30% of these partnerships are with Mozambican women. Of older women, 7% had a non-regular partner in the past year compared to 19.2% of men (Pearson F=13.65, p=0.00). Among younger male refugees, 30% report non-regular sexual partnerships in the past 12 months while only 7.1% of female refugees do (Pearson F=25.52, p=0.00). Less than half of men (46.1%) have used a condom in their last non-regular sex and condom use is particularly low among younger women in non-regular relationships (7.1%).

A particularly worrying fact is that 5.7% of married respondents had a non-regular sexual partnership in the past 12 months. Moreover, 20% of respondents who ever had a non-regular relationship divulged that the last relationship had been with a married person. Of women, 51.4% had their last non-regular relationship with a married person.

Perhaps related to the low number of single women in the camp, refugee men tend to have sexual partners in the local community. Of refugee men, 30.3 % had a Mozambican as their last or current non-regular partner. In contrast, no refugee women reported having a Mozambican as their last or current partner.

Men had been engaged in transactional sex four times more than women (16% vs. 4%, respectively). One third (35.6%) of transactional sexual relationships involved the use of a condom during the last transactional sex but younger refugees use them less than older refugees (Pearson F=3.71, p=0.06). Worryingly, although very few women report having had transactional sex in the past year, vulnerability to transactional sex appears to increase both during and after displacement.

Finally, 10% of respondents have been victim of forced sex: 8% of men and 17% of women reported at least one episode of sexual abuse during their lives (Pearson F16.19, p=0.00). Forced sex did not stop with displacement and was most often perpetrated by other refugees (34.1%) compared to the military (23.5%), national populations (9.4%) or other groups.

Sex under the influence of alcohol is reportedly a limited phenomenon (3.4% ever did). None of the female respondents reported the use of a condom during sex under the influence of alcohol. Substance abuse is a marginal phenomenon as well (5.7% ever took illegal drugs); it affects younger men and women equally around 5% while older women (8.1%) are more affected than older men (4.7%) (Pearson F=4.76, p=0.02).

Of refugees interviewed, 93.9% had heard about HIV/AIDS, especially through the radio (74.6%) and from the health centre (69.6%). Refugees were eager to have more public sensitization programs. Not only had the refugees heard about HIV/AIDS but they were knowledgeable about it in terms of the main tenets of HIV prevention. Respondents had a very high level of understanding of basic preventive measures, including ABC (abstinence, faithfulness and condoms). Combining the three indicators, we find that 59.7% of all respondents know about ABC. We cannot reject the hypothesis that there are no gender and age differences [(Pearson F=2.24, p=0.13) (Pearson F=0.28, p=0.59), respectively]. In comparison, 44.8% of respondents in Kiziba camp in Rwanda could identify all three measures.

However, Marratane refugees had more difficulties dealing with issues beyond the main ABC messages. Mother-to-child transmission through pregnancy, delivery and breastfeeding is understood by 65.2%, 83.1% and 80% of respondents respectively.

Myths about HIV are still common; in particular more women than men believe that HIV can be transmitted through sharing cooking utensils (22.8% vs. 12.0%, Pearson F=3.37, p=0.03). More women than men also believe that HIV status should remain a secret within the family and in the community (54.6% vs. 29.0%, Pearson F=54.23, p=0.00). Concern for HIV status remaining a secret is not noticeably different between age groups (Pearson F=1.22, p=0.29).

In spite of the free provision of health care inside the camp, only 52.5% percent of affected men and 66% of affected women (Pearson F=3.76, p=0.056) had sought treatment for their last sexually transmitted infection (STI). There is therefore a clear need to deepen and extend HIV prevention messages in the camp to include STI symptoms and treatment.

Of respondents, 25% had ever undergone testing for HIV, of whom 82.3% received test results. We cannot reject the hypothesis that there is no difference between men and women on HIV testing (Pearson F=0.47, p=0.4929). The most frequent reason for not undergoing an HIV test is that the respondent was sure that they were not infected (49.4%), followed by fear of the result (13.9%), and not knowing where to go (12.7%). Of women who had been tested, only 68% had received the test results compared to 92.5% of men (Pearson F=20.53, p=0.00). In comparison, only 7.8% of the local population in Nampula City had ever undergone an HIV test but 92.6% of them received the results.

Finally, we note that 85.1% of men are circumcised, a protective factor against HIV infection.

Recommendations:

- Given the lower number of women in the camp compared to men, women were more involved in regular partnerships; worryingly, it is in these regular partnerships that condom use is particularly low and the extent of married respondents having non-regular sex points toward a high risk of infection. Condoms and HIV testing must be promoted for refugees in regular sexual partnerships, especially among women;

- Refugee men had substantial links with the host community. At the same time they were oftentimes effectively single and sexually active. In addition to programs inside Marratane, HIV/AIDS awareness and condom use must be promoted among local Mozambicans, especially women and transactional sex workers in Nampula who were most in contact with refugee men;

- Forced sex remains a problem after displacement for both men and women. The majority of perpetrators of violence are refugees themselves. Further support must be given to interventions aimed at fighting sexual and gender-based violence, including men as potential survivors as well;

- The basic principles of HIV prevention were well understood in Marratane, but not all aspects of prevention of mother-to-child transmission, especially among women. Moreover, understanding of abstinence, faithfulness and condom use in the fight against HIV/AIDS does not necessarily

mean common misconceptions about HIV/AIDS are averted. Already high levels of knowledge about HIV/AIDS can be further improved. There is a need to pursue and deepen HIV/AIDS sensitization programmes;

- A higher percentage of women reported experiencing STIs than men. Women were also largely unwilling to obtain their test results when they undertook an HIV test. There is a clear need to set up a dedicated health service independent of the camp's open health centre which would tackle issues of reproductive health privately, integrated within a range of other services, thereby diminishing the risk of stigmatization.

Baseline BSS Indicators:

Marratane refugee camp (Mozambique, Nov. 2005), Surrounding national populations (2003), and Kiziba refugee camp (Rwanda, 2005)

	Marratane Camp			Surr. Nat. Pop.	Kiziba Camp
Indicators	Male	Female	Total	Total	Total
Education					
No formal education	4.1%	26.5%	13.7%	15.1	30.7%
Primary education only	15.1%	30.7%	21.7%	-	39.7%
Never had sex: 15-19 age group	47.8%	58.8%	54.1%	-	71.3%
Condom use during last sex with a non-regular partner					
15-24 age group	47.6%	7.1%	37.5%	-	16.7%
25-49 age group	45.0%	22.2%	42.0%	-	24.3%
All ages	46.1%	13.0%	40.0%	-	20.0%
Ever had transactional sex:					
15-24 age group	17.8%	6.3%	11.5%	-	-
25-49 age group	15.5%	2.1%	10.5%	-	-
All ages	16.0%	3.8%	10.8%	-	-
Ever forced to have sex:					
15-24 age group	9.4%	13.4%	11.5%	-	2.8%
25-49 age group	6.9%	19.4%	11.5%	-	3.4%
All ages	7.6%	16.9%	11.5%	-	3.1%
Men having sex with men	1.5%			-	-
HIV/AIDS knowledge					
HIV/AIDS knowledge: Abstain	82.2%	79.3%	80.9%	-	-
HIV/AIDS knowledge: Be Faithful	93.6%	90.1%	81.2%	-	-
HIV/AIDS knowledge: Condoms	77.9%	83.4%	81.1%	60.7%	-
All three	61.3%	57.5%	59.7%	-	44.8%
Ever tested for HIV					
15-24 age group	25.5%	18.9%	22.0%	-	14.9%
25-49 age group	25.7%	27.7%	26.4%	-	19.6%
All ages	25.7%	24.1%	25.0%	7.8%	17.1%

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
BSS	Behavioural Surveillance Survey
CHW	Community Health Worker
DRC	Democratic Republic of Congo
GLIA	Great Lakes Initiative on AIDS
HIV	Human Immunodeficiency Virus
INAR	National Institute for Assistance to Refugees
PMTCT	Prevention of Mother-to-Child Transmission
STI	Sexually Transmitted Infection
UNHCR	United Nations High Commissioner for Refugees
VCT	Voluntary Counselling and Testing

Definitions

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 of 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"
Regular sexual partner	A regular sexual 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
Non-regular sexual partner	A non-regular sexual 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
Transactional sex	A sexual relationship where money, a gift or a favour is provided in exchange for sex
Male to male sex	Any sexual relation among male respondents engaging persons of the same sex
Older men and women	Individuals aged 25-49 years old
Refugee respondent	Refugee aged 15-49years old
Teenage boys and girls	Individuals aged 15-19 years old
Young adult men and women	Individuals aged 20-24 years old
Younger men and women	Individuals aged 15-24 years old

1. Introduction

This report provides a detailed analysis of the November 2005 Behavioural Surveillance Survey (BSS) in Marratane refugee camp, Mozambique. It demonstrates the continued need for HIV/AIDS interventions and provides concrete evidence to support effective HIV/AIDS programming.

1.1 Background

Marratane refugee camp is located in northern Mozambique in the province of Nampula. The camp was set up in 2001 to regroup refugees located in the Bobole and Massaka camps around the capital city of Maputo, which were officially closed in April 2003.[1] As of November 2005, Marratane camp officially hosted 4200 refugees, mainly from the Democratic Republic of Congo (DRC), Rwanda, and Burundi. Many of the refugees – none of which, except for a single Zimbabwean, are from countries sharing a border with Mozambique – have spent extensive time in other camps, notably in Tanzania, before coming to Mozambique. Many come from opposing sides of the conflicts that have plagued the Great Lakes region since 1994.

Marratane camp is located in an area of subsistence farming 34km from Nampula City. Refugees have access to land around the camp and are engaged in poultry production as well. UNHCR and its implementing partners (World Vision, Save the Children and World Relief International) provide shelter, latrines, water, a monthly food distribution, free healthcare, education, and other social and community services and training programs. Preliminary findings from a nutritional survey carried out by UNHCR in November 2005 indicate that refugees may have a better nutritional status than the local surrounding population.

The camp is open and people are free to move to Nampula City, the economic capital of the northern region of Mozambique. Many refugees, especially those who have been in the camp the longest, engage in economic activities in the city. Nampula City is on the Nacala Development Corridor, centred around the Nacala Railway line, which links the port of Nacala on the Indian Ocean to the central and southern regions of Malawi and eastern Zambia.[2] The city was strategic military centre for the Portuguese and still hosts the Mozambican military academy. Nampula City remains a hub for trade in cashew nuts although the local economy has suffered from the decline of this cash crop. Today, Nampula City is bustling with renewed activity and a thriving class of small capitalists shows evident signs of wealth.

1.2 The Situation of HIV/AIDS

In 2003, adult HIV prevalence in Mozambique ranged between 9.4% and 15.7%. Prevalence rates are lower in the Northern regions as compared to the South and Central regions. Median HIV prevalence among women attending antenatal clinics in Northern Mozambique was 8%.[3] There are no HIV prevalence data available for refugees in Marratane. However, inferences can be made from the situation in the country of origins at the time and location of displacement. There are no data for the Eastern region of the DRC where a large proportion of respondents in Marratane come from. However, over the past decade, national median estimates of HIV prevalence among antenatal clinic attendees in the DRC hovered between 3% and 6% in urban areas and between 3% and 9% in rural areas.[4] Similarly, in Burundi, median estimates of HIV prevalence among antenatal clinic attendees was between 19% and

[1] US Committee for Refugees and Immigration, World Refugee Survey 2004, Mozambique Country Report, available at: http://www.uscr.org/countryreports.aspx?area=investigate&subm=19&ssm=29&cid=141
[2] For more information, see: http://www.nacalacorridor.com/
[3] UNAIDS, UNICEF, WHO. Mozambique: Epidemiological Fact sheets on HIV/AIDS and Sexually Transmitted Infections, 2004.
[4] UNAIDS, UNICEF, WHO. The Democratic Republic of Congo: Epidemiological Fact sheets on HIV/AIDS and Sexually Transmitted Infections, 2004.

29% in the period 1995-1998 in urban areas and between 10% and 20% in rural areas in the same period. In the capital of Rwanda, Kigali, the median HIV prevalence among antenatal clinic attendees reached a peak of 34% the year before the genocide.[5]

The Mozambican Government's policy towards HIV/AIDS is implemented through the Integrated Health Network in each province. CARE/Mozambique is the implementing partner for the Network in Nampula province. The first Voluntary Counselling and Testing (VCT) centre in the city of Nampula opened in October 2002.[6]

A health clinic in Marratane camp provides free health services to refugees and attends to the local population for a nominal fee, which is charged to all nationals attending health centres. To receive specialized care, refugees go to the Nampula City public hospital which is 30 minutes away by car. There is no VCT centre inside the camp. Some community groups in the camp are organized around the issues of health and HIV/AIDS. A number of respondents have received training in community health and HIV/AIDS in Marratane or in their first country of refuge, and are participating in regular sensitization campaigns or distribute condoms in the camp.

1.3 Objectives

The objectives of the Marratane refugee camp Behavioural Surveillance Survey (BSS) are to:

- Measure the level of behavioural indicators that are likely to contribute to HIV spread among refugees to support program design and evaluation ;
- Identify gaps in services linked to HIV/AIDS in the refugee community and promote the inclusion of respondents into regional HIV/AIDS planning through the comparison with local baseline surveys ; and
- Contribute to standardized tools and sampling frame construction for customized BSS in refugee camps and to the understanding of behaviour relating to HIV/AIDS in situations of displacement by comparison with other UNHCR BSSs.

2. Methodology -- Survey Design and Analysis

2.1 Survey Design

The sampling frame for the Survey was the registration data from the National Institute for Assistance to Refugees (INAR) as of Monday 5 November 2005. The registration data contains information on nationality, age, and gender for all refugees officially registered in Marratane. As shown in Table 1, the total population aged 15 to 49 registered with INAR in the camp was 1918. The main groups include Congolese, Rwandans and Burundians. Other nationalities comprising no more than 9 individuals were not included in the population under study.

Table 1: Refugee Population 15-49 Years Old, Marratane (05/11/2005)

Nationality	Male	Female	Total
DRC	863	611	1 474
Burundi	158	120	278
Rwanda	81	76	157
Other nationalities	6	3	9
Total	1 108	810	1 918

[5] UNAIDS, UNICEF, WHO. Rwanda: Epidemiological Fact sheets on HIV/AIDS and Sexually Transmitted Infections, 2004.
[6] Auger, Chantal. Baseline Survey for the Integrated Health Network – Nampula. Care Mozambique, March 2003.

A stratified random sampling method was used to select the sample for the survey. Stratified sampling entails more precision than simple random sampling and allows better estimates by gender or nationality group. The sampling frame was divided in 6 strata according to gender and the 3 nationalities. Further stratification in terms of age groups was not implemented in order to avoid obtaining many strata on particular questions which included only one respondent. Such a situation would call for collapsing strata *ex post* in order to obtain estimates of the variance. The sample was allocated to strata in proportion to its share of the population. If proportional allocation is used, a formula for sample determination is[7]:

$$1/n \leq 1/N + [V_o / \sum W_h P_h (1-P_h)]$$

where N=1918, h = 1, 2…, 6, and $W_h = N_h/N$.

Assuming a rate of risky behaviour of 30% and 10% among men and women and a conservative maximum variance V_o, the minimum number of respondents for stratified sampling is 400. However, a final sample of 900 individuals was taken from the population of respondents registered in the Marratane camp as shown in Table 2.

Table 2: Strata Sizes

Nationality	Male	Female	Total
DRC	407	288	695
Burundi	74	57	131
Rwanda	38	36	74
Total	519	381	900

2.2 Questionnaire Design

The questionnaire was adapted from the GLIA Support Project's Kakuma refugee camp BSS[8]. The GLIA questionnaire was translated into French by the consultant and adapted to the situation of Marratane where only the refugee community was interviewed. As a result, questions to be delivered to the host community were dropped and response categories were adjusted.

The questionnaire was not pre-tested. Since the questionnaire was computerized in Johannesburg, it could not be modified on the site of the study. Enumerators were instructed to correct minor orthographic and grammatical mistakes in the questionnaire as they carried out the interviews and note where improvements could be made.

The question regarding the appearance of infected persons was problematic. The initial question from the GLIA BSS in the Kakuma refugee camp was: "Est-il possible qu'une personne apparemment en bonne santé ait en fait le virus du SIDA / Is it possible for a healthy-looking person to have the AIDS virus?" The question led to confusion since AIDS is not a virus but a syndrome. The French questionnaire used in Marratane asked: "Est-il possible qu'une personne apparemment en bonne santé ait le SIDA / Is it possible for a healthy-looking person to have AIDS?" We recommend that future UNHCR BSSs use the FHI/UNAIDS - and original GLIA meeting on BSSs, formulation: "Do you think that a healthy-looking person can be infected with HIV, the virus that causes AIDS?"

[7] Raj, Des and Promod Chandhok (1998) *Sample Survey Theory*. New Delhi: Narosa Publishing, p.106.
[8] Behavioural Surveillance Survey for Great Lakes Initiative on AIDS (GLIA), UNHCR, Draft Report on the Behavioural Surveillance Survey, Kakuma Refugee Camp, 13 June 2005.

In the course of the survey, it appeared that some refugees were perplexed about rumours about the availability of a cure for AIDS which had been developed in Africa. Future BSSs should estimate the reach of these types of rumours.

Another improvement for future questionnaires would be decoupling HIV counseling questions from testing questions. This is particularly important where, like in Marratane, there are extensive initiatives aimed at raising awareness about HIV/AIDS but there is no local HIV test site.

2.3 Selection and Training of Enumerators

Representatives of block units within the camp were requested to submit individuals for selection. In addition, the consultant asked some community activists he met during the previous week's nutrition survey to join the selection in order to bring some diversity within the group. More than 50 persons were considered in the selection process. Unfortunately, only 7 women were initially proposed. When problems occurred in the nomination process, block leaders were given the opportunity to present a female candidate only.

Thirty enumerators were selected on 8 November 2005 after a private interview. The selection criteria concentrated on abilities in reading, calculation, and general presentation skills. The same test was administered to 50 candidates and consisted of reading the consent form of the questionnaire, finding and reading a question in the questionnaire, and calculating the age of someone. The final list of enumerators (see Table 3) was drawn keeping in mind the need to fill gender and nationality quotas following the principle that enumerators would only interview individuals of the same sex and nationality in order to ensure trust and understanding. Quite a few enumerators had received formal HIV/AIDS sensitization training from non-governmental organisations (NGOs) and were sometimes versed in basic survey methods.

Table 3: Data Collection Team by Gender and Nationality

Nationality	Male	Female	Total
DRC	13	9	22
Rwanda	2	2	4
Burundi	2	2	4
Total	17	13	30

The consultant trained the enumerators the day after the selection. The consultant introduced the objectives of the BSS and general interviewing procedures. The rest of the training consisted of a detailed review of the questionnaire itself. The consultant fielded questions from the enumerators throughout the training and continuously during the daily morning meetings. When the consultant followed fieldworkers during interviews, advice was provided to improve interviewing skills and the data collection.

2.4 Data Collection

The data collection was carried out continuously from 10 to 21 November 2005. The list of names sampled was divided among enumerators who made direct contact with respondents. The specific way to reach respondents was left to the judgment of the enumerators. Many refugees were known to the enumerators, which facilitated identification and improved trust. Some respondents were reached by phone and given an interview date. The data collection involved substantial searching time and enumerators had to walk many times the length of the camp in order to find respondents. The last week-end of the data collection, a list of remaining respondents was drawn and publicized at strategic points in the camp. Refugees were then asked to meet enumerators at the centre of the camp on an appointed date.

The INAR database could not distinguish Marratane refugees who resided in Nampula for schooling or work from those living permanently the camp at the time of the survey. The Great Lakes Initiative on

HIV/AIDS (GLIA) BSS meeting had agreed that in the future only refugees present in the camp would be included in BSS surveys.[9] Therefore, refugees who were not regular residents of the camp were not interviewed for this survey.

Of the 900 refugees 156 were confirmed not to be living permanently in Marratane at the time of the survey, and were not eligible for the BSS. At the end, 744 persons were eligible to be interviewed, but because 7 persons refused to be interviewed, a total of 737 interviews were conducted (giving a 99.991% response rate).

Table 4: Respondents by Nationality and Gender

Nationality	Male		Female		Total	
	N	%	N	%	N	%
DRC	333	78.5	233	74.4	566	76.7
Burundi	58	13.7	48	15.3	106	14.4
Rwanda	33	7.8	32	10.2	65	8.8
Total	424	100 (57.5)	313	100 (42.5)	737	100 (100)

During fieldwork, questionnaires were checked against the registration age. Some consistency checks were also performed at this stage.

2.5 Data Capturing and Analysis

Data capturing: The questionnaire was designed and printed in a format compatible with TELEform©. TELEform© is a state-of-the-art software package that works in conjunction with a scanner or fax server to expedite data capturing and increase accuracy through the use of Optical Character Recognition (OCR). Research questionnaires are scanned or received as fax images. These images are then "read" by TELEform© using sophisticated optical character recognition (OCR), optical mark recognition (OMR) and image character recognition (ICR) engines. The accuracy of the data is an important benefit derived from using TELEform©. While computers are not infallible, they do make fewer mistakes in basic data entry than humans. TELEform© highlights information that it finds illegible or unclear and flags this field for verification. The TELEform© operator is thus only required to verify questionable data entries (rather than entering the data).

Data analysis: This report presents survey estimates of population proportions and Pearson tests of differences corrected for the design with finite population correction. The Pearson chi-squared statistic is corrected for the survey design using the second-order correction of Rao and Scott (1984) and converted into an F-statistic. The proportional allocation of observations to strata considerably simplified the analysis. There was no need to use sampling weights to compute the indicators. Missing data from item non-response can be imputed or assumed to be completely at random. It was assumed that item non-response was generated completely at random.[10]

Following best practices established in the Family Health International BSS Guidelines[11], proportions were calculated on the basis of the total relevant population for questions of knowledge and behaviours. For questions elaborating on issues of knowledge and behaviours, proportions were computed from the valid responses for that particular issue.

As discussed above, the sampling frame contained all the residents of Marratane and some refugees who did not live permanently in the camp at the time of the survey. Formally, the discrepancy between the

[9] Great Lakes Initiative on AIDS (GLIA), Meeting on Behavioural Surveillance Surveys, World Bank, 20-21st April 2005, Washington DC.
[10] Family Health International, Behavioural Surveillance Surveys: Guidelines for Repeated behavioural surveys in populations at risk of HIV, 2000, p.28.
[11] Family Health International, ibid, Chapter 9, pp.106-156.

sampling frame and the actual resident population of the camp means that subsequent analysis for the BSS report is in fact a sub-population analysis. Sampling theory demonstrates that extraneous units do not create bias, but that their presence in the sampling frame increases the variance of the estimates. The formal proof follows simply from including non-contributing observations in the sample with zero on all their characteristics.[12]

Throughout this report, comparisons are made between the refugee population in Marratane and the local population in nearby Nampula City, using a 2003 CARE/Mozambique baseline survey[13] which evaluates condom use, knowledge of Sexually Transmitted Infections (STIs) and HIV/AIDS among 400 randomly-selected respondents within the city limits. However, the comparisons of the refugee population in Marratane with the Mozambican population must be treated with caution. Government public health interventions between early 2003 and late 2005, including the operation of a VCT centre in Nampula City, could have changed behaviours substantially.

The original CARE data set was not available to the consultant. Therefore, comparisons between populations are simple differences between point estimates and do not carry proper statistical testing.

In addition, comparisons are also made with results obtained from a 2004 BSS carried in the Kiziba camp in Rwanda.[14] Kiziba camp housed more than 18,000 refugees including 6,734 refugees aged 15-49. Of respondents in Kiziba, 98.2% were Congolese (DRC).

3. Results: Background Characteristics of the Respondents

3.1 Socio-Demographic Characteristics

Table 5: Socio-demographic Characteristics of Respondents

Categories	Male		Female		Total	
	N	%	N	%	N	%
Age						
15-24 years	107	25.2	127	40.6	234	31.8
25-49 years	317	74.8	186	59.4	503	68.3
Total	424	100 (57.5)	313	100 (42.5)	737	100(100)
Relationship status						
Married	256	61.5	198	64.5	454	62.8
Single	147	35.3	84	27.4	231	32.0
Divorced	7	1.7	11	3.6	18	2.5
Widow/widower	6	1.4	14	4.6	20	2.8
Total	416	100.0	307	100.0	723	100.0
Religion						
Catholic	106	28.5	74	27.3	180	28.0
Protestant	226	60.8	162	59.8	388	60.3
Muslim	31	8.3	27	10.0	58	9.0
Other	9	2.4	8	3.0	17	2.6
Total	372	100.0	271	100.0	643	100.0
Education						
Never went to school	5	1.2	34	11.0	39	5.4
Some primary school	12	2.9	48	15.5	60	8.3
Primary completed	63	15.1	95	30.7	158	21.7
Collège	232	55.6	77	24.8	309	42.5

[12] Raj and Chandhok, ibid., p.276.
[13] Auger, ibid.
[14] UNHCR and GLIA, Enquête de Surveillance Comportementale chez les Réfugiés et la Population: Camp de Kiziba et Secteurs de Rubazo et Kagabiro, Septembre 2004.

Categories	Male		Female		Total	
	N	%	N	%	N	%
Lycée	84	20.1	51	16.5	135	18.6
University	21	5.0	5	1.6	26	3.6
Total	417	100.0	310	100.0	727	100.0
Income-generating activity						
Unemployed	273	68.3	224	79.7	497	73.0
Agriculture	46	11.5	14	5.0	60	8.9
Trade	34	8.5	32	11.4	66	9.7
Pastoral	2	0.5	1	0.4	3	0.4
Transportation	2	0.5	0	0.0	2	0.3
Crafts	8	2.0	3	1.1	11	1.6
Private services	20	5.0	1	0.4	21	3.1
Public services	6	1.5	2	0.7	8	1.2
Humanitarian and development	6	1.5	3	1.1	9	1.3
Other	3	0.7	1	.4	4	0.6
Total	400	100.0	281	100.0	681	100.0

This table shows: older refugees are more numerous than younger refugees, and that married refugees are more numerous than single refugees; the main religion in the camp is Protestantism; men are more educated and have more access to income-generating activities than women.

Gender and Age Structure: The demographic structure of the Marratane camp is tilted towards older adult men: 57.5% of respondents are men and predominantly older adult men. Men from 15-24 years of age only represent 25.2% of the adult male population under study. Of women respondents, 42.5% are younger, aged 15-24. The Care/Mozambique Baseline Survey exhibits a balanced gender distribution with 51.7% of men among the local population in Nampula City.[15] In the Kiziba camp of Rwanda, 53.5% of respondents are between 15 and 24 years of age compared to 31.8% in Marratane. Women are a large majority in Kiziba since they represent 64.7% of the camp's population.

During the Marratane survey, enumerators reported that respondents appeared to visibly lie about their age. Indeed, there were discrepancies between age calculated from registration data and reported age during the survey. Regression analysis of the absolute difference between reported and registration age shows that errors in reporting were not completely random – Rwandans were less likely than Congolese and Burundians to report large discrepancies, while refugees without formal education were more likely to make mistakes. However, neither gender nor age of first marriage appears to have been misreported.

Marital Status: The majority of adult refugees in Marratane are married (62.8%), but 35% of men and 27.4% of women are single. Divorce and widowhood are uncommon among male refugees at 1.7 and 1.4% respectively. Of women, 3.6% are divorced and 4.6% are widows. In the Kiziba refugee camp, 44.7% of respondents were married and 46.9% were single.

The mean age of marriage in Marratane was 23.4 (s.d. 0.16) for men and 18.3 (s.d. 0.2) for women (Wald F=305.79, p=0.00). The Congolese marry earlier than Burundians and Rwandans [(Wald F=5.45, p=0.02) (Wald F=20.48, p=0.00), respectively]. The Congolese marry at 20.4 years (s.d. 0.16), Burundians at 21.3 (s.d. 0.38) and Rwandans at 23.3 (s.d. 0.62). The mean age of marriage of the Congolese was 22.0 (s.d. 0.17) for men and 17.8 (s.d. 0.24) for women (Wald F=249.44, p=0.00). The mean age of marriage of the Burundians was 24.8 (s.d. 0.59) for men and 19.5 (s.d. 0. 4) for women (Wald F=36.61, p=0.00). Finally, the mean age of marriage of the Rwandans was highest at 27.3 (s.d. 0.72) for men and 19.9 (s.d. 0.54) for women (Wald F=28.12, p=0.00).

[15] Unfortunately, the CARE/Mozambique Baseline Survey of Integrated Health Network in Nampula did not contain exact information on the composition of the sample by gender. Using the percentages by gender on the question of the use of condom compared to total use of condom and solving for the share of men, the percentage of men comes to 51.7%.

Being officially married does not necessarily entail currently living with a long term partner. Of married respondents, 20% did not currently live with a long term partner. Furthermore, note that the questionnaire did not probe married respondents living with a long term partner whether or not he or she was their spouse.

Finally, nearly all married respondents in Marratane reported being in a monogamous relationship. Nine male respondents in total, eight of which were Congolese, reported being in a polygamous marriage.

Religion: Of respondents in Marratane, 643 (87%) indicated a religious affiliation. The majority of respondents are Protestant (60.3%) followed by Catholics (28%) and Muslims (9%). There is no significant difference between men and women in terms of religious affiliation (Pearson F=0.51, p=0.67). Other faiths included Jehova witnesses and Apostles. The Kiziba camp was also dominated by Protestants (72.7%) and Catholics (25.4%) but did not have a Muslim population. In the local community of Nampula City, Catholics predominate, accounting for 48.6% of the population, followed by Muslims (33.3%) and Protestants (11.7%).

Education: The population of the camp has a relatively high level of education, although there are marked educational differences between men and women (Pearson F=53.50, p=0.00). Of men, 80.7% studied beyond primary school while only 3.1% had received little or no formal education. Significantly fewer women in Marratane are educated – 13.7% have never been to school or have not completed primary school. Only 43% of women studied beyond primary school. However, comparing Marratane to Kiziba, the Marratane population is more educated: in Kiziba 11.6% of men and 41.2% of women had never attended formal schooling. Education levels were also much lower in the local population in Nampula City where 17.4% of women and 11.8% of men, had received little or no formal education. Finally, 5% of Marratane men and 1.6% of women had attended university compared to 2.1% of local men and 0.5% of local women.

While 81.8% of refugee men find it easy to read a newspaper and 2.6% cannot read it at all, only 57.4% of refugee women can read the newspaper easily and 13% cannot read at all. In Nampula City, more than 25.6% of the population cannot read a newspaper or a letter.

The differences in educational level by country of origin is statistically significant (Pearson F=9.9793, p=0.00). Of Congolese, 12.2% have never been to school or have not completed primary school compared to 17.1% of Burundians and 20.3% of Rwandans. Only 4.7% of Rwandans have completed high school or more compared to 22% of Congolese; 33.3% of Burundians have completed high school.

Employment or Economic Activity: About one-third of respondents reportedly engage in an income-generating activity. Again, there are differences between men and women (Pearson F=23.27, p=0.00), with 32.6% of men and 20.9% of women involved in an income-generating activity. The major remunerating activities of the adult refugee camp population were agriculture and trade, drawing 8.8% and 9.7% respectively of all adult respondents. Of all male respondents, 5% found employment in private services. Note that responding negatively to having an income-generating activity does not necessarily mean being inactive. Although idle men were conspicuous in Marratane, female respondents were oftentimes difficult to reach because of water and subsistence agriculture activities, which are not remunerated.

Burundians have the highest rate of unemployment with 80.8% of them without income-generating activity, compared to 74% for the Congolese and 51.6% for the Rwandans. Employment rates are significantly different across country of origins (Pearson F=17.55, p=0.00). The Congolese are most successful in trade (32.8%), agriculture (32.1%), private services (11.9%) and crafts (7.5%). Burundians engage in trade (50%), agriculture (15%), humanitarian activities (15%) and private services (10%).Rwandans are most successful in agriculture, trade and private services, with 22.6%, 19.4%, and 4.8% respectively, but are absent in all other trades including public services and humanitarian and development organizations. Differences between patterns of employment are significant across country of origins (Wald F=3.18, p=0.00).

3.2 Displacement, Mobility, and Networking between Communities

Table 6: Displacement, Mobility and Networking with Surrounding Communities

Categories	Male		Female		Total	
	N	%	N	%	N	%
Length of stay in Marratane						
Between 6-12 months	14	3.3	18	5.8	32	4.4
1-2 years	183	44.0	126	40.6	309	42.6
3-5 years	205	49.3	147	47.4	352	48.5
More than 5 years	14	3.4	18	5.8	32	4.4
Don't know	0	0.0	1	0.3	1	0.1
Total	416	100.0	310	100.0	726	100.0
Have left the camp for more than one month in the past year						
Yes	97	23.2	36	12.2	133	18.6
No	322	76.9	259	87.8	581	81.4
Total	419	100.0	295	100.0	714	100.0
Primary reason for being away from the camp						
Work-related	28	31.1	2	4.4	30	22.2
Trade-related	24	26.7	17	37.8	41	30.4
Family-related	12	13.3	7	15.6	19	14.0
School-related	16	17.8	13	28.9	29	21.5
Health-related	8	8.9	5	11.1	13	9.6
Other	2	2.2	1	2.2	3	2.2
Total	90	100.0	45	100.0	135	100.0
Frequency of visits to the surrounding community						
Never	174	41.4	167	55.5	341	47.3
Less than once a month	43	10.2	32	10.6	75	10.4
Once a month	109	26.0	70	23.3	179	24.8
Many times a month	94	22.4	32	10.6	126	17.5
Total	420	100.0	301	100.0	721	100.0
Reason for the last visit to the surrounding community						
Work-related	17	7.1	2	1.5	19	5.1
Trade-related	23	9.6	14	10.4	37	9.9
Shopping	80	33.3	41	30.4	121	32.3
Health-related	12	5.0	22	16.3	34	9.1
School-related	12	5.0	9	6.7	21	5.6
Entertainment	7	2.9	0	0.0	7	1.9
Obtain food	22	9.2	12	8.9	34	9.1
Visit relatives	41	17.1	19	14.1	60	16.0
Obtain wood	8	3.3	6	4.4	14	3.7
Attend religious service	18	7.5	9	6.7	27	7.2
Other	0.0	0.0	1	0.7	1	0.3
Total	240	100.0	135	100.0	375	100.0

This table shows: the length of stay in the camp is similar between men and women and that nearly half of respondents have stayed 3 to 5 years; a higher proportion of men than women have left the camp for more than one month in the past, and men visit the surrounding community more frequently; men tend to leave the camp to search for work opportunities while women are relatively more tasked with shopping, school and health matters.

Time away from Country of Origin: Respondents report having been away from their country of origin on average 5.9 years for men and 7.4 years for women (Wald F=23.58, p=0.00). Burundians have been away longest with an average of 8.6 years of exile, followed by the Congolese, 6.3 years, and the Rwandans 5.3 years. The difference between Burundians, on the one hand, and Congolese or Rwandans respondents, on the other hand, is significant [(Wald F=18.35, p=0.00)(Wald F=11.0, p=0.001), respectively]. The difference between Rwandan and Congolese respondents is significant at the 1% level of confidence as well (Wald F=7.11, p=0.0078).

Time spent at Marratane Camp: As shown in Table 6, most respondents have stayed in Marratane between one and five years reflecting the camp's recent establishment and history of receiving refugees largely from other camps. Thus, 42.6% of respondents had stayed for one to two years in the camp and 48.5% for three to five years. The difference of time in the camp along gender lines is significant [Pearson F=3.41, p=0.0087]. Of women, 5.8% had stayed between six and 12 months compared to 3.3% of men. There may be a trend towards newer arrivals being more balanced in terms of gender. Notably, there were no respondents in the sample who indicated that they had lived in Marratane for less than 6 months, possibly reflecting a lag between registration in the camp and the updating of the registration database with INAR. In Kiziba, the time spent in the camp was higher than in Marratane with 81.1% having spent 5 to 10 years in the camp.

Travelling away from the camp for more than 1 continuous month: 18.6% of respondents have been away from the camp for more than one month continuously, although again there are large disparities between men and women (Pearson F=28.2, p=0.00). Of men, 23.2% against 12.2% of women have reported spending more than one month away. Long periods away from the camp were more frequent in Kiziba than in Marratane. In Kiziba, 34.2% of respondents had spent at least one month away, including 52.4% of men and 24.3% of women.

Men largely travel for work (31.1%) or trade-related reasons (26.7%). Women travelled mainly for reasons of trade (37.8%) and school-related reasons (28.9%), followed by Health (11.1%) and work (4.4%). In Kiziba, where long travel was more frequent, the main reason for travelling was to visit relatives and friends (51.8%) followed by studies (26.9%) and work (15.2%).

Non-regular visits outside the camp: The frequency of non-regular visits is also an indicator of sexual networking opportunities with surrounding communities. Of all respondents, 47.3% never visit the local communities, 10.4% do less than once a month, 24.8% once a month and 17.5% many times a month. The difference between male and female respondents on account of frequency of visits is significant (Pearson F=14.74, p=0.00) at both extremes: 55.5% of women never visit the surrounding communities against 41% of men, and only 10.6% of women do many times a month against 22.4% of men.

Rwandans, probably owing to their higher employment levels, are the most mobile compared to Burundians and Congolese inhabitants of the camp. Only 26% of Rwandans never visit the surrounding community while 44.6% do so many times a month. The Congolese report the lowest proportion (13.4%) visiting the surrounding community many times a month.

The most frequently cited reason for a visit to the host community was shopping (32.3%) followed by seeing relatives (16%), trading (9.9%), and obtaining food (9.1%) or healthcare (9.1%). Even with the profusion of churches inside the camp – over 40 churches exist in the camp – 7.2% of respondents cited attendance to a religious service as the reason for their last visit to the surrounding community. The main points of departure between men and women on the reason for a visit were work and health. Only 1.5% of women said they had visited the local community for a work-related reason compared to 7.1% of men. Of men, 5% had visited the local community for a health-related reason compared to 16.3% of women.

The Congolese visited the surrounding community to shop (32%), visit relatives (16%), obtain food (10.5%), trade (9.8%) and obtain healthcare (9%). Rwandans essentially visited the surrounding community to shop (36.2%), attend to school-related matters (21%) and trade (9.9%), while Burundians mainly shopped (30.2%), visited relatives (22.6%), or attended a religious service (13%).

4. Results: Sexual Behaviour and Condom Use

4.1 Sexual Debut among 15-24 Year Olds

As expected, sexual experience increases with age. Nearly half (45.9%) of teenagers (aged 15-19) and 79.2% of young adults (age 20-24) have been sexually active. In both age groups, slightly more males than females have had sexual experience. Teenage boys in Marratane and Kiziba have similar rates of sexual debut with abstinence at 47.8% and 53% respectively. However, teenage girls in the Marratane camp become sexually active earlier than those in the Kiziba camp. In Kiziba, 86.3% of 15-19 years old girls had never had sex compared to only 55.6% in Marratane. Similarly, among young adults, rates of abstinence are lower in Marratane than in Kiziba. In Kiziba, 27.6% of young adult males and 25.4% of young adult females had never had sex before, compared to only 13.1% of Marratane young adult males and 17.2% of Marratane young adult females respectively.

Table 7: Sexual Experience among 15-24 year Olds by Gender and Age Group

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-19 years							
Ever had sexual intercourse	Yes	24	52.2	26	41.3	50	45.9
	No	22	47.8	37	58.8	59	54.1
	Total	46	100.0	63	100.0	109	100.0
Have had sexual intercourse in the last 12 months	Yes	19	41.3	21	33.3	40	36.7
	No	27	58.7	42	66.2	69	63.3
	Total	46	100.0	63	100.0	109	100.0
Unmarried and had sex partner in last 12 months	Yes	15	35.7	8	17.4	23	26.1
	No	27	64.3	38	82.6	65	73.9
	Total	42	100.0	46	100.0	88	100.0
20-24 years							
Ever had sexual intercourse	Yes	51	83.6	48	75.0	99	79.2
	No	10	16.4	16	25.0	26	20.8
	Total	61	100.0	64	100.0	125	100.0
Have had sexual intercourse in the last 12 months	Yes	36	59.0	40	62.5	76	60.8
	No	25	41.0	24	37.5	49	39.2
	Total	61	100.0	64	100.0	125	100.0
Unmarried with sex partner in last 12 months	Yes	27	61.4	3	27.3	30	54.6
	No	17	38.7	8	72.7	25	45.4
	Total	41	100.0	11	100.0	55	100.0
Total							
Ever had sexual intercourse	Yes	75	70.1	74	58.3	149	63.7
	No	32	29.9	53	41.7	85	36.3
	Total	107	100.0	127	100.0	225	100.0
Have had sexual intercourse in the last 12 months	Yes	55	51.4	61	48.0	116	49.6
	No	52	48.6	66	52.0	116	50.4
	Total	107	100.0	127	100.0	234	100.0
Unmarried with sex partner in last 12 months	Yes	42	48.8	11	19.3	53	37.1
	No	44	51.2	46	80.7	90	62.9
	Total	86	100.0	57	100.0	143	100.0

This table shows: around half of teenagers have had a sexual relationship before, and more than three quarters of young adults did; one third of unmarried teenage males and two thirds of unmarried young adult men had a sex partner in the past twelve months; rates for sexual partnerships in the year are twice as high for unmarried men than for unmarried women; sexual partnerships in the past year are equally frequent between married and unmarried younger men but much less frequent among unmarried younger women than married younger women.

Marriage is not a pre-condition for sexual activity for younger men but it is for younger women. Among unmarried 15-24 year olds, in Marratane more men (48.8%) than women (19.3%) have had a relationship in the last year. The difference of the proportions in terms of gender is statistically significant (Pearson

F=25.04, p=0.00). The same pattern is found for the two younger age groups – among unmarried teenagers (ages 15-19) and among unmarried young adults (ages 20-24). Of unmarried teenage boys, 35.7% had a sex partner in the last twelve months compared to 17.4% of teenage girls. Of unmarried young adult men, 61.4% had a sexual relationship in the past year compared to only 27.3% of young adult women.

Unmarried younger men in Kiziba camp have had sexual relationships in the past year in similar proportions as unmarried younger men in Marratane. However, 9.8% of teenage girls and 62.5% of young adult women had a sexual relationship in the past year in Kiziba.

The median age for the first sexual experience reported by respondents is 19 years old. The median age of sexual experience among the sexually active teenagers and young adults at each age is also 19 years old, equal to that found in Kiziba. On average, men's first sexual experience occurs at 18.9 years while women's is lower at 17.7 years. The difference between male and female mean age of first sexual relationship is significant (Wald F=15.07, p=0.0001). Rwandans have the latest start in sexual activity around 21.7 years on average. The Congolese and the Burundians start their sexual life earlier, at 18 and 18.8 years respectively. The difference between Congolese and Burundians is significant at the 5% level (Wald F=4.28, p=0.0390). The difference between, on the one hand, Rwandans and, on the other hand, Congolese and Burundians is significant at the 1% level [(Wald (F=37.83, p=0.00) (F=16.74, p=0.00), respectively].

4.2 Sexual Behaviours with Different Partners

4.2.1 Regular Sex Partners

A regular sexual partner is defined as a person linked by marriage or a live-in partner with whom the respondent has regular sexual relationships.

Table 8: Experience with Regular Sexual Partner

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Ever had a regular sexual relationship?	Yes	24	22.4	45	35.4	69	29.5
	No	83	77.6	82	64.6	165	70.5
	Total	107	100.0	127	100.0	234	100.0
Had sex with a regular partner in past 12 months	Yes	13	12.1	37	29.1	50	21.4
	No	94	87.9	90	70.9	184	78.6
	Total	107	100.0	127	100.0	234	100.0
Used condoms during last sexual encounter	Yes	3	12.5	1	2.5	4	6.25
	No	21	87.5	39	97.5	60	93.75
	Total	24	100.0	40	100.0	64	100.0
25-49 years							
Ever had a regular sexual relationship?	Yes	210	66.2	99	53.2	309	61.4
	No	107	33.8	87	46.7	194	38.6
	Total	317	100.0	186	100.0	503	100.0
Had sex with a regular partner in past 12 months	Yes	156	49.2	72	38.7	228	45.3
	No	161	50.8	114	61.3	275	54.7
	Total	317	100.0	186	100.0	503	100.0
Used condoms during last sexual encounter	Yes	16	8.6	2	2.2	18	6.47
	No	171	91.4	89	97.8	260	93.5
	Total	187	100.0	91	100.0	278	100.0
Total							
Ever had a regular sexual relationship?	Yes	234	55.2	144	46.0	378	51.3
	No	190	44.8	169	54.0	359	48.7
	Total	424	100.0	313	100.0	737	100.0

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
Had sex with a regular partner in past 12 months	Yes	169	39.9	109	34.8	278	37.7
	No	155	60.1	204	65.2	459	62.3
	Total	424	100.0	313	100.0	737	100.0
Used condoms during last sexual encounter	Yes	19	9.0	3	2.3	22	6.4
	No	192	91.0	128	97.7	320	93.6
	Total	211	100.0	131	100.0	342	100.0

This table shows: few younger men and one third of younger women were in a regular relationship in the past 12 months; about half of older men and about 41% of older women were in such a relationship; condom use with a regular partner is approximately 9% for men and 2.3% for women.

Frequency of regular partnerships: Of all men in the sample, 39.9% indicated that they had a regular sexual relationship in the last year compared to 34.8% of women. The gender difference is statistically significant (Pearson F=7.43, p=0.0006).

Younger respondents reported fewer regular sexual relationships – among younger men aged 15-24 years, 12.1% ever had a regular sexual partner in the past 12 months compared to 29.1% of women of the same age. The difference between younger male and younger female respondents is significant (Pearson F=10.801, p=0.00). More older respondents (aged 25-49) report having had a regular sexual relationship in the last year than younger respondents – 49.2% of older men and 38.7% of older women had a regular sexual partner in the past year. The difference between older men and older women respondents is significant (Pearson F=9.25, p=0.0001).

Partnership patterns: Partnership patterns in terms of country of origin diverge (Pearson F=135.61, p=0.00). Rwandans nearly exclusively had other Rwandans among their regular partners except 4.6% of them who report a regular relationship with a Burundian. The most recent regular partner of 93% of Congolese was also Congolese, and the rest were equally divided between Burundian, Rwandan and Mozambican nationals. Burundians, however, reported that their last regular sexual partner was a fellow Burundian in 78.6% of cases. Congolese (10.7%), Rwandans (8.9%) and Mozambicans (1.8%) were also among the last regular partners of Burundian respondents.

Table 9: Regular Partnership Patterns in Terms of Country of Citizenship

Nationality of last regular partner	Nationality of respondent					
	Burundi		Congo (DRC)		Rwanda	
	N	%	N	%	N	%
Burundi	44	78.6	3	1.2	2	4.6
Congo (DRC)	6	10.7	227	93.0	0	0.0
Rwanda	5	8.9	4	1.6	41	95.4
Mozambique	1	1.8	5	2.1	0	0.0
Don't know	0	0.0	5	2.1	0	0.0
Total	56	100.0	244	100.0	43	100.0

Condom Use in Regular Sexual Relationships: Condom use in regular relationships is uncommon. Only 6.4% of respondents with a regular sexual partner reported having used a condom during their last sexual relationship. However, this is higher than is seen in other refugee camps – in Kiziba camp of Rwanda, only 1.1% of respondents used a condom with their regular partner. Encouragingly, condom use is higher among younger men 15-24 years (12.5%) as compared to men 25-49 years old (only 9%), suggesting more protective behaviours among younger men.

Much like in Kiziba, the use of condoms with a regular partner is almost nonexistent for women of all ages in Marratane, hovering barely above the 2% level for all group ages. The difference between men

and women on condom use with the last regular partner is statistically significant (Pearson F=4.97, p=0.0264).

There were 22 respondents (6.4%) who had used a condom in their last sexual relationship with their regular partner. Of the three women, two said they used a condom on their own initiative and one that it was a joint decision. Of the 19 men, one had used a condom at the request of their partner, nine had taken the initiative, eight said it was a joint decision and one did not answer the question.

Table 10: Reasons for not using a condom during last sexual relationship with regular partner

Categories	Male		Female		Total	
	N	%	N	%	N	%
Trust my partner	147	82.1	76	65.5	223	75.6
Do not like them	26	14.5	34	29.3	60	20.3
Did not think of it	14	7.8	14	12.1	28	9.5
Partner objected	3	1.7	22	19.0	25	8.5
Use other contraceptive	8	4.5	6	5.2	14	4.8
Not available	7	3.9	7	6.0	14	4.7
Do not know what a condom is	4	2.2	6	5.2	10	3.4
Too expensive	0	0.0	4	3.4	4	1.4
Other than main categories	5	2.8	3	2.6	8	2.7
Don't know	1	0.6	12	10.3	13	4.4
Total	179		116		295	

The reason most cited for not using a condom with one's regular partner during the last sexual relationship was trust in the partner (75.6%) followed by dislike of condoms (20.3%). However, male and female respondents do not provide equivalent answers:

- More men (82.1%) declared that they trust their partners than women (only 65.5%).
- Fewer men (14.5%) stated that they did not like condoms than women (29.3%).
- Fewer men (1.7%) stated that their partner objected to the use of a condom than women (19%).

These responses illustrate elements of contradiction between the rationale given by men and women, which may indicate a lack of discussion on the use of condoms between regular partners or may suggest a conflict over the issue.

4.2.2 Non-regular Sex Partners

A non-regular sexual partner is defined as a partner outside of marriage, live-in situation or commercial sex worker with whom the respondent had had sex during the specified period of time.

Frequency of non-regular partnerships: Of all respondents, 11.8% had sex with a non-regular partner in the past 12 months. Men report significantly more non-regular sex partners (16.5%) than women (5.4%) (Pearson F=29.70, p=0.00). Non-regular partnerships were also more common among younger respondents – particularly younger men. Of younger males, 29.9% report a non-regular sexual partner in the last 12 months compared to 7.8% of younger females – a significant difference (Pearson F=25.52, p=0.00). In contrast, 19.2% of older men and 7% of older women had a non-regular partner in the same period – again a significant difference between men and women (Pearson F=13.65, p=0.00).

The level of non-regular sexual activity is similar between the Marratane camp and the Kiziba camp of Rwanda. In Kiziba, 31.6% of younger men and 7.1% of younger women had had a non-regular sexual partner in the last 12 months. For those aged 25-49 years, the rates in Kiziba were 13.9% for men and 5.6% for women.

Table 11: Experience with Non-regular Partners

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Ever had non-regular sex partner	Yes	43	40.2	15	11.8	58	24.8
	No	64	59.8	112	88.2	176	75.2
	Total	107	100.0	127	100.0	234	100.0
Had sex with a non-regular partner in the past 12 months	Yes	32	29.9	9	7.1	41	17.5
	No	75	70.1	118	92.9	193	82.5
	Total	107	100.0	127	100.0	234	100.0
Used condoms during last sexual encounter	Yes	20	47.6	1	7.1	21	37.5
	No	22	52.4	13	92.9	35	62.5
	Total	42	100.0	14	100.0	56	100.0
25-49 years							
Ever had non-regular sex partner	Yes	60	18.9	12	6.0	72	14.3
	No	257	81.1	174	94.0	431	85.7
	Total	317	100.0	186	100.0	503	100.0
Had sex with a non-regular partner in the past 12 months	Yes	38	12.0	8	4.3	46	9.1
	No	279	88.0	178	95.7	457	90.9
	Total	317	100.0	186	100.0	503	100.0
Used condoms during last sexual encounter	Yes	27	45.0	2	22.2	29	42.0
	No	33	55.0	7	77.8	40	58.0
	Total	60	100.0	9	100.0	69	100.0
Total							
Ever had non-regular sex partner	Yes	104	24.3	27	8.6	130	17.6
	No	310	75.7	286	91.4	557	82.4
	Total	424	100.0	313	100.0	737	100.0
Had sex with a non-regular partner in the past 12 months	Yes	70	16.5	17	5.4	87	11.8
	No	354	83.5	296	94.6	650	88.2
	Total	424	100.0	313	100.0	737	100.0
Used condoms during last sexual encounter	Yes	47	46.1	3	13.0	50	40.0
	No	55	53.9	20	87.0	75	60.0
	Total	102	100.0	23	100.0	125	100.0

This table shows: men are three times more engaged in non-regular sexual partnerships; younger respondents are twice involved in non-regular partnerships; a third less women had a non-regular partner in the past year than men; less than half of men used a condom in non-regular sex and condom use is particularly low among younger women.

Condom Use in Last Non-regular Partnership: Of respondents who ever had a non-regular relationship, 40% had used a condom in their last one compared to 24.3% of respondents in Kiziba. Reported condom use with non-regular partners is significantly different between men and women in Marratane (Pearson F=14.36, p=0.00). Men report using condoms 46.1% of the time, while women report using a condom only 13% of the time. In Kiziba, 28.2% of men and 16.6% of women used a condom in their last non-regular sex partnership.

There is no significant difference between younger men and older men in their use of condoms in sexual relationships. Although men's age doesn't appear to influence their use of condoms with non-regular partners, the age of a woman does. Fewer women in Marratane overall report using condoms with non-regular partners than men, but younger women report less (7.1%) than older women (22.2%). In contrast, women in Kiziba have an opposite pattern –higher levels of condom use among younger women (25%) age 15-24 years old compared to 9.1% for older women aged 25-49.

Because of the predominance of men with a non-regular partners, we cannot reject the hypothesis that there is no difference between the rates of condom use during non-regular sexual relationships between respondents 15-24 years old and respondents 25-49 years old (Pearson F=.56, p=0.4556).

Table 12: Reasons for not using a condom during last sexual relationship with non-regular partner

Categories	Male		Female		Total	
	N	%	N	%	N	%
Did not think of it	16	30.8	2	12.5	18	26.4
Do not like them	6	11.5	3	18.8	9	13.2
Trust my partner	6	11.5	2	12.5	8	11.8
Not available	7	13.5	1	6.3	8	11.8
Do not know what a condom is	5	9.6	3	18.8	8	11.8
Unplanned	4	7.7	0	0	4	5.9
Use other contraceptive	2	3.9	1	6.3	3	4.4
Partner objected	2	3.9	0	0	2	2.9
Did not think it was necessary	1	1.9	0	0	1	1.5
Want a baby	1	1.9	0	0	1	1.5
Other than main categories	3	5.8	2	12.5	5	7.3
Don't know	1	1.9	3	18.8	4	1.3
Total	52		16		68	

The main reasons for not using a condom during the last non-regular sexual relationship are found in Table 12 above. It is interesting to note that many more women than men did not know what a condom is, or did not like them. Moreover, 18.8% of women did not know why they had not used a condom compared to 1.9% of men. Men, on the other hand were more likely to indicate that they didn't think of using a condom, or that condoms were not available. Note that in Kiziba the main reason for men and women of not using a condom was ignorance of condoms followed by trust in the partner and unplanned sexual relationship.

Marital Status and Non-regular Relationships: As we noted earlier, 20% of married respondents did not actually live with a long-term partner, which raises the question of the frequency of non-regular sexual partnerships among married respondents in Marratane. Of married respondents, 5.7% had a non-regular sexual relationship in the past 12 months, including 6.6% of married men and 4.6% of married women.

Moreover, 20% of respondents who ever had a non-regular relationship divulged that the last relationship had been with a married person. Of women, 51.4% had their last non-regular relationship with a married person compared to 8.7% of men. There was a significant difference between men and women in terms of the civil status of their last or current non-regular partner (Pearson F=15.04, p=0.00). Although this may include non-regular relationships before displacement as well, these figures show the extent to which married respondents may place their spouse at risk of infection.

Perhaps due to the few single women in the camp, refugee men tend to have sexual partners in the local community. Of refugee men, 30.3 % had a Mozambican as their last or current non-regular partner. In contrast, no refugee women reported having a Mozambican as their last or current partner.

Table 13: Relationship Status of Last or Current Non-regular Partner, by Marital Status of Respondents

Categories	Male		Female		Total	
	N	%	N	%	N	%
Married respondents						
Married partner	4	12.0	11	61.1	15	29.4
Single partner	18	54.6	6	33.3	24	47.1
Divorced partner	6	18.2	0	0.0	6	11.8
Widow/widower partner	4	12.1	0	0.0	4	7.8
Don't know partner	1	3.0	1	5.6	2	3.9
Total	33	100.0	18	100	51	100.0
Single respondents						
Married partner	5	7.1	8	42.1	13	14.6
Single partner	48	68.6	7	36.8	55	61.8
Divorced partner	8	11.4	2	10.5	10	11.2
Widow/widower partner	2	2.9	1	5.3	3	3.4
Don't know partner	7	10.0	1	5.3	8	9.0
Total	70	100.0	19	100.0	19	100.0
Total respondents						
Married partner	9	8.7	19	51.4	28	20.0
Single partner	66	64.1	13	35.1	79	56.4
Divorced partner	14	13.6	2	5.4	16	11.4
Widow/widower partner	6	5.8	1	2.7	7	5.0
Don't know partner	8	7.8	2	5.4	10	7.1
Total	103	100.0	37	100.0	140	100.0

4.2.3 Transactional Sex Partners

A transactional sexual relationship is defined as involving the promise of money, gift or favour. Transactional sex increases the risk of exposure to HIV. The formulation of the question in the Marratane BSS did not distinguish the type of reward, whether favour, gift or money.

Frequency of transactional sex: Significantly more men than women report having had sex in exchange for money, gift or favour at all ages (Pearson F=40.70, p=0.00). More younger men (17.8%) than younger women (6.3%) had ever exchanged sex for reward. The difference between younger men and younger women is significant (Pearson F=40.70, p=0.00). Likewise, more older men (15.5%) have exchanged sex for a reward compared to only 2.1% of older women.

We cannot reject the hypothesis that there is no difference between the two age groups (15-24 years old compared to 25-49 year old) who report having engaged in transactional sex (Pearson F=0.22, p=0.6359).

These levels of transactional relationships are higher in Marratane than in the Kiziba camp. In Kiziba, only 1.4% of men and 0.8% of women reported a sexual relationship in exchange for money and 0.8% of men and 1.4% of women reported a sexual relationship in exchange for favours.

In Marratane, 3.5% of men and 0.6% of women report having had transactional sex in the past 12 months. The gender difference is statistically significant (Pearson F=22.94, p=0.00). The difference between age groups is also significant. Thus, 6.5% of younger men and 1.6% of younger women had a transactional sexual relationship in the past year compared to 2.5% of older men and no older women aged 25-49 years.

Table 14: Transactional Sexual Relationships and Condom Use

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Ever had sex in exchange for money, gift or favour	Yes	19	17.8	8	6.3	27	11.5
	No	88	82.2	119	93.7	227	88.5
	Total	107	100.0	127	100.0	234	100.0
Had sex in exchange for money, gift or favour in the last 12 months	Yes	7	6.5	2	1.6	9	6.0
	No	100	93.5	125	98.4	225	94.0
	Total	107	100.0	127	100.0	234	100.0
Used condom during last transactional sex ever	Yes	4	23.5	2	25.0	6	24.0
	No	13	76.5	6	75.0	19	76.0
	Total	17	100.0	8	100.0	25	100.0
25-49 years							
Ever had sex in exchange for money, gift or favour	Yes	49	15.5	4	2.1	53	10.5
	No	268	84.5	182	97.9	450	89.5
	Total	317	100.0	186	100.0	503	100.0
Had sex in exchange for money, gift or favour in the last 12 months	Yes	8	2.5	0	0.0	8	1.6
	No	309	97.5	186	100.0	495	98.4
	Total	317	100.0	186	100.0	503	100.0
Used condom during last transactional sex ever	Yes	18	40.9	2	40.0	20	40.8
	No	26	59.1	3	60.0	29	59.2
	Total	44	100.0	5	100.0	49	100.0
Total							
Ever had sex in exchange for money, gift or favour	Yes	68	16.0	12	3.8	80	10.8
	No	356	84.0	301	96.2	654	89.2
	Total	424	100.0	313	100.0	737	100.0
Had sex in exchange for money, gift or favour in the last 12 months	Yes	15	3.5	2	0.6	17	7.3
	No	409	96.4	311	99.4	720	92.7
	Total	424	100.0	313	100.0	737	100.0
Used condom during last transactional sex ever	Yes	22	36.1	4	33.3	26	35.6
	No	39	63.9	8	66.7	47	64.5
	Total	61	100.0	12	100.0	73	100.0

This table shows: men are engaged in transactional sex four times more than women; one third of transactional sexual relationships involve the use of a condom but that younger respondents use them less than older respondents.

Condom Use in Transactional Sex: Only one-third of the Marratane respondents' transactional sexual relationships involved the use of condoms. The difference in condom use by age group is significant at the 10% level of confidence (Pearson F=3.71, p=0.0579). Fewer younger respondents (age 15-24) - 25.9%, used a condom during their last transactional sex experience compared to those aged 25-49 years (40.9%). Among those who had used condoms, 54.6% declared having suggested it, 22.7% that it was the suggestion of their partner, and 22.8% that it was a joint decision.

With respect to gender difference in condom use during transactional sex, we cannot reject the hypothesis that there is no difference (Pearson F=0.07, p=0.7984).

Table 15: Reasons for not using a condom during last transactional sexual relationship

Categories	Male		Female		Total	
	N	%	N	%	N	%
Trust my partner	7	20.6	3	30.0	10	22.7
Did not think of it	6	17.6	4	40.0	10	22.7
Not available	7	20.6	1	10.0	8	18.2
Do not know what a condom is	5	14.7	1	10.0	6	13.6
Do not like them	4	11.8	1	10.0	5	11.4
Partner objected	2	5.9	0	0.0	2	4.6
Too expensive	2	5.9	0	0.0	2	4.6
Unplanned sex	1	2.9	0	0.0	1	2.3
Don't know	1	2.9	0	0.0	1	2.3
Total	34		10		44	

For the remaining two-thirds of the respondents who did not use a condom during transactional sex, the main reasons were trust in the partner (22.7%) and not thinking of it (22.7%), followed by non-availability (18.2%) and not knowing what a condom is (13.6%). Women were twice as likely to say that they trusted their partners as men.

Table 16: Transactional sexual relationships over the displacement cycle

Categories	Male		Female		Total	
	N	%	N	%	N	%
Before displacement	35	51.5	1	8.3	37	45.0
During displacement	11	16.2	5	41.7	17	20.0
After displacement	32	47.1	9	75.0	42	51.2
Total	68		12		81	

Note that in this table, and in all tables that involve multiple response questions, percentages may add up to more than 100%.

Transactional Sex over the Displacement Cycle: Transactional sexual relationships before displacement concerned about 45% of respondents who ever had transactional sex: 51.5% of these men and 8.3% of women. In particular, women become more vulnerable to transactional sexual relationships during and after displacement. The rate of transactional sex of women increases from 8.3% before displacement to 41.7% during displacement and 75% after displacement. 16.2% of men ever engaging in transactional sex reported this occurred during displacement; 47.1% reported that it occurred after displacement. Therefore transactional sexual relationships are concern throughout the displacement cycle.
As the period 'during displacement' is usually the shortest of the three stages ('before', 'during', or 'after'), the figure of 4.17% of women reporting transactional sex 'during' displacement is particularly worrying, and underscores the vulnerability of women during this stage.

4.2.4 Male to Male Sex

Only 6 men (1.5%) reported ever having a sexual relationship with another man. Among the six men, half had had their first homosexual relationship before displacement and the other half after displacement. Only three of them had used a condom in their last sexual relationship with a man. Of the three others, two did not know what a condom was and the other did not know why he had not used a condom.

4.3 Knowledge and Access to condoms

Most respondents aged 15-49 (89.7%) had heard of condoms. The level of knowledge of condoms increases with age (Pearson F= 22.22, p=0.00). However, women are much less aware of condoms than men and this difference between gender on knowledge of condoms is significant (Pearson F=59.31, p=0.00). Knowledge levels in the local community are similarly high –92.1% of respondents in Nampula City had heard about condoms.

Table 17: Knowledge of male condoms and use

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Ever heard of a male condom	Yes	97	90.7	100	78.7	197	84.2
	No	10	9.3	27	21.3	37	15.8
	Total	107	100.0	127	100.0	234	100.0
Ever used condom	Yes	37	52.9	12	19.7	49	37.4
	No	33	47.1	49	80.3	82	62.6
	Total	70	100.0	61	100.0	131	100.0
25-49 years							
Ever heard of a male condom	Yes	305	96.2	159	85.5	464	92.2
	No	12	3.8	27	14.5	39	7.8
	Total	317	100.0	186	100.0	503	100.0
Ever used condom	Yes	97	34.5	18	14.2	115	28.2
	No	184	65.5	109	85.8	293	71.8
	Total	281	100.0	127	100.0	408	100.0
Total							
Ever heard of a male condom	Yes	402	94.8	259	82.7	661	89.7
	No	22	5.2	54	17.3	76	10.3
	Total	424	100.0	313	100.0	737	100.0
Ever used condom	Yes	134	38.2	30	16	164	30.4
	No	217	61.8	158	84	375	69.6
	Total	351	100.0	188	100.0	539	100.0

This table shows: most respondents have heard of condoms and knowledge increases with age; women are less aware of condoms than men; but, only one-third of sexually active refugees have ever used a condom.

Table 18: Knowledge of Condom Functions among respondents who had heard of condoms

Categories	Male		Female		Total	
	N	%	N	%	N	%
Protects from STIs/HIV/AIDS	376	93.5	211	81.5	587	88.8
Family planning	201	52.2	93	35.9	303	45.8
Prevents pregnancy	182	45.3	117	45.2	299	45.2
Total	402		259		661	

Condom use: Among those who had heard of condoms most respondents (88.8%) understand that condoms protect against HIV/AIDS/STIs, but few understand the family planning/contraceptive benefits of condoms. However, women are significantly less able to identify the use of condoms to protect against STIs/HIV/AIDS (81%) than men (93%) (Pearson F=48.4, p=0.00). We cannot reject the hypothesis that there is no difference between men and women in terms of identifying preventing pregnancy as a use for condoms (Pearson F=0.0013, p=0.9712) but the difference between men and women on family planning is significant (Pearson F=37.42, p=0.00).

The high level of knowledge about condoms does not translate into reported use of them. Among respondents with sexual experience only 30.4% have ever used a condom. Females of all ages are significantly less likely to have ever used a condom during sexual intercourse (Pearson F=60.20, p=0.00) than men. Among women 15-24 years old, 19.7% have ever used a condom compared to 52.9% of men. Of women 25-49 years old, 16% have ever used a condom compared to 38.2% of men.

Reported use rates in the local community are only slightly higher -- 39.9% of respondents in Nampula City had ever used a condom, including 48.3% of men and 30.9% of women. Thus, condom use seems to be less prevalent among respondents than among the local population.

Finding condoms: Marratane respondents who had used a condom were asked to identify places where condoms could be obtained. All men knew where to find a condom while 7.5% of women reported they

did not In comparison, only 80.2% of respondents in Nampula City knew a place where they could get a condom.

Of the 172 respondents who had ever used a condom, 10 thought it was difficult to find and 12 said it depended. Nine of these respondents cited unavailability and the attitude of health workers as the main constraints in obtaining condoms.

Table 19: Source of condoms

Categories	Male		Female		Total	
	N	%	N	%	N	%
Health facility	84	60.9	16	42.1	100	56.8
Pharmacy	46	33.3	8	21.0	54	30.7
Community health worker	34	24.6	13	34.2	47	26.7
Friend	16	11.6	1	2.6	17	9.7
Market	7	5.1	1	2.6	8	4.5
In a shop	2	1.5	1	2.6	3	1.7
Other than main categories	2	1.5	0	0.0	2	1.1
Don't know	0	0.0	3	7.9	3	1.7
Total	138		38		176	

The most frequently cited source of condoms was a health facility, followed by the pharmacy and community health workers (CHW).

Obtaining condoms from a friend is a popular option among men, who mentioned it 11.6% of times, but only 2.6% of women specified they could obtain a condom this way. Finally, shops and markets were among the less frequently cited places for men and women.

Local residents of Nampula City are more reliant on the market (60.2%), restaurants or "barracas" (54.8%), the hospital (52.1%), and pharmacies (48.6%).

Female Condoms: The survey in Marratane asked three questions about female condoms. Only 25% of all male respondents and 10% of female respondents had ever heard of female condoms. Among them, 77.9% of men and 85.7% of women declared that they were difficult to obtain. Half of respondents who had heard about female condoms said they or their partner would be interested in using one but 10.9% of men and 20.5% of women were uncertain.

5. Results: HIV and STI Knowledge, Attitudes, and Practices

Enumerators and respondents who had followed some kind of HIV/AIDS training informally reported that the sensitization programs were limited to the basics – which they referred to by its English acronym ABC–, and did not address the subtle mechanisms of the virus and other STIs. In this section, we look at the extent of HIV/AIDS knowledge and attempt to confirm these key informants' opinion that the basic issues of HIV prevention are well understood throughout the Marratane refugee community.

5.1 Knowledge of HIV/AIDS

The vast majority of respondents (93.9%) have heard about HIV or a disease called AIDS. However, there is a significant difference along gender lines (Pearson F=36.95, p=.00) where 97% of men have heard of it against 89.5% of women. As a comparison, 97.7% of respondents in Nampula City had heard about HIV/AIDS and there were no differences along gender lines. We cannot reject the hypothesis that there is no difference between respondents from different countries (Pearson F=1.40, p= 0.2450). All men and nearly all women interviewed had heard about AIDS in Kiziba camp in Rwanda.

Of respondents knowledgeable about HIV/AIDS, 51.9% of respondents knew someone who died of AIDS, 30.3% did not, and 17.8% did not know. Indeed, 41% believe there is more infection in the camp than in the local community, 19.6% thought otherwise, and 38% did not know.

5.1.1 Sources of Information about HIV/AIDS

Table 20: Sources of Information on HIV/AIDS (ranked by most frequently cited)

Categories	Male		Female		Total	
	N	%	N	%	N	%
Radio	339	82.3	178	63.3	517	74.6
Health centre	280	68.0	202	71.9	482	69.6
Newspaper	257	62.4	118	42.0	375	54.0
TV/Video	253	61.4	119	42.3	372	53.7
Community health worker	231	56.1	130	46.3	361	52.1
From friend	165	40.0	124	44.1	289	41.7
School	153	37.1	68	24.2	221	31.9
Sister/brother	114	27.8	63	22.4	177	25.5
Poster/pamphlet	64	15.5	22	7.8	86	12.4
Other	16	3.9	12	4.3	28	4.0
Do not know	0	0.0	12	4.3	12	1.7
Total	412		281		693	

As shown in Table 20, radio was mentioned as the most important source of information about HIV/AIDS, followed by the health centre, newspapers, and TV/video. Interestingly, more respondents from Nampula City (95%) than in Marratane camp (74%) mention consider the radio as an information source, suggesting that either radio reception or language may be a barrier to listening to radio in Marratane.

Table 21: Preferences for Future Sources Information on HIV/AIDS

Categories	Male		Female		Total	
	N	%	N	%	N	%
Public sensitization program	347	84.2	207	73.7	554	79.9
Radio	301	73.1	178	63.3	479	69.1
School	240	58.3	138	49.1	378	54.5
Newspaper	218	52.9	120	42.7	338	48.8
Other	34	8.3	14	5.0	48	6.9
Total	412		281		693	

There are substantive gender differences however; men are far more likely to mention newspapers, TV/video, through the school, and through posters/pamphlets as an information source compared to women. This may reflect men's greater education/literacy levels as described in section 3.1 above.

There are also differences in terms of country of origin. In particular, Rwandans and Burundians are more likely to hear about HIV/AIDS on the radio or in a health centre than Congolese. Rwandans are also more likely to mention newspapers than Burundians and the Congolese. This finding is surprising given that Rwandans have a lower level of education than the other groups. However, only a tiny fraction of Rwandans hear about HIV/AIDS from their sister or brother, or from posters and pamphlets.

In comparison, local residents of Nampula city were more likely to state that after the radio, friends were the second most important source of information (53.9% of respondents), followed by television (50.1%).

A public sensitization program is reportedly the preferred medium of HIV/AIDS information for the majority of respondents, followed by radio. The least preferred media of information on HIV/AIDS are school (54.5%) and newspapers (48.8%).

5.1.2 Knowledge of HIV Transmission and Prevention

Table 22: Knowledge of Modes of Transmission and Preventive Measures

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Abstain	Yes	76	77.5	89	89.0	165	80.9
	No	18	18.4	9	8.5	27	13.2
	Don't know	4	4.1	8	7.5	12	5.9
	Total	98	100.0	106	100.0	204	100.0
Be faithful	Yes	90	90.9	96	90.6	186	90.7
	No	5	5.1	4	3.8	9	4.4
	Don't know	4	4.0	6	5.6	10	4.9
	Total	99	100.0	106	100.0	205	100.0
Use condom	Yes	81	81.8	96	89.7	177	85.9
	No	14	14.1	5	4.7	19	9.2
	Don't know	4	4.0	6	5.6	10	4.9
	Total	99	100.0	107	100.0	206	100.0
All three	Yes	66	61.7	76	40.2	92	39.3
	No	41	38.3	51	59.8	142	60.7
	Total	107	100.0	127	100.0	234	100.0
25-49 years							
Abstain	Yes	253	83.8	126	76.4	379	81.2
	No	40	13.2	23	13.9	63	13.5
	Don't know	9	3.0	16	9.7	25	5.3
	Total	302	100.0	165	100.0	467	100.0
Be faithful	Yes	287	94.4	149	89.8	436	92.8
	No	14	4.6	8	4.8	22	4.7
	Don't know	3	1.0	9	5.4	12	2.5
	Total	304	100.0	166	100.0	470	100.0
Use condom	Yes	229	76.6	130	79.2	359	77.5
	No	52	17.4	17	10.4	69	14.9
	Don't know	18	6.0	17	10.4	35	7.6
	Total	299	100.0	164	100.0	463	100.0
All three	Yes	194	61.2	104	55.9	298	59.2
	No	123	38.8	82	44.1	205	40.8
	Total	317	100.0	186	100.0	503	100.0
Total							
Abstain	Yes	329	82.2	215	79.3	544	81.1
	No	58	14.5	32	11.8	90	13.4
	Don't know	13	3.3	24	8.9	37	5.5
	Total	400	100.0	271	100.0	671	100.0
Be faithful	Yes	377	93.6	245	90.1	622	92.1
	No	19	4.7	12	4.4	31	4.6
	Don't know	7	1.7	15	5.5	22	3.3
	Total	403	100.0	272	100.0	675	675
Use condom	Yes	310	77.9	226	83.4	536	80.1
	No	66	16.6	22	8.1	88	13.2
	Don't know	22	5.5	23	8.5	45	6.7
	Total	398	100.0	271	100.0	669	100.0
All three	Yes	260	61.3	180	57.5	440	59.7
	No	164	38.7	133	42.5	297	40.3
	Total	424	100.0	313	100.0	737	100.0

This table shows: respondents had a very high level of understanding of basic preventive measures, including abstain, be faithful and use condoms; older women were less knowledgeable than older men about preventive measures, while younger women were generally more knowledgeable than younger men. In the aggregate, we find that nearly two thirds of all refugees know the three preventive measures.

Knowledge of ABC[16]: Respondents in Marratane have a high level of understanding of the ways to prevent HIV transmission. Of those who had heard about HIV/AIDS, 81.1% believe one can protect oneself from infection by abstaining from sexual relationships, 92.1% by remaining faithful to one uninfected sexual partner, and 80.1% by using a condom consistently. Moreover, 87.6% agreed that a person can get infected by taking injections with a needle that was already used by someone else. These knowledge levels are higher than among residents of Nampula City: only 60.7% of local residents thought they could protect themselves from HIV by always correctly using a condom, less than 54%, including 65.8% of men and 41.4% of women, replied they could protect themselves by practicing abstinence. The Kiziba camp BSS report 47.2% of respondents knew about the trilogy of abstinence, condoms and being faithful as means of preventing HIV transmission. Unfortunately, the Kiziba report did not provide information on each term separately.

Among younger (15-24 year old) respondents in Marratane who had heard about HIV, more females (84%) than males (77.6%) know they can protect themselves from HIV/AIDS through abstinence. This gender difference is significant (Pearson F=5.27, p=0.0053). In the older age group (25-49 years old), the pattern is inversed with more men (83.8%) than women (76.4%) understanding that abstinence protects against infection. Again, these gender differences are significant (Pearson F=10.1372, p=0.00).

Regarding faithfulness, 90.7% of younger respondents understood they can protect themselves from HIV/AIDS by remaining faithful with no significant gender difference in knowledge (Pearson F=0.47, p=0.62). Similarly, 92.1% of older respondents understood the benefit of remaining faithful, but significantly more older men (94.4%) than older women (89.8%) understand the benefits of faithfulness (Pearson F=8.72, p=0.0002).

Female respondents of all ages in Marratane were more likely than male respondents to agree that condom use protects against infection. Among younger respondents who had heard about HIV/AIDS, more females (89.7%) than males (81.8%) indicated that they could protect themselves by using a condom consistently, and this gender difference is significant (Pearson F=5.63, p=0.0036). Likewise, among older respondents, more women (79.3%) than men (76.6%) understood the benefit of using condoms consistently, and again this gender difference is significant (Pearson F=6.32, p=0.0018).

Finally, combining the three indicators, we find that 59.7% of all respondents know about ABC, including 61.3% of men and 57.5% of women. We cannot reject the hypothesis that there are no gender and age differences [(Pearson F=2.24, p=0.13)(Pearson F=0.28, p=0.59), respectively]. In Kiziba, however, only 44.8% of the sample could identify the three preventive measures.

Table 23: Knowledge of Transmission through Used Needles

Categories	Male		Female		Total	
	N	%	N	%	N	%
15-24 years						
Yes	83	84.7	92	85.2	175	85.0
No	10	10.2	11	10.2	21	10.2
Don't know	5	5.1	5	4.6	10	4.8
Total	98	100.0	108	100.0	206	100.0
25-49 years						
Yes	275	90.8	141	84.9	416	88.7
No	19	6.3	17	10.2	36	7.7
Don't know	9	2.9	8	4.8	17	3.6

[16] A = Abstinence, B= Be Faithful, C=Use Condoms.

Categories	Male		Female		Total	
	N	%	N	%	N	%
Total	303	100.0	166	100.0	469	100.0
Total						
Yes	358	89.3	233	85.0	591	87.6
No	29	7.2	28	10.2	57	8.4
Don't know	14	3.5	13	4.7	27	4.0
Total	401	100.0	274	100.0	675	100.0

Among younger respondents who heard about HIV, 84.7% of men and 85.2% of women knew one could get infected by an injection with a used needle. The difference between younger men and younger women is not significant (Pearson F=0.02, p=0.97). Among older respondents, 90.8% of men and 84.9% of women knew about infection from a syringe. The difference between older men and older women is significant (Pearson F=2.72, p=0.0245).

To conclude, the main tenets of HIV prevention are well understood in Marratane. However, the lower levels of understanding of the benefits of condoms in fighting HIV transmission compared to the higher levels of knowledge about abstinence and faithfulness indicates that some improvements in the promotion of condoms can be made.

5.1.3 Misconceptions of HIV Transmission and Prevention

Table 24: Misconceptions of HIV transmission

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Sharing cooking utensils	Yes	20	20.6	30	28.3	50	24.6
	No	70	72.1	64	60.4	134	66.0
	Don't know	7	7.2	12	11.3	19	9.4
	Total	97	100.0	106	100.0	203	100.0
Healthy-looking person can be infected	Yes	69	71.9	82	75.9	151	74.0
	No	11	11.5	19	17.6	30	14.7
	Don't know	16	16.7	7	6.5	23	11.3
	Total	96	100.0	108	100.0	204	100.0
25-49 years							
Sharing cooking utensils	Yes	28	9.3	32	19.4	60	12.9
	No	259	85.7	123	74.5	382	81.8
	Don't know	15	5.0	10	6.1	25	5.3
	Total	302	100.0	165	100.0	467	100.0
Healthy-looking person can be infected	Yes	263	86.8	135	83.3	398	85.6
	No	20	6.6	17	10.5	37	8.0
	Don't know	20	6.6	10	6.2	30	6.4
	Total	303	100.0	162	100.0	465	100.0
Total							
Sharing cooking utensils	Yes	48	12.0	62	22.8	110	16.4
	No	329	82.5	187	69.0	516	77.0
	Don't know	22	5.5	22	8.1	44	6.6
	Total	399	100.0	271	100.0	670	100.0
Healthy-looking person can be infected	Yes	332	83.2	217	80.4	549	82.1
	No	31	7.8	36	13.3	67	10.0
	Don't know	36	9.0	17	6.3	53	7.9
	Total	399	100.0	270	100.0	669	100.0

This table shows: women hold common misconceptions about HIV/AIDS more than men, in particular about sharing cooking utensils.

Respondents who had heard of HIV/AIDS were asked questions dealing with common misconceptions about HIV/AIDS. Worryingly, 16.4% believed that they can be infected with HIV when sharing cooking utensils. There is a significant difference between age groups (Pearson F=20.3284, p=.00), with more younger (15-24) respondents indicating that they believe this than older respondents (25-49). In addition, there are more younger women (28.3%) than men (20.6%) who believed they could be infected with HIV by sharing cooking utensils; and this gender difference is significant (Pearson F=3.3785, p=0.0344). Indeed, the predominance of this belief among women persists with age, significantly more older women (19.4%) than older men (9.3%) hold this belief (Pearson F=10.6859, p=0.00).

Of respondents who had heard of HIV/AIDS, 10% believe a healthy-looking person cannot have AIDS[17]. There is a significant difference between age groups on the matter of physical appearance (Pearson F=13.3280, p= 0.00) — more younger respondents (age 15-24) believe that that a healthy-looking person cannot have AIDS. Among younger respondents, significantly more women (17.6%) than men (11.5%) incorrectly believing that a healthy-looking person cannot be sick with AIDS (Pearson F=6.1996, p=0.0021). More older women (10.5%) than older men (6.6%) believed it as well, although this difference is not significant (Pearson F=2.207, p=0.1105).

In the end, common misconceptions regarding HIV/AIDS were not as pervasive in the camp as the high level of understanding of preventive measures. However, one refugee male school teacher approached the consultant on the subject of African medicines that allegedly cure HIV/AIDS. He proposed that a test be made on a patient with natural remedies he had access to and he claimed could cure AIDS immediately. The present data does not allow checking for the pervasiveness of this view in the Marratane population. Future surveys or community consultations should investigate the belief in the availability of a cure and other misconceptions, and their effect on risky behaviour.

5.1.4 Knowledge of Mother-to-Child Transmission of HIV

Table 25: Knowledge of Mother-to-child Transmission

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
During pregnancy	Yes	60	60.6	75	70.1	135	65.5
	No	27	27.3	20	18.7	47	22.8
	Don't know	12	12.1	12	11.2	24	11.7
	Total	99	100.0	107	100.0	206	100.0
During delivery	Yes	75	75.8	84	77.8	159	76.8
	No	8	8.1	6	5.5	14	6.8
	Don't know	16	16.1	18	16.7	34	16.4
	Total	99	100.0	108	100.0	207	100.0
During breastfeeding	Yes	78	79.6	87	80.6	165	80.0
	No	6	6.1	5	4.6	11	5.3
	Don't know	14	14.3	16	14.8	30	14.6
	Total	98	100.0	108	100.0	206	100.0
25-49 years							
During pregnancy	Yes	192	64.0	108	67.1	300	65.1
	No	78	26.0	34	21.1	112	24.3
	Don't know	30	10.0	19	11.8	49	10.6

[17] As mentioned in the questionnaire design section, the formulation of this question differed from standard BSSs in that it asked if it were possible for a healthy-looking person to have AIDS instead of being infected with HIV. A negative answer is still a good proxy for an individual's reliance on appearance to infer infection. However, a positive answer may not necessarily entail higher risk understanding as it may reflect two types of reasoning: (1) a healthy-looking person cannot be infected with HIV and have AIDS, therefore I incur no risk; or, (2) a healthy-looking person can be infected with HIV but would not have AIDS, therefore I am still at risk. Moreover, it is worth noting that five to 10% of respondents who heard about HIV/AIDS could not answer this question.

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
	Total	300	100.0	161	100.0	461	100.0
During delivery	Yes	265	87.8	131	82.4	396	85.9
	No	14	4.6	10	6.3	24	5.2
	Don't know	23	7.6	18	11.3	41	8.9
	Total	302	100.0	159	100.0	461	100.0
During breastfeeding	Yes	243	80.7	127	78.4	370	80.0
	No	29	9.6	16	9.9	45	9.7
	Don't know	29	9.6	19	11.7	48	10.3
	Total	301	100.0	162	100.0	463	100.0
Total							
During pregnancy	Yes	252	63.2	183	68.3	435	65.2
	No	105	26.3	54	20.2	159	23.8
	Don't know	42	10.5	31	11.5	73	10.9
	Total	399	100.0	268	100.0	667	100.0
During delivery	Yes	340	84.8	215	80.5	555	83.1
	No	22	5.5	16	6.0	38	5.7
	Don't know	39	9.7	36	13.5	75	11.2
	Total	401	100.0	267	100.0	668	100.0
During breastfeeding	Yes	321	80.4	214	79.2	535	80.0
	No	35	8.8	21	7.8	56	8.4
	Don't know	43	10.8	35	13.0	78	11.7
	Total	399	100.0	270	100.0	669	100.0

This table shows: mother-to-child transmission is not as well understood as ABC; transmission during pregnancy is the least understood of vector of MTCT.

Several questions of direct relevance to knowledge of the prevention of mother-to-child transmission (PMTCT) were asked.

Transmission during pregnancy: Among Marratane respondents who had heard about HIV, 65.2% correctly believe a woman with HIV/AIDS can transmit the virus to her unborn baby during pregnancy. More women (68.3%) than men ((63.2%) knew about transmission during pregnancy, and this difference is significant (Pearson F=5.34, p=0.03). Nevertheless, knowledge of this aspect of PMTCT is lower than that found among residents of Nampula City (79.4%). The gender difference was not significant in Nampula.

Of younger males, 60.6% understood mother-to-child transmission during pregnancy against 70.1% of younger women. However, the difference between younger men and women is not significant at the conventional levels (Pearson F=2.47, p=0.085). Among older respondents, 64% of men and 67.1% of women knew about mother-to-child transmission during pregnancy. The difference along gender lines among older respondents is also not significant (Pearson F=1.52, p=0.21).

Transmission during delivery: In addition, 83.1% of respondents believed a woman with HIV/AIDS can transmit the virus to her child during delivery, including 84% of men and 80.5% of women.

Of younger respondents knowledgeable about HIV, 75.7% of men and 77.8% of women believed a woman with HIV/AIDS could transmit the virus during delivery. The difference between younger men and younger women is not significant (Pearson F=0.53, p=0.58). Of older respondents knowledgeable about HIV, 87.7% of men and 82.4% of women held that HIV could be transmitted during delivery. The difference is significant only at the 8% level of confidence (Pearson F=2.53, p=0.0793).

Transmission during breastfeeding: Of respondents, 80% believed a woman with HIV/AIDS can transmit the virus to her child during breastfeeding, while 8.4% said it was not possible, and 11.7% did not know.

Among respondents knowledgeable about HIV, 79.6% of younger men and 80.6% of younger women believed a woman with HIV/AIDS could transmit the virus to her child during breastfeeding. The difference between younger men and younger women is not significant (Pearson F=0.24, p=0.78). Among older respondents, 80.7% of men and 78.4% of women knew that a woman can transmit the virus during breastfeeding. The difference is not significant however (Pearson F=0.52, p=0.59).

These responses show that not all elements of the prevention of mother-to-child transmission are well understood. A particular effort must be placed on explaining transmission during pregnancy. By and large, understanding of PMTCT does not appear to be a function of age or gender. Therefore, a comprehensive strategy towards PMTCT must be implemented.

5.2 Knowledge of Sexually Transmitted Infections (STIs)

5.2.1 Knowledge of STI Transmission

Of respondents, 84.8% had heard about other diseases transmitted through sexual intercourse apart from HIV/AIDS, although this knowledge was much higher among men (91.6%) than (75.7%) women, and this difference is statistically significant (Pearson F=71.22, p=0.00).

5.2.2 Prevalence of Sexually Transmitted Infections

Table 26: Frequency of STI Symptoms and Treatment Seeking Behaviour in the Past 12 months among those who Know about STIs[18]

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Genital discharge	Yes	5	5.7	9	13.2	14	9.0
	No	83	94.3	59	86.8	142	91.0
	Total	88	100.0	68	100.0	156	100.0
Genital ulcer	Yes	5	5.7	13	22.4	18	12.3
	No	83	94.3	45	77.6	128	87.7
	Total	88	100.0	58	100.0	146	100.0
Seek treatment	Yes	5	45.5	14	82.4	19	67.9
	No	6	54.5	3	17.6	9	32.1
	Total	11	100.0	17	100.0	28	100.0
25-49 years							
Genital discharge	Yes	11	3.9	16	15.2	27	7.0
	No	272	96.1	89	84.8	361	93.0
	Total	283	100.0	105	100.0	388	100.0
Genital ulcer	Yes	7	2.5	11	10.5	18	4.8
	No	267	97.5	94	89.5	361	95.2
	Total	274	100.0	105	100.0	379	100.0
Seek treatment	Yes	16	55.2	13	56.5	29	55.8
	No	13	44.8	10	43.5	23	44.2
	Total	29	100.0	23	100.0	52	100.0
Total							
Genital discharge	Yes	16	4.3	25	14.4	41	7.5
	No	355	95.7	148	85.6	503	92.5
	Total	371	100.0	173	100.0	544	100.0
Genital ulcer	Yes	12	3.3	24	14.7	36	6.9
	No	350	96.7	139	85.3	489	93.1

[18] In the instrument, questions on STI symptoms are only asked of those who are knowledgeable about STIs. This may bias the results by underestimating the frequency of reported symptoms.

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
	Total	362	100.0	163	100.0	525	100.0
Seek treatment	Yes	21	52.5	27	67.5	48	60.0
	No	19	47.5	13	32.5	32	40.0
	Total	40	100.0	40	100.0	80	100.0

This table shows: women reported STIs more than men; younger women sought treatment more than any other group.

Among those who had heard about STIs other than HIV/AIDS, significantly more women than men reported having experienced genital discharge and genital ulcers in the last year:

- 14.4% of all women reported having suffered from genital discharge in the past 12 months compared to 4.3% of men;
- 13.2% of younger women reported having suffered from genital discharge in the past 12 months compared to 5.7% of men (Pearson F=5.39, p=0.0206)
- 15% of older women had suffered from genital discharge compared to 3.9% of men (Pearson F=31.97, p=0.00).

- 14.7% of all women compared to 3.3% of men reported a genital ulcer (Pearson F=47.84, p=0.00)
  - 22.4% of younger women suffered from genital ulcer in the past 12 months as opposed to 5.7% of younger men (Pearson F=18.31, p=0.00); and
  - 10.5% of older women suffered from genital ulcer compared to 2.5% of older men (Pearson F=22.53, p=0.00).

These results clearly indicate the need to target women for STI treatment services.

5.2.3 Treatment Seeking Behaviour

More than half of those who suffered from an STI symptom in the past 12 months sought treatment, but treatment was sought by more women (67.5%) than men (52.5%). The difference is significant at the 10% level of confidence (Pearson F=3.76, p=0.056). However, among younger women, 82.4% sought treatment compared to 45.5% of younger men, and this difference is significant (Pearson F=8.14, p=0.0056). There was no significant difference between older men and older women - 55.8% of all 25-49 year olds sought treatment (Pearson F=0.02, p=0.8919). Particularly as free healthcare is provided in the camp, there is a need to target younger men in raising their understanding of the signs and symptoms of STIs and the benefits of seeking treatment.

With respect to partner notification, fewer men than women informed their partners of their STIs. Of men, only 13.9% informed all their partners of their STI, 22.2% informed some partners; while 63.9% did not reveal their STI to any of partner. Women were divided equally between informing all, some and none at all.

Table 27: Sources of Advice and Treatment for STIs other than HIV/AIDS[19]

Variable	Male		Female		Total	
	N	%	N	%	N	%
Health worker	15	71.4	26	96.3	41	85.4
Pharmacist	12	57.1	15	55.6	27	56.2
Friend	8	38.1	14	51.8	22	45.8
Traditional healer	2	9.5	13	48.1	15	31.2
Total	21		27		48	

The survey investigated the sources of advice and treatment for STIs. Of the respondents affected by an STI who sought treatment in the past 12 months, 85.4% sought treatment or advice from a health worker, 56.2% from a pharmacist, 45.8% from a friend and 31.2% from a traditional healer. Many more women (48.1%) sought treatment from a traditional healer compared to men (9.5%), or from friends (51.8% of women compared to 38.1% of men). This data shows the crucial role of health workers in attending to STIs other than HIV/AIDS.

To conclude, there is a need to improve the knowledge of STIs other than HIV/AIDS among women. Women are particularly affected by STIs even when taking into account the fact that they are less knowledgeable about STIs. It was also shown that health workers and pharmacists are the first point of treatment or advice for women and men, but that traditional healers are also an important source for treatment or advice for women. Therefore, HIV/AIDS interventions should seek to cover other STIs than HIV/AIDS, to engage traditional healers and to ensure that health workers in the camp can properly care for infected refugees.

5.3 Voluntary Counselling and Testing

5.3.1 History of HIV Testing

Table 28: HIV Testing

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Ever been tested	Yes	27	25.5	23	18.9	50	22.0
	No	79	74.5	99	81.1	178	78.0
	Total	106	100.0	122	100.0	228	100.0
Received test results	Yes	23	85.2	16	69.6	39	78.0
	No	3	11.1	5	21.7	8	16.0
	Don't know	1	3.7	2	8.7	3	6.0
	Total	27	100.0	23	100.0	50	100.0
Would go in the future	Yes	95	89.6	101	86.3	196	87.9
	No	9	8.4	11	9.4	20	9.0
	Don't know	2	1.9	5	4.3	7	3.1
	Total	106	100.0	117	100.0	223	100.0
25-49 years							
Ever been tested	Yes	80	25.7	49	27.7	129	26.4
	No	231	74.3	128	72.3	359	73.6
	Total	311	100.0	177	100.0	488	100.0
Received test results	Yes	75	94.9	35	67.3	110	84.0
	No	2	2.5	15	28.8	17	13.0
	Don't know	2	2.5	2	3.9	4	3.0
	Total	79	100.0	52	100.0	131	100.0

[19] The question was asked for each category with response yes or no. The rate of non-response on each item increases as we go down the list. Enumerators may have followed with the question in an open-ended format much like for questions of reasons for not using a condom or for sources of information. Therefore this question is treated as the other open-ended questions with a unique denominator.

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
Would go in the future	Yes	278	89.4	159	89.3	437	89.4
	No	23	7.4	15	8.4	38	7.8
	Don't know	10	3.2	4	2.3	14	2.8
	Total	311	100.0	178	100.0	489	100.0
Total							
Ever been tested	Yes	107	25.7	72	24.1	179	25.0
	No	310	74.3	227	75.9	537	75.0
	Total	417	100.0	299	100.0	716	100.0
Received test results	Yes	98	92.5	51	68.0	149	82.3
	No	5	4.7	20	26.7	25	13.8
	Don't know	3	2.8	4	5.3	7	3.9
	Total	106	100.0	75	100.0	181	100.0
Would go in the future	Yes	373	89.4	260	88.1	633	88.9
	No	32	7.7	26	8.8	58	8.1
	Don't know	12	2.9	9	3.1	21	3.0
	Total	417	100.0	295	100.0	712	100.0

This table shows: a quarter of respondents knowledgeable about HIV had been tested; fewer women received the test results than men; there was a very high willingness to go for a test in the future.

Table 29: VCT: Testing and Results Uptake

	Total	Ever Tested	Testing Uptake	Received Results	Results Uptake
Men 15-24	106	27	25.5%	23	85.2%
Women 15-24	122	23	18.9%	16	69.6%
Men 25-49	311	80	25.7%	75	94.9%
Women 2-49	177	49	27.7%	35	67.3%
All men 15-49	417	107	25.7%	98	92.5%
All women 15-49	299	72	24.1%	51	68.0%
TOTAL respondents 15-49	716	179	25.0%	149	82.3%

Of respondents, 25% had undergone testing for HIV and 82.3% of them received their results. We cannot reject the hypothesis that there is no difference between men and women on HIV testing (Pearson F=0.47, p=0.4929). However, the gender difference on results uptake in Marratane is significant (Pearson F=20.53, p=0.00). Of women who had been tested, only 68% had received the test results compared to 92.5% of men. In comparison, only 7.8% of the local population in Nampula City had ever undergone an HIV test but 92.6% of them received the results. In Kiziba, the data shows that 14.9% of 15 to 24 years old and 19.6% of 25 to 49 years old respondents had ever undergone a test but there was no data on results uptake. Up to 31.3% of older men had been tested compared to 18.7% of younger men. Among women, 12.4% of 15 to 24 years old and 14.4% of 25 to 49 years old had ever been tested.

Table 30: Last Time Tested for HIV

Categories	Male		Female		Total	
	N	%	N	%	N	%
Less than one month ago	6	5.8	2	2.9	8	4.6
Between 1-6 months ago	26	25.0	10	14.5	36	20.8
Between 6-12 months ago	11	10.6	10	14.5	21	12.1
Between 1-2 years ago	23	22.1	15	21.7	38	22.0
More than 2 years ago	35	33.7	24	34.8	59	34.1
Don't know	3	2.9	8	11.6	11	6.4
Total	104	100.0	69	100.0	173	100.0

The gender difference in results uptake in Marratane suggests that the places where women were tested – most likely antenatal clinics – may not have been using rapid tests that provide results on the same day. Indeed, among all respondents, 34.1% of those ever-tested for HIV had been tested more than two years ago – prior to the introduction of rapid tests. More than 56% of the respondents tested for HIV had been tested one year ago or before.

Table 31: Reasons for Not Testing (ranked by most frequently cited)

Categories	Male		Female		Total	
	N	%	N	%	N	%
Sure of not being infected	21	47.7	18	51.4	39	49.4
Afraid for the result	5	11.4	6	17.1	11	13.9
Don't know where to go	4	9.1	6	17.1	10	12.7
Afraid of blood taking	2	4.5	4	11.4	6	7.6
Too expensive	2	4.5	3	8.6	5	6.3
Afraid of catching an infection	1	2.3	3	8.6	4	5.1
Fear of stigmatization	0	0.0	3	8.6	3	3.8
Other	0	0.0	3	8.6	3	3.8
Don't know	7	15.9	7	20.0	14	17.7
Total	44		35		79	

The most frequent reason for not undergoing an HIV test is that the respondent was sure that they were not infected (49.4%), followed by fear of the result (13.9%), and not knowing where to go (12.7%). By and large, women had many more reasons for not having a test than men; and women were far more likely to cite "not knowing where to go" and "fear of stigmatization" as a reason for not testing. In Kiziba, 80.5% of men and 82.4% of women stated they were sure of not being infected as a reason for not testing. Only 4.5% of men and 2.8% of women in Kiziba had been scared of the results and a mere 2.1% of men and 2.8% of women cited not knowing about the test as a reason for not doing it.

5.3.2 Knowledge of HIV Testing Services

Table 32: Principal Source of Information on VCT services

Categories	Male		Female		Total	
	N	%	N	%	N	%
Posters	118	45.6	61	46.6	179	45.9
Community health worker	81	31.3	43	32.8	124	31.8
School	30	11.6	19	14.5	49	12.6
Health services	16	6.2	3	2.3	19	4.9
Signpost	4	1.5	5	3.8	9	2.3
Presentations	8	3.1	0	0.0	8	2.1
Other	2	0.1	0	0.0	2	0.5
Total	259	100.0	131	100.0	390	100.0

Of respondents, 78% know where to receive information on VCT. In addition, 22.5% of them identified that VCT information existed in both the local community and the refugee camp, 33.7% that it existed only in the camp, and 26% that it existed only in the local community. 45.9% learnt about VCT services through posters, another 31.3% directly from community health workers, 12.6% from the school, and 6.2% from a visit at the health services.

Table 33: Sites Where an HIV Test Can Be Obtained (ranked by most frequently cited)

Categories	Male		Female		Total	
	N	%	N	%	N	%
Public hospital	307	94.5	167	87.9	474	92.0
Government health facility	189	58.1	65	34.2	254	49.3
Private hospital/clinic	140	43.1	65	34.2	205	39.8
Public clinic/family planning	127	39.1	61	32.1	188	36.5
Public mobile clinic	102	31.4	35	18.4	137	26.6
Private medical doctor	90	27.7	35	18.4	125	24.3
Private mobile clinic	74	22.8	31	16.3	105	20.4
Pharmacy	12	3.7	14	7.4	26	5.0
Traditional healer	5	1.5	10	5.3	15	2.9
Total	325		190		515	

Respondents most often mentioned the public hospital as a site where an HIV test can be performed (92%), followed by public health facilities (49.3%), private hospitals and clinics (39.8%), and public clinics or family planning centres (36.5%). It is of note that 5.3% of women identified the traditional healer as a possible source for an HIV test.

5.3 3 Future Intention to Test

Encouragingly, 88.9% of all respondents expressed the wish to go for a test in the future and there didn't appear to be any difference between men and women on wanting a test in the future (Pearson F=0.32, p=0.7211) or between age groups (Pearson F=0.34, p=0.7068). In comparison, 73.5% of Nampula City residents were interested in receiving an HIV test, but only if they were assured that test results were confidential. Of local men, 80.5% were willing to be tested, while only 66.1% of local women were.

5.4 Attitudes toward HIV and AIDS

Table 34: Attitudes towards HIV/AIDS

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Should remain a secret in the community	Yes	28	28.3	59	55.1	87	42.2
	No	790	70.7	46	43.0	116	56.3
	Don't know	1	1.0	2	1.9	3	1.5
	Total	99	100.0	107	100.0	206	100.0
Should remain a secret in the family	Yes	28	28.3	56	51.9	84	40.6
	No	70	70.7	50	46.3	120	58.0
	Don't know	1	1.0	2	1.8	3	1.4
	Total	99	100.0	108	100.0	207	100.0
HIV-infected should be allowed to stay in workplace	Yes	78	81.3	78	72.2	156	76.5
	No	15	15.6	28	25.9	43	21.1
	Don't know	3	3.1	2	1.9	5	2.4
	Total	96	100.0	108	100.0	204	100.0
HIV-infected should teach adolescents about condoms	Yes	83	84.7	88	81.5	171	83.0
	No	11	11.2	18	16.7	29	14.1
	Don't know	4	4.1	2	1.8	6	2.9
	Total	98	100.0	108	100.0	206	100.0
25-49 years							
Should remain a secret in the community	Yes	87	29.2	90	54.2	177	38.1
	No	208	69.8	69	41.6	277	59.7
	Don't know	3	1.0	7	4.2	10	2.2
	Total	298	100.0	166	100.0	464	100.0

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
Should remain a secret in the family	Yes	77	26.1	91	54.8	168	36.4
	No	214	72.5	72	43.4	286	62.0
	Don't know	4	1.4	3	1.8	7	1.5
	Total	295	100.0	166	100.0	461	100.0
HIV-infected should be allowed to stay in workplace	Yes	250	83.1	116	69.5	366	78.2
	No	45	14.9	47	28.1	92	19.7
	Don't know	6	2.0	4	2.4	10	2.1
	Total	301	100.0	167	100.0	468	100.0
HIV-infected should teach adolescents about condoms	Yes	239	78.9	115	70.1	354	75.8
	No	54	17.8	40	24.4	94	20.1
	Don't know	10	3.3	9	5.5	19	4.1
	Total	303	100.0	164	100.0	467	100.0
Total							
Should remain a secret in the community	Yes	115	29.0	149	54.6	264	39.4
	No	278	70.0	115	42.1	393	58.7
	Don't know	4	1.0	9	3.3	13	1.9
	Total	397	100.0	273	100.0	670	100.0
Should remain a secret in the family	Yes	105	26.6	147	53.7	252	37.7
	No	284	72.1	122	44.5	406	60.8
	Don't know	5	1.3	5	1.8	10	1.5
	Total	394	100.0	274	100.0	668	100.0
HIV-infected should be allowed to stay in workplace	Yes	328	82.6	194	70.5	522	77.7
	No	60	15.1	75	27.3	135	20.1
	Don't know	9	2.3	6	2.2	15	2.2
	Total	397	100.0	275	100.0	672	100.0
HIV-infected should teach adolescents about condoms	Yes	322	80.3	203	74.6	525	78
	No	65	16.2	58	21.3	123	18.3
	Don't know	14	3.5	11	4.0	25	3.7
	Total	401	100.0	272	100.0	673	100.0

This table shows: more women believe HIV status should remain a secret within the family and in the community than men; concern for HIV status remaining a secret does not change noticeably between age groups; teaching adolescents about condoms is generally accepted.

Respondents were asked about their attitudes towards people infected with HIV through a series of questions relating to confidentiality, care, the workplace, and teaching to adolescents.

Of all respondents, 39.4% believe HIV infection should remain a secret within the community and 37.7% that it should also remain a secret within the family. However, the differences along gender lines are significant with more women than men concerned about stigma and secrecy:

- 54.6% of women compared to 29% of men believe HIV status should remain a secret within the community (Pearson F=54.23, p=0.00)
- 53.7% of women compared to 26.7% of men agree that it should also remain a secret within the family (F=52.36, p=0.00).

We cannot reject the hypothesis that there are no differences between age groups about these two issues [(Pearson F=1.22, p=0.29), (Pearson F=1.02, p=0.35), respectively].

In addition, 77.7% of respondents think people infected with HIV should be allowed to stay in their workplace. While not statistically significant, women are more concerned about HIV infected persons having access to the workplace than men – a surprising finding given that women have less access to outside economic opportunities: 82.6% of men compared to 70.6% of women support HIV infected persons' access to the workplace. By contrast, within the local community only 53.6% of respondents accepted that people infected with HIV should be permitted to continue working with others in factories and offices.

Finally, a total of 78% of respondents support teaching adolescents how to use condoms. In that respect, men (82.6%) are more supportive than women (70.6%). Support for teaching condom use to adolescents drops by 7 percentage points from the younger to the older generation. Among women in particular, 81.5% percent of respondents aged 15-24 years old support the measure and only 70% do so in the 25-49 years age group.

Table 35: Willingness to Care for Relative with AIDS

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Care for female relative	Yes	79	81.4	96	89.7	175	85.8
	No	15	15.5	11	10.3	26	12.7
	Don't know	3	3.1	0	0.0	3	1.5
	Total	97	100.0	107	100.0	204	100.0
Care for male relative	Yes	81	81.8	96	88.9	177	85.5
	No	15	15.2	11	10.2	26	12.6
	Don't know	3	3.0	1	0.9	4	1.9
	Total	99	100.0	108	100.0	207	100.0
25-49 years							
Care for female relative	Yes	259	86.0	151	92.1	410	88.2
	No	35	11.6	11	6.7	46	9.9
	Don't know	7	2.3	2	1.2	9	1.9
	Total	301	100.0	164	100.0	465	100.0
Care for male relative	Yes	273	91.0	152	91.6	425	91.2
	No	21	7.0	14	8.4	35	7.5
	Don't know	6	2.0	0	0.0	6	1.3
	Total	300	100.0	166	100.0	466	100.0
Total							
Care for female relative	Yes	338	84.9	247	91.1	585	87.4
	No	50	12.6	22	8.1	72	10.8
	Don't know	10	2.5	2	0.7	12	1.8
	Total	398	100.0	271	100.0	669	100.0
Care for male relative	Yes	354	88.7	248	90.5	602	89.4
	No	36	9.0	25	9.1	61	9.1
	Don't know	9	2.3	1	0.4	10	1.5
	Total	399	100.0	274	100.0	673	100.0

This table shows: the willingness to care for a relative, male or female, is generally high; men are more willing to care for a male relative than a female relative; women are more predisposed to care for a relative than men.

Of respondents, 87.4% are willing to take care of a female relative sick with AIDS in their own household and 89.5% are willing to do so for a male relative. We cannot reject the hypothesis that there is no difference between age groups on caring for female relatives (Pearson F=1.46, p=0.23). However individuals age 25-49 years old are more than 5 percentage points more willing to take care of male relatives than female relatives (Pearson F=5.40, p=0.0046). Of young men, 81.8% and 88.9% of young men are willing to take care of a male relative in their household against 91% of older men and 91.6% of older women. While the difference between men's and women's attitudes towards sick male relatives disappears with age, women remain much more committed to helping female relatives than men: 86% of older men against only 81.4% of younger men are willing to take care of a female relative. By contrast, 89.7% of younger females and 92% of older ones are willing to do so. In way of comparison, it was found that 90.9% of Mozambicans are willing to take care of someone who is HIV positive. Note that the question was less stringent in the questionnaire for Nampula City than the one in the Marratane survey, the latter referring specifically to the home.

Several informal encounters during the survey suggest that importance of secrecy is related to a genuine fear of stigmatization, especially among women. For example, during informal discussions after the BSS

questionnaire was completed, female respondents requested a private, enclosed room to ask questions about HIV/AIDS as the camp's health centre had no auditory privacy. In addition, one male refugee approached the consultant to request that all refugees be submitted to an HIV test and the test results be made public.

Therefore, efforts to fight stigma, especially among women, should be a priority of health interventions in the camp. As access to VCT increases, care must be taken than individuals are not prevented by fear from seeking these services and that results are kept confidential.

6. Other Potential Risks and Circumcision

6.1 Forced Sex

Forced sex is defined as including all forms of sexual relationships against the will of the respondent.

Table 36: Forced sex (ever)

Categories	Male		Female		Total	
	N	%	N	%	N	%
15-24 years						
Yes	10	9.4	17	13.4	27	11.5
No	97	90.6	110	86.6	207	88.5
Total	107	100.0	127	100.0	234	100.0
25-49 years						
Yes	22	6.9	36	19.4	58	11.5
No	295	93.1	150	80.6	445	88.5
Total	317	100.0	186	100.0	503	100.0
Total						
Yes	32	7.6	53	16.9	85	11.5
No	392	92.4	260	83.1	652	88.5
Total	424	100.0	313	100.0	737	100.0

This table shows: a tenth of respondents have been victim of forced sex; older women have been the most subject to forced sex.

Of all respondents, 10.2% admit having been forced to have sexual relations against their will at least once. Many more women (16.9%) than men (7.6%) have ever been victim to forced sex and the gender difference is statistically significant (Pearson F=16.19, p=0.00). Even at younger ages (15-24 years), females (13.4%) have been subjected to forced sex more than males (9.4%). Of older respondents (age 25-49), many more women (19.4%) than men (6.9%) were ever victim of forced sex, and this is also statistically significant (Pearson F=18.35, p=0.00).

Experience with forced sex reported by the respondents in Marratane is higher than in the Kiziba camp where no younger men and 4.6% of younger women reported a forced sexual relationship and 2.8% of older men and 3.7% of older women did so too.

Note that at the time of the data collection in Marratane, World Vision was holding a seminar on sexual and gender based violence. This and other activities in the camp aimed at reducing violence and conflicts may have contributed to better identification, awareness and reporting of forced sex in Marratane compared to Kiziba camp.

Table 37: Occupation of Perpetrator of Forced sex

Categories	Male		Female		Total	
	N	%	N	%	N	%
Refugee	7	21.9	22	41.5	29	34.1
Military/security forces	5	15.6	15	28.3	20	23.5
Person from local community	6	18.7	2	3.8	8	9.4
Humanitarian worker	0	0.0	1	1.9	1	1.2
Other	3	9.4	2	3.8	5	5.9
Don't know	3	9.4	8	15.1	11	12.9
Total	32	100.0	53	100.0	85	100.0

Respondents were abused first and foremost by other refugees (34.1%) followed by military and other security forces (23.5%), and persons from the local community (9.4%).

Table 38: Period of Victimization from Forced sex

Categories	Male		Female		Total	
	N	%	N	%	N	%
Before displacement	15	46.9	27	49.1	42	49.4
During displacement	5	15.6	23	43.4	28	32.9
After displacement	13	40.6	19	35.8	32	37.6
Total	32		53		85	

Forced sex reportedly occurred most frequently before displacement. Of respondents who experienced forced sex reveal, 49.4% were victimized before displacement. Men experienced the most of forced sex before (46.9% of affected men) and after displacement (40.6%). Only 15.6% of male victims of forced sex suffered it during displacement.

Among women victims of forced sex, 49.1% were forced to have sex before displacement, 43.4% after displacement, and 35.8% after displacement. As with transactional sex, it appears that women are particularly vulnerable during the relatively short period of 'during' displacement. It is also clear that forced sex does not end with arrival in the host country and that continuous activities and interventions to prevent and respond to forced sex must be supported.

6.2 Sex under the Influence of Alcohol

Table 39: Sex under the Influence of Alcohol

Variables	Categories	Male		Female		Total	
		N	%	N	%	N	%
15-24 years							
Ever had sex under influence of alcohol?	Yes	4	3.7	1	0.8	5	2.1
	No	103	96.3	126	99.2	229	97.9
	Total	107	100.0	127	100.0	234	100.0
Used condom during sex in past 12 months?	Yes	3	75.0	0	0	3	60.0
	No	1	25.0	1	100.0	2	40.0
	Total	4	100.0	1	100.0	5	100.0
25-49 years							
Ever had sex under influence of alcohol?	Yes	16	5.0	4	2.2	20	4.0
	No	301	95.0	182	97.8	483	96.0
	Total	317	100.0	186	100.0	503	100.0
Used condom during sex in past 12 months?	Yes	2	12.5	0	0	2	10.5
	No	14	87.5	3	100.0	17	89.5
	Total	16	100.0	3	100.0	19	100.0
Total							

Ever had sex under influence of alcohol?	Yes	20	4.7	5	1.6	25	3.4
	No	404	95.3	308	98.4	712	96.6
	Total	424	100.0	313	100.0	737	100.0
Used condom during sex in past 12 months?	Yes	5	25.0	0	0.0	5	20.8
	No	15	75.0	4	100.0	19	79.2
	Total	20	100.0	4	100.0	24	100.0

This table shows: sex under the influence of alcohol is a limited phenomenon; women never reported the use of a condom during sex under the influence of alcohol.

Among younger respondents age 15-24, 3.7% of males and 0.8% of females have had sex under the influence of alcohol. This percentage increases in the older age group, with 5% of older men and 2.2% of older women reporting that they have had sex under the influence of alcohol. In total, there is a significant gender difference in respondents between sexually active men and women under the influence of alcohol (Pearson F=26.50, p=0.00). However, we cannot reject the hypothesis that there is no difference between age groups.

Among younger men who had sex under the influence of alcohol, 75% reportedly used a condom the last time. In contrast, very few of the older men (12.5%) report using a condom when last under the influence of alcohol. No women reported the use of a condom when they had had sex under the influence of alcohol.

6.3 Drug Use

Table 40: Substance Abuse

Categories	Male		Female		Total	
	N	%	N	%	N	%
15-24 years						
Yes	5	4.7	7	5.5	12	5.1
No	102	95.3	120	94.5	222	95.0
Total	107	100.0	127	100.0	234	100.0
25-49 years						
Yes	15	4.7	15	8.1	30	6.0
No	302	95.3	171	91.1	473	94.0
Total	317	100.0	186	100.0	503	100.0
Total						
Yes	20	4.7	22	7.0	42	5.7
No	404	95.3	291	93.0	695	94.0
Total	424	100.0	313	100.0	737	100.0

This table shows: substance abuse is a marginal phenomenon; it affects younger men and women equally; older women are more affected than older men.

5.7% of all Marratane respondents report having ever taken illegal drugs. Of older respondents 4.7% of men and 8.1% of women had ever taken illegal drugs. Interestingly, more women report having used illegal drugs than men, but this difference is only significant for the older age group (Pearson F=4.7676, p=0.0293).

In contrast, fewer respondents in Kiziba camp report using illegal drugs – only 4% of men and 0.8% of women. In Nampula City, more residents (11.2%) report having used marijuana in the past; this involved the older age groups particularly.

Table 41: Mode of Drug Administration (ranked by most frequently cited)

Categories	Male		Female		Total	
	N	%	N	%	N	%
Injection	1	5.0	10	45.5	11	26.2
Smoking	2	10.0	8	36.4	10	23.8
Inhalation	0	0.0	9	40.9	9	21.4
Chewing	0	0.0	4	18.2	4	9.5
Orally	3	15.0	4	18.2	7	16.7
Total	20		22		42	

Respondents who had ever taken illegal drugs explained how they had taken these drugs. Men were particularly reluctant to indicate the mode of consumption compared to women. Of women who had taken drugs, 45.5% did though injection, 40.9% by inhalation, 36.3% smoking, 18.2% chewing and orally. Of men who had taken drugs, at least 15% did orally, 10% smoking, and 5% through injection.

6.4 Circumcision

Recent studies suggest that male circumcision is a protective factor against HIV infection. In Marratane, 85.1% of men and 6.8% of women were circumcised. More men of Congolese nationality were circumcised (95.1%) than Burundians (60.9%) and Rwandans (20%). Only one Burundian woman in the sample was circumcised. No Rwandan woman was circumcised.

The main reason for male circumcision was tradition (71.4%) followed by health (22%). Approximately one-third of women (36.8%) were circumcised because of tradition and one-third (36.8%) for health reasons. Of the 19 women who had undergone circumcision, 26.3% did not know why.

Of men, 67.7% prefer a partner that is not circumcised, 16.3% prefer one that is and 16% did not know. Of women, 74% prefer a circumcised partner, 12.8% preferred one that is not circumcised and 13.2% did not know.

7. Discussion

The results of the Marratane BSS survey provide a comprehensive picture of sexual behaviour and attitudes related to HIV and AIDS. These results provide evidence for the design of future interventions.

The Marratane camp houses a disproportionate number of older men. The skewed nature of the composition of the camp appears to influence relationships and sexual behaviour. Two thirds of males and females are officially married. Since there are fewer women than men, a higher share of men are effectively living alone than what the statistics on marital status may suggest. In addition, 20% of married respondents were not currently living with their long term partner.

Another important socio-demographic characteristic of the camp is the high level of education of the respondents compared to the local community and other refugee situations. Female respondents are effectively less educated than men but even they enjoy a level of education uncommon in other refugee situations and in their local host community in Mozambique. Congolese, followed by Burundians, are the most educated, which impacts their capacity to integrate in the local economy as seen below. The high level of education in the camp also allows for the formulation and diffusion of advanced HIV/AIDS awareness programs.

The last notable socio-demographic characteristic of respondents is that there are few income-generating activities and patterns of income-generating activity substantially differ between nationality groups. Rwandans are the least unemployed and are particularly successful in agriculture, trade and private

services. Congolese and Burundians are the most unemployed. Since these nationality groups are the most educated, it is likely that unemployment is linked to their inability or unwillingness to engage in agricultural work. Congolese and Burundian respondents find employment in public services, humanitarian and development organizations, when no Rwandan does. Given the discrepancy between official registration numbers and actual residents in Marratane, it is probable that sustainable income-generating activities from skilled wage labour entail a quasi-permanent residence in Nampula City. The types and extent of income-generating activities have consequences for their interaction with the local community and their attendance at programs in the camp.

HIV/AIDS interventions should take into account the actual number of effectively single men and the undersupply of female partners. Knowledge of condoms is high but their regular use is effectively low. The fact that condoms are essentially known to prevent HIV/AIDS rather than as contraceptives combined with the skewed population composition may be contributing to low condom use. More than 40% of respondents are in regular sexual partnerships where condom use is particularly low. Moreover, there is little agreement between regular partners on why they do not regularly use condoms, which may indicate that condoms are not discussed between partners. Women are more involved in regular partnerships than men; condom use with regular partners is low. Therefore, condoms and HIV testing must be promoted for refugees in regular sexual partnerships, especially among women.

Of all respondents, 11.8% had sex with a non-regular partner in the past twelve months. Of younger males (ages 15-24), 29.9% had a non-regular sexual partnership while only 7.1% of female refuges did. Of older men (ages 25-49), 12% had had non-regular sex compared to 4.3% of older women. Perhaps the fewer female partners available for a large number of effectively single, but oftentimes married, men, 5.7% of all married men had had a non-regular sexual relationship in the past twelve months. This is a particularly worrying statistic considering the very low level of condom use in regular partnerships as well as non-regular partnerships. Nearly half of men reported having used a condom in their last non-regular sexual relationship but condom use is nearly absent among women with non-regular partners.

Given that 30% of the non-regular partners of refugee men are Mozambican, the spread of HIV inside the camp will also depend on the level of safer sex practices in the local community. Moreover, 16% of men and 3.8% of women have ever engaged in transactional sex, with 3.5% of men and 0.6% of women reporting transactional sex experience in the last year. Worryingly, only one-third of transactional sex encounters involved the use of a condom. Therefore, a successful HIV prevention strategy in Marratane must include HIV/AIDS awareness campaigns and condom promotion with both the residents of Marratane camp as well as in the local community. The awareness campaigns should also target vulnerable groups such as women and commercial sex workers who are most in contact with refugee men. Although few women in the camp report having had transactional sex, those who did have become more vulnerable during and after displacement. Therefore, ways must be found to understand the incentives to engaging in transactional sex among women, including an exploration of the relationship between access to income-generating activities and transactional sexual relationships.

The last element of sexual behaviour which must be closely monitored in the camp is history of sexual abuse past and present: 6.8% of men and 14.7% of women reported at least one episode of sexual abuse. Forced sex remains a problem after displacement and the first perpetrators of violence are refugees themselves. Further support must be given to interventions aimed at fighting sexual and gender-based violence.

Nearly all respondents interviewed had heard about HIV/AIDS, especially through the radio and from a health centre. Respondents were also eager to have more public sensitization programs. Not only had the respondents heard about HIV/AIDS but they were knowledgeable about it in terms of the main tenets of HIV prevention. However, respondents had difficulties dealing with issues beyond the main message of abstain, be faithful and use condoms. Mother-to-child transmission through pregnancy is understood by less than two thirds of the respondents. Myths about HIV are still common, in particular among women. There is a clear need to pursue and increase HIV/AIDS sensitization programmes in the camp to address PMTCT thoroughly.

Moreover, sexually transmitted infections mostly affect women in proportions rising up to nearly 15% while only half that share of men is affected. In spite of the free provision of healthcare in the camp, only half of the affected persons had sought treatment for their STI. There is therefore a clear need to scale up dissemination of HIV prevention messages in the camp, and deal with STIs comprehensively. In particular, STIs should be integrated in HIV interventions and in all health education programs, and information on STIs as well as access and delivery of treatment, especially for women, must be improved.

If respondents have no particular difficulties in finding condoms, HIV counselling and testing is more difficult to access. In fact, the most frequently cited reasons for not undertaking a test after being sure of not being infected, is not knowing where to go. Less than one-third of respondents have had an HIV test and up to 32% of women who had a test have actually not received the test results or did not know if they have. Therefore, there is a clear need in Marratane to expand services to provide more integrated reproductive health services. Training of health service providers would ensure friendliness and high quality of service provision, right health worker attitude to encourage women to come back for their test results.

Appendix: Behavioural Surveillance Survey Questionnaire (French)

ENQUETE RELATIVE A LA SURVEILLANCE DU COMPORTEMENT CAMP DE MARRATANE

Numéro de série du questionnaire |__|__|__|__|

FORMULAIRE DE CONSENTEMENT

Bonjour Monsieur/Madame.

Je m'appelle ……Je suis un enquêteur oeuvrant pour lutter contre le VIH/SIDA avec le Haut Commissariat des Nations Unies pour les Réfugiés à Marratane.

Nous voudrions connaître les comportements et les pratiques associés à la propagation du VIH/SIDA dans votre communauté.

Vous avez été choisi(e) au hasard et nous aimerions, avec votre autorisation, vous interroger. Soyez rassuré(e) que nous voulons apprendre à partir de votre expérience et que toutes les informations que nous allons collecter nous aideront a lutter contre le SIDA dans votre communauté ; le pays et la région. Quelques unes des questions posées sont de nature sensible, mais vous noterez que votre nom ne sera pas écrit sur le questionnaire et tout, détail relevant de votre vie privée sera gardé secret. Il ne sera pas utilisé en relation avec le recensement, la distribution de la nourriture ou tout autre service.

Votre participation à cette enquête est très importante et nous avons confiance que vous nous fournirez des informations adéquates qui nous aideront à développer des activités efficaces dans la lutte contre la propagation du VIH.

L'entretien prendra du temps, mais avec votre coopération, il peut être vite fait. Pourrais-je avoir votre permission d'entreprendre cette enquête ?

Oui ☐ Non ☐

Si vous ne voulez pas participer, pourquoi?……

Signature de l'enquêteur qu'un consentement verbal a été obtenu:

NOM ET CODE DE L'ENQUETEUR

_____-

_____ |____|____|

Début de l'enquête: **__/__/ *h* /__/__/min**

	Visite 1	Visite 2	Visite 3
No répondant	1 = Refus 2 =Questionnaire complété 3 = Questionnaire complété en partie 4 = Absent 5 = Autres		

SECTION I: CARACTERISTIQUES (20 Questions)

N°	QUESTIONS	REPONSES	PASSER A
101.	Enregistrez le sexe de l'interlocuteur	1 = Homme 2 = Femme |___|	
102.	Quel âge aviez-vous lors de votre dernier anniversaire?	Enregistrez le nombre d'années 99 = Ne sait pas ……|___|___|	
103.	Dans quel pays êtes-vous né(e)?	1 = Burundi 2 = Congo (RDC) 3 = Rwanda ……|___| 4 = Autre (Spécifiez) _____	

N°	QUESTIONS	REPONSES	PASSER A
104.	Quelle est votre nationalité actuelle?	1 = Burundaise 2 = Congolaise (RDC) 3 = Rwandaise ……|___| 4 = Autre (Spécifiez) _____	
105.	Quelle est votre religion?	1 = Catholique 2 = Protestante 3 = Musulmane |___| 4 = Autre (Spécifiez) _____	
106.	Quel est votre niveau d'études le plus élevé?	0 = N'a jamais été a l'école 1= N'a pas terminé les études primaires 2 = primaire 3 = Collège 4 = Lycée |___| 5 = Université	
107.	Quelle facilité avez vous à lire un journal:	1 = Facile 2 = Difficile 3 = Ne peut pas lire	
108.	Avez –vous une activité génératrice de revenus?	1 = Oui 2 = Non |___|	SI NON, PASSEZ A 110
109.	Dans quel secteur gagnez-vous ce qui vous fait vivre? ***(seulement une réponse est possible. Enregistrez la principale activité génératrice de revenu)***	1 = Agriculture 2 = Commerce 3 = Elevage 4 = Transport |___|___| 5 = Pêche 6 = Artisanat 7 = Services privé 8 = Services public 9 = Organisations humanitaires ou de développement 10=Autres (Spécifiez) _____	
110.	Depuis combien de temps vivez-vous dans le camp de Marratane?	1 = Moins de six mois 2 = Entre 6 et 12 mois 3 = 1 – 2 ans |___|___| 4 = 3 – 5 ans 5 = Plus de 5 ans 99 = Ne sait pas	
111.	Depuis combien de temps avez-vous quitté votre pays natal?	Indiquez le nombre d'années |___|___| 99 = Ne sait pas	
112.	Dans les 12 derniers mois, avez-vous été en dehors du camp où vous vivez aujourd hui pendant une période ininterrompue d'un mois ou plus ?	1 = Oui 2 = Non |___|	SI NON, PASSEZ A 114

N°	QUESTIONS	REPONSES	PASSER A
113.	Pourquoi avez-vous été absent pour un mois ou plus?	1 = Emploi 2 = Commerce 3 = Raisons familiales 4 =Raisons politiques 5 = Raisons militaires |___|___| 6 =Raisons scolaires 7 = En prison 8 = Raisons de santé 9 = Autre (Spécifiez) _____	
114.	A quelle fréquence rendez- vous visite a la communauté environnante du camp?	0 = Jamais 1 = Moins d'une fois par mois 2 = Une fois par mois |___| 3 = Beaucoup de fois par mois	SI JAMAIS PASSEZ A **116**
115.	La dernière fois que vouz avez rendu visite à la communauté voisine, c'était pour quelle raison ? ***Seulement une réponse peut être enregistrée***	1 = Emploi 2 = Commerce 3 = Faire des achats/ aller au marche 4 = Soins de santé 5 = Ecole 6 = Divertissement |___|___| 7 = Nourriture 8 = Visite parentale/ amicale 9 = Chercher du bois de chauffage 10 = Se présenter aux services religieux 11 = Autre (Spécifiez) _____ .	
116.	Avez-vous jamais été marié(e)?	1 = Oui 2 = Non |___|___|	SI NON, PASSEZ A 118
117.	Quel âge aviez-vous quand vous vous êtes marié(e) pour la première fois?	Age en années 99 = Ne sait pas |___|___|	
118.	Quel est votre état-civil actuel?	1 = Marié(e) 2 = Célibataire 3 = Divorcé(e) |___| 4 = Veuf/veuve	SI ACTUELLEMENT NON- MARIÉ(E)E, PASSER A 120
119.	Etes-vous dans un mariage monogame ou polygame?	1 = Monogame 2 = Polygame |___|	
120.	Vivez-vous actuellement avec un partenaire a long terme?	1 = Oui 2 = Non |___|	

SECTION II: LES PRESERVATIFS MASCULINS ET FEMININ (9 questions)

N°	QUESTIONS	REPONSES	SAUTER
201	Avez-vous déjà entendu parler des préservatifs/capotes?	1 = Oui 2 = Non |___|	SI NON, PASSEZ A **301**
202	A quoi pensez-vous que les préservatifs sont servent ? **Question spontanée .Enregistrez toutes les réponses données**	1 = Se protéger contre les MST / VIH / SIDA |___| 2 = Prévient la grossesse |___| 3 = Planning familial |___| 4 = Autre (Spécifiez) _____ |___| 99 = Ne sait pas |___|	
203	Avez-vous déjà utilisé un préservatif ?	1 = Oui 2 = Non |___|	SI NON ,PASSEZ A **301**
204	Savez-vous où vous pouvez obtenir un préservatif ? **Seulement une response possible**	1 = Pharmacie |___| 2 = Antenne médicale |___| 3 = Au marché |___| 4 = Auprès de mes amis |___| 5 = Au magasin |___| 6 = Travailleur de santé communautaire |___| 7 = Autre (Spécifiez) _____ |___| 99 = Ne sait pas |___|	
205	Est-ce facile d'obtenir un préservatif ?	1 = Oui, facile 2 = Non, difficile |___| 3 = Ca dépend	SI OUI, PASSER A 207
206	Quelle est la principale contrainte a l'obtention d'un préservatif chaque fois que vous en avez besoin ? ***Enregistrez toutes les réponses***	1 = Trop loin (accès géographique) 2 = Très cher 3 = Places non ouvertes aux heures commodes 4 = Pas disponibles |___| 5 = Peur être vu 6 = L'attitude des travailleurs de santé 7 = Outré (Spécifiez) _____ 99 = Ne sait pas	
207	Avez –vous jamais entendu parler du préservatif féminin ?	1 = Oui 2 = Non |___|	SI NON, PASSEZ A 301
208	Est-il facile d'obtenir un préservatif féminin ?	1 = Facile 2 = Difficile 2 = Ca dépend |___|	
209	Vous-même ou votre partenaire, seriez-vous prêt à utiliser un préservatif féminin une fois disponible ?	1 = Oui 2=Non |___|___| 99 = Ne sait pas	

SECTION III :ANTECEDENTS SEXUELS ET COMPORTEMENTS A RISQUE (41 questions)

NUM	QUESTIONS	REPONSES	SAUTER
301	Avez-vous jamais eu de rapport sexuel ?	1 = Oui 2 = Non |___|	SI NON PASSER A 328
302	A quel âge avez-vous eu votre premier rapport sexuel	L'âge en années 99 = Ne sait pas |___|___|	
303	Avez-vous déjà eu un partenaire (sexuel) régulier? (Un partenaire régulier est un conjoint ou un partenaire loge et nourri)	1 = Oui 2 = Non |___|	SI NON ,PASSER A 311
304	Avez-vous eu un partenaire régulier au cours des 12 derniers mois? Vérifiez Q120	1 = Oui 2 = Non |___|	
305	Quelle était la nationalité de votre plus récent partenaire sexuel régulier?	1 = Burundaise 2 = Congolaise (DRC) 3 = Rwandaise |___| 4 = Mozambicaine 5 = Autre (Specifiez) _____ 99 = Ne sait pas	
306	Quel âge avait/a votre plus récent partenaire sexuel régulier ?	Ecrire l'âge en années 99 = Ne sait pas |___|___|	
307	La dernière fois que vous avez eu des rapports sexuels avec votre partenaire régulier, avez-vous utilisé un préservatif ?	1 = Oui |___| 2 = Non	SI NON, PASSER A 309
308	Qui a suggéré l'utilisation d'un préservatif?	1 = Mon partenaire 2 = Moi-même |___| 3 = Conjointement	PASSER A 310
309	Pourquoi n'avez-vous pas utilisé de préservatif avec votre dernier/présent partenaire régulier? ***Enregistrez toutes les réponses***	1 = Non disponible |___| 2 = Trop cher |___| 3 = Refus du partenaire |___| 4 = Je ne les aime pas |___| 5 = Utilise une autre forme de contraception |___| 6 = J'ai confiance en mon partenaire |___| 7 = Je n'y ais pas pensé |___| 8 = Je n'y ai pas pensé |___| 9 = Autre (Specifiez) _____ |___| 99 = Don't know |___|	
310	Combien de partenaires réguliers avez-vous eu depuis 12 mois (ou depuis que vous êtes arrivé si vous êtes arrivé il y a moins de 12 mois)?	Indiquez le nombres Si aucun indiquez 0 |___|___| 99 = Ne sait pas	
311	Avez-vous eu des rapports sexuels avec un partenaire occasionnel? **(Un partenaire sexuel occasionnel est est différent de celui avec qui on vit ou qu'on paie**	1 = Oui 2=Non |___|___|	SI NON PASSER A Q320

NUM	QUESTIONS	REPONSES	SAUTER
	pour le sexe)		
312	Quelle était la nationalité de votre plus récent partenaire sexuel occasionnel ?	1 = Burundais 2 = Congolais (DRC) 3 = Rwandais 4 = Mozambicain |___| 7= Autre(Spécifiez)_____ 99 = Ne sait pas	
313	Quel était état-civil de votre plus récent partenaire sexuel occasionnel ?	1 = Marie 2 = Célibataire 3 = Divorce |___|___| 4 = Veuf/veuve 5 = Autre (spécifiez) ---------- 99 = Ne sait pas	
314	Quelle était la profession de votre plus récent partenaire sexuel occasionnel?	1 = Etudiant 2 = Homme/Femme d'affaires 3 = Commerçant 4 = Chauffeur/chauffeur de camion |___|___| 5 = Bonne 6= Eleveur 7 = Fermier 8 = Militaire,paramilitaire,policier 9 = Prostitué(e) 10 = Travailleur de bureau 11 =Sans emploi 12 = Autre(spécifiez) _____ 99 = Ne sait pas	
315	Avec combien de partenaires occasionnels avez-vous eu des rapports sexuels depuis 12 mois (ou depuis que vous êtes arrivé si <12 mois)?	Indiquer le nombre 98 = Pas de réponse |___|___| 99 = Ne sait pas	
316	Avec combien de partenaires occasionnels avez-vous eu des rapports sexuels depuis 30 jours?	Indiquer le nombre 98 = Pas de réponse |___|___| 99 = Ne sait pas	
317	La dernière fois que vous avez eu des rapports sexuelles avec un partenaire occasionnel, avez-vous utilise un préservatif ?	1 = Oui 2 = Non	SI NON, PASSEZ A 319
318	Qui a suggéré l'usage du préservatif la dernière fois que vous avez eu des rapports sexuels avec un partenaire occasionnel?	1 = Mon partenaire 2 = Moi-meme |___| 3 = Décision conjointe	PASSER A 320

NUM	QUESTIONS	REPONSES	SAUTER
319	Quelle était la raison majeure pour laquelle vous n'avez pas utilisé un préservatif la dernière fois que vous avez eu des rapports sexuels avec un partenaire occasionnel? ***Ecrire une reponse seulement .***	1 = Pas de préservatifs disponibles 2 = Trop cher 3 = Refus du partenaire 4 = N'aime pas 5 = A utilisé un autre contraceptif 6= N'a pas pensé que c'était nécessaire 7 = J'ai confiance en mon partenaire 8 = N'a pas pensé à l'usage 9 = Ne sait pas ce qu'est un préservatif 10 = Veut avoir un enfant 11 = Raisons religieuses |___|___| 12 = Rapports sexuels non planifié 13 = N'a pas pense que était nécessaire 14 = Autre (Specifiez) _____ 99 = Ne sait pas	
320	Avez-vous déjà eu de rapport sexuel en échange avec de l'argent, un cadeau ou une faveur?	1 = Oui 2 = Non |___|	SI NON, PASSER A 328
321	A quelle période avez-vous reçu de l'argent/cadeau de échange de rapports sexuels ? ***Enregistrez toutes les réponses***	1 = Avant d'être déplacé(e) 2 = Durant le déplacement forcé |___| 3 = Après avoir été déplacé(e)	
322	Au cours des derniers 30 jours, avec combien de partenaires avez-vous eu des rapports sexuels en échange contre de l'argent, un cadeau ou une faveur ?	Ecrire le nombre Aucun, indiquez 0 |___|___| 99 = Ne sait pas	SI AUCUN ALLER A 328
323	Qui était la dernière personne avec laquelle vous avez eu des rapports sexuel contre de l'argent, un cadeau ou une faveur ?	1 = Réfugié 2 = Personne de la communauté locale 3 = Militaire, paramilitaire, policier 4 = Travailleur des services humanitaires ou de developpement 5 = Autre (spécifiez) 99 = Ne sait pas	
324	Quand avez- vous échangé des rapports sexuels contre de l'argent pour la dernière fois?	1 = il y a moins d'un mois 2 = entre 1 et 3 mois 3 = >3 – 6 mois |___| 4 = >6 – 12 mois 5 = il y a plus d'un an 99 = ne sait pas	
325	La dernière fois que vous avez échangé du sexe contre de l'argent,un cadeau ou une faveur, avez-vous	1 = Oui 2 = Non	SI NON, PASSEZ A

NUM	QUESTIONS	REPONSES	SAUTER
	utilisé un préservatif ?	99 = Ne sait pas |___|___|	327
326	Qui vous a suggéré l'usage d'un préservatif la dernière fois que vous avez échangé du sexe contre de l'argent, un cadeau ou une faveur ?	1 = Mon partenaire 2 = Moi-même |___| 3 = Décision conjointe	PASSER A 328
327	Quelle était la raison majeure pour laquelle vous n'avez pas utilise un préservatif la dernière fois que vous avez fait des rapports sexuels en échange contre de l'argent,un cadeau ou une faveur ? ***Ecrire seulement une réponse***	1 = Pas de préservatif disponible 2 = Trop cher 3= Refus du partenaire 4 = Ne les aime pas 5 = A utilise d'autres contraceptifs |___|___| 6 = A confiance en son partenaire 7= N'a pas pensé à en utiliser un 8 = Ne sait pas ce que c'est qu'un préservatif 9 = Veut avoir un enfant 10 = Raisons religieuses 11 = Rapports sexuels non planifiés 12 = Autre (Spécifiez) _____ 99 = Ne sait pas	
328	Avez-vous jamais eu des rapports sexuels contre votre volonté?	1 = Oui |___| 2 = Non	SI NON, PASSEZ A 332
329	Combien de fois avez-vous été forcé(e) à avoir des rapports sexuels ces 12 derniers mois?	Indiquez le nombre |___|___| 99 = Ne sait pas	
330	Pendant quelle période de votre vie avez-vous été forcé(e) a faire des rapports sexuels ? ***Enregistrez toutes les réponses***	1. = Avant le déplacement |___| 2. = Pendant le déplacement |___| 3. = Après le deplacement |___|	
331	Qui vous a forcé(e)? ***Plus d'une réponse peuvent être données***	1 = Réfugié |___| 2 = Une personne de la communauté locale |___| 4 = Un militaire,un paramilitaire,un policier |___| 5 = Travailleur humanitaire |___| 6 = Autre (Spécifiez) |___| 99 = Ne sait pas |___|	
332	Avez-vous déjà eu des rapports sexuels sous l'influence de l'alcool?	1 = Oui 2 = Non |___|	IF 2 GO TO Q334
333	Avez-vous utilisé un préservatif lors de votre dernière relations sexuelles sous influence de l'alcool?	1 = Oui 2 = Non |___|	
334	Avez-vous déjà pris des drogues ?	1 = Oui 2 = Non |___|	IF 2 GO TO Q337
335	Sous quelles formes avez-vous pris des drogues? ***Enregistrez toutes les réponses***	1 = Inhalation |___| 2 = Injection |___| 3 = En fumant |___|	

NUM	QUESTIONS	REPONSES	SAUTER
		4 = En machant |___| 5 = Oralement |___| 6 = Autre (Spécifiez) _____ |___|	
336	Avez-vous partagé des seringues avec d'autres personnes lorsque vous consommiez des drogues ?	1 = Oui 2 = Non |___|	
337	(si interlocuteur est un homme): Avez-vous eu des rapports sexuels avec un homme?	1 = Oui 2 = Non |___|	SI NON PASSER A Q401
338	Quand avez-vous eu vos premiers rapports sexuels avec un homme?	1 = Avant le déplacement 2 = Pendand le déplacement |___| 3 = Après le déplacement	
339	A quelle fréquence aviez-vous ou avez-vous des rapports sexuels avec un homme?	1 = Souvent 2 = Parfois |___| 3 = Occasionnellement ou rarement	
340	Avez-vous utilisé un préservatif la dernière fois que vous avez eu des rapports sexuels avec un homme?	1 = Oui |___| 2 = Non	SI NON PASSER A Q401
341	Quelle était la raison majeure pour laquelle vous n'avez pas utilisé un préservatif la dernière fois que vous avez eu des rapports sexuels avec un homme? ***Ecrire seulement une réponse***	1 = Pas de préservatif disponible 2 = Trop cher 3= Refus du partenaire 4 = Ne les aime pas 5 = A utilise d'autres contraceptifs |___|___| 6 = A confiance en son partenaire 7= N'a pas pensé à en utiliser un 8 = Ne sait pas ce que c'est qu'un préservatif 9 = Veut avoir un enfant 10 = Raisons religieuses 11 = Rapports sexuels non planifiés 12 = Autre (Spécifiez) _____ 99 = Ne sait pas	

SECTION IV: CONNAISSANCES, OPINIONS ET ATTITUDES ENVERS LE VIH/SIDA (24 QUESTIONS)

N°	QUESTIONS –	REPONSES	SAUTE
401	Avez – vous jamais entendu parler du VIH ou d'une maladie appelée le SIDA ?	1 = Oui 2 = Non |___|	SI NON, PASSER A 501
402	Où entendez-vous parler du VIH/SIDA? ***Enregistrez toutes les réponses***	1 = Radio |___| 2 = TV/ Video |___| 3 = Journal |___| 4 = Centre de santé |___| 5 = Un ami |___| 6 = Poster/papier |___| 7 = Frère/Sœur |___| 8 = Travailleur de santé |___| 9 = L'école |___| 10 = Autre (spécifiez) _____ |___| 99 = Ne sait |___|	
403	Pensez-vous qu'il y ait beaucoup de cas de VIH/SIDA dans le camp ou dans la communauté locale environnante ?	1 = Dans le camp 2 = Communauté locale environnante |___|___| 99= Ne sait pas	
404	Connaissez-vous quelqu'un qui soit mort du SIDA dans le camp?	1 = Oui 2 = Non |___| 99 = Ne sait pas	
405	Comment une personne peut-elle avoir le SIDA? **(Enregistrez toutes les réponses)**	1 = Relations sexuelles |___| 2 = Relations sexuelles avec plusieurs partenaires |___| 3 = Sexe avec des prostituées |___| 4 = En utilisant pas de préservatif |___| 5 = Contact homosexuel |___| 6 = Transfusion de sang |___| 7 = Un baiser |___| 8 = Piqures de moustiques |___| 9 = Partage des objects coupants comme des rasoirs |___| 10 = Partage des seringues usagées |___| 11 = Par la mère enceinte |___| 12 = Partager les toilettes |___| 13 = Partager des couverts et ustensiles de cuisine |___| 14 = Autre (spécifiez) _____ |___| 99 =Ne sait pas |___|	
406	Est-ce qu'une personne peut faire quelque chose pour éviter d'attraper le VIH/SIDA ou le virus qui cause le SIDA?	1 = Oui 2 = Non |___| 99 = Ne sait pas	SI NON, PASSER A 408

407	Que peut faire cette personne? (Enregistrez toutes les réponses)	1 = S'abstenir de sexe |___| 2 = Utiliser un préservatif/capote |___| 3 = Limiter le sexe à un partenaire/rester fidèle |___| 4 = limiter le nombre de partenaire sexuels |___| 5 = Eviter le sexe avec les prostitués |___| 6 = Eviter le sexe avec celui qui a plein de partenaires |___| 7 = Eviter le sexe avec un homme qui a du sexe avec des hommes |___| 8 = Eviter le sexe avec ceux qui s'injectent des drogues|___| 9 = Eviter les transfusions sanguines |___| 10 = Eviter les injections |___| 11 = Eviter les rasoirs et les lames |___| 12 = Eviter les baisers |___| 13 = Eviter les piqueres de moustiques |___| 14 = Rechercher la protections d'un guérisseur |___| 15 = Autre (specifiez) _____ |___| 99 = Ne sait pas |___|	
408	Les gens peuvent – ils se protéger contre l'infection du VIH en restant fidèles à leurs partenaires non infectés et fidèles ?	1 = Oui |___|___| 2 = Non 99 = Ne sait pas	
409	Les gens peuvent –ils se protéger contre les infections du VIH en utilisant un préservatif chaque fois qu'ils ont des rapports sexuels ?	1 = Oui |___|___| 2 = Non 99 = Ne sait pas	
410	Les gens peuvent –ils se protéger contre les infections du VIH en s'abstenant de rapports sexuels ?	1 = Oui |___|___| 2 = Non 99 = Ne sait pas	
411	Les gens peuvent –ils être infectés par le VIH en partageant des ustensiles de cuisine avec quelqu'un d'infecté?	1 = Oui |___|___| 2 = Non 99 = Ne sait pas	
412	Une personne peut-elle être infectee du VIH une fois injectee avec une seringue ayant déjà été utilisée par quelqu'un d'autre ?	1 = Oui |___|___| 2 = Non 99 = Ne sait pas	
413	Est- il possible qu'une personne apparamment bien portante ait le SIDA ?	1 = Oui |___|___| 2 = Non 99 =Ne sait pas	
414	Une femme enceinte qui a le VIH/SIDA peut-elle transmettre le virus a son enfant durant la grossesse?	1 = Oui |___|___| 2 = Non 99 = Ne sait pas	SI NON PASSER A 417
415	Que peut faire une femme enceinte avec le VIH/SIDA pour réduire le risque de transmettre le VIH à son enfant ? (Enregistrez toutes les réponses)	1 = Prendre des médicaments (antirétroviraux) |___| 2 = Voir un travailleur de santé |___| 3 = Voir un guérisseur |___|	

		4 = Autre (spécifiez) _____ |___| 99 = Ne sait |___|	
416	Une femme qui a le VIH/SIDA peut-elle transmettre le virus a son bébé au moment de l'allaitement ?	1 = Oui |___|___| 2 = Non 99 = Ne sait pas	
417	Une femme qui a le VIH/SIDA peut-elle transmettre le virus a son bébé au moment de l'allaitement ?	1 = Oui |___|___| 2 = Non 99 = Ne sait pas	
418	Où voudriez-vous qu'on puisse parler du VIH/SIDA? **(Enregistrez toutes les réponses)**	1 = A la radio |___| 2 = A l'école |___| 3 = Lors de campagne de sensibilisation |___| 4 = Dans les journaux |___| 5 = Autre (spécifiez) _____ |___|	
419	Si un membre de votre communauté est atteint du virus qui cause le SIDA aimeriez-vous que cela reste secret?	1 = Oui (garder cela en secret) 2 = Non |___|___| 99 = Ne sait pas	
420	Si un membre de votre famille est atteint du virus qui cause le SIDA aimeriez-vous que cela reste secret?	1 = Oui (garder cela en secret) 2 = Non |___|___| 99 = Ne sait pas	
421	Si une parente à vous tombait malade à cause du virus qui cause le SIDA, seriez-vous prêt à prendre soins d'elle dans votre propre ménage ?	1 = Oui 2 = Non |___|___| 99 = Ne sait pas	
422	Si un parent à vous tombait malade à cause du virus qui cause le SIDA, seriez-vous prêt à prendre soins d'elle dans votre propre ménage ?	1 = Oui 2 = Non |___|___| 99 = Ne sait pas	
423	Si une personne est infectée par le virus qui cause le sida, lui serait-il permis de continuer à aller sur son lieu de travail?	1 = Oui 2 = Non |___|___| 99 = Ne sait pas	
424	Devrait -on enseigner aux jeunes adolescents comment on utilise des préservatifs?	1 = Oui 2 = Non |___|___| 99 = Ne sait pas	

SECTION V: LES INFECTIONS SEXUELLEMENT TRANSMISSIBLES (12 questions)

N°	QUESTIONS	REPONSES	SAUTE
501	En dehors du SIDA, avez-vous déjà entendu parler des maladies qui peuvent être transmises par des rapports sexuels ?	1 = Oui 2 = Non |___|___|	SI NON PASSER A 508
502	Si un homme avait une maladie sexuellement transmissible, quels symptômes aurait-il ? **(Enregistrez toutes les réponses)**	1 = Douleurs abdominales |___| 2 = Ecoulements génitaux |___| 3 = Ecoulements avec mauvaises odeurs |___| 4 = Sensation de brûlure lorsqu'il urine |___| 5 = Rougeurs/inflammations sur les parties génitales |___| 6 = Ulcères/irritations génitales |___| 7 = Vérus génitales |___| 8 = Gratte au niveau des parties génitales |___| 9 = Sang dans les urines |___| 10 = Perte de poids |___| 11 = Impotent |___| 12 = Autre (Spécifiez) _____ |___| 99 = Ne sait pas |___|	
503	Si une femme avait une maladie sexuellement transmissible, quels symptoms aurait-elle? **(Enregistrez toutes les réponses)**	1 = Douleurs abdominales |___| 2 = Ecoulements génitaux |___| 3 = Ecoulements avec mauvaises odeurs |___| 4 = Sensation de brûlure lorsqu'elle urine |___| 5 = Rougeurs/inflammations sur les zones génitales |___| 6 = Boursouflures au niveau des zones génitales 7= Ulcères/irritations génitales |___| 8 = Vérus génitales |___| 9 = Gratte au niveau des zones génitales |___| 10 = Sang dans les urines |___| 11= Perte de poids 12 = Difficultés à avoir un enfant 13 = Autre (Spécifiez) _____ |___| 99 = Ne sait pas |___|	
504	Avez-vous eu une de ces infections sexuelles durant ces derniers 12 mois?	Oui Non a. Ecoulements génitaux? 1 2 b. Ulcers/ irritations génitales? 1 2	SI AUCUN ALLER 508
505	La dernière fois que vous avez eu un infection transmise sexuellement, avez-vous recherché un traitement?	1 = Oui 2 = Non |___|___|	SI NON PASSER A 508
506	La dernière fois que vous avez une infection transmise sexuellement, avez-vous recherché ? **REPONDRE A CHAQUE QUESTION**	O N Un traitement/conseil d'un travailleur de santé 1 2 Un traitement d'un guérisseur 1 2	

N°	QUESTIONS	REPONSES	SAUTE
		Un traitement en pharmacie 1 2 Conseil d'un ami ou d'un parent 1 2	
507	Lors de votre dernière infection transmise sexuellement, en avez-vous informé votre partenaire sexuel(s) ?	1 = Oui (tous) 2 = Non |___| 3 = Quelque uns, pas tous	
508	Quelques hommes et femmes ont été circoncis, avez-vous été circonsis(e)?	1 = Oui 2 = Non |___|___|	SI NON, PASSER A 511
509	A quel âge avez-vous été circoncis?	|___|___| 99 = Ne sait pas	
510	Quel fut la raison principale de votre circoncision?	1 = Tradition/religion 2 = Santé/ Hygiène 3 = Satisfaction sexuelle |___|___| 4 = Autre (Specifiez) 99 = Ne sait pas	
511	Si vous pouviez choisir, préféreriez-vous un partenaire sexuel circoncis ou non-circoncis ?	1 = Circoncis 2 = Non circoncis |___| 3 = Ne sait pas/pas de préférence	
512	Seriz-vous intéressé(e) par la circoncision si elle était abordable et sûre ?	1 = Oui 2 = Non |___|___| 99 = Ne sait	

SECTION VI: EXPOSITION ET ACCES AUX INTERVENTIONS (13 questions)

N°	QUESTIONS	REPONSES	SAUTE
601.	Connaissez-vous un endroit où une personne puisse être testée pour le VIH?	1 = Oui 2 = Non |___|___| 99 = Ne sait pas	SI NON PASSER A 606
602.	Où peut-on passer un test pour le HIV? **(ENREGISTREZ TOUTES LES REPONSES)**	**Secteur Public** 1 = Hôpital |___| 2 = Centre de santé du gouvernement |___| 3 = Clinique/centre de planning familial |___| 4 = Clinique Mobile |___| 5 = Autre (Spécifiez) _____ |___| **Secteur Privé** 6 = Hôpital privé/Clinique |___| 7 = Pharmacie |___| 8 = Docteur, profession libérale |___| 9 = Clinique mobile |___| 10 = Guérisseur |___| 11 = Autre (Spécifiez) _____ |___|	
603.	Savez-vous où l'on peut recevoir des services de conseil et test volontaire pour le VIH/SIDA (CTV)?	1 = Oui 2 = Non |___|___| 99 = Ne sait pas	IF NON OU SAIT PAS, PASSER A Q606
604.	Est-ce que des services de conseil et test volontaire pour le VIH/SIDA existent localement et dans le camp?	1 = Localement 2 = Dans le camp |___|___| 3 = Dans les deux 99 = Ne sait pas	
605.	Où avez-vous appris que de telles services existaient?	1 =A l'école |___| 2 = Dans un service de santé |___| 3 = Lors de présentations |___| 4 = Affiche |___| 5 = Personnel de santé communautaire |___| 6 = Tableau d'affichage/panneau |___| 7 = Autre (spécifiez) _____	
606.	Avez-vous jamais été examiné(e) pour le VIH ? ***(Faire savoir que l'on ne veut pas savoir les resultats de l'examen)***	1 =Oui |___| 2 = Non 99 = Ne sait pas	SI NON PASSER A 610
607.	Quand vous vous êtes fait examiner pour VIH pour la dernière fois?	1 = Il y a moins d'un mois 2.= Il y a entre 1 et 6 mois 3= il y a entre 6 et 12 mois |___|___| 4 = Il y a entre 1 et 2 ans 3 = Il y a plus de 2 ans	

N°	QUESTIONS	REPONSES	SAUTE
		99 = Ne sait pas	
608.	Avez-vous obtenu les résultats du test?	1 = Oui |___| 2 = Non 99 = Ne sait pas	SI 1 PASSER A 610
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.	Vous feriez-vous tester dans le futur ?	1 = Oui 2 = Non |___|___| 99 = Ne sait pas	SI OUI, PASSEZ A 612
611.	Quelle est la raison primordiale pour laquelle vous ne voulez pas aller vous faire examiner ? ***Seulement une response possible***	1 = Ne sait pas ou aller se faire examiner 2 = Sur de ne pas être infecte |___|___| 3 = A peur des resultats 4 = A peur du prelevement du sang 5 = A peur d'attraper une infection 6 = A peur de la stigmatisation 7 = Trop cher 8 = Autre (spécifiez) _____ 99 = Ne sait pas	
612.	Le test est-il accessible à tous?	1 = Oui 2 = Non |___|___| 99 = Ne sait pas	SI NON FINIR
613.	Qui a des difficultés à accéder aux services de conseil et de test pour le VIH/SIDA?	1 = Les garçons 2 = Les filles 3 = Les femmes |___|___| 4 = Les hommes |___|___| 5 = les personnes âgées 7 = Autre (Spécifiez) _____ 99 = ne sait pas	FINIR

C'EST LA FIN DU QUESTIONNAIRE, MERCI D'AVOIR PRIS LE TEMPS DE REPONDRE A NOS QUESTIONS. NOUS APPRECIONS VOTRE AIDE

La fin de l'entrevue : __/__/ h