

**KNOWLEDGE, PERCEPTIONS AND BEHAVIOR  
ASSOCIATED WITH HIV/AIDS AMONG SOMALI  
REFUGEES ON TRANSIT UNDERGOING  
MEDICAL SCREENING IN NAIROBI**

**BY  
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A THESIS SUBMITTED IN PARTIAL FULFILLMENT FOR  
THE DEGREE OF MASTERS IN PUBLIC HEALTH OF THE  
UNIVERSITY OF NAIROBI

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## DECLARATION

I Dr. Christine W. Kisia hereby declare that this thesis is my original work and has not been submitted either wholly or in part to this university or any other institution, for the award of any degree or diploma.

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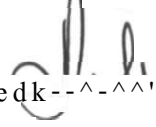
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## **DEDICATION**

This thesis is dedicated to the memory of my beloved mum, Anna Ndunge Kisia. Thank you for being the best mother and friend one would ever wish for. Mum we'll always be together.

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## **List of abbreviations**

AIDS	Acquired Immuno-Deficiency Syndrome
CDC	Centre for Disease Control
FGDs	Focus Group Discussions
FHI	Family Health International
HIV	Human Immuno-Deficiency Virus
IDPs	Internally Displaced People/Persons
IOM	International Organization for Migration
KDHS	Kenya Demographic and Health Survey
MOH	Ministry of Health
NASCOP	National AIDS and STI Control Programme
STD	Sexually Transmitted Diseases
TBAs	Traditional Birth Attendants
PLWHA	People Living With HIV and AIDS
UNAIDS	United Nations programme on AIDS
UNGASS	United Nations General Assembly Special Session+
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Education Fund
USCR	United States Committee for Refugees
WHO	World Health Organization
VCT	Voluntary Counseling and Testing

## DEFINITION OF TERMS

- **Migration**

Is defined as the process of moving, either across an international border, or within a State (IOM, 2004). It includes the movement of refugees, displaced persons, uprooted people as well as economic migrants. Internal migration refers to a move from one area (a province, district or municipality) to another within one country. International migration is a territorial relocation of people between nation-states.

- **Mobile people**

These are people who move from one place to another temporarily, seasonally or permanently for a host of voluntary or involuntarily reasons. They include truck drivers, seafarers, transport workers, agricultural workers, business people, traders, employees of large industries, government officials, uniformed service officers, construction workers, students and sex workers.

- **Migrants**

These are mobile people who take up residence or who remain in a place away from home for an extended period of time.

- **Internal migrants**

They are people who move from home to other locations within their own countries. This includes rural-rural, rural-urban, urban-rural movement and resettlements of people.

- **External migrants**

Refer to people who cross international borders and take up residence in a foreign country.

- **A refugee**

International law defines a "refugee" as a person who has fled from and/or cannot return to their country due to a well-founded fear of persecution, including war or civil conflict.

A refugee is a person who "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality, and is unable to or, owing to such fear, is unwilling to avail himself of the protection of that country..." (Article 1, The 1951 Convention Relating to the Status of Refugees).

## **ABSTRACT**

### **AIM:**

The study was conducted on urban Somali refugees on transit and undergoing HIV and AIDS counselling sessions as part of their medical screening process at the IOM's Migration Health Assessment Centre (MHAC) in Nairobi just before resettlement to other countries. The study's main objective was to establish and compare the knowledge, perceptions and behaviors of both before and after undergoing the sessions.

### **METHODOLOGY:**

A descriptive cross sectional study was conducted to establish this. Both qualitative and quantitative methods were used to collect data. Consecutive sampling of respondent's who were of Somali origin, aged 15 years and above, who had never undergone counseling and those who gave informed consents was used to obtain the sample. A total of 377 respondents were interviewed before the counselling sessions, with 360 of them same respondents re-interviewed after. Also eight focus group discussions were conducted and 6 key informants interviewed.

### **RESULTS:**

There was almost a balance between the genders, with male respondents slightly more. Most of the respondents were single, between 15 to 30 years old, having been displaced from their country for the last 15 years and had no form of education.

The findings generally indicate that respondents had heard of HIV and AIDS and its emergence as a global challenge, with radio and television being the most common sources of information. However, knowledge on the various modes of HIV transmission and prevention was limited, with lots of myths and misconceptions existing among the respondents.

HIV/AIDS related knowledge were quite low before the counseling sessions, but did slightly improve after from 6.1% to 15.6% respondents scoring adequately in HIV/AIDS related knowledge (75% and above scores).

This change in knowledge though slight was statistically significant. However, some of the misconceptions like the spread of HIV through mosquito bites actually increased.

Respondents' attitudes towards condom use, people living with HIV and AIDS and HIV testing before marriage were generally negative before counseling. Most of these attitudes changed significantly after counselling with more respondents willing to care for people living with HIV/AIDS and also go for HIV testing before marriage. In general, the community appears to be tolerant of their own HIV infected members, but regard outsiders who are already infected as immoral and sinners.

More respondents were still not willing to use condoms for any reason in future after undergoing the counseling sessions. Overall this change in respondents' attitude was also statistically significant. Respondents with increased knowledge levels had more negative attitudes towards individuals with HIV/AIDS, condom use and even HIV testing before marriage. There was a significant improvement in the respondents overall HIV and AIDS related attitudes, with respondent's attitude scores increasing from 13.5% before counseling to 93.3% after. This is a significant finding and suggests that the pre-test counselling sessions offered to the refugees before resettlement are effective HIV/AIDS preventive strategies. There was the generalized belief that HIV/AIDS was not a threat to the community and that it did not affect this community, thus their perceived personal risk was low. Most believed that HIV/AIDS only affected immoral people who did not follow Islam and the will of God.

## **CONCLUSION:**

This study suggests that knowledge about HIV/AIDS is low in this refugee population. The population receives little information on HIV/AIDS, while condom knowledge is particularly low with men and women having a negative attitude to condom use. It does not perceive HIV/AIDS as threat in its community and associates it with immorality.

The findings indicate a need for targeted, culturally sensitive HIV/AIDS information program. A follow up long term study is also proposed to find out any behavioral changes resulting from information received during HIV and AIDS counseling sessions among this community.

# CHAPTER 1

## 1.0 INTRODUCTION AND BACKGROUND

### 1.1 INTRODUCTION

Health and migration are linked and interdependent. Indeed, many of the same disparities that drive the global spread of disease also drive migration. That is not to say that movement should be stopped, but rather that the health implications and opportunities have to be managed. Well-managed migration health, including public health, promotes the well being of all, and can facilitate the integration of migrants within communities by promoting inclusion and understanding, contributing to stable societies and enhanced development.

Theoretically, migration can be seen as a process that consists of four phases: where a person comes from (**source**), where they pass through (**transit**), where they go (**destination**) and where they go back to (**return**). The context of migration is also about how a person travels; the length of time they are away; why they left in the first place; the relationships they maintain with home while they are away; and how far they are from home. Migration is often cyclical or seasonal, as people return home for periods of time and health vulnerabilities are specific to the context of migration at each phase in the cycle.

When a person is deciding on whether to leave his/her country of origin a combination of "push" and "pull" factors determine destination, how to go and length of stay. Push factors such as political unrest, war, persecution, famine, family problems and pressures, social upheaval, lack of opportunities and infrastructure are examples of situations encouraging people to move. Pull factors such as economic prosperity, political stability; professional opportunities and labour shortages encourage people to migrate.



Mobility and migration are now global phenomena. In 2003, it was estimated that approximately 175million people (2.9%) of the world's population lived temporarily or permanently outside their countries of origin (IOM, 2003).

In Africa, it is estimated that 10% of African workers will be living and working outside their countries of origin (ILO, 2002). At the end of 2002, 40 million people were displaced due to conflict. This number included 15 million refugees who had fled across international borders and 25 million internally displaced persons (IDP).

At the end of 2004 this number had decreased to 9.6 million refugees and 8.4 million persons are estimated to be displaced outside their country of origin (USCR, 1999). By the end of 2004, developing regions hosted 6.5 million refugees, 68 per cent of the global refugee population. The 50 Least Developed Countries (LDCs) provided asylum to 15 per cent of the world's refugees (UNHCR, 2004).

Kenya hosts over 200,000 refugees, including about 130,000 from Somalia, 60,000 from Sudan, 10,000 from Ethiopia, and 9,000 from other countries. Kenyan authorities have required most of these refugees to live in two designated camps near the village of Dadaab in the country's remote east (about 140,000 refugees), and in Kakuma in northwest Kenya (about 90,000 refugees). However, some of these refugees have found their way into the homeland (Refugees and Immigration Ministries, 2006).

Special vulnerabilities faced by migrants include reproductive health problems, HIV/AIDS, TB, diarrhoeal diseases, malnutrition and malaria among others. The need to provide quality health care to the migrants necessitates an understanding of the issues that pertain to migrants and mobile populations.

HIV/AIDS is often overlooked in the immediate wake of a disaster, because at the time it appears as though more urgent issues need to be addressed. Unfortunately, it is sometimes at this stage when HIV/AIDS threatens most. The relationship between HIV/AIDS epidemic and migration was recognized by the United Nations during the General Assembly Special Session on HIV/AIDS (UNGASS) in June 2001.

Part of the Declaration states that by the year 2005, countries will develop and begin to implement national, regional and international strategies that facilitate access to **HIV/AIDS** prevention programmes for migrants and mobile workers including the provision of information on health and social services.

Being a migrant or refugee, in and of itself, is not a risk factor for becoming infected with HIV. Indeed migrants (especially economic migrants) from many countries are more likely to be healthier, younger and more economically active than those who remain. However, there is growing evidence that migrants are more vulnerable to HIV/AIDS than people who do not move.

Vulnerability refers to the social, cultural, economic and political environment of individuals, families, communities and societies, and occurs in situations where people are limited in their ability to make free and informed decisions. Apart from these vulnerabilities, refugees may also be exposed to HIV during their migration process.

The rapid spread of HIV across communities, countries and continents is a testimony of the linkages between population movement and the growing epidemic.

Studies on certain highly mobile groups (e.g. truck drivers, traders, military, and seafarers) have identified travel and migration as one of the factors related to HIV infection. In many countries, regions reporting higher seasonal and long-term mobility also have higher rates of infection, and higher rates of infection can also be found along transport routes and in border regions (UNAIDS 2001b).

Other studies have linked the spread of HIV and other sexually transmitted infections to migration, both voluntary and conflict-induced. A report by UNAIDS in 2001 shows that, in many countries, HIV has been most visible in the early stages of the epidemic along truck routes, in trading towns, and in border areas where populations are highly mobile. Such studies indicate that migration and mobility increase vulnerability to HIV/AIDS.

In order to curb the AIDS epidemic, the specific interest lies in the change of behavior that is governed by attitude and level of knowledge. The behavior of an individual towards a situation is a reflection of that individual's attitude to that situation.

It is known that cultural values influence both the attitude and behavior of individuals because culture is a sum total of the knowledge, attitude and behavior patterns of members of a particular society (Borofsky, 1983).

It is also widely recognized that knowledge of ones HIV infection can help a person to stay healthy for longer as well as preventing new infections.

HIV testing and counseling can lead to a reduction in the number of sexual partners, increased condom use, fewer sexually transmitted infections, and safe injecting practices. Central to Family Health International's (FHI) approach to counseling and testing is the view that it is a person's right to know his or her HIV status. They recognize that effective counseling is inherently culturally sensitive and complex, and therefore support working with local counterparts and the community to develop appropriate VCT services that focus on their clients' needs.

Voluntary Counseling and Testing (VCT) for HIV is internationally recognized as an effective and important strategy for both prevention and care. Research has found it to be a cost-effective strategy for facilitating behavior change and it is an important entry point for care and support for those who test positive. VCT programs have demonstrated their ability to increase safe sexual behavior and use of care and support services among adults (Coates et al, 1998). By helping clients learn their HIV sero-status and creating a personalized HIV risk reduction plan, VCT can provide the information and support necessary to change risky behavior that could lead to HIV infection or transmission. VCT also provides benefit for those who test negative. For those people who learn that they are negative, it may result in a change of behavior.

These findings have boosted interest and support for VCT as a valuable component of comprehensive HIV/AIDS programming. However in the case of migrants resettling to other countries, the "V", which stands for voluntary in VCT, is usually lost or omitted as this test is usually a compulsory medical requirement requested by receiving States before resettlement. This non-VCT HIV counseling is also a common practice in other settings, such as students awaiting enrolment in public universities and polytechnics.

It may also be a requirement in some employment settings or for insurance purposes. Whereas the motivation to undergo HIV testing in a VCT setting is the client's willingness to know his/her HIV status and he/she is keener on learning about HIV/AIDS. This is quite different in the case of migrants and others where the motivation for knowing one's HIV status is quite different, and one's eagerness to learn about HIV and AIDS is questionable.

Profiling migrants according to their health status is common practice. Some governments use screening as a way of obtaining information necessary for referral of migrants for health care; however, others tend to use it to block entry. Testing under such circumstances is akin to mandatory testing, and in some instances is done without appropriate pre- and post-test counseling or safeguards of confidentiality.

While the benefits and impact of VCT have been extensively researched, little has been done in establishing the benefits of HIV testing in this non-voluntary/mandatory method where the HIV test is part of a medical requirement and all clients have to undergo it.

This study is designed to establish the knowledge, attitudes, beliefs and practices related to HIV/AIDS among the Somali refugees before and after receiving HIV counseling and testing at the International Organization of Migration (IOM) clinic before resettlement to other destination countries. It will also evaluate if HIV counseling and testing in a non-VCT environment can produce the same positive effects as VCT has been shown to do in this community.

## **1.2 BACKGROUND INFORMATION**

### **1.2.1 HIV/AIDS epidemiology**

The epidemiology of HIV is similar to that of other sexually transmitted infections (STIs). People are at a risk of HIV infection either through their own sexual behavior or that of their partner. Other common modes of transmission include blood transfusion, mother to child transmission and intravenous drug abuse.

WHO and UNAIDS estimate that 340 million curable STIs occur annually worldwide among people aged 15-49: 85% of these are in developing countries. They create an enormous burden on general health and on economies. STIs also greatly increase susceptibility to HIV infection.

The global AIDS epidemic is one of the greatest challenges facing our generation. AIDS is a new type of global emergency - an unprecedented threat to human development requiring sustained action and commitment over a long time. By 1993 HIV/AIDS was ranked 26<sup>th</sup> contributing 0.84% of the total world's disease burden. By the year 2020, it is expected to move up to the 10<sup>th</sup> position accounting for 2.61% of the total disease burden (UNAIDS/WHO, 2003).

Data from UNAIDS and WHO, 2006 estimates that 4.3 million people were infected with HIV. Today, some 39.5 million people are living with HIV, which killed 2.9 million in 2006, and over 20 million since the first cases of AIDS were identified in 1981 ( Table 1).

The number of people living with HIV/AIDS continues to rise, despite the fact that effective prevention strategies exist.

Sub-Saharan Africa remains the hardest-hit region with extremely high HIV prevalence among pregnant women reported in a number of countries. It has just over 10% of the world's population, but is home to almost 25 million people living with HIV—63% of all Persons with HIV globally.

In 2006 alone, an estimated 2.1million [1.8 million-2.4 million] Africans died of AIDS, almost three quarters (72%) of all AIDS deaths globally (UNAIDS/WHO, 2006).

**Table 1: Total number of adults and children living with HIV**

		AVERAGE	RANGE
		<b>Total</b>	<b>39.5 million</b>
Number of People living with HIV	Adults	37.2 million	[32.1-44.5 million]
	Women	17.7 million	[15.1-20.9 million]
	Children <15 years	2.3 million	[1.7-3.5 million]
People newly infected With HIV in 2006	Total	4.3 million	[3.6-6.6 million]
	Adults	4.3 million	[3.6-5.7 million]
	Children <15 years	530000	[410,000-660,000]
AIDS deaths in 2006	Total	2.9 million	[2.5-3.5 million]
	Adults	2.6 million	[2.2-3.0 million]
	Children <15 years	380000	[290,000-500,000]

Source: (UNAIDS/WHO 2006)

By the end of 2003, Kenya had lost 1.5 million people to AIDS, and the national HIV prevalence stood at 7% (NASCOP 2003, KDHS, 2003). Approximately 300-500 Kenyans were dying daily due to AIDS.

Although the Ministry of Health (MOH) has reported a decline in the prevalence from 13.5 % in 1998 to about 7% in 2003 and now to 6.1% in 2006, there remains a wide variation in HIV prevalence between different regions and within subpopulations. These variations depend on many factors including population density, increased movement of people due to trading and migration routes, cultural beliefs, and practices such as wife inheritance (UNHCR, 2004).

The impact of HIV/AIDS epidemic in Kenya has been felt at family, community and national levels. According to the Kenyan Ministry of Health, "HIV/AIDS has a strong negative impact on the productive sectors of the economy because infection rates are highest among young, productive members of society." There has been an increase in hospital bed utilization by AIDS patients from approximately 15% in 1992 to about 51% in 2000 (MOH, 2001). Staff illnesses, absenteeism, and deaths negatively affect productivity. HIV/AIDS is socially and economically devastating to the country as young people mostly in the age group 15 to 45 years continue to succumb to HIV/AIDS, thus resulting in loss of energetic manpower. Another major social concern at the community and/or family level is children dropping out of school to provide income for family, and also the issue of orphans and vulnerable children.

The loss of manpower has been felt most in countries like Somalia, which has suffered from prolonged civil strife since the central government collapsed in 1991 and is ranked among the world's least-developed countries. The country is in a period of considerable political, social and economic transition, compounded by the emergence of HIV/AIDS and risk factors that may lead to a rapid escalation of the epidemic. The lack of health and social infrastructure, and a conservative culture could also impact the spread of the epidemic.

According to UNAIDS, the prevalence of HIV/AIDS in Somalia is considered 2%, which is low compared to other countries in the region. However, HIV infection appears to be increasing rapidly in the country, from 0.2% in 1987 to 2% in 1997 (UNAIDS, 2000) with wide regional variations.

The number of people 0-49 years old living with HIV/AIDS is estimated to be between 43,000 and 100,000. Studies report that the HIV prevalence among blood donors is 4.4% in the Gedo region and 2.9% in Sool and Middle Shabell, and that the prevalence of HIV among women attending antenatal clinics rose from 0.84% in 1999 to 3.0% in 2000 (UNAIDS/WHO, 2002). Areas with more social stability and trade-related mobility have higher prevalence.

Though the HIV/AIDS prevalence is significantly lower than in neighboring countries (Djibouti, Ethiopia and Kenya), population mobility between these countries and the low level of HIV/AIDS awareness in Somalia increases the vulnerability of Somali populations. The local nomadic lifestyle (40% of the population are nomads) and returnees from refugee camps and elsewhere present an increased threat of an HIV/AIDS epidemic in the country.

### **1.2.2 Somali refugees in Kenya**

In 1997, the total population of Somalia was estimated at 10 million by the UN Population division (UN, 2003). The population growth rate is estimated at 2.7% per annum with 50% under 18. The multiple Cluster Indicator Survey (MICS) conducted by UNICEF in 2000 estimates infant mortality and under five mortality rates at 133 and 225 per 1000 live births respectively. The same survey estimates that Somalia registers a maternal mortality rate of 1,100 per 100,000 births.

Somalia's population consists of the majority Somali (85%) and two minority ethnic groups, Bantu and Arab (15%). Most of the population is Sunni Muslim and Islam is extremely important to the Somali sense of national identity. The official language is Somali. Arabic, Italian and English are also spoken (Refugees International, 2006).

Since the collapse of the Said Barre regime in 1991, Somalia has been mired in factional warfare and widespread insecurity.



Somalia is devoid of any effective central government and public services. Somalis began fleeing their homeland around 1991 when civil war, which continues to the present, broke out causing much displacement and suffering that continues in all three regions of Somalia (Somaliland, Puntland, and South-Central) to this day. Somaliland has enjoyed quasi-independence and stability since 1991. Its people have held successful elections, print their own currency, and have established government institutions that are starting to function.

The HIV/AIDS response is still in its infancy, however. Puntland region, in the north-east has likewise begun to see some development as a result of improved security but lacks an effective HIV/AIDS response.

The South-Central region of Somalia, which border Ethiopia and Kenya and includes the capital cities of Boidoa (Transitional Federal Government) and Modagishu, have experienced ongoing conflict and environmental disasters. As-of April 2007, conflict in South-Central Somalia is at the worst point since 1991. Government and social institutions have completely broken down.

The country is one of the largest sources of refugees and internally displaced persons in Sub-Saharan Africa. According to the organization Refugees International (RI, 2006), an estimated 400,000 people are displaced in Somalia, while refugees number 389,272. Violence and displacement have resulted in 2.5 million deaths since 1991. A large majority of Somalis live in poverty. The internally displaced experience additional hardships, in particular those who belong to ethnic minorities or minority clans and do not benefit from protection by a dominant clan or local authorities. As a result, many have even less access to water and food, economic opportunities, health care and education than the local population. Displaced women and children are particularly vulnerable to exploitation and violence.

Kenya hosts approximately 130,000 refugees from Somalia, with many more still coming in. Most refugees, while fleeing into Kenya, walked miles over Somalia's desolate savanna into Kenya's North Eastern Province. Others risked their lives in makeshift boats to reach Kenya's coastline further south.

Many were the victims of violence, including rape, as they fled war-torn Somalia. Most of the refugees remain in camps in Kenya, and over 80 percent are women and children (UNHCR, 1993).

Tens of thousands of additional Somali asylum seekers live without refugee status recognition or humanitarian assistance in urban areas, particularly in the capital city, Nairobi.

While some of the refugees still stay at the camp, others have become urban refugees having integrated with the local community. These make up the majority of the Somali refugees at the Nairobi Medical Health Assessment Clinic (MHAC) of the International Organization for Migration (IOM) who have already been admitted for resettlement to other countries and are undergoing medical checkups as a pre-requisite for entry in the admitting States.

Refugees especially those residing in urban dwellings with no legal status are often less documented and so receive less or no support from refugee agencies and the host country. Their vulnerability is therefore expected to be higher than those living in camps.

Although the majority of Somali refugees at the IOM clinic are living in urban centers where awareness campaigns are visible, information such as education and communication tools for dissemination are mostly designed in English and Kiswahili, languages not spoken very frequently in the Somali community. Moreover, messages depicting scenes from bars and teenagers drinking alcohol, young people in discos dancing and being encouraged to use condoms could be viewed as culturally inappropriate and not useful or the messages could be perceived as intended for a different audience.

Provision of booklets, poster campaigns, and leaflets with written information would also not be useful for the majority of this community due to high illiteracy rates. Providing information for women and girls in the Somali community is challenging due to social and cultural discrimination that prevents them from accessing public and private media, and they are also less likely to access radio, TV and video from external sources.

While most Somali people have heard of HIV and AIDS their knowledge on HIV transmission and prevention is extremely limited.

The apparently low prevalence of HIV contributes to the perception that HIV/AIDS is not a threat to Somali people. In places with low prevalence of HIV, awareness activities may be less effective due to the perceived impression of no threat.

Low or inadequate knowledge related to HIV/AIDS, socio-cultural beliefs, attitudes and practices surrounding sexual behavior, are thought to be the principal factors associated with the rapid spread of the epidemic. However, behavioral change poses the greatest challenge mainly due to diverse socio-cultural and personal factors, which are inherent in society and among people. There is therefore need to assess the knowledge, attitude, beliefs and practices related to HIV/AIDS among this community.

### **2.3 Socio-cultural factors and HIV**

Culture, by definition is a complex set of distinctive spiritual, material, intellectual and notional features that characterize and define a society/ social group fundamental rights of the person, value systems, traditions and beliefs (CP, 1982). It consists of all those activities through which a society defines and identifies itself (UNESCO, 1997).

The HIV epidemic is impacted by a number of broader environmental, political, cultural and social aspects. Traditional cultural practices reflect values and beliefs held by members of a community for periods often spanning generations. Every social grouping in the world has specific traditional cultural practices and beliefs, some of which are beneficial to all members, while others are harmful to all or a specific group, such as women or youth. These traditions, customs, beliefs and attitudes towards gender have greatly influenced the success and failure of HIV prevention.

Socio-cultural practices among many communities are known to play a role in the spread of HIV/AIDS. With the emergence of HIV/AIDS some of these practices need to be re-examined so that those that facilitate the spread of HIV can be abolished and those that help in prevention can be promoted.

**There** are still major gaps in understanding of various cultures and even how culture can be manipulated to support norms that reduce the risk of HIV disease

Some of the cultural factors in the Somali community that contribute in the spread of HIV/AIDS are female genital cutting (FGC), wife-sharing, sexual networking or "re-cycling" young women through divorces and re-marriages, polygamy, customary circumcision of boy and lack of women's rights in issues of divorce and inheritance.

Others include traditional dances and customs that involve skin cutting and piercing, traditional health practitioners and birth attendants who offer traditional medical services, ablation of the dead and widow inheritance, the latter of which provides moral dignity to sexual activity that is acceptable only to married people (Ahmed, 2004).

Practices such as FGM, which is embedded in the Somali culture and performed on girls aged 4-11, has a prevalence of about 95% in Somalia (UNICEF, 2004).

The health consequences of FGM include hemorrhage, trauma and infections, including exposure to HIV.

#### **1.2.4 International Organization for Migration (IOM)**

The International Organization for Migration (IOM) is principal inter-governmental organization in the field of migration and works closely with governmental, intergovernmental and non-governmental partners. The organization is dedicated to the orderly and humane management of migration to promote international cooperation on migration issues, to assist in the search for practical solutions to migration problems and to provide humanitarian assistance to migrants in need, including refugees and internally displaced people.

It was established in 1951 as an intergovernmental organization to resettle European displaced persons, refugees and migrants. It is now made of a variety of migration management activities throughout the world in the areas of migration and development, facilitating migration, regulating migration, health and migration, forced migration, including other crosscutting activities. Currently IOM is present in 291 locations across the world.

The organization provides services to 120 member states and 19 observer states, assisting both migrants and governments to attain migration goals for the benefit of all.

### **Migration health assessments**

Migration health is a traditional and cross-cutting IOM area of activity, as well as an essential human rights' concern. The IOM's Migration Health Department (MHD) delivers direct services to a wide variety of mobile people, including migrants, refugees, displaced populations, students, long term visitors, demobilized soldiers, trafficked persons, and voluntary returnees. In particular, the Migration Health Department is responding to the health needs of individual migrants, as well as public health needs of host communities through activities such as the control of infectious diseases, emergency interventions, responding to chronic diseases, mental health, cultural and health concerns, human rights issues, and migration health management

These services include preventive and curative health activities such as, the provision of immunizations, the promotion of health through awareness and education, and the detection and treatment of infections and diseases. It also promotes the standardization of immigration, travel and international health legislation/guidelines.

The MHD has presence in more than 40 countries, assisting migrants at all stages of migration: in countries of origin, transit, destination and return. It assists in the resettlement of migrants and refugees by providing pre-departure health assessments as requested by receiving countries. Such health assessments are part of the wider process of the resettlement application, a process that differs from country to country.

Some States request a blood test for the detection of the human immunodeficiency virus (HIV); such tests are usually a requirement by the receiving country if the candidate wishes to pursue his or her immigration application.

Resettlement involves the selection and transfer of refugees from a State in which they have sought protection to a third State that has agreed to admit them - as refugees - with permanent residence status.

The status provided should ensure protection against refoulement and provides a resettled refugee and his/her family or dependants access to civil, political, social, economic and cultural rights similar to those enjoyed by nationals. It should also carry with it the opportunity to eventually become a naturalized citizen of the resettlement country. Resettlement serves three equally important functions. First, it is a tool to provide international protection and meet the special needs of individual refugees whose life, liberty, safety, health or other fundamental rights are at risk in the country where they have sought refuge. Second, it is a durable solution for larger numbers or groups of refugees, alongside the other durable solutions of voluntary repatriation and local integration. Third, it can be a tangible expression of international solidarity and a responsibility sharing mechanism, allowing States to help share each other's burdens, and reduce problems impacting the country of first asylum (UNHCR, 1992).

Resettlement under UNHCR auspices is geared primarily to the special needs of refugees under the Office's mandate whose life, liberty, safety, health or fundamental human rights are at risk in the country where they sought refuge. It is also considered a durable solution for refugees who, although not in need of immediate protection, have compelling reasons to be removed from their country of refuge. The decision to resettle a refugee is normally made only in the absence of other options such as voluntary repatriation and local integration or where resettlement under a comprehensive approach to durable solutions is seen as the optimal solution for the individual or refugee groups in question. It becomes a priority when there is no other way to guarantee the legal or physical security of the person concerned.

The pre-departure health assessments, aim at reducing and better managing the public health impact of population mobility on receiving countries as well as to facilitate integration of migrants, through detection and cost-effective management of health conditions and provision of medical information on migrant's health. In addition, pre-departure health assessments offer an opportunity to promote the health of assisted migrants through initiating preventive and curative interventions for conditions that, if left untreated, could have a negative impact on the migrant's health and/or on the public health of the host communities.

MHD offers pre-departure treatment of migrants with infectious and non-infectious conditions, immunizes for preventable infections, and provides pre- and post-test HIV counseling.

In addition to pre-test counselling, clients are offered one on one post test counselling, on-going, supportive and nutritional counseling, treatment of opportunity infections and provision of anti-retro viral therapy for the HIV positive clients.

Apart from this, IOM through various MHD programmes is supporting the Kenyan government to establish a coordinated multisectoral programme to improve uptake of health services for thousands of marginalized urban migrants. Of particular concern are tuberculosis, HIV/AIDS, disease outbreaks and re-emergence, and adverse reproductive health outcomes.

These populations comprise a highly vulnerable population with poor living conditions and elevated morbidity and mortality. Many of the same inequalities that drive the spread of HIV also drive migration. Through its HIV/AIDS programs, IOM works to prevent and counter the misinformation, misunderstanding and stigmatization that continue to foster the perceived relationship between migration and HIV/AIDS. IOM uses a pragmatic and rights based approach to bring AIDS prevention and access to care and support to mobile populations throughout the world.

HIV/AIDS-related travel restrictions usually take the form of a law or administrative instruction that requires people to indicate their HIV-free status before entering or remaining in a country.

Some States request a blood test for the detection of the human immunodeficiency virus (HIV); such tests are compulsory if the candidate wishes to pursue his or her immigration application. Restrictions may single out HIV/AIDS; may include HIV/AIDS among excludable communicable or contagious conditions; or may leave it to the discretion of immigration officials to exclude a person living with HIV/AIDS. According to UNAIDS, over 125 countries require long-term migrants to undergo medical check-ups including an HIV test before migrating to their countries (UNAIDS, 2001).

## CHAPTER 2

### 2.0 LITERATURE REVIEW

Twenty years after the first clinical evidence of AIDS was reported, it has arguably become the most devastating disease humankind has ever faced. In most settings, STIs and HIV spread fastest where there is poverty, powerlessness and instability, all characteristics of refugee and internally displaced populations.

#### 2.1 Migration and HIV

People are increasingly on the move for political, humanitarian, economic and environmental reasons. This population mobility has health and human rights implications both for migrants and for those they leave behind. Migrants often face serious obstacles to good health due to discrimination, language and cultural barriers, legal status, and other economic and social difficulties. At the same time, migration policies may have significant public health consequences. In many parts of the world, the migration of health professionals can be a serious impediment to the delivery of health care in countries of origin.

According to the 88<sup>th</sup> Council Session of IOM (2004), globalization has changed the scope and patterns of migratory movements, underlining the fact that the links and interdependencies between migration and health are not static but evolve with the same complexity characterizing migratory flows. The report adds that with more people traveling faster and to more destinations, migration health is today a major public health concern. The re-emergence of tuberculosis in developed parts of the world, the rapid spread of HIV (Human Immunodeficiency Virus) and SARS (Severe Acute Respiratory Syndrome) are only a few **examples** of the critical relationship between population mobility and health. As people move, temporarily, seasonally or permanently, they connect individual and environmental health factors between one community and another.



The session paper recognizes that migrants travel with their health profiles and beliefs, reflecting the socio-economic and cultural background and disease prevalence of their community of origin, and indicates that often such profiles and beliefs are different from those of the host communities, with these disparities having impact on the health and related services of the host communities.

The relationship between HIV/AIDS and migration is complex. Some migrants are often vulnerable to HIV infection at their destination as is often the case with men who work far from home and live in men-only camps. For others the greatest risk occurs on transit, as in the case of women who must trade in sex in order to survive. As for the countries of origin, partners of migrant workers have been shown to be at increased risk of infection when the latter return from working in countries with high HIV prevalence.

In sub-Saharan Africa, the confluence of high prevalence of HIV infection, conflict, and poverty has led to particularly dangerous conditions for refugees and internally displaced persons (Spiegel, 2004). These are usually forced from their original homes by emergencies - a flood, earthquake or drought, or even war or civil strife with some refugees having remained displaced for over twenty years. About 75% of all refugees and displaced people are women and children. This group is also more vulnerable to HIV/AIDS.

Several studies have established that some migrants and mobile populations are at a higher risk than the overall population for poor health in general and HIV infection in particular (Zwi & Cabral, 1991; Brindis et al., 1995). Early surveillance rounds showed a strong correlation between HIV prevalence and locations along the main Trans-Africa highway between Mombasa and the Ugandan border towns. Studies conducted on long-distance truckers have consistently reported HIV rates much higher than in the general population (Baeten et al. 2005, Bwayo et al. 1994, Mbugua et al, 1995).

A study by Paul Spiegel, 1998 shows an HIV prevalence that is particularly high at the border crossing points and along transport routes in mainland Southeast Asia; Cambodia, Laos, Malaysia, Myanmar [Burma], Thailand, Vietnam, and southern China while

another study by UNAIDS, 2001 shows a high prevalence along the heavily traveled corridor in West Africa between Abidjan, Cote d'Ivoire, and Ouagadougou, Burkina Faso. A survey of health facilities and pharmacies targeting truck drivers in selected hot spots along Mombasa-Kampala highway done in 2004 revealed that STIs are common among truckers. However, the very nature of their work and the apparent lack of access to competent health practitioners result in an increase in their vulnerability to HIV/AIDS (Olenja J. and Njeru E.K. 2004).

Indeed, the association of STIs with population movement whether voluntary or not is long-standing. The danger is that as people are forced to leave conflict-affected areas, they are placed at increased risk as they move into areas of increased HIV/AIDS prevalence. At the aggregate level, migration brings more people into close contact and creates a greater mixing of populations at places of destination, which provides the ready environment for disease transmission. Forced migrants are exposed to the increased danger of HIV infection in all stages of their refugee experience: during the conflict in their country of origin, the flight from their homes, settlement elsewhere, and even during repatriation or resettlement (Smith, 1997). These endemic dangers are intensified for women as the breakdown in social cohesion leads to serious threats to their safety and security (Harris & Smyth, 2001).

Displacement, which promotes exposure between high- and low-prevalence populations, rather than refugee status itself, appears to be a critical factor in the spread of STIs including HIV. Refugee settings are often great melting pots in terms of where the inhabitants originally came from and their host community. Refugees who previously lived in urban settings may be well informed about the risks of HIV and have formulated their own ideas on self-protection. On the other hand, other refugees who lived in rural areas may not have had access to the same level of HIV prevention information.

Apart from differing levels of knowledge on HIV in these settings, there can be huge differences between different groups in rates of actual infection. People who have fled from areas where HIV was not common may be living side by side in a crowded area with refugees from areas with much higher HIV rates.

While simply living side by side with others poses no risk at all to anyone, sexual contact and other HIV-risk behavior with groups of differing HIV prevalence can quickly spread the virus among all the groups.

In these situations, those who came from areas where HIV was uncommon may thus suddenly find themselves potentially exposed to a much higher HIV risk. If they also had little prior knowledge of HIV risks and prevention, they may be very vulnerable to infection.

Heterosexual behavior remains the key determinant of HIV/AIDS transmission in Sub-Saharan Africa. Refugee adolescents who are frequently idle are usually more willing to challenge traditional norms and take sexual risks in the absence of social and cultural constraints. A study by Tadiese et al of 575 adolescents in Kakuma refugee camp in 2003, found that 70 percent were sexually active and engaged in unplanned and unprotected sexual intercourse. Moreover, at most stage of flight, women and girls are vulnerable to rape and sexual abuse, which increases the prevalence of STIs including HIV. The majority of migrants who also happen to be women travel alone and this can lead to high-risk behavior or vulnerabilities.

In conditions of extreme poverty or marginalization, women use sex for money or for other forms of reward as a survival strategy (UNAIDS, 2001). As an example, in Buduburam Camp for Liberian refugees in Ghana, relief distributions have been phased out, access to employment and other resources is limited and women often have sex with several men as a necessary economic tactic (Dick, 2001). It is also common to find a proliferation of prostitution in and around refugee settlements, as women and girls lose the support of family through separation and society because of dislocation (World Vision International, 1996). Sex becomes the currency by which they pay for the basics of survival.

As victims of armed conflict and as refugees, women and children are particularly vulnerable to sexual violence and abuse, and therefore to STIs including HIV/AIDS. Warring factions often use rape as an expression of violence and revenge against those whom they consider to be their enemies.

UNHCR has itself acknowledged that sexual and gender-based violence occurs through all stages of the refugee cycle: during the conflict; prior to flight; during flight; in the host country of asylum; during repatriation; and during reintegration (UNHCR, 2003).

Combatants have frequently used rape as a weapon of war, with examples of systematic rape found from the conflicts in Mozambique, Rwanda, Liberia, Sierra Leone, Sri Lanka, Bosnia, Kosovo, and Sudan (Elliot, 1999 ; Donovan, 2002 ; Amnesty International, 2004).

During the conflict in Sierra Leone, as elsewhere, women were raped in exchange for the safe passage of their family to neighboring countries (UNHCR, 2001) while in Guinea, Liberia and Sierra Leone it has been found that refugee children and internally displaced youths are being forced to exchange sex for relief supplies and security by local aid workers, peacekeeping soldiers and refugee leaders in a system so endemic and prolific that many involved have no idea that relief is meant to be free (USCR, 2002).

Being separated from family or regular partners, loneliness, depression, poverty and anonymity cause a person to take risks they would not take at home. It is believed that misconceptions about host country norms and the pressure to 'fit in' also can lead to increased risk taking. Coping in a new environment may mean discarding old social restraints and surviving in settings where there are few social controls on interpersonal behavior and where young females enter into serial casual relationships in the hope of finding emotional support and economic security. In the case of refugees it may also be a matter of finding extra food and physical security.

Refugees who are fleeing poverty at times find themselves in similar situations when they arrive at their destination. As well as putting a person at risk of exploitation, problems such as poor housing and lack of food are likely to be far more pressing than poor sexual health. These factors aggravate poverty and powerlessness in refugees and may push them to risky sexual behavior.

Another characteristic of forced migration settings is the exposure and interaction with military personnel. Military presence has been shown to facilitate STI transmission.

The sexual behavior of armed forces, including peace-keeping units, can further spread **HIV/AIDS** (Smallman-Raynor and Cliff, 1991 ; Hankins et al, 2002 ; Elbe, 2003 ).

The high-risk sexual behavior associated with military forces and peacekeepers has resulted in prevalence rates being far higher among military personnel than the civilian population in both their countries of origin and those in which they are operating.

In Cambodia, a survey estimated the HIV prevalence for military personnel to be 8 per cent, while the prevalence among the Cambodian civilian population was 2.7 per cent (UNAIDS, 2000).

Several factors may promote unprotected sexual activity by military personnel, including those assigned to peacekeeping operations in post conflict zones: service requires long periods away from home and family; the military culture values risk-taking; most military personnel are young men, a group at high risk of HIV; military staff are often better paid than the local population; and military installations demand and attract the commercial sex industry. In most conflict settings, both the demand for sex by the military and the (mostly female) commercial sex industry that expands in response are perceived as routine and acceptable.

Along with the stigma and discrimination that goes with HIV/AIDS, refugees may well have to cope with stigma and discrimination attached to migrants from particular regions. This often leads to a delay in seeking treatment resulting in poorer health outcomes. Vulnerability is also compounded by the ungrounded belief by the host community that refugees and migrants are the main carriers and transmitters of STIs and HIV infections.

Individual factors such as one's health beliefs, an individual's ethnic background or cultural heritage also exert a strong influence on their health belief systems and ultimately on their health-related behavior. A persons health beliefs often impacts on their health seeking behavior. Many migrants may not access health services, unless they have symptoms of an illness. Language barriers, isolation and culturally inappropriate health facilities also limit migrant access to and use of curative services. The accessibility of these health services including counseling, awareness campaigns and availability of drugs may be markedly reduced and at times almost non-existent.

Countries of asylum are ultimately responsible for the protection and well-being of people living on their soil, including refugees. However, refugees particularly when not fully documented and recognized as such have been systematically excluded from many host countries HIV/AIDS National Strategic Plans (NSPs) and their needs have not been addressed in proposals submitted to major donors. Refugees and local populations interact on a daily basis.

Their systematic exclusion is not only discriminatory but it also undermines effective HIV/AIDS prevention and care efforts. Added to this, relief agencies may not have given attention to preventing STIs or HIV/AIDS, nor developed much in terms of treatment. Migrants may be in situations where they are ineligible for and/or could not otherwise afford HIV/AIDS treatment.

Even if health and social services would be prepared to assist migrant populations, they often encounter great difficulties to reach out to them.

More often than not, migrant populations live in a legal vacuum, having no stay or work permit for the host country and live with the constant fear of deportation. Any contact with official government agencies, even if related to health matters, increases the fear of being reported to the police and is, therefore, often accompanied by suspicion. This factor combined with the hardships of daily life makes providing HIV testing, care, support and treatment particularly challenging for these populations.

The nature of settlement for displaced persons is also critical when addressing levels of vulnerability.

Well-organized refugee camps may offer improved protection, nutrition, health services (including for HIV prevention, treatment of opportunistic infections and care), education, and social services (Spiegel, 2004b). The duration time in camps is also relevant, with long-term post-emergency refugee camps generally having better preventive and curative health services than the shorter term camps, and the surrounding local host population (Spiegel et al, 2002 ; Hynes et al, 2002 ).

For example, research by UNHCR has found that there is a pattern of reduced HIV Prevalence in camp populations.

Using antenatal sentinel surveillance, HIV prevalence was measured among pregnant women in more than twenty camps housing around 800,000 refugees in Kenya, Rwanda, Sudan, and Tanzania. Results showed that the refugee populations in three of the four countries had significantly lower HIV prevalence than the surrounding host communities. In the fourth, the refugees and host community had comparable prevalence (Spiegel, 2002).

However, where camps are more open (where population movement is less restricted and interaction with the local community higher); the HIV risk would also appear higher (Salama and Dondero, 2001).

In situations where refugees and IDPs are dispersed the risks of contracting HIV appear much higher because the protective factors in camps is removed and people are generally placed in environments of higher HIV prevalence. Given that an estimated 60 to 75 per cent of Africa's refugees may have never lived in camps, large numbers of displaced persons are therefore placed at increased risk of HIV in their new surroundings. This applies to a large proportion of the Somali refugees attending HIV and AIDS counseling at the IOM clinic.

The combination of these factors increases the risk to refugees of epidemic diseases. Sexually transmitted infections (STIs), including HIV, are among the diseases to which refugees are vulnerable. The degree to which refugees are vulnerable to HIV depends in part on the level of HIV prevalence in their country of origin and in their host country (Hankins et al. 2002; Spiegel, 2004). It also depends on the refugee's knowledge and attitudes related to HIV and AIDS, as this will govern sexual behavior and related behavioral change.

## **2.2 Knowledge, attitude and behaviors associated with HIV/AIDS**

When discussing HIV/AIDS, knowledge is power. One of the earliest studies of knowledge, attitudes, behavior, and prevalence related to HIV and other STIs within an African refugee population was conducted in 1992.

The study took place in the Dimma refugee settlement in southwestern Ethiopia, and focused on Sudanese refugees and Ethiopian sex workers. The investigation found that knowledge of HIV/AIDS and condom use were extremely low among Sudanese refugee women, and that sexual contact between Sudanese refugee men and sex workers was common. HIV and STI prevalence among the study population was high.

In addition to yielding this information, the study was one of the first of its kind to underscore the importance of conducting a situation analysis, establishing baseline data, and carrying out a survey on knowledge, attitudes, and behavior as preliminary steps to designing a program to respond to HIV and AIDS among refugees and other mobile populations (Holt et al, 2003).

A recent behavioral survey was conducted by UNHCR among refugees in Kakuma camp in Kenya and the local host population outside the camp. The results showed higher basic HIV and AIDS competence among refugees than among surrounding host or source community populations in South Sudan. The most striking difference was noticed in the in-depth knowledge about HIV prevention, with refugee knowledge greatly exceeding that of both the local population, and people in the areas of origin. Nearly three quarters of the refugees surveyed in the camp were aware of the three main methods of HIV prevention, whereas only 32 per cent of the local population had the same level of knowledge.

Another significant result of the survey was that ten per cent more refugees than local people were aware of some of the most common misperceptions about HIV transmission.

Simply, in a well-established camp such as Kakuma, refugees - thanks to strong HIV/AIDS prevention programmes, and the unique opportunities for HIV prevention offered by camp-related activities such as food distribution - may be better off than the local population in terms of useful knowledge (UNHCR, 2005). These results are apparent in comparisons between HIV prevalence: some five per cent of the camp's Population is HIV positive, compared to 16.5 per cent in the nearest Kenyan sentinel site of Lodwar.



No data is available for Kakuma town, which is closest to the refugee camp. Although the prevalence at the Kakuma camp is much lower (5%) than surrounding communities, it is steadily increasing as exposure to higher-infected populations continues (Spiegel, 2002).

In another UNICEF study on the knowledge, attitudes, beliefs and practices on HIV/AIDS and STIs among Somalis in Somalia conducted in 2004, fewer than 10% of the respondents knew of vertical transmission.

While 70% of men and 64% of women were aware that being faithful is one way to prevent HIV transmission, less than 25% of respondents were aware that using condoms is a means of preventing HIV transmission, with only 11.4% of women stating awareness of this means.

Quite often it is evident that although knowledge maybe high, it is neither correct nor complete. For example, 37% of truck drivers who reported to have knowledge of HIV/AIDS in a study done in India claimed that the disease was acquired from women who did not maintain good personal hygiene and that one of the ways of preventing infection among commercial sex workers was to encourage cleanliness (Mishra, 1997).

Knowledge of the correct method of transmission was noted to be relatively low among ethnic Somalis in North Western Somalia (UNICEF, 1999). Furthermore misconceptions are common especially about knowledge of the cause and transmission of HIV. In Kenya, some Luos attribute the disease to a curse (chira), while in some communities in Uganda where the disease is known as "slim" due to the wasting nature of the disease it is attributed to witchcraft.

The incorrect knowledge about the cause and mode of transmission of the disease is responsible for the behavior noted among some of the infected people, like raping infants as reported in South Africa, in belief that it will bring about a cure. This makes it necessary to identify misconceptions and beliefs among the Somali refugees in Kenya.

It is reported that women and girls do not have adequate access to the knowledge and power necessary to prevent their own infection.

It is estimated that globally more than 80% of young women do not have 'sufficient' knowledge about HIV and AIDS, including how HIV is transmitted and methods of self-protection (UNAIDS, UNFPA and UNIFEM, 2004). This is fundamentally an effect of poor access to education for girls, compounded by cultural norms prohibiting overt discussions of female sexuality. In sub-Saharan Africa, for example, fifty-four percent of girls do not complete basic primary school education.

Due to diversity in socio-cultural sexual practices inherent in Kenyan societies, awareness about HIV/AIDS among Kenyans, which is relatively high, is not matched by comparable sexual behavior change (session paper on HIV/AIDS in Kenya, 1997).

HIV/AIDS is still a disease compounded by stigma. The same UNICEF study in 1999 reported that the majority of Somalis (51% of men and 58% of women) felt teachers with HIV should not continue teaching in schools. A higher proportion (61% of men and 71% of women) refused to buy food from an HIV positive vendor. The stigma most likely arises from misconceptions about HIV causality.

A qualitative study carried out by Castle S, 2004, among young people and other community members in rural Mali to elicit knowledge and attitudes with regard to HIV/AIDS indicated that rumors concerning methods of infection are likely to increase the stigmatization of those with the disease. The most common inaccurate perception of mode of transmission involved urinating in a place where someone with AIDS had already urinated. Shared clothes, food and water were also seen as sources of infection. Both children and teachers recommended that those with AIDS be isolated and said that that even talking to them would lead to risk of infection. These discriminatory views were likely to have been reinforced by parents and community elders who possessed the same misinformation.

In Kenya and other countries in Sub-Saharan Africa, HIV/AIDS and other STIs are associated with immorality and the practice of having multiple sexual partners, in addition to sex outside marriage (Nduati and Kiai, 1996).

These misconceptions of the causes of HIV/AIDS influence people's attitudes, especially their view of their chances of getting infected.

Attitudes towards HIV/AIDS and people living with HIV/ AIDS (PLWHA) may also help predict behavior change; however the existing literature is inconclusive. Several studies find high levels of empathy, tolerance, acceptance, and positive attitudes towards PLWHA (Serovich & Greene, 1997; Villarruel et al, 1998). However, other findings show neutral, unfavorable, or unsympathetic attitudes towards AIDS or those persons with AIDS (Carducci et al, 1995; Katz et al, 1995; Konde-Lule et al, 1989).

For example, a study by Al-Owaish et al. (1999) report that 80% of Kuwaiti participants felt that persons with AIDS should not be left to live freely in the community.

A possible explanation for the variance in findings among studies is demographic characteristics such as nationality, age, sex, religion, ethnicity, and marital status.

Knowledge level is another possible predictor of attitude, indicating that increasing knowledge levels of AIDS may produce more positive attitudes towards individuals with AIDS (Carducci et al, 1995). Various studies have shown that despite a high knowledge of sexual risks, fear of HIV and awareness of the protective value of condoms, the young men exhibit high risk behavior. They feel the need to conform to social prescriptions of male prowess, early sexual experience, and having more than one partner, yet their feelings about this behavior are ambiguous and contradictory. The perception of their personal risk getting HIV infection is usually low (Bauni, 2000: Cok, 2001).

Individuals must perceive themselves to be at risk of the health threat before they will take actions to reduce risky behavior or to engage in healthy alternative behavior

In the UNICEF study conducted in Somalia in 2004, only 5% of either sex considered themselves at risk of contracting HIV. More than half of the respondents in a study carried out in Djibouti among adolescents in school felt that they were not at risk of contracting HIV/AIDS but their friends were (Rodier et al, 1990). According to the Kenya Demographic and Health Survey conducted in 2003 about one-third of women and men say they have no risk of getting HIV, while 40% of women and 52% of men say they have only a small chance.

Fifteen percent of women and 10% of men feel they have a moderate risk of getting AIDS, while 9% of women and 5% of men think they have a great chance of getting AIDS. In general women perceived their risk of infection greater than men.

Research focusing on the effects of beliefs of susceptibility to AIDS indicates that adolescents and adults who report high perceived risk for AIDS practice safer sexual behavior, whereas those who perceive low risk for contracting AIDS report practicing unsafe sexual behavior (Gray & Saracino, 1989; Villarruel et al, 1998).

However, in a study by Volk and Koopman in 2001 on health behavior in Kenya, perceived susceptibility to AIDS was not a significant predictor of condom. According to the authors of this study, the failure of perceived susceptibility to predict behavior most likely resulted from participants' misconceptions about the origins and transmission of AIDS. For example, some participants reported the belief that anal sex was a safe alternative to vaginal sex (Volk & Koopman, 2001). For these individuals, misconceptions, or lack of accurate knowledge about AIDS, resulted in inaccurate assessments of susceptibility. In this way, it seems that perceived susceptibility must be coupled with accurate knowledge in order to bring about behavioral change.

The spread of HIV is associated with risky sexual behavior such as casual sex or sex with multiple partners without using a protective device like a condom. Condom use in the Somali community was reported to be low (UNICEF, 2004). In Kenya, condom use during higher-risk sex is more pronounced among women who have never married (28%) than 19% of those married (KDHS, 2003).

The risk of HIV transmission may increase in emergency situations where refugees and the internally displaced do not have access to condoms, or where providers of humanitarian assistance do not take precautions against the transmission of blood-borne infections.

To change risky behavior, it is necessary to understand the socio-cultural values precipitating this type of behavior.

Some cultural norms and rules such as the ritual of "cleansing" widows before they are inherited has a big role to play in the transmission and spread of HIV/AIDS, especially if no protective measures are taken (Nduati and Kiai, 1996). In Kenya, cultural and religious positions with regard to sex and the use of condoms create dilemmas for those attempting to formulate policies on the management and control of HIV/AIDS (MOH, 1997). This is a major issue in Somalia and among the Somali community, which is much more conservative than Kenya.

### **2.3 HIV counseling and testing\***

## **UNIVERSITY OF NAIROBI** **MEDICAL i : .MARY**

HIV counseling has two significant objectives: prevention and care. It concentrates on emotional, behavioral, and social issues related to possible or actual infection with HIV. In essence, counseling is a confidential dialogue between a client (in counseling, the word "client" is preferred to "patient") and a counsellor, aimed at enabling the client to cope with stress and take personal decisions related to HIV/AIDS. With the consent of the client, counseling can be extended to spouses, sex partners, and other persons considered important by the client.

VCT is the process by which an individual undergoes counseling enabling him or her to make an informed choice about being tested for HIV. This decision must be entirely the choice of the individual and he or she must be assured that the process will be confidential (UNAIDS, 2001). VCT consists of pre-test counseling about whether to take an HIV test and what one's personal risks are for HIV infection. If the client decides to take the HIV test, he or she then receives test results during a post-test counseling session.

Clients work with the counselor during the post-test counseling session to develop life plans for behavior that protect themselves and others from HIV transmission and they receive referrals for needed services. While many people get HIV-related counseling and testing, only those who receive pre- and post-test counseling, and test voluntarily, are Participating in VCT.

Research undertaken by Family Health International (FHI) 2004, demonstrates that voluntary counseling and testing (VCT) is a cost-effective strategy that facilitates behavior change and is also an important component of a comprehensive HIV/AIDS program. Knowing one's status through testing provides an entry to other HIV/AIDS services, including prevention of mother to child transmission, clinical management of related illnesses, access to antiretroviral therapy, and psychological and legal support. Counseling and testing increases people's perception of their vulnerability to HIV and is a motivating force to want to remain HIV-negative. As more people accept testing as a viable option, paths to communication are opened. In this way, stigma and discrimination are slowly but steadily reduced.

Studies among adults in developing countries report behavioral change after VCT on a range of indicators, including condom use, reduction in number of partners, and reduction in STI incidence. For example, a multi-center VCT efficacy trial in Kenya, Tanzania, and Trinidad found a number of changes due to VCT (Voluntary HIV Counseling and Testing Efficacy Group, 2000). The trial had a randomized sample of 3,120 individual volunteers and 586 couples. Results showed that there was a significantly greater decline in the proportion of individuals who had unprotected sex with non-primary partners, among the group that received VCT as compared with the group that received a health education intervention.

HIV-infected individuals were likely to reduce sexual risk behavior with primary partners and HIV-infected men were likely to reduce risk behavior with non-primary partners as well. For couples, those who participated in VCT were significantly more likely to reduce unprotected intercourse with their enrollment partner when compared to those who received health education only. The study concludes that VCT is efficacious in promoting behavior change.

While one is usually self-motivated to visit a VCT establishment to find out his HIV status, the motivation in non-VCT HIV counseling and testing is quite different. This varies from seeking employment, joining institutions of higher education, obtaining insurance policies and in the case of refugees seeking resettlement to other States.

Most countries will require migrants to undergo complete medical examinations before being resettled to their countries. This examination will usually include an HIV test, and although most organizations will offer pre-test counseling before the test, this is still a mandatory test whose exclusion could affect the client's process. With a lot of studies focusing on the tenets and benefits of VCT, little if any has been done to determine the effectiveness of offering HIV counseling in this non-voluntary manner where the clients motivation to know his HIV status is entirely different as compared to VCT.

The goal of the IOM pre-test counseling is to inform and educate individuals on HIV and AIDS. It also provides benefits for those who test HIV-positive as well as those who test HIV-negative. Pretest counseling increases migrants' perception of their vulnerability to HIV and promotes behavioral changes. Moreover, it is a unique opportunity to reinforce prevention messages.

In providing accurate information and correcting false beliefs and myths on HIV and AIDS, pretest counseling may also assist in reducing stigma in the community. Finally, pre-test counseling prepares individuals to cope with a potential HIV-positive status and contributes at establishing a relationship with the counsellor.

## **CHAPTER 3**

### **3.0 STATEMENT OF THE RESEARCH QUESTION**

#### **3.1 RESEARCH PROBLEM**

The ongoing plight of refugees and displaced people worldwide is one of today's great tragedies. Largely unacknowledged by the government, and under-assisted by UNHCR and other agencies, urban refugees in Nairobi live in squalid housing conditions, often without access to food, clean water, jobs, education or medical care and are often excluded from HIV/AIDS programmes, which are already overburdened. They interact with the local population on a daily basis and their consistent exclusion is not only discriminatory but also undermines effective HIV/AIDS prevention and care efforts in Kenya. The Somali refugee population has been residing in Kenya for the last 16 years and yet there is limited HIV and AIDS related information on this unique study population.

HIV/AIDS stigma and discrimination is widespread among the Somali population and knowledge and acceptance of condoms as a tool of prevention is very low. HIV/AIDS is seen as a non-Islamic, foreigner's disease leading to denial and further discrimination. Most Somalis have only a basic understanding of how HIV is transmitted and prevented leading to misinformation, myths and misconceptions. A report by Dr. Abubakar et al (2000) on STI prevalence in Somaliland indicated that 31% of women and 12% of men in the study had one or two STI symptom.

Over the years, the prevalence of HIV among Somali refugees undergoing medical assessments at the International Organization for Migration clinic before resettlements to other countries has been steadily raising. This compounded by the high prevalence of STIs in Somalia, the lack of knowledge, alarming misconceptions, socio-cultural Practices and traditional surgical procedures can exacerbate the epidemic further.



The close association between HIV and taboo issues linked to sex and sexuality adds to the difficulty of addressing HIV and AIDS among this community.

This lack of information is a barrier to effective designing of HIV/AIDS programmes that target and meet the needs of this population.

This study aims to contribute to the reduction of this gap by conducting an assessment of urban refugees' knowledge, perceptions and behavior associated with HIV and AIDS.

### 3.2 STUDY JUSTIFICATION

Refugees constitute one of the most difficult populations to reach with HIV/AIDS prevention and care services and like other migrants and mobile populations, urban refugees are also vulnerable to HIV and AIDS. As people move, temporarily, seasonally or permanently, they connect individual and environmental health factors between one community and another. The re-emergence and rapid spread of Rift Valley Fever among nomadic communities; the measles outbreak in refugee camps and in Nairobi's Eastleigh estate, which hosts a large number of Somali urban refugees; the discovery of polio among Somali refugees in Dadaab Camp in North Eastern Kenya making the re-emergence of polio in Nairobi a real threat and the cholera outbreaks in parts of Turkana facilitated by cross border movements between Kenya and South Sudan are some examples of the threat of migration and spread and impact of diseases in the country.

The years of conflict and civil war, the highly mobile and nomadic population, the weak governmental structures and lack of infrastructure in Somalia increases the health vulnerabilities of this population. This is compounded by the community's inability to access basic needs, a conservative culture where sexual issues especially HIV and AIDS are regarded as taboo subjects and the lack of health data on this population.

This study is designed to provide information on the knowledge, attitude, beliefs and practices related to HIV/AIDS among the urban Somali refugees undergoing HIV counseling and testing at the IOM clinic for resettlement purposes. Under the UNHCR classification of refugees, majority of these urban refugees are usually classified as illegal immigrants having not acquired refugee status for various reasons. This will provide basis for designing and implementing HIV and AIDS intervention programmes targeting this population. At the same time it will evaluate if pre-test counseling sessions offered to this group are effective in changing the respondents HIV and AIDS associated knowledge and attitudes. The study will also provide guidance and appropriate policy and Programme responses on HIV preventive strategies in other refugee settings to policy takers, international organizations and NGO's involved in refugee welfare.

### **3.3 RESEARCH QUESTIONS**

1. What is the level of knowledge associated with HIV/AIDS among urban Somali refugees at the IOM clinic?
2. What are the perceptions and behaviors towards HIV/AIDS among urban Somali refugees at the IOM clinic?
3. Are the Pre-test counseling sessions offered to these individuals before resettlement effective in changing their level of knowledge and attitudes related to HIV/AIDS?

### **3.4 OBJECTIVES**

#### **3.4.1 General objective**

To establish the level of knowledge, perceptions and behavior associated with HIV/AIDS among the Somali refugees undergoing HIV Pre-test counseling at the IOM clinic.

#### **3.4.2 Specific objectives**

1. To determine the social and demographic characteristics of Somali refugees undergoing HIV pre-test counseling at the IOM clinic before resettlement.
2. To assess the knowledge, perceptions and behavior related to HIV/AIDS before and after HIV pre-test counseling among the Somali refugees at the IOM clinic.
3. To determine the relation between socio-demographic characteristics of the participants and their knowledge, attitude, beliefs and practices related to HIV/AIDS.
4. To determine the effectiveness of the HIV Pre-test counseling sessions offered to the Somali refugees at the IOM clinic.
5. To make recommendations to policy makers on how to design and improve HIV/AIDS programmes targeting urban refugees.

### 3.5 HYPOTHESES

1. Social and demographic characteristics of refugees do not affect their HIV/AIDS related knowledge, attitude, beliefs and practices.
2. The majority of the respondents have no adequate levels of knowledge and have negative attitude related to HIV/AIDS **before** receiving pre-test counseling.
3. A large proportion of the respondents do not perceive themselves at risk of contracting HIV.
4. There is no significant change in knowledge and attitude associated with HIV/AIDS **after** the refugees undergo HIV pre-test counseling at the IOM clinic.
5. Knowledge of HIV/AIDS does not influence an individual's HIV and AIDS related attitude.
6. The HIV Pre-test counseling sessions offered to the Somali refugees at the IOM clinic do not significantly change their HIV and AIDS related knowledge and attitude.

## CHAPTER 4

### 4.0 METHODOLOGY

#### 4.1 Study design

A descriptive cross-sectional study was conducted to establish the knowledge, perceptions and behavior associated with HIV/AIDS among Somali refugees in Nairobi. Both qualitative and quantitative tools were used to collect data in this study.

#### 4.2 Variables

##### 4.2.1 Independent variables

In this study, the following variables were considered as independent:

- Sex
- Age
- Level of education
- Marital status
- Years of displacement
- Previous residence in a refugee camp

##### 4.2.2 Dependent variables

The dependent variables included:

- Knowledge
- Attitude
- Beliefs
- Practices related to HIV/AIDS

The relationships to be determined are presented in table 2.

**Table 2: Variable relationships to be determined**

<b>DEPENDENT</b>	<b>INDEPENDENT</b>
<b>Knowledge</b>	Sex
	Age
	Marital status
	Level of education
	Years of displacement
	Previous residence in a refugee camp
	<b>Attitude</b>
<b>Attitude</b>	Sex
	Age
	Marital status
	Level of education
	Years of displacement
	Previous residence in a refugee camp
	<b>Knowledge</b>
<b>Beliefs</b>	Sex
	Age
	Marital status
	Level of education
	Years of displacement
	Previous residence in a refugee camp
	<b>Practices</b>
<b>Practices</b>	Sex
	Age
	Marital status
	Level of education
	Years of displacement
Previous residence in a refugee camp	

### **4.3 Study area**

The study was conducted at the IOM clinic in Nairobi, where refugees and other clients awaiting to be resettled to other countries undergo the medical health assessment including HIV/AIDS counseling and testing. With all participants being urban refugees, the majority if not all were from Nairobi's Eastleigh estate. Nairobi's Eastleigh estate has a mixed ethnic population of 160,000, and also hosts up to 50,000 migrants, many with irregular immigration status, who are largely marginalized from health and social services and protections.

### **4.4 Study population**

The study population was composed of Somali refugees aged 15 years and above and undergoing medical health assessments, which include HIV/AIDS counseling and testing at the IOM clinic as they await resettlement to other countries. This population of urban refugees is classified as refugees with no legal status or illegal refugees, having chosen to live away from designated refugee camps, where they are supposed to.

Migrants and refugees undergoing IOM migration health assessments have not specifically sought HIV counseling and testing. Their main concern is life in a new country, and not having their health assessed or their HIV status checked. In addition, because of the simultaneous processing of large groups, often in remote environments and with stringent logistic constraints, pre-test counseling is carried out in groups of 15 to 20 clients, while post test counseling is done on individual basis. These unique features make the study population a distinct group.

The counselors and the interpreters at the IOM clinic, were also interviewed as key informants

#### **4.5 Inclusion criteria**

This included:

- Somali refugees receiving HIV counseling and testing at the IOM clinic.
- Refugees who had not yet received any HIV/AIDS counseling at the clinic before.
- Those who gave an informed consent.

#### **4.6 Exclusion criteria**

- Somali refugees not undergoing HIV counseling and testing at the clinic.
- Those who had already undergone prior HIV/AIDS counseling at the clinic (re-medicals).
- Those who did not give an informed consent.

#### **4.7 Sampling**

##### **4.7.1 Sampling units**

Individuals aged 15 years and above, refugees of Somali origin who were undergoing HIV counseling and testing at the IOM clinic for the first time before resettlement to other countries.

##### **4.7.2 Sampling procedure**

###### **Quantitative data**

To obtain the sample size for the quantitative data collection, consecutive inclusion of study subjects who met the criteria was used.



### 4.7.3 Determining sample size

The sample size for the study was derived from the following formula for descriptive studies (John Wiley and sons Woolson, 1987).

$$n = \frac{z^2 p (1-p)}{d^2}$$

Where n = sample size

p = estimated proportion of Somali's who have adequate

HIV/AIDS knowledge, hypothesized at 62% (UNICEF, 2004).

Z = critical value corresponding to 95% confidence interval obtained from the table of standard normal distribution (= 1.96)

d = degree of precision desired, set at ± 5%

Substituting in the formula:

$$\begin{aligned} n &= \frac{(1.96)^2 \cdot 0.62 \cdot (1 - 0.62)}{(0.05)^2} \\ &= 347 \text{ participants} \end{aligned}$$

## Qualitative data

### a) Focus Group Discussions

For the qualitative data, purposive sampling was utilized to obtain the participants from the clinic for the purpose of the study. Participants who were willing and who had never undergone any HIV counseling before were divided into four groups.

In total 8 FGDs were conducted with a total of 79 participants. The groups were divided according to sex and age with two groups each for male and females comprising of participants aged 15 to 35 years and those aged 35 years and above belonging to the other two groups.

Each group comprised of 8 to 12 participants allowing the participants to be more cohesive and interactive. During the FGDs, participants were engaged in active discussions related to HIV and AIDS.

Another four FGDs with the same participants were conducted after the HIV pre-test counseling. These FGDs also focused on issues discussed in the counseling sessions, how they were covered and ways of improving them.

#### **b) Key informant Interviews**

Six key informants were interviewed. These were selected based on their roles in the community and in the HIV and AIDS counseling programme. They consisted of two men aged 57 and 61 years who commanded respect in the community, with knowledge and experience of various aspects of Somali culture and value systems. Others interviewed were a young female and male respondent aged 22 and 24 years respectively. Two HIV and AIDS counsellors working for IOM and involved in the counseling sessions were also interviewed.

#### **HIV and AIDS Counseling Sessions**

After administering the questionnaire, all respondents received one session of HIV and AIDS counseling, which was conducted by trained and highly qualified IOM HIV/AIDS counsellors. Counseling sessions took place in the afternoons and was conducted in groups of between 15 to 20 clients, which lasted 60 to 90 minutes.

Although group sessions have proven to be more effective since they stimulate discussion and interactivity, this is only possible when the gender, age and language composition of the groups are appropriate. These pre-test counseling groups are usually gender and culturally disaggregated with Somali interpreters being used for translating purposes.

Counseling sessions were however, not age disaggregated and comprised of respondents of different age groups. This sometimes led to intimidation of the younger clients by the older ones leading to fear of asking questions or raising any concern.

Older clients would at times be very dominating in the group and proved to be very difficult in controlling the sessions. Sessions also comprised of different family members together, which raised some ethical issues and lacked confidentiality.

#### **4.8 Data collection**

Collection of data took six weeks. This was started after the mandatory clearance and authorization was obtained from the Department of Community Health, University of Nairobi, and the IOM clinic in Nairobi. Only participants who gave an informed consent were included in the study. Quantitative data was collected using structured questionnaires, while open-ended questions with a guide were employed for collection of the qualitative data.

Four research assistants who were HIV/AIDS cultural mediators and interpreters working at the IOM clinic involved in offering HIV/AIDS counseling to the refugees awaiting resettlement were recruited and trained by the principal investigator. The mediators were of Somali origin and were all fluent in Somali, the language spoken by all respondents. The questionnaire was pre-tested in a population similar to the study population that was not part of the study. The purpose of the pre-test was to determine the overall feasibility of the study and specifically pre-test the study instrument. Based on the results of this, a few modifications to the questionnaire were made. Questions, which proved to cause confusion among the respondents in the pre-testing, were deleted or altered for the final field work.

A structured questionnaire divided in four sections of HIV and AIDS related knowledge, attitudes, beliefs and practices was administered to the respondents. This was conducted on the first day of the medical health assessment process before the respondents underwent HIV/AIDS pre-test counseling.

Two days later and after undergoing the HIV pre-test counseling, respondents; who had been coded for ease of follow up, were re-interviewed using the same structured questionnaire. This second interview again covered the respondents' HIV and AIDS associated knowledge and attitude, but excluded the HIV and AIDS related beliefs and practices. This was because two days was deemed short for any significant change in behavior.

Qualitative methods included focus group discussions and key informant interviews. These methods were chosen because interacting with group members would stimulate richer responses, encourage valuable insights, and also permit the exploration of socio-cultural factors that are difficult to obtain using quantitative methods. The issues investigated in the FGDs included socio-economic and cultural factors that predispose people to HIV; most vulnerable groups; perceptions and awareness about HIV and AIDS; HIV and AIDS information dissemination; care of people affected by HIV and AIDS; involvement of the community and their leaders in HIV and AIDS programmes and suggestions on what can be done to curb the spread of HIV in the community.

The discussions were led by the principal investigator with the assistance of a Somali translator due to the language barrier. For ease of recording and to capture all views a tape recorder was used.

#### **4.9 Data processing and analysis**

##### **Quantitative data**

The completed questionnaires were checked daily to ensure each question had been filled correctly and that no data was missing. They were then numbered and coded for ease of handling. Data was then entered using SPSS data entry program. Quantitative data was analyzed using SPSS programme and Likert's scale was used to evaluate subjects attitudes related to HIV/AIDS. The results are presented in descriptive form using frequency tables, cross tabulation tables and bar charts.

The following analytical procedures were used:

- Descriptive statistics (e.g. frequency, mean, proportions)
- For comparison and differences of variables (Chi-square ( $X^2$ ), correlation, test of significance, standard normal deviate (SND) test and paired t-test were done
- Level of significance was fixed at 0.05

## **Qualitative data**

**Qualitative data from focus group discussions and key informant interviews was transcribed, coded and summarized according to themes and analyzed manually according to the study objectives.**

### **4.10 Scoring knowledge and attitudes**

On knowledge, the questionnaire carried 19 questions with 27 possible correct responses, covering awareness of HIV and AIDS, modes of transmission and modes of prevention. For each correct answer, a participant scored one point. Therefore, if respondents received twenty-seven correct answers their score was 100 percent.

Based on previous research done among Somalis in North Eastern Kenya and two similar studies done among Somalis living in Somaliland by UNICEF in 1999 and 2004, the cut-off point for level of knowledge in this study was taken as 75%. Participants attaining 75% and above were considered to have adequate knowledge.

On attitudes, 12 questions were asked in Likert's scale and the highest mark a respondent could get was 60 and the lowest 12. Respondents who scored above 36 points out of the possible 60 (above 60%) were said to have a positive attitude, while those who scored 36 and below (equal to or below 60%) were considered to have negative attitudes towards condom use and people with HIV/AIDS. Sixty percent was chosen as the cut-off point because an individual who selected "neutral" in all 12 questions scored 36 marks out of 60, which is equal to 60%.

#### **4.11 Minimization of errors/biases**

The interviewers were given a brief overview of the study and trained on interviewing techniques, logistics and accurate recording of data into the questionnaires before the commencement of the study; standardized questionnaires were used and all questionnaires were reviewed with the research assistants at the end of the day and necessary corrections made as soon as possible.

Data was coded accurately and research assistants supervised. Confidentiality of the responses was emphasized to the respondents.

#### **4.12 Limitations of the study**

As with any such survey, there are potential limitations that are discussed here to prevent misinterpretation of the results.

1. The investigator assumed and believed that respondents were largely forthcoming during the interview, providing open and honest answers to the questions posed. Nevertheless, as in all surveys, respondents may have modified their answers according to social norms or to their perceptions of interviewer expectations.
2. Without a control group, a direct causal link cannot be drawn between survey results and the counseling intervention efforts alone. However since no other interventions were implemented and the short period between the two interviews, all changes in knowledge and attitude are believed to be as a result of the counseling sessions.
3. Language barrier between investigator and the majority of respondents who did not speak either English or Kiswahili. Therefore, interviews were conducted through a translator.
4. The short interval of two days between the first and second interview was not adequate to assess the respondents change in HIV/AIDS associated practices and behaviors.

#### **4.13 Ethical considerations**

1. Permission to carry out the study was obtained from the IOM Migration Health Department and the Department of Community Health, University of Nairobi.
2. The purpose of the study was explained to all potential participants and informed written consent of willing participants was obtained.
3. Respondents were assured of confidentiality as serial numbers and not names were used on the questionnaires.
4. Interviews were conducted in privacy to reinforce confidentiality. This was all done in Somali language.
5. Participants were at liberty to refuse to participate in the study or terminate the interview any time. They were also provided with appropriate information and counseling after the completed interview and focus group discussions.
6. As much as possible, disruption of the day-to-day activities of participants and clinic was minimal.

## CHAPTER FIVE

### 5.0 RESULTS

**This chapter first gives the socio-demographic characteristics of the respondents in the quantitative data collection survey followed by the findings, presented in order of knowledge, attitude, beliefs and practices related to HIV and AIDS (before and after HIV/AIDS counseling sessions).**

#### 5.1: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Table 3 summarizes the socio-demographic characteristics of the respondents before and after the counseling sessions.

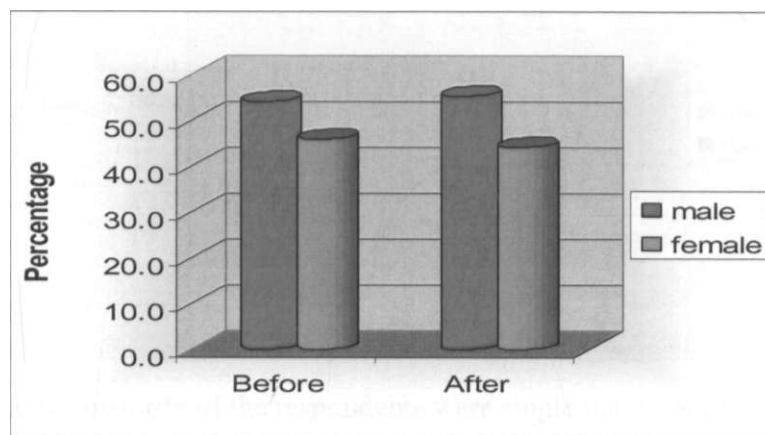


**Table 3: Socio-demographic characteristics of the respondents**

<b>Characteristics</b>	<b>Percentage before counseling (n=377)</b>	<b>Percentage after counseling (n=360)</b>
<b>Sex</b>		
<b>Male</b>	<b>54.1</b>	<b>55.6</b>
<b>Female</b>	<b>45.9</b>	<b>44.4</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Age</b>		
<b>15-30 years</b>	<b>72.4</b>	<b>71.9</b>
<b>31-49 years</b>	<b>9</b>	<b>9.3</b>
<b>Above 50 years</b>	<b>18.6</b>	<b>18.8</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Mean age</b>	<b>29 years</b>	<b>29 years</b>
<b>Years of displacement</b>		
<b>15-16 years</b>	<b>70.5</b>	<b>69.4</b>
<b>12 years</b>	<b>6.6</b>	<b>7.0</b>
<b>Others</b>	<b>22.8</b>	<b>23.5</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Previous residence in camp</b>		
<b>Yes</b>	<b>40.5</b>	<b>38.6</b>
<b>No</b>	<b>59.5</b>	<b>61.4</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Marital status</b>		
<b>Single</b>	<b>69.3</b>	<b>69.4</b>
<b>Married</b>	<b>23.7</b>	<b>24.1</b>
<b>Divorced</b>	<b>1.9</b>	<b>2.0</b>
<b>Widowed</b>	<b>5.1</b>	<b>4.5</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Education</b>		
<b>None</b>	<b>88.3</b>	<b>87.7</b>
<b>Lower primary (std 1 -4)</b>	<b>2.4</b>	<b>2.6</b>
<b>Upper primary (std 4-8)</b>	<b>2.9</b>	<b>3.2</b>
<b>Secondary</b>	<b>0.8</b>	<b>0.6</b>
<b>Post-secondary</b>	<b>0</b>	<b>0</b>
<b>Religious</b>	<b>5.6</b>	<b>5.9</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

A total of 377 respondents were interviewed before undergoing HIV/AIDS Pre-test counseling. Of these, 204 (54%) were males while the remaining 173 (46%) were females. Two days later and after under going HIV and AIDS counseling sessions, the same respondents were re-interviewed with 17 being lost to follow up. Therefore, a total of 360 respondents were re-interviewed. Of these, 199 (56%) were males while the remaining 161 (44%) were females (Figure 1).

**Figure 1: Gender distribution of respondents**



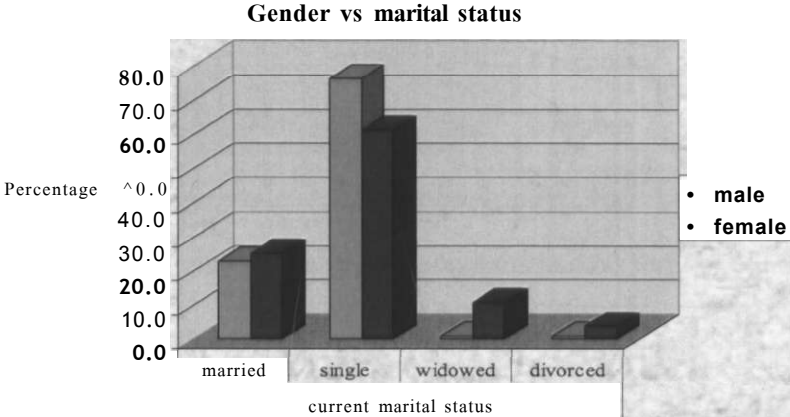
(Male respondents were the majority both before and after counseling sessions).

The age of the respondents ranged from 15 to 81 years. Majority of the respondents were between 15-30 years old (72%); while those above 50 years of age were 19%. The mean **ages** of male and female respondents were 27 and 31 years respectively both before and **after** the HIV/AIDS counseling sessions, while the overall mean age was 29 years.

**Respondents** had been displaced for two to sixteen years with 70% of them having been **refugees** for the last 15 to 16 years. Overall 60% of the refugees interviewed had never **lived** in refugee camps before while 40% had. Single respondents were the majority (69%), followed distantly by those married who were 89 (24%), then the divorced and widowed respondents.

There was statistical evidence of a relationship between the sex of the respondent and their marital status both before and after counseling, with more females than males reporting to be married and more males than females reporting to be single ( $X^2=26.114$ ;  $df=3$ ,  $p=0.000$ ). However, more females than males reported to be either widowed or divorced (Figure 2).

**Figure 2: Gender of respondents versus their marital status**



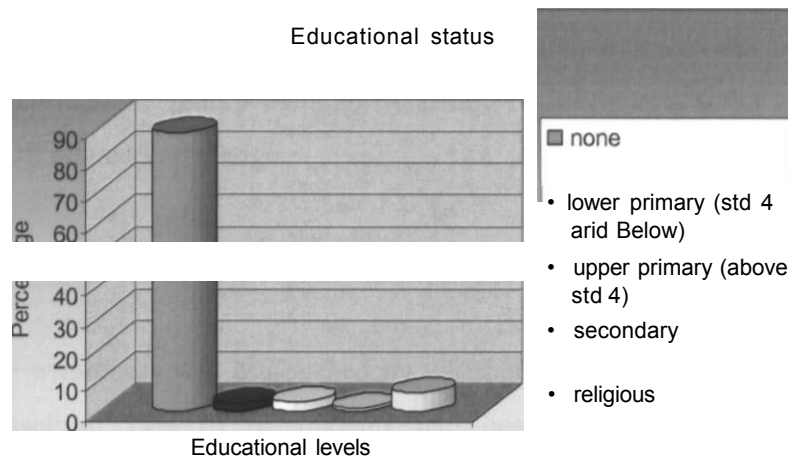
(As seen above majority of the respondents were single male, followed by married females).

The age at marriage for respondents ranged from 12 to 48 years. However, the most common age group at marriage ranged was 17 and 21 years, followed by those in the age group 12-16 years.

Of importance to note is that the 87% of the married men, reported they had one wife each, 10% had two wives each, while 3% had three wives. Most of the married men (86%) were in first time unions having never married before. There were 72% married women in monogamous unions, while 21% were in polygamous unions having one or two co-wives. This was again statistically significant ( $X^2=31.955$ ;  $df=2$ ;  $p=0.000$ ), with most respondents being in a monogamous relationship.

Of all the respondents, 88% had never attended school and had no form of education, while 12% had some form of education (Figure 3).

**Figure 3: Respondents educational status**



(An overwhelmingly majority of the respondents had no form of education)

More males (48%) than females (40%) reported having never attended school. Additionally, more males than females had attended all levels of formal education, while more females (4%) than males (2%) had attended religious education.

The relationship between gender and education was however, not significant ( $p=0.544$ ) and there was also no statistical significant relationship between educational levels and respondents who had lived in camps and those who had not ( $p=0.443$ ).

## 5.2: KNOWLEDGE RELATED TO HIV and AIDS

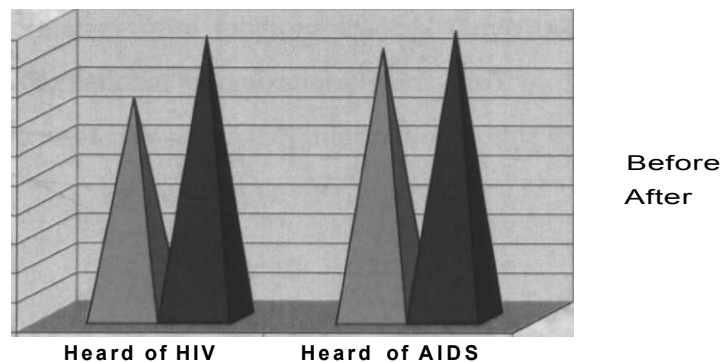
One aim of the study instrument was to evaluate the respondent's awareness of HIV/AIDS, their knowledge on various modes of HIV transmission and prevention, and sources of information. This was done by asking respondents a series of questions on HIV and AIDS related knowledge.

### 5.2.1: Awareness of HIV and AIDS

Respondents' awareness was established by whether they had heard of HIV and AIDS. Before counseling, 75% of respondents had heard of HIV while 25% had not. Respondents who had heard of HIV increased to 96% after undergoing the counseling sessions. Overall, more men than women (84% against 65%) said they had heard of HIV. This difference was statistically significant ( $p=0.000$ ), with the number of males who had heard about HIV outweighing females.

When asked if they had heard of AIDS before counseling, 92% of respondents said they had; while after counseling almost all (98%) respondents had.

**Figure 4: Respondents awareness of HIV and AIDS**



**(Noted increase in respondents who were aware of HIV and AIDS after undergoing counselling)**

When awareness of AIDS was analyzed by gender, it was shown that more males (95%) than females (90%) had heard about AIDS. There was however, no statistically significant difference ( $p=0.113$ ) between having heard about AIDS and gender of the respondents. Out of the 377 refugees interviewed before receiving any HIV/AIDS counseling, 6% had not heard of either HIV or AIDS.

In the Focus Group Discussions (FGDs) most participants were aware of AIDS, which even had a Somali translation (AYDHIS) as opposed to HIV. Both female and male participants exhibited this knowledge by giving some signs and symptoms commonly found in AIDS patients, such as weight loss, skin disorders, tuberculosis and ulcers of the mouth. Some participants in both female and male groups added that the disease affects those who had chosen to disregard God's commandments and laws and engaged in pre-marital and extra-marital sex. While most participants knew of both HIV and AIDS, very few could explain the difference in the two terms. Most thought the terms meant one and the same thing and could be used inter-changeably.

### **5.2.2: Sources of HIV and AIDS information**

A majority of the respondents cited radio and TV (75% and 70% of respondents respectively) as the most common sources of HIV and AIDS information. Friends were the source of information for 39% of the respondents, while only 7% of the respondents obtained their information from religious leaders. Government officials, civil society organization and international organizations were cited by less than 2% each of the respondents as sources of HIV and AIDS information (Table 4).

**Table 4: Sources of HIV and AIDS information (n=377)**

Category label	Percentage cases
TV	69.5
Radio	74.6
Friends	38.5
Husband/wife	3.2
Health workers	4.8
Civil Society Organizations	1.1
Government officials	1.9
Parents	3.7
Schools	0.3
Religious leaders	7.2
Community leaders	3.2
International agencies	1.9
Don't remember	0.3
Others	1.3

(Radio and TV were the most common cited sources of information).

These views were again reflected in the FGDs where television and radio were cited as the most common sources of information, especially the emergence of radio channels broadcasting in Arabic, which was understood by most of the respondents. In spite of the large audience and respected position they hold in the community, religious leaders tended to shy away from discussing HIV and AIDS. More men were getting their information from both radio and TV than women, while more females used friends as a source of information. The proportion that reported husband/wife as a major source of HIV/AIDS information was only 3.2%, which indicates minimal spousal communication regarding HIV and AIDS issues.

### **5.2.3: Awareness of HIV/AIDS modes of transmission**

The survey probed awareness about the modes of HIV transmission. Interviewers Presented a list of possible transmission methods. Unprotected sex with an infected Partner was the most cited by 60% of respondents before and 97% after counselling.

This was followed by sharing of needles and other skin piercing instruments then by blood transfusion with HIV infected blood. A large number of refugees (41%) interviewed before receiving any information on HIV and AIDS could not cite any HIV transmission mode. This reduced to 1.4% of respondents after the counseling sessions.

**It** was also noted that about 23% of the subjects thought that HIV infection could only be acquired through the will of God. Surprisingly, after the counseling sessions the number of respondents who thought this went up to 29%. Another 3% of the respondents gave incorrect methods of HIV transmission such as through mosquito bites (1.9%) and physical contact. The percentage of respondents who thought mosquitoes could transmit HIV went up from 1.9% to 2.2 % (Table 5)

**Table 5: Awareness of HIV modes of transmission**

Modes of Transmission	Percentage of cases BEFORE counseling n=377	Percentage of cases AFTER counseling n=360
Unprotected sex with infected person	59.9	96.9
Transfusion with infected blood	47.6	93.6
Sharing injections and other skin piercing instruments	48.7	92.5
From mother to child	19.9	61.1
Mosquito bites	1.9	2.2
Touching an HIV + person	1.1	0
Passing of body fluids	19.1	29.2
Only through the will of God	23.4	29.2
Don't know	40.6	1.4

(Overall, counselling made great difference among respondents).



When knowledge of HIV/AIDS transmission before counseling was analyzed by gender it was shown that more females (28%) than males (26.7%) cited unprotected sex with an **infected** person. Other methods of transmission mentioned in the FGDs were cutting and piercing of body parts during traditional ritual dances, polygamy and the practice of widow inheritance, which young respondents felt was risky since the practice of HIV testing before marriage was not practiced in their community. Majority of the participant's felt one could only get infected with HIV through the will of God. There were also a lot of myths and misconceptions on the transmission of HIV in the FGDs; one was that condoms are a mode of HIV transmission, while other respondents believed that mosquito bites could transmit HIV and transmission could also occur by rubbing against **the** body of one infected with the virus.

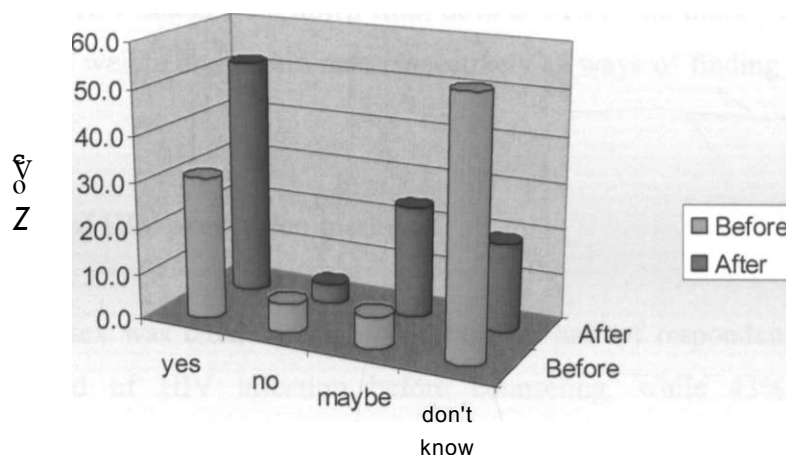
After the counseling sessions, more participants in the FGDs were now able to mention more modes of HIV transmission. However, some participants still thought that one could still get HIV from a mosquito bite, from kissing an infected person or even from sharing things like towels, plates and other household items. Participants confessed that they were not convinced that one could not get HIV from these methods even after being told so in the counseling sessions.

The key informants also confirmed that the widely known method of HIV transmission in the community was sexual intercourse and the disease affected principally immoral people. They believed that HIV did not affect practicing Muslims and alleged the low HIV rates in Somalia, whose adult HIV prevalence is around 1% and the prevalence in other Islamic countries in North Africa and the Middle East, which are less than 0.1%. They also confessed that most people in the community especially the older generation did not know anything about the disease as it was quite foreign to them and they strongly believed it did not exist in their community.

Perceptions about HIV and AIDS reflect awareness. Respondents were therefore asked whether a healthy looking person could have HIV and/or infect another with HIV. Almost a third (31%) of the refugees interviewed before the counseling sessions, were ..... that healthy looking person could be infected with the HIV virus, while most

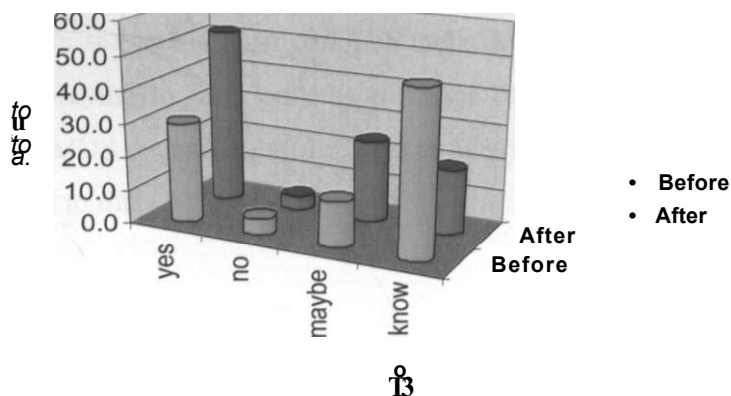
respondents (56%) did not know and a further 13% were not sure. After the counseling sessions, more respondents (52%) knew that a healthy looking person could be infected with HIV (Figure 5).

**Figure 5: Knowledge of a healthy looking person having HIV infection**



About a third of respondents (30%) thought that a healthy looking person could infect another with HIV; while 49% did not know. After counseling more respondents (52%) knew that a healthy looking person could infect another with HIV; while 19% of respondents did not know (Figure 6).

**Figure 6: Knowledge of HIV transmission by a healthy looking person**



**Before** receiving any HIV and AIDS counseling and information, an overwhelmingly **80% of** the respondents had never discussed HIV/AIDS with anybody, 68% of **respondents** knew that one could **find** out his/her HIV status by taking a HIV test.

After counseling the percentage of respondents who knew that by taking an HIV test one could find out his HIV status went down from 68% to 51%, with more people 64% and 54% citing loss of weight and a skin rash respectively as ways of finding out ones HIV status.

#### **5.2.4 Knowledge of HIV prevention methods**

Abstinence from sex was cited by slightly more than half of respondents (53%) as a preventive method of HIV infection before counseling, while 43% of refugees interviewed didn't know how HIV infection could be prevented (table 6). Another 42% and 38% of respondents mentioned being faithful to ones partner and not sharing skin piercing instruments respectively as other methods. Praying to God only, was cited as one of the ways of preventing HIV infection by 26% of the respondents.

After counseling, knowledge of the different HIV preventive methods greatly improved with more respondents citing more methods.

Being faithful to ones partner was the most cited by 91.8% of the refuges interviewed after counseling as compared to before counseling where a majority of respondents (53%) cited abstinence from sex as the most common method of HIV prevention. Respondents who thought that praying to God only as a means of HIV prevention doubled after receiving HIV and AIDS counseling (from 26% to 58%). More women than men (36.9% against 21.6%) cited to this.

**Table 6: Knowledge of HIV prevention methods**

Prevention methods	Percentage of cases (BEFORE) n=377	Percentage of cases (AFTER) n=360
Abstinence from sex	53.2	89.8
Being faithful	42.4	91.8
Using condoms	17.3	50.8
Not sharing skin piercing instruments	38.4	80.5
No casual sex	27.6	55.9
Pray to God only	25.7	58.5
Nothing at all	1.1	0
I don't know	43.2	0

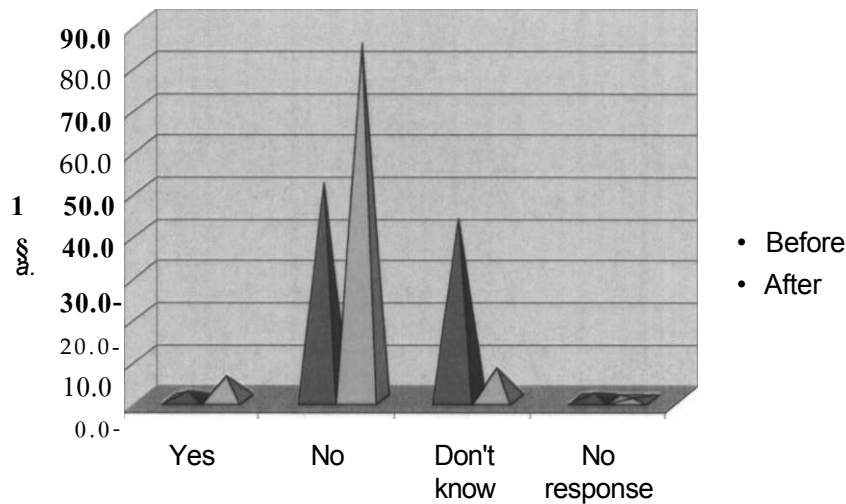
(Increased knowledge in HIV prevention methods after counselling)

Participants in the FGDs indicated abstinence from sex outside marriage to be the primary method of preventing infection followed by being faithful to ones partner. Other methods mentioned were insisting on sterile equipment when performing any traditional surgical procedures, not sharing razors at the barbers, insisting on clean and sterilized instruments at hospitals and praying to God to protect one from contracting the disease. Condoms are key to preventing the spread of HIV and sexually transmitted infections.

The study sought information on the respondent's awareness of condoms, and where they could be obtained. Majority (46%) of the respondents had neither seen nor heard of condoms. More men as compared to women had both heard and seen condoms (37% against 8%). Findings from the FGDs negate this, as all participants in the focus group discussion reported to have heard of condoms.

Asked if AIDS could be cured, 8 (2.1%) of the respondents answered it could, 195 (52.3%) respondents said it could not be cured, while 164 (44%) did not know if it could be cured or not. After the counseling sessions, the percentage of respondents who knew that AIDS could not be cured improved from 52% to 86% (Figure 7).

**Figure 7: Knowledge if AIDS can be cured**



(Majority knew that AIDS could not be cured both before and after counselling)

More males (1.9%) than females (0.3%) said AIDS could be cured. Still more males (35.4%) than females (17.7%) said it could not be cured while more females (27.8%) than males (16.9%) did not know if AIDS could be cured. When those who said AIDS could be cured were asked how this could be done, two participants cited using modern medicine, while the rest did not give an answer. Some Participants in the FGDs believed AIDS could be cured with the use of camel milk.

### **5.2.5: Relationship's between socio-demographic factors and level of knowledge**

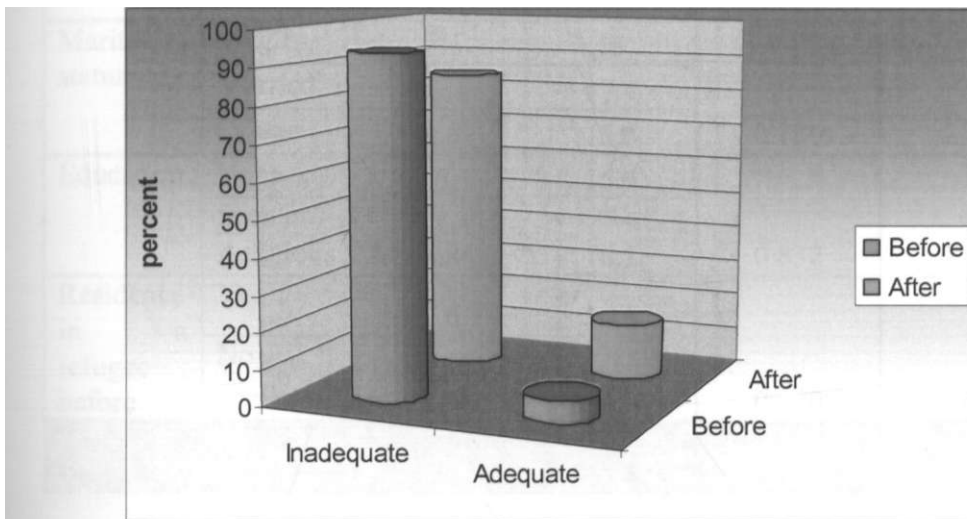
**The** questionnaire carried 19 questions, which had 27 correct answers related to HIV and **AIDS** knowledge. Respondents who got all 27 correct answers scored 100%. Based on **previous** similar studies conducted in Somalia, the cut-off point was 75%, which was **regarded** as an adequate HIV and AIDS knowledge score. Table 7 presents the distribution of level of knowledge scores.

**Table 7: Distribution Level of knowledge scores**

Knowledge score out of 27	BEFORE		AFTER	
	Frequency	Percentage	Frequency	Percentage
KNOWLEDGE SCORES BELOW 75% (INADEQUATE)				
0	13	3.45	0	0
1	34	9.02	2	0.56
2	42	11.14	2	0.56
3	26	6.9	0	0
4	15	3.98	0	0
5	10	2.65	0	0
6	10	2.65	2	0.56
7	8	2.12	1	0.28
8	15	3.98	0	0
9	10	2.65	3	0.83
10	11	2.92	4	1.11
11	9	2.39	4	1.11
12	6	1.59	12	3.33
13	13	3.45	13	3.61
14	19	5.04	24	6.67
15	14	3.71	26	7.22
16	25	6.63	28	7.78
17	19	5.04	57	15.83
18	20	5.31	37	10.28
19	23	6.1	49	13.61
20	12	3.18	40	11.11
Total Inadequate score(0-20)	354	93.89	304	84.44
Cut off point KNOWLEDGE SCORES ABOVE 75% (ADEQUATE)				
21	10	2.65	36	10
22	8	2.12	11	3.06
23	1	0.27	5	1.39
24	1	0.27	4	1.11
25	3	0.8	0	0
26	0	0	0	0
27	0	0	0	0
Total Adequate score 21-27	23	6.11	56	15.56
-SveraH total	377	100	360	100

**Before** counseling a quarter of the respondents had scores ranging from 0% to 11% with the largest group (11%) of respondents scoring 7%. After counseling, more than half of **the** respondents (57%) had 63% level of knowledge scores. Also before receiving any **counseling** sessions, only 23 or 6.1% of **all** respondents had **an** adequate knowledge score or scored 75% and above in their level of knowledge scores. After undergoing HIV and AIDS counseling, 56 out of the 360 respondents re-interviewed or 15.6% of respondents **scored** adequately. This showed a slight increase of respondent's knowledge after the HIV and AIDS counseling session. Even though more than double, this percentage increase still represents insufficient basic HIV/AIDS competence of respondents (Figure 8).

**Figure 8: HIV and AIDS knowledge score**



(There was a slight increase in HIV and AIDS knowledge scores after the counseling sessions).

**Results** of the socio-demographic characteristics of the respondents in comparison to their knowledge scores are shown in table 8.



**Table 8: Comparison of socio-demographic characteristics and level of knowledge**

CHARACTERISTICS		ADEQUATE KNOWLEDGE SCORES OF HIV AND AIDS (3*5%)		Significance (P value)	Significance (P value)
		BEFORE Counseling (%)	AFTER Counseling (%)		
Sex	Male	6.9	20.6	0.832	0.004
	Female	5.2	9.4		
Age group in years	15-30	5.9	17.2	0.922	0.681
	31-49	5.9	15.2		
	>50	7.1	10.4		
Marital status	Single	5	15	0.186	0.580
	Married	10.1	17.4		
	Others	3.6	15.6		
Education	None	6	15.4	0.832	0.807
	Secular/				
	Religious	6.8	16.7		
Residence in a refugee before	Yes	2.6	16.5	0.020	0.681
	No	8.5	14.9		
Overall		<b>6.1</b>	<b>15.6</b>		

There was a significant statistical relationship between knowledge scores and previous residence in a refugee camp before counseling; while after counseling the relationship between respondent's gender and their knowledge score was statistically significant. Of the 23 or 6.1% of respondents who had an adequate knowledge score before counseling, 61% were men, while 39% were female.

On the relationship between sex and knowledge, 7% of the males and 5% of the females scored above 75% on the questions related to knowledge, with men scoring better than females. There was however, no statistical significant difference between the sex and the HIV and AIDS related knowledge (p=0.502).

**After** counselling, more men than women had adequate scores for HIV and AIDS related knowledge (20.6% against 9.4%). This relationship between sex and knowledge scores was statistically significant, with more males having adequate HIV/AIDS related knowledge than females. (p=0.004))

Before counseling, 94% of the 273 respondents who were between the ages of 15-30 years had inadequate HIV and AIDS related knowledge. Similarly 94% of those in the **31-49** years age group also had inadequate knowledge scores. No statistically significant relationship was found between the respondent's age and their knowledge related to HIV/AIDS. However, after the counseling sessions respondents between the ages of 15 to 30 years had higher levels of HIV and AIDS knowledge as compared to those in other age groups. This relationship was again not statistically significant (p=0.402).

Of the single respondents 15% had adequate knowledge scores after the counseling sessions; this was an increase from 5% before counseling. Among the married respondents, 9 out of 89 (or 10.1%) had adequate knowledge before counseling. This also increased to 17.4% after the counseling sessions. The respondent's marital status was not found to significantly influence their level of knowledge related to HIV ad AIDS, (p=0.186).

Before counseling, 55% of refugees who had been displaced for 15 to 16 years had higher knowledge scores as compared to those displaced for fewer years. Percentage difference was found to be statistically significant ( $X^2=40.657$ ,  $df=14$ ,  $p=0.000$ ), with years of displacement influencing the level of HIV and AIDS related knowledge among the sampled population. This was also the same after counseling with respondents displaced for more year having higher knowledge scores ( $X^2=170.844$ ,  $df=1$ ,  $p=0.000$ ).

**Before** the HIV and AIDS counseling sessions, among the 152 respondents who had lived " the camp or 2.6% had adequate knowledge; while 19 out of 223 (8.5%) of those who had never lived in a camp, had adequate knowledge on HIV/AIDS.

This difference was statistically significant with respondents who had never lived in **refugee** camps having more knowledge on HIV and AIDS than ones who had lived in camps before, ( $p=0.020$ ).

With regard to education, 3 respondents out of 44 (6.8%) with some form of education had adequate knowledge on HIV/AIDS before counseling, while 20 out of 333 (6%) respondents with no education had adequate knowledge. This relationship was found not to be statistically significant ( $p=0.832$ ). After the counseling sessions 16.7 % of respondents with some of education had adequate HIV/AIDS related knowledge, whereas 15.4% of refugees with no form of education also scored adequately. Again this relationship was not found to be statistically significant ( $p=0.807$ ), thus respondents' education did not influence their HIV and AIDS related knowledge.

Respondents' mean score of knowledge before counseling was 11.80 marks out of the 27, this represented 44%. This went up to 17.22 (or 64%) after counseling. This indicated a change in respondents HIV and AIDS related knowledge after counseling. This change was however not significant ( $p=0.83$ ) (Table 9).

**Table 9: Knowledge scores - Paired Samples Statistics**

	Mean	N	Std. Deviation	Std. Error Mean	Correlation	Sig.
Before	11.80	360	7.86	0.41	-0.01	0.83
After	17.22	360	3.54	0.19		

When paired sample t tests were carried out, there was a noted difference in respondents' means before and after counseling. This difference was highly significant indicating a significant change in HIV and AIDS related knowledge among the respondents after counseling ( $t= -11.87$ ,  $p=0.000$ ).

### 5.3 ATTITUDES RELATED TO HIV and AIDS

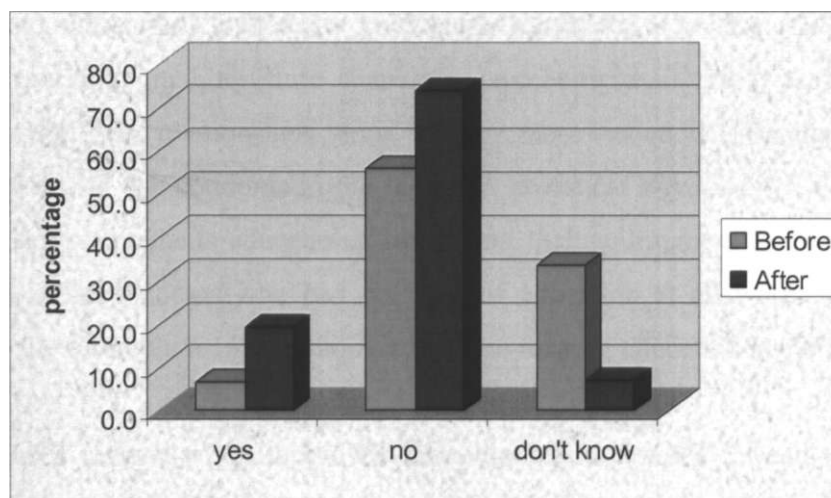
A series of questions posed on a Likert-scale format were asked to elicit respondents' attitudes toward HIV/AIDS both before and after HIV and AIDS counseling. The results are presented in subsections below.

#### 5.3.1 Attitudes towards condom use

In order to assess use of condoms, respondents were asked whether they had ever used condoms before, their future use of condoms and what they felt about the use of condoms by others. Only 6% of respondents had ever used condoms before, these were 8% of the male and 3.5% of the female respondents. There was no significant relationship between use of condom and the respondent's sex, age, previous residence in a refugee camp, marital status, educational level or knowledge related to HIV and AIDS.

Asked if they would use condoms in future, again only 7% of the respondents said they would, while the majority of the respondents (59%) said they would not. Another 34% did not know whether or not they would (Figure 9).

**Figure 9: Respondents willingness to use condoms**



(Opposition to condom use increased after the counselling sessions).

Respondents not willing to use condoms in future to protect against STIs, HIV or pregnancy went up from 59% before counseling to 73% after counseling. On the other hand, the number of respondents who would use condoms in future also went up from 7% before counseling to 19% after counseling.

There was a significant correlation between the gender of the respondent and their willingness to use condoms in the future. More males (10%) than females (4%) were willing to use condoms in the future, while more females (47%) than males (25%) were not certain whether or not they would use condoms in future. The rest (66% of male and 50% of female) were not willing to use condoms at all in future (Table 10).

Again after counseling, more men than women were willing to use condoms in future (23% against 14%) after counselling (Table 10).

**Table 10: Gender versus respondents' willingness to use condoms in future**

	<b>Male</b>	<b>Female</b>
Before	9.8%	3.6%
After	22.6%	13.8%

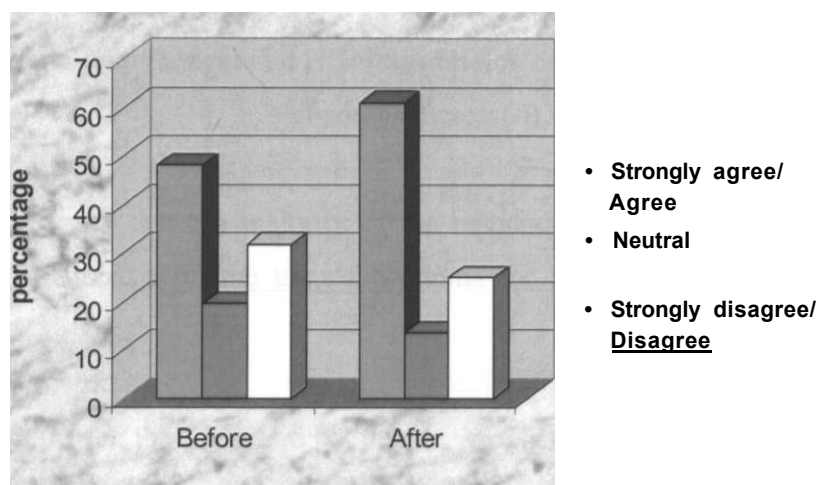
Respondents who had never lived in camps, those married, those aged between 15 to 30 years old and those with inadequate knowledge related to HIV and AIDS were also willing to use condoms in future than their counterparts. There was however, no statistically significant relationships found between these respondents' characteristics and their willingness to use condoms in the future. A statistical significant relationship was found between respondents educational levels and their willingness to use condoms in future, 20% of respondents who had no form of education at all were willing to use condoms in the future than 15% of those with some form of education (p=0.041).

As the FGDS, a number of male and female participants below 35 years confessed to having used condoms before and were also willing to use them in future and to advice their friends to use them.

protection against STIs was the most given reason for using condoms. However, some **participants** felt they had inadequate information on how to use condoms and expressed their need to learn more. Male participants above 35 years old expressed reservations on its safety in preventing HIV infection, while their female counter-parts confessed that they had inadequate information on condoms and were also certain that Islam did not allow the use of condoms.

The percentage of respondents who strongly agreed and/or agreed that young boys and girls should be discouraged to use condoms if they wanted to have sex went up from 48% **to** 61% while those who either strongly disagreed and/or disagreed went slightly down **from** 31.8% to 25.2% after counseling (figure 10).

**Figure 10: Discouragement of use of condoms by young people**

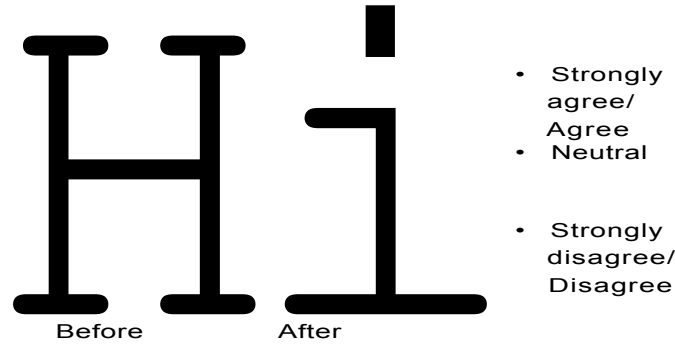


(Respondents who strongly discouraged the use of condoms by young people went up after counselling).

When respondents were asked if transmission of HIV could still occur even when **condoms** were used, almost half of them (48.9%) felt that it would; while a third (33.1%) respondents were not sure.

Unfortunately after the counseling sessions the respondents who thought that transmission of HIV could still occur with the use of condoms went up to 68.7%; while those who disagreed with this went down from 17.8% to 10.5% (Figure 11).

**Figure 11: Occurrence of HIV transmission with use of condoms**



(Respondents who thought that HIV transmission could still occur with the use of condoms increased)

Of significance was that the majority of the respondents (59% before and 65% after counseling) disagreed with the use of condoms for any reason among legal partner, (Table 11).

Most respondents felt that God, and not people, should be the one who decides whether a child is conceived and so the use of condoms even for family planning was generally not accepted. Generally, the respondents' and participants in FGDs felt that campaigns to encourage condom use in the community should be abandoned and instead strategies that conform to Islamic teachings on moral uprightness be encouraged. These included abstinence, being faithful to ones partner, fasting to extinguish excess sexual desires and encouraging marriage, especially among the youth.

**Table 11: Attitude towards condom use**

Use of condoms	Strongly agree/ Agree (%)		Neutral (%)		Disagree Strongly/ disagree (%)	
	Before	After	Before	After	Before	After
The use of condoms by young boys and girls who want to have sex should be discouraged	48	61	20	14	32	25
Transmission of HIV will still occur even when condoms are used when having sex	49	69	33	20	18	11
Legal partners can use condoms	23	30	17	4	59	65

(Noted increase in negative attitudes for condom use after counseling).

### 5.3.2 Attitudes towards people living with HIV/AIDS

To assess whether the community has accepted people living with HIV and AIDS (PLWHA), respondents were asked some questions on the social aspects related to care and support for PLWHA both before and after counseling sessions.

**With** respect to whether family members should care for persons with HIV/AIDS, 69% **agreed** or strongly agreed they should, while 13.3% either disagreed or strongly disagreed (**Table 12**). There was a positive correlation between the gender of the respondent and **their** belief that a HIV positive family member should be cared for by the family ( $P < 0.01$ ). Significantly more males than females (79% versus 57%) felt this should **happen**, while more females than males (20% versus 8%) felt this should not happen. **Additionally**, more females (23%) than males (13%) were neutral on the issue ( $p = 0.000$ ).



This attitude towards people living with HIV and AIDS greatly improved in respondents after undergoing counseling. The majority (91.8%) either strongly agreed or agreed that family members should care for persons with HIV/AIDS.

**Prior** to the counseling sessions, three quarters of the respondents (75.2%) indicated that they were willing to arrange counseling services for a member of their family infected with HIV. This went up to 93.8% after the sessions (Table 11). Before counseling more than 70% of respondents' said they would wash soiled bed sheets and clothing of an infected person, help dress his/her wounds, keep the person comfortable and protect them from problems that can make them worse and also help them to be as independent as possible. This went up after counseling to 84% (Table 11).

When asked if HIV infected people should be kept within the community and family groups for as long as possible, 70.9% either agreed or strongly agreed. Only 12.6% disagreed or strongly disagreed, while 16.3% were not sure. After counseling 90% either agreed or strongly agreed with this (Table 11).

When respondents were asked how they felt about people with HIV/AIDS, 58% and 42% **Of** men and females, respectively (37.4% of all respondents) sympathized with them. Only 8% of respondents felt they either deserved it or were immoral people. The majority **Of** respondents, 41.2% reported that they have never seen any PLWHA, thus couldn't predict their feelings about them (21.9% of men and 19.3% of women).

Participants in the FGDs agreed that infected family members should be kept within the community, but close physical contacts should be avoided. They also felt that community members should also be informed of the sick person's status so that they could avoid **getting** infected and at the same time, the infected person should be asked to repent and **beg for** God's forgiveness and cure. Opinions from the young and the older focus group discussion participants differed on how they felt about people infected with HIV. **Participants** older than 35 years did not believe there were any HIV infected people in **their** community and if they were there, they probably deserved it as this proved they <sup>w</sup>ere not practicing the Islamic religion.

Most of the participants below 35 years old confirmed that they had seen and knew of a few members in their community who had HIV/AIDS and they did not view their disease as a punishment from God, but they mostly empathized with them.

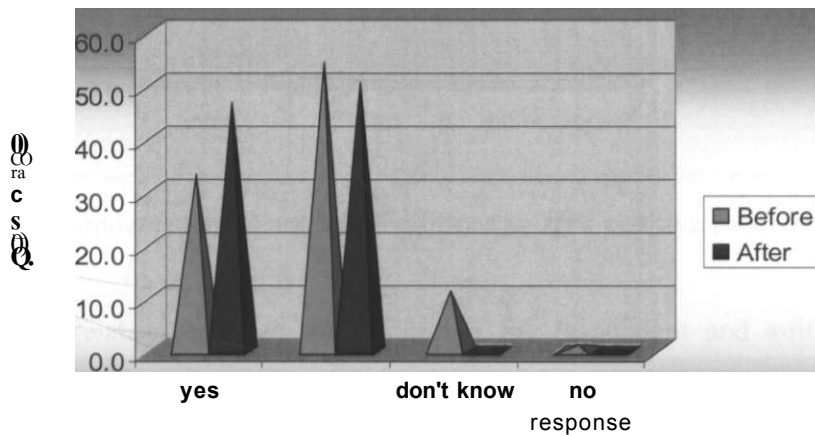
**Table 12: Attitude towards people living with HIV/AIDS**

Attitudes towards PLWHA	Strongly agree and/or Agree (%)		Neutral (%)		Disagree Strongly and/or disagree (%)	
	BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER
"Persons with HIV/AIDS should be cared for by their family members until they die	69	91	17	6	13	2
When caring for and supporting HIV infected and AIDS patients, you should arrange for counseling services	75	92	15	7	9	1
Change and wash soiled bed sheets and clothing of an infected person	71	83	16	12	13	5
Help the sick to keep his/her wound covered with a bandage or clothing	59	83	17	13	15	4
Help clean spit blood from an infected person with a disinfectant	66	83	18	12	15	5
Keep HIV infected person comfortable and protecting them from problems that can make them feel worse	75	91	15	7	10	2
Help them to be as independent as possible	74	91	17	6	10	2
Keep them within the community and family groups for as long as possible	71	91	16	6	13	3
Carried or remarrying people getting Should have an HIV test	79	92	14	4	7	3

In the survey, respondents were asked if a school teacher with HIV should continue **teaching**. The results of the analysis indicate that a majority of Somali refugees (54.4%) feel such teachers should not continue teaching (figure 12). There was a statistical significance correlation ( $X=23.981$ ,  $df=3$ ,  $p=0.000$ ) between the gender of respondents **and** if a HIV positive teacher should continue teaching with more females than males feeling this way (67% against 44% respectively). Age, educational levels or marital status **of** the respondents did not influence this attitude towards school teacher as these relationships were found not to be statistically significant.

This did not improve much after the counseling sessions. A half of the respondents (50.6%) still felt an HIV positive teacher should not continue teaching. However, the number that disagreed on this went up from 33% to 47%, indicating a slight change in attitude towards continued teaching by an HIV positive teacher (figure 12). Most of the respondents felt that these are immoral people who would impart corrupted knowledge, which would be disrespectful to Allah.

**Figure 12: Continued teaching by an HIV positive teacher**

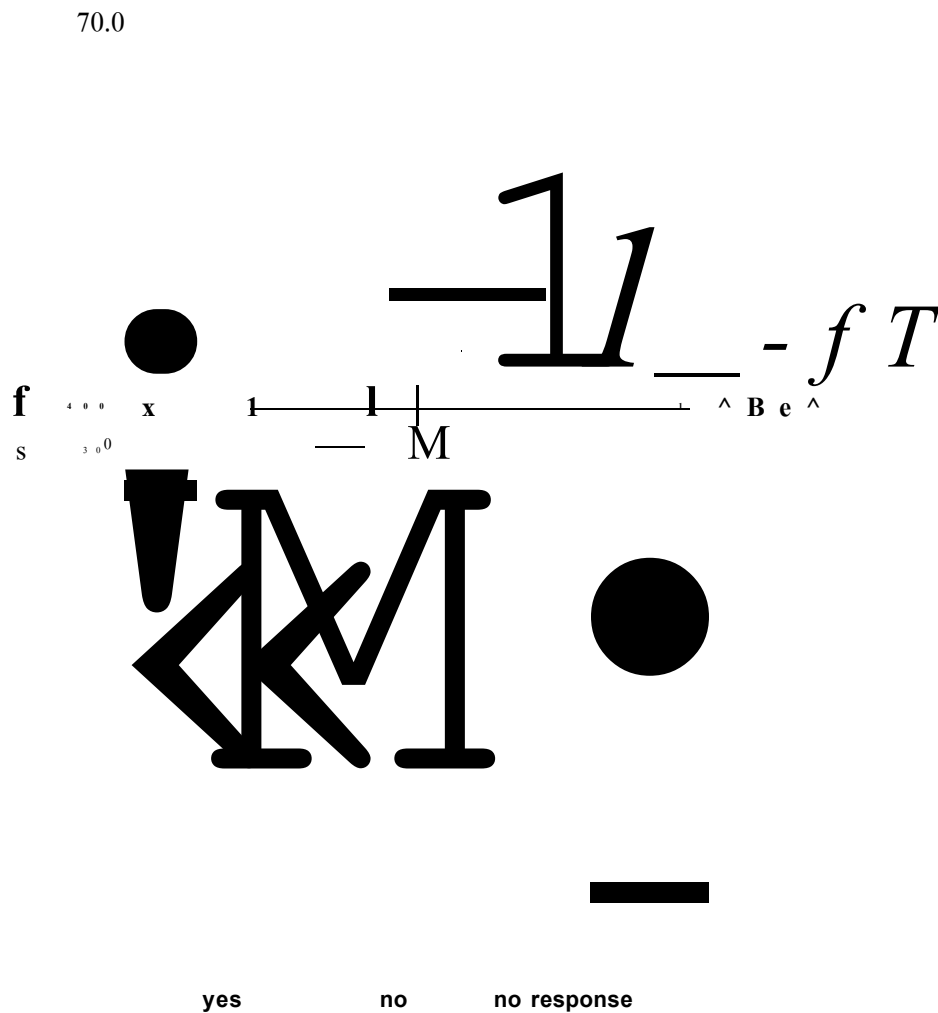


**(Majority of respondents felt that an HIV positive teacher should not continue teaching).**

Similarly, when asked whether they could buy food from an HIV positive food vendor only 28.5% of the respondents responded in the affirmative, while the majority 65% confirmed that they would not buy food from an HIV infected vendor (Figure 13).

Respondents felt that this was for moral reasons as the HIV positive food vendor was deemed immoral and sinful and also for safety reasons as he would be handling their food and thus the risk for contamination. This was expressed even after the counseling sessions where it had been made clear that HIV could not be transmitted through sharing and handling of food substance.

**Figure 13: Buying food from an HIV positive food vendor**



(Most respondents would not buy food from an HIV positive food vendor).

There was a correlation between the gender of the respondent and attitude towards

The FGDs again confirmed this view with the majority of the participants feeling that a HIV positive teacher and food vendor should not be allowed to continue teaching and selling food respectively as had gone against Allah's teachings and were immoral or promiscuous and they could also easily transmit HIV either through body contact or contact with body fluids.

### **5.3.3 Attitude towards HIV testing**

The attitude towards HIV testing before marriage was the same before and after HIV and AIDS counseling with the majority of the refugees interviewed (93.9%) feeling that couples should get tested for HIV before marriage.

Participants in the FGDs were also positive about HIV testing with some suggesting that specific VCT centers should be designed to cater for their needs, as they could not assess most centers due to language barriers. They also supported the idea of HIV testing for couples who wished to get married. Participants who reported reluctance to test for HIV cited the incurable nature of AIDS, faithfulness and not being sexually active as some of their reasons.

### **Fear of HIV and AIDS**

Respondents who had ever heard of AIDS were asked what it is about HIV and AIDS they most feared. Most respondents fear HIV and AIDS because it is a killer disease (62% men and 37% of women), while another 32% and 42% of men and women respectively, fear HIV and AIDS because it has no cure. A substantial proportion of respondents (22%) don't fear AIDS because of the trust they have in Allah.

### **5.3.4: Relationship's between independent variables and attitudes**

On attitudes, 12 questions were asked in Likert's scale and the highest mark a respondent could get was 60, which represented 100% and the lowest mark was 12, which presented ~~20%~~

Respondents who scored 36 points and above out of the possible 60, (got 60% and above) were said to have a positive attitude, while those who scored below 36 (that is below 60%) were considered to have negative attitudes towards condom use and people with HIV/AIDS. Sixty percent was chosen as the cut-off point because an individual who selected "neutral" in all 12 questions scored 36 marks out of 60, which is equal to 60%. **Table 13** below summarizes the distribution of respondents' attitude scores

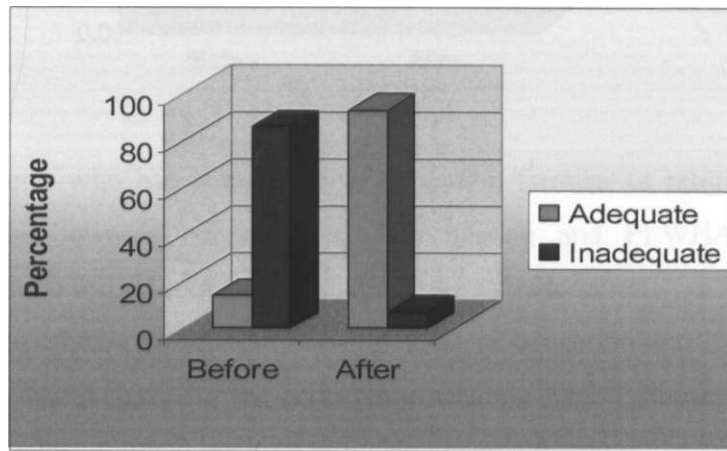
**Table 13: Distribution of attitude scores**

Attitude score out of 60	Percentage score range	BEFORE COUNSELING		AFTER COUNSELING	
		Frequency	Percentage	Frequency	Percentage
ATTITUDE SCORES BELOW 60%					
<b>10-15</b>	17-25	25	7	1	0
<b>16-20</b>	27-33	87	23	2	1
<b>21-25</b>	35-42	80	21	3	1
<b>26-30</b>	43-50	89	23	7	2
<b>31-35</b>	52-58	45	12	9	3
<b>Total respondents</b>		<b>326</b>	<b>86</b>	<b>22</b>	<b>7</b>
Cut off point ATTITUDE SCORES ABOVE 60%					
<b>36-40</b>	60-67	22	6	17	5
<b>41-45</b>	68-75	10	3	55	15
<b>46-50</b>	77-83	8	2	66	18
<b>51-55</b>	85-92	8	2	78	22
<b>56-60</b>	93-100	3	1	122	34
<b>Total respondents</b>		<b>51</b>	<b>14</b>	<b>338</b>	<b>93</b>
<b>Overall Total</b>		<b>377</b>	<b>100</b>	<b>360</b>	<b>100</b>

(Significant increase in attitude scores after counselling)

**Before** counseling, majority of the respondents scored between 27% and 50%. This improved significantly with most respondents scoring between 68% and 100% after the sessions. Of the 377 respondents interviewed before under going the counseling sessions, 51 or 13.5% had a positive attitude score. This increased tremendously after counselling, with 338 respondents or 93% scoring above 60% (Figure 14).

**Figure14: Attitude scores of sampled population**

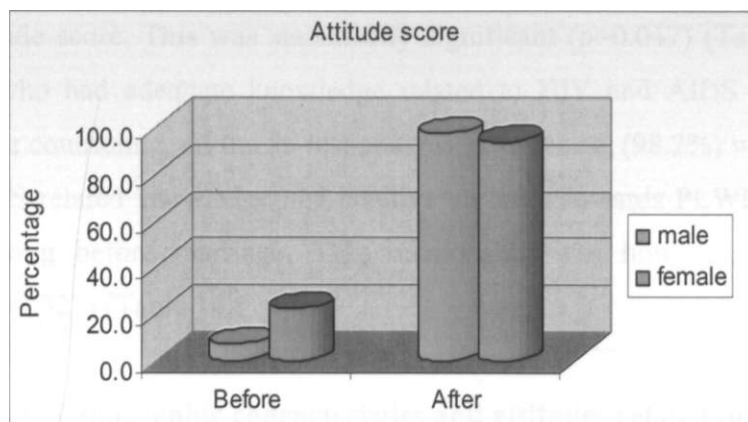


(Attitude scores increased significantly after counseling)

More females (22.2%) had a positive attitude score than males (7%), thus females were more likely to approve the use of condoms and their attitude towards PLWHA and testing before marriage was positive compared to males (Figure 15). This difference was statistically significant ( $p=0.000$ ) (Table 14).

There was great improvement in the respondent's attitudes towards HIV and AIDS after counseling. Of the 360 respondents who underwent HIV/AIDS counseling sessions, 336 (or 93.3%) had positive attitude scores when re-interviewed again (figure 14). Of these 56.6% were male while 43.4% were female. Slightly more men had positive attitudes than women (Figure 15).

**Figure 15: Attitude scores disaggregated by gender**



Of the respondents who had some form of education (secular or religious), 6.8%, had positive attitudes towards condom use, HIV testing and PLWHA, while 14.9% respondents with no formal education had a positive attitude score.

There was no significant correlation between level of education and HIV/AIDS related attitudes (Table 14). Again after the counseling sessions, slightly more respondents who had no form of education had positive attitudes towards condom use, people living with **HIV** and AIDS and HIV testing before marriage than those with some form of education (96% against 94.3%).

HIV/AIDS related attitudes were found not to be significantly related to either marital status or previous residence in a refugee camp (table 14). Respondents who were single and those currently married (85.2% and 88% respectively) had negative HIV/AIDS related attitudes; while 84.6% of respondents who had resided in a refugee before and 87% of respondents who had never resided in a camp before had negative attitudes.

After counseling, respondents who were married, never lived in camps and were 50 years and above had more positive attitudes related to HIV and AIDS than their counterparts who were single, lived in refugee camps before and aged between 15 and 49 years. These relationships were however not statistically significant (table 14).



All 23 respondents who had adequate knowledge on HIV/AIDS had a negative attitude score, while 85.2% of respondents with inadequate knowledge on HIV/AIDS also had a negative attitude score. This was statistically significant ( $p=0.047$ ) (Table 12), with all respondents who had adequate knowledge related to HIV and AIDS having negative attitudes. After counseling, all the 55 respondents, except one, (98.2%) who had adequate HIV and AIDS related knowledge had positive attitudes towards PLWHA, condom use and HIV testing before marriage. This relationship was however, not statistically significant ( $p=0.327$ ) (Table 14).

**Table 14: Socio-demographic characteristics and attitudes related to HIV and AIDS**

CHARACTERISTICS		POSITIVE ATTITUDES TOWARDS HIV AND AIDS (< 60%)		Significance (P value)	Significance (P value)
Sex	Male	7	97	0	0.076
	Female	22	93		
Age group in years	15-30	12	96	0.208	0.783
	31-49	18	93		
	>50	18	96		
Marital status	Single	12	95	0.053	0.734
	Married	15	96		
	Others	29	96		
Education	None	15	96	0.148	0.588
	Secular/Religious	7	94		
Previous residence in refugee camp	Yes	3	94	0.503	0.551
	No	9	96		
Knowledge related to HIV and AIDS	Adequate	0	95	0.047	0.327
	Inadequate	15	98		
Overall		14	93		

The mean attitude score of respondents before counseling was 25 out of the possible 60 marks (42%). This went up to 50 marks (83%) after the counseling sessions. This indicated a change in respondents' attitude scores before and after counseling. This difference was however not statistically significant ( $p=0.48$ ) (table 15).

**Table 15: Paired sample statistics - Attitude scores**

	Mean score	N	Std. Deviation	Std. Error Mean	Correlation	Sig.
Before	24.52	341	9.61	0.52	0.04	0.48
After	49.91	341	6.92	0.37		

When the differences in the respondents' means were analyzed using paired t-tests, the mean difference was found to be highly significant ( $t= -35.55$ ,  $p=0.000$ ).

## 5.4 BELIEFS RELATED TO HIV and AIDS

One's perception of risk of infection is a good indicator of the degree to which one considers the need for adopting behavior that emphasizes prevention. Respondents were asked who they thought was at risk of getting HIV infection, their chances of getting HIV/AIDS and whether they thought there was need to change their behavior/practices in the future in order to reduce their risk of getting infected with HIV or affecting others.

### 5.4.1 Groups at risk of HIV infection

Prostitutes were thought to be the group at most risk of getting HIV infection by 85.9% of the respondents. Persons with many sexual partners and town dwellers were reported to be at risk by 52.1% and 46.5% of respondents, respectively. Those who are not married and those who take miraa (khat) followed closely at 41% and 33.5% of cases. Young people were thought to be at risk of HIV infection by only 7.7% of the respondents, while 20.5% of respondents thought those in contact with infected person were also at risk (Table 17).

**Table 16: People at risk of HIV infection as mentioned (n=377)**

Category label	Percentage of cases
Town dwellers	46.5
Those who take miraa (khat)	33.5
Prostitutes	85.9
Persons who are not married	41
Persons with many sexual partners	52.1
Young people	7.7
Those in contact with infected person	20.5

**(Prostitutes, persons with many sexual partners and town dwellers were thought to be most at risk).**

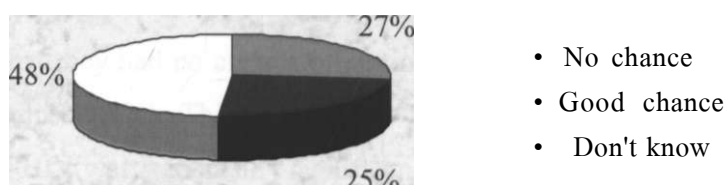
Some participants in the FGDs and key informant interviews confirmed that due to economic hardships and inability to find jobs, women and girls in their community had started engaging in prostitution.

#### 5.4.2: Personal risk to HIV infection

When respondents were asked to state their chances of getting HIV infection, 100 (or 26.6%) said they had no chance, 93 (or 24.7%) said they had good chance ; while almost half of the respondents (182 or 48.4%) didn't know their chances of getting infected with HIV infection (Figure 16).

**Figure 16: Self-reported risk of HIV infection**

Personal risk to HIV infection



(Majority believed they had no chance of contracting HIV)

More men believed they had good chances of being infected with HIV than most women (37.3% against 9.9%), while at the same time 28.1% of the women believed they had no chances of contracting HIV as opposed to 22.4% of men ( $p=0.000$ ), maybe an indication of women's faithfulness. Respondents with no form of education thought they had a **25.8%** chance of getting infected with HIV, while those with some form of education (secular or religious) believed they had a 16.3% chance. This relationship was however, not statistically significant ( $p=0.328$ ).

With respect to marital status, 24.6% of the single respondents and 25% of the married ones believed they had no chance of getting HIV infection. This was also similar when the respondent's responses were analyzed according to age with those between 15 and 30 years reporting a 25.3% chance of not getting HIV with 26% of them believing they had a good chance of getting HIV, while those aged between 30 and 49 years had a 21.2% chance of not getting HIV and a 24.2 % chance of getting infected. There was however, no significant difference found in these comparisons.

Those who had lived in refugee camps before believed they had less chances of getting HIV than urban refugees who had never been to camps (16.7% against 30.5%). This relationship between camp life and ones chance of getting HIV was statistically significant ( $p=0.001$ ).

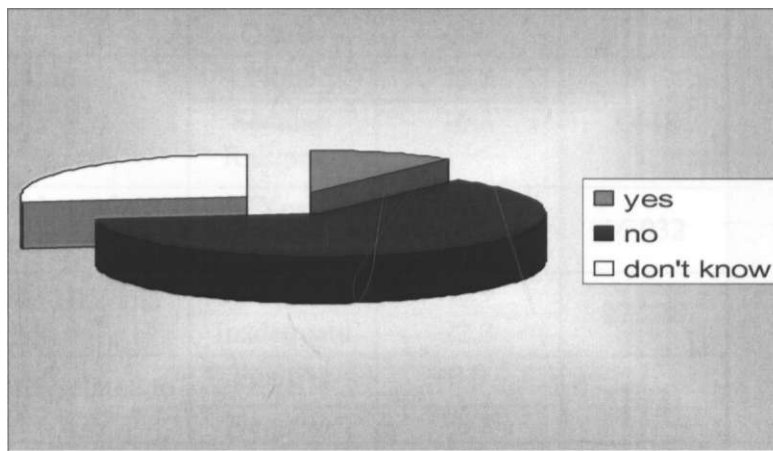
Respondents who had adequate HIV and AIDS related knowledge believed their chances of contracting HIV infection were lesser as compared to those with inadequate knowledge (39.1% against 24.1%). While those had a negative attitude scores were more likely to believe that they had no chance of getting HIV than those with positive attitude scores (28.2% against 7.8%). This relationship between HIV attitude scores and ones chances of getting HIV was statistically significant ( $p=0.000$ ).

From both the FGDs and key informant interviews, majority of the respondents did not consider themselves at risk of contracting HIV. Most of them expressed that this was because they did not engage in sexual activities (69% of respondents were single), they were faithful to their partners and their trust and belief in Allah would also protect them against HIV. Also participants who thought HIV only infected immoral people were less likely to think they had any chance of getting infected as they followed Allah's teaching and thus there was no chance of them getting HIV/AIDS except through His will.

### 5.4.3: Need to change behavior in the future

Majority (62.7%) of the respondents felt they did not need to change their behavior or practices in future as a way of reducing their risk of getting infected with HIV or infecting others, while more than a quarter (27.2%) did not know (Figure 17). More men than women (12.4% against 8.1%) were more likely to change their behavior/practices ( $p=0.021$ ) (Table 18).

**Figure 17: Need for future behavior change**



(Most respondents did not know if they needed to change their behavior in future)

Respondents aged between 31 to 49 years, those who had lived in refugee camps before, **those** who had some form of education and the single ones were also more likely to **change** their behavior or practices so as to protect themselves from HIV infections, respectively (Table 18).

**Of the** 23 respondents who had adequate HIV and AIDS knowledge, 3 (13%) compared to 10.2% (36 out 352) of those with inadequate knowledge believed they needed to **change** their behavior and practices in future to reduce their chances of HIV transmission ( $P=0.025$ ). All the 51 respondents who had positive attitudes related to HIV and AIDS **felt they** did not need to change their behavior or practices, while 38 out of 315 (12%) respondents who had negative attitude scores felt they should. This relationship was also highly significant ( $P=0.0000$ ) (Table 18).

**Table 17: Socio-demographic characteristics and self-reported risk**

<b>Characteristics</b>		<b>No chance of getting HIV infection (%)</b>	<b>Chi square (x)</b>	<b>Significance (P value)</b>
<b>Sex</b>	<b>Male</b>	37.3	39.132	0.000
	<b>Female</b>	9.9		
<b>Age group in years</b>	15-30	26.0	1.957	0.924
	31-49	24.2		
	>50	20.0		
<b>Marital status</b>	<b>Single</b>	27.3	5.723	0.455
	<b>Married</b>	25.8		
	<b>Others</b>	7.1		
<b>Education</b>	<b>None</b>	25.8	3.448	0.328
	<b>Secular/ Religious</b>	16.3		
<b>Previous residence in a refugee camp</b>	<b>Yes</b>	21.3	16.032	0.001
	<b>No</b>	27.3		
<b>Knowledge on HIV and AIDS</b>	<b>Adequate</b>	60.9	27.228	0.000
	<b>Inadequate</b>	22.3		
<b>Attitudes scores related to HIV and AIDS</b>	<b>Positive</b>	0.0	43.731	0.000
	<b>Negative</b>	28.8		

There was a significant relationship between gender, previous residence in a camp, knowledge and attitude related to HIV and AIDS and ones self-reported risk of contracting HIV.

## **5.5: PRACTICES RELATED TO HIV and AIDS**

Apart from socio-cultural practices related to sexuality, there are several traditional surgical procedures that are commonly practiced in the Somali community. Specific questions were put to the respondents to establish the frequency of these procedures and whether or not they were carried out under sterile and safe conditions. Respondents were also asked if any safety precautions were taken during the ablution of the dead, an essential practice carried out by Somalis and Muslims in general after the death of one of their own in preparation for the burial and which carries some risk due to one's extensive contact with body fluids. The use of condoms and their availability was also enquired to find out respondents' practical measures to reduce the risk of HIV infection.

### **5.5.1: Traditional surgical practices**

When respondents were asked whether they had been circumcised, 99% of the men answered in the affirmative, while 81% of the women had undergone female genital mutilation. Besides circumcision (in both sexes), 55% of the respondents had undergone at least one traditional surgical procedure, these were haemorrhoidectomy, which is the removal of hemorrhoids; uvulectomy, the removal of the uvula or tonsillectomy, which is the removal of the tonsils (Table 19).

The practice of these procedures is done as an alternative to modern surgical procedures by traditional medical healers and usually involves the excision of the whole or part of the respective tissue or organ. This carries the risk of HIV transmission from an infected person to an uninfected one if done under non-sterile conditions. Men were more likely to undergo a traditional surgical procedure than women (59.8% against 27.3%).

The issue of female genital mutilation was extensively discussed in the FGDs and with the key informants. This practice is widely practiced among the Somali community and regarded as an important cultural symbol for a Somali woman. There have been many Abates concerning the practice over the decade with some Muslim religious leaders disapproving of it, as they believed it went against the religion of Islam.



As a result the practice had evolved over time from the known extensive radical operation, which involves the complete removal of the clitoris and both labia's to a more conservatory operation know as "sunna", which involves making a tiny clitoral incision. Participants confirmed that sterile instruments were also used in most cases though not always.

**Table 18: Frequency of traditional surgical procedures (n=377)**

Procedure	Frequency	Percentage
Male circumcision	371	98.9
Female genital cut	302	80.5
Haemorrhoidectomy	141	37.6
Uvulectomy	254	67.7
Tonsillectomy	224	59.7

(An overwhelming majority had undergone at least one traditional surgical procedure).

Asked whether they thought all the above procedures were carried out under sterile conditions, 37.1% said they were not, while 38.1% did not know. Referring to the above procedures, 36.5% of the respondents also stated that the instruments used in these procedures were not sterile and 37.6% did not know whether they were sterile or not. An almost equal number of respondents (24.8% and 25.9%) reported that the procedures were conducted under sterile conditions and instruments used were sterilized (table 20).

**Table 19: Safety of traditional surgical procedures**

Opinion of safety of traditional surgical practices	Yes	No	Don't know
In your opinion, are these traditional procedures carried out under sterile conditions?	93 (24.8)	139 (37.1)	143 (38.1)
Are the instruments used in these procedures	97 (25.9)	137 (36.5)	141 (37.6)
Do persons who perform the ablution of the dead use gloves?	219(58.7)	60(16.1)	99 (25.2)

(Figures in parenthesis are percentages).

A majority of the respondents (58.7%) confirmed that protective gloves are worn when ritual ablution of the dead was carried out. A quarter of the respondents (25.2%) did not know whether gloves were used, while 16.1% reported that no protective gloves were used (Table 20).

### **5.5.2: Risky practices by the community**

Specifically, an attempt was made to determine the practices undertaken by the community that facilitated the transmission and spread of HIV. Condom use was cited by only 17.3% of respondents as a mode of prevention. An overwhelming majority of the respondents had never discussed the use of condoms with anybody nor used one (83.3% and 87.3% respectively). Shops were cited by 35% of respondents as sources for condoms, while most (58%) did not know where they could obtain one. Again majority (57%) of the respondents were not sure if they would be able to obtain condoms every time they needed them. More men (41%) than women (13%) reported to have access to condoms anytime they needed them ( $p=0.000$ ). When asked if they could afford to buy a condom, 62.1% said they could not, while 48% of the respondents said they would not feel embarrassed to buy a condom in a public place. Most of the respondents (72.6%) would not advise their friends to use condoms.

Most young girls started engaging in sexual activity from as young as 9 years old to 22 years with the mean age being 16.9 years. On the other hand young men would start engaging in sexual activity from the ages of 10 to 30 years, with the mean age of being 20.5 years. Prostitution, which was rare in this community, was now on the increase as confirmed by the FGDs. It was also pointed out by all the groups in the FGDs that the vast majority of pregnant women in the community preferred to deliver at home with the assistance of Traditional Birth Attendants (TBAs). Some of the respondents, who had delivered with the assistance of these TBAs, stated that more often than not the TBAs used their bare hands with no protective gloves to carry out the deliveries.

### 5.5.3: Relationship between independent variables and traditional practices

The percentage of respondents who had never used a condom was almost equal in both sexes (86.0% in men versus 88.8% in women). When analyses by age was done, the use of condom was more or less the same in the different age groups with those between 15-30 years reporting a 6.7% usage, 31-49 year olds reporting 3.0% usage, while those above 50 years old reporting a 4.4% usage. There was no statistically significant relationship between usage of condom and marital status, residence in a camp, education level, knowledge score or attitude score.

More women than men (45.8% against 28.5%) admitted they would be embarrassed to buy a condom in a public place. This difference was statistically significant ( $X^2=16.461$ ,  $df=2$ ,  $p=0.000$ ).

Those who had lived in refugee camps before were less likely to get embarrassed when buying condoms in a public place compared to their counterparts who had never lived in camps before (27% against 45.2%,  $p=0.000$ ). There was no significant difference between marital status and age of respondents with respondents getting embarrassed when buying condoms in public places ( $p=0.091$  and  $0.063$  respectively).

An almost equal number of respondents with education and without education (14.3% and 13.6%) did not know if they would be embarrassed to buy condoms in a public place. Respondents who had some form of education were less likely to get embarrassed than those with no education at all (36.5% against 47.7%), this difference was however not statistically significant.

The relationship between knowledge scores and buying of condoms in a public place was found to be significant ( $p=0.017$ ) with respondents who had inadequate HIV and AIDS related knowledge less likely to get embarrassed when buying condoms in a public place than those with adequate HIV and AIDS knowledge (36% against 65.2%).

Respondents who had positive attitude score were less likely to get embarrassed when buying a condom in a public place than respondents who had negative attitude score (7.8% against 43%), this was also statistically significant ( $\chi^2=24.218$ ,  $df=2$ ,  $p=0.000$ ).

Respondents who had adequate knowledge related to HIV and AIDS were more likely to have discussed the use of condoms with somebody, compared to those with inadequate knowledge (30.4% against 8.9%,  $p=0.003$ ). While respondents who had a positive attitude related to HIV and AIDS were less likely to have talked to anybody about the use of condoms than those with negative attitude scores (2% against 11.8%,  $p=0.075$ ).

More men were more likely to advise their friends to use a condom than women would (17.9% against 8.2%,  $p=0.023$ ), while respondents who had lived in refugee camps before were less likely to advise their friends to use condoms compared to those who had never lived in a camp before (14.6% against 11.9%,  $p=0.003$ ). There was no significant relationship between respondent's age, marital status or educational level with respondents advising a friend to use a condom. Respondents who had adequate HIV and AIDS related knowledge would more likely advise a friend to use a condom than those with inadequate knowledge (39.1% against 11.7%,  $p=0.000$ ), while respondents with positive HIV and AIDS attitudes were less likely to advise their friends to use condoms (3.9% against 15.3%,  $p=0.075$ ).

## CHAPTER SIX

### 6.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 DISCUSSION

##### 6.1.1: Socio-demographic factors

Most of the respondents were young between the ages of 15 and 30 years and single. Male respondents were slightly more than their female counterparts both before and after the counseling sessions. From the results it is evident the respondents tended to marry at an early age, even sometimes as minors with females getting married at an earlier age than males. While there were 21 females who had been married by age 18 years, only eight males had married by the same age. In essence males tended to delay their age at marriage than females. The latest age at marriage was 48 years for males and 30 years for females.

Majority of the respondents reported to be in a monogamous relationship. In light of the Somali religion and cultural context one would expect to find more respondents in polygamous than monogamous unions. However, the uniqueness of this population and their motivation to resettle in western countries, where polygamy is considered illegal might have an influence in the respondents' responses.

**Most** of the respondents had been displaced from their country for the last 15 to 16 years **with** a majority never having lived in refugee camps before. This translated to the **majority** of respondents being urban refugees. This reflects that majority of this Population has been living in Kenya for a long period and mostly interacting with the local population in urban settings.

**Also of importance** to note is that majority of the respondents had no form of education **whatsoever**. There was no significant difference between education and the gender of the **respondents** or previous residence in a refugee camp. This showed the high illiteracy

level among the community, this can be attributed to displacement. There was however, an obvious gender disparity in school attendance from upper primary, with attendance favoring males.

### **6.1.1 Knowledge on HIV and AIDS**

The findings generally indicate that respondents had heard of HIV and AIDS and its emergence as a global challenge. Respondents were more aware of AIDS than HIV with more men than women aware of AIDS. Most respondents could however, not differentiate between the two terms and used them inter-changeably. This confusion is also experienced at the local level among the Kenyan population and was thus expected. The respondents' awareness of HIV and AIDS did not however, translate to knowledge related to HIV and AIDS modes of transmission or prevention. Significantly more men than women had heard of HIV. This can be explained by virtue of men in this community being more exposed to media and social networks, which are common sources of HIV and AIDS information.

Most participants in the focus group discussions knew of signs and symptoms associated with AIDS. In spite of the perceived low HIV prevalence in the community, most participants actually confirmed having seen a member of their community with AIDS. Knowledge on the various modes of HIV transmission was limited, with "illegal" sexual acts incriminated in the transmission of HIV. Other modes were little known with less than a half of the respondents being able to mention two modes of HIV transmission (unprotected sex and one other method). This was lower compared to the respondents host country -Kenya in which 98% could give at least two modes of transmission of the disease (KDHS, 2003). It was also noted that some respondents thought that HIV/AIDS was acquired only through the will of God; while majority did not know any mode of HIV transmission.

**There** was moderate improvement in knowledge of modes of HIV transmission after HIV and AIDS counseling with almost 90% of respondents citing at least 3 correct modes of HIV transmission. Respondents who thought that HIV could only be acquired through the

will of God and mosquito bites increased after the counseling sessions. This could be due to the fact that these were some of the methods that do not transmit HIV that were mentioned in counselling sessions, thus causing confusion.

Knowledge of the methods of prevention of HIV infection was not any better. A quarter of the respondents indicated that praying to God only could prevent HIV transmission, this number more than doubled after the HIV/AIDS counseling sessions. Only 38% of the respondents could recognize or mention more than one method of preventing HIV infection. This knowledge did improve after undergoing counseling sessions; although respondents who thought that praying to God only could also prevent HIV increased, with more women than men thought this.

During the counselling sessions, modes of HIV transmission and prevention were discussed in length, some respondents felt this was overwhelmingly information and represented a situation onto which they had very little control. The respondents who attributed both the transmission and prevention of HIV only to the will of God increased after the counseling sessions and this can be attributed to this overwhelmingly feeling and some choosing to leave everything to God's fate. This understanding on how HIV is not transmitted is important for protecting oneself and also for preventing stigma against individuals with HIV and AIDS.

Radio and television were the most common sources of HIV and AIDS information for most of the respondents, while religious leaders only accounted for 3%. International agencies, civil organizations and the government were each cited by approximately 1% of the respondents. This can be explained by the fact that there is general fear of authority bodies among refugees and lack of effective HIV programs targeting this community. This is a significant finding to illustrate the need for improved coverage of HIV-related services to urban refugees/migrants and other mobile populations and thus media and social networks form the best way forward for education and communication among this community.

As a limitation of the face-to-face interview method used in this study to elicit the respondent's responses, there is a high likelihood of social desirability bias in some sensitive issues, e.g. condom knowledge and usage, which was very low in face-to-face, but knowledge and usage of condom was much more accepted in FGDs where participants felt much free to express their opinions in a group setup.

Overall, only 6.1% of respondents had adequate HIV/AIDS related knowledge before the counselling sessions. This went up to 15.6% of respondents after counseling. Though this represents more than a double increase in the respondents HIV/AIDS related knowledge, it is still low as compared to the host nation. This low increase can be attributed to the respondent's high illiteracy levels, faced with a complex issue and a lot of information to absorb at one time. The community does not perceive HIV as a threat in their community and would wish that other health issues, like malaria, malnutrition, reproductive health and others, which they perceive to be a priority, were addressed. This perception can also account for this low increase in the respondents HIV and AIDS related knowledge.

Adequate HIV and AIDS related knowledge was significantly related to the sex of respondents, with males having higher knowledge scores than females; number of years of displacement, with respondents displaced for more than 12 years having higher scores; and previous residence in a refugee camp, where respondents who had never resided in refugees camps ever having higher knowledge scores.

**This** can be explained by virtue of being in Kenya for longer years and living in urban centers where they were much more exposed to HIV and AIDS messages than those who had been in the country for shorter durations. Due to the culture and religion of the population male respondents were also more likely to interact with more people outside **their** community and thus acquire more knowledge as compared to women who had limited interaction with members outside their community and thus the higher knowledge **scores** among male respondents.

respondent's age; educational levels or marital status did not influence their HIV and AIDS related knowledge. This statement both refutes and accepts the stated hypotheses of respondents' characteristics influencing their HIV and AIDS related knowledge.



### 6.1.2 Attitudes towards condom use

The general belief is that condom use is against Islam and its use is punishable by Allah; others believe that condoms themselves spread HIV. Surprisingly more respondents vowed not to use condoms in future after undergoing counseling. The community also believes that condoms promote promiscuity, while key informers reported that most people lacked sufficient knowledge about condom.

Respondents who strongly disagreed or / and disagreed on the use of condoms among young boys and girls who wanted to engage in sexual practices and also among legal partners rose after counseling sessions. There was also an increase in respondents who thought that transmission of HIV could still occur even when condoms were used during sexual intercourse.

Generally, respondents' attitudes towards the use of condoms in future, use of condoms among young boys and girls wanting to engage in sex, use of condoms among legal partners and the safety of condoms was more negative after undergoing HIV and AIDS counseling. Condom use for any purpose was viewed quite negatively in this community. This was even more evident during some counseling sessions where clients would get offended by the mere mention of condoms let alone seeing and having their use demonstrated. Some clients' especially older women would cover or shut their eyes so as not see these demonstrations as they regarded them sinful. In some counseling sessions counselors would be compelled by the older clients not to have a condom demonstration as they were either not comfortable or they regarded them to be sinful and against their religion.

This strong reaction to condoms and their usage can be attributed to the religious influence in the community. This strong Islamic practicing community and since the use of condoms for any purpose is not acknowledged in their religion, its use is viewed as a **sin**.

Sadly in the same counseling group sessions there would be other clients especially the younger ones between 15 and 25 years old, who were eager to know how to use condoms and even have some for their own personal use. In several occasions, these younger clients would actually follow the HIV/AIDS counselors and the principal investigator to be shown how to use condoms and even to ask for some. This demonstrates the need to have the group counseling session's age disaggregated so as to avoid such scenarios.

### **6.1.3 Attitude towards people living with HIV/AIDS**

In general, the community appears to be tolerant to persons who are already infected and most of respondents expressed willingness to care for persons living with HIV.

But some anecdotal information from the FGDs and key informant interviews suggested the opposite: "relatives of patients usually remove the infected persons from hospital to abandon them far away from home" as quoted from a key informant.

The attitude towards PLWHA greatly improved after the counseling sessions, with over 90% of respondents willing to take care of people infected with HIV /AIDS in their community. Most respondents asserted it was the family's responsibility to care of a HIV positive relative. More males were willing to care for relatives than the female respondents. This could be due to females feeling this would be an added burden on their part as they are solely responsible for taking care of the sick.

The survey indicated some discriminatory tendencies towards people infected by HIV/AIDS, with only a minority of the respondents willing to purchase food from a vendor known to be HIV positive and more than half of respondents stating that an HIV positive teacher should not teach. Several statements made by focus group respondents emphasized the culture of discrimination prevalent among the community. Some of the radical comments suggested encampment of PLWHA while others recommended mandatory testing and restriction of movement for those presenting positive. Divorce or separation in cases where ones partner is HIV positive was also recommended. This attitude arises possibly from the belief that HIV/AIDS was a disease of the immoral People.

This change in attitudes towards HIV infected food vendors and teachers did not improve that greatly after the counseling sessions. Those willing to buy food from an HIV infected known food vendor and those who thought that an HIV positive teacher should continue teaching increased only slightly.

Noteworthy is that the pattern observed from these two responses is similar, reflecting the consistency in views against people living with HIV/AIDS. This finding is similar to the UNICEF study conducted in 2004, where the majority of Somalis (51% of men and 58% of women) felt teachers with HIV should not continue teaching in schools and a higher proportion (61% of men and 71% of women) wouldn't buy food from an HIV positive vendor.

These differing attitudes expressed on PLWHA (for example the infected school teacher and food vendor) and the willingness to take care of one of their own if infected, could be due to the fact Somalis tended to have very strong family bonds.

This is further compelled in the case of the sample population who are refugees in a foreign country thus strengthening this bond. Participants tended to view people infected with HIV as one of their own and they would therefore help the person out. On the other hand, teachers and food vendors infected with HIV were viewed as outsiders, maybe because these would not be people from their community and as such most participants would have nothing to do with them.

Overall, there was major improvement in the attitudes of respondents after undergoing HIV and AIDS counseling. Respondents who had positive attitudes related to HIV and AIDS before counseling were 51 (or 13.5%). More females had significantly more positive attitudes than males. Majority of the respondents had positive attitude score after the counseling sessions. Respondents who were single, those with no form of education, and those who had never lived in a refugee camp before had higher attitude scores than their counterparts though the difference was not statistically significant. Surprisingly all the respondents who had adequate knowledge on HIV and AIDS had negative attitude scores related to HIV and AIDS ( $p=0.047$ ). Therefore adequate knowledge related to HIV and AIDS was associated with negative attitude towards condom use, PLWHA and HIV testing before marriage.

A study by Carducci et al in 1995 showed knowledge level of HIV/AIDS as a possible predictor of attitude, indicating that increasing knowledge levels of AIDS may produce more positive attitudes towards individuals with AIDS. In the case of this study population the opposite was found to be true, respondents with increased knowledge levels had more negative attitudes towards individuals with HIV/AIDS, condom use and even HIV testing before marriage.

Respondents who had adequate HIV/AIDS related knowledge felt that for one to get HIV they would have had unprotected sexual intercourse with an infected person, or would have been unfaithful or engaged in a sexual acts before marriage. All these represented immoral behavior and felt that the person was immoral and had committed a sinful act thus the negative attitude. Respondents who had inadequate HIV/AIDS related knowledge felt that a person could have acquired HIV from other means, which were not entirely his fault, but by God's will and thus sympathized with infected people.

#### **6.1.4 Beliefs related to HIV and AIDS**

The positive attitude towards HIV testing before marriage is a reflection of the respondent's belief or perception of personal risk. The individual's perception of personal risk determines whether protective behavior will be adapted or not.

However, almost half of the respondents did not know their chances of contracting HIV infection while a quarter said they had no chance. Unlike in the 2003 KDHS results where more Kenyan women perceived themselves at greater risk of HIV, in this study, more men than women believed they had a greater chance of contracting HIV. As most of the respondents did not know their chances of getting HIV, a majority did not see the need to change their behavior or practices in future as a way of reducing their risk of getting infected with HIV or infecting others. There was a general belief that HIV and AIDS are not prevalent among Somalis and only prostitutes and immoral people could be infected with the disease.

Research focusing on the effects of beliefs of susceptibility to AIDS indicates that adolescents and adults who report high perceived risk for AIDS practice safer sexual behavior, whereas those who perceive low risk for contracting AIDS report practicing unsafe sexual behavior (Gray & Saracino, 1989; Villarruel et al., 1998). However, in a study of health behavior in Kenya, perceived susceptibility to AIDS was not a significant predictor of condom use (Volk & Koopman, 2001). According to the authors of this study, the failure of perceived susceptibility to predict behavior most likely resulted from participants' misconceptions about the origins and transmission of AIDS. For example, some participants reported the belief that anal sex was a safe alternative to vaginal sex (Volk & Koopman, 2001). For these individuals, misconceptions, or lack of accurate knowledge about AIDS, resulted in inaccurate assessments of susceptibility.

In this way and as is the case of the sample population, it seems that perceived susceptibility must be coupled with accurate knowledge in order to bring about behavioral change.

#### **6.1.5 Practices related to HIV and AIDS**

At present, the most effective way to prevent or reduce the spread of HIV/AIDS is through behavioral change. In Kenya, behavior change has not kept pace with the increase in the level of awareness. This is attributed to the socio-cultural practices, especially those related to sexuality, which are still prevalent.

In the sample population of Somali refugees, traditional surgical procedures are common. Some of the common practices are: haemorrhoidectomy, uvulectomy, tonsillectomy, tooth extraction, female genital mutilation and circumcision of boys. These procedures are not always performed under sterile conditions or with sterile equipments as confirmed by 37% of the respondents and they pose the risk of transmitting not only HIV but also other blood borne diseases. Apart from social and cultural influences, which facilitate some of these practices, health service may also be inaccessible to this community.

Those providing traditional surgical practices need to be better trained and means found to monitor and regulate their work through the government sector.

With so many myths and misconceptions surrounding the use of condoms, it was expected that its use would be low in this community with only 17% of respondents admitting to have ever used one, while the majority (84%) of respondents had never discussed the use of condoms with anybody. Majority of the participants and some key informants strongly believed that condoms use was against Islam and would thus not use or advocate for its use for any purpose.

Discussing the use of condoms was strongly related to knowledge related to HIV and AIDS, with respondents who had adequate HIV and AIDS related knowledge more likely to have discussed the use of condoms with somebody else and also more willing to advice friends to use them.

More men than women and respondents who had never lived in refugee camps before as compared those who had lived in refugee camps before were willing to advice their friends to use condoms

Respondents with positive attitude scores related to HIV and AIDS were less likely to have talked to anybody about the use of condoms than those with negative attitude scores, and they were also less likely to advice their friends to use condoms. This is probably because respondents' attitudes were only positive towards people living with HIV and AIDS and HIV testing before marriage, but their attitudes towards condom use for any reason was negative both before and even more so after counseling sessions.

Apart from the myths and beliefs expressed on condoms and their use, another factor that could facilitate the transmission of HIV in this community as elaborated in the FGDs and key informant interviews was the high divorce rate. The culture and practice of "marry-divorce-re-marry" posed the greatest danger of becoming infected. One of the key informants expressed concern that young people in the community were not taking marriage seriously any more and they tended to break most of the religious and cultural rules set up to protect the institute of marriage, leading to the high divorce rate.

To add on to this wife inheritance was widely practiced in this community. Besides these, other risky practices in the community are polygamy, the use of unskilled traditional birth attendants, and cutting and piercing of one's skin during traditional ceremonies. These practices are however, viewed as acts of morality and acceptable to both Islam and the Somali culture, hence changing or reversing them could prove difficult.

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## 6.2 CONCLUSION

There is no known cure for AIDS and no viable vaccine on the horizon. Therefore informing and educating and changing the attitudes and beliefs of the public remain the only strategies to prevent transmission of the disease.

In spite of the growing number of Somali refugees in Kenya, only a few studies have examined their knowledge, attitudes, beliefs and practices with respect to HIV/AIDS and this have mostly targeted refugees in camp settings.

The survey shows that there is a significant lack of correct knowledge among this sample population. Majority of respondents had heard of AIDS and knew that it was primarily sexually transmitted. They however, did not know more specific information, such as the cause of the disease; how to detect it; the modes of transmission; or how to prevent it; leading to misinformation, myths and misconceptions. The overall lack of knowledge about HIV suggests that the community lacks a sense of risk about transmission and an awareness of self-protection.

Knowledge and acceptance of condoms as a tool of prevention is very low. Condom use for any purpose is shunned in the community and viewed as a sinful act. HIV/AIDS is seen as a non-Islamic, foreigner's disease leading to denial and further discrimination, which go hand in hand. HIV/AIDS stigma and discrimination is widespread among the Somali population. Generally the community is tolerant of their own members who maybe infected with HIV and are willing to care for them. This is however not the case for outsiders infected with HIV who are viewed as sinful and immoral.

The community continues to deny that HIV/AIDS exists among its members. The community generally believes its chances of contracting HIV are very slim if not none and thus most don't see the need for future behavior change. Numerous traditional and cultural practices in this community can facilitate the spread of HIV. The practice of FGM is widespread with almost every woman undergoing it. Some of these practices are still carried out in unsterile conditions thus exposing one to blood borne diseases including HIV.



Although counseling cannot be equated to a teaching session, a certain degree of knowledge transfer to the clients is needed. To motivate behavior change among the respondents, knowledge, attitudes and values have to be taken into account, as behavior change is the result of changing attitudes and the successful integration of obtained knowledge. To achieve this, a significant change in knowledge related to HIV and AIDS among clients receiving HIV and AIDS counseling at the clinic has to be achieved.

There was an overall improvement in the level of HIV and AIDS associated knowledge and attitudes after counselling and thus the counselling sessions were effective in informing, educating, changing attitudes and perhaps beliefs of this community. This is a significant finding and suggests that the pre-test counselling sessions offered to the refugees before resettlement to other countries are effective HIV/AIDS preventive strategies.

In spite of this significant change in respondent's knowledge and attitudes related to HIV and AIDS, there are some aspects of the IOM HIV and AIDS counseling program that need to be assessed and evaluated.

From the study it emerged that respondents would have been more comfortable in counselling sessions that were age disaggregated, so as to participate more freely without fear of other older or younger members. The mixing of clients from the same family was found not to offer a favorable environment for discussing some sensitive topics like condom use. Some clients expressed the wish to learn more on HIV and AIDS than the allocated time and thus the need for maybe more than one counselling session. Translators are used in almost all-counselling session due to language barrier; this can also pose a problem as one is never sure of what is being translated.

Also to be appreciated from the study is the complex and unique nature of this Population. This is almost a captive population, refugees in Kenya for a long period of time and now being presented with the chance of resettling to another country, perceived to offer them a better quality of life.

Their interest and motivation in understanding HIV/AIDS issues and their compliance in participating in the study, which are not mandatory requirements in their medical screening process present a difficult challenge as both are not deemed a priority to the population at this stage of their life.

### **6.3 RECOMMENDATIONS**

While advocacy and awareness raising should continue to focus on the aspects of raising awareness of HIV and AIDS among this community, efforts to improve knowledge of transmission modes and prevention methods need strengthening and improvement.

From this study, it is recommended that to address the HIV epidemic in this community, a programme needs to be formulated to focus on the manner in which new and critical knowledge could be introduced within the culture system of the Somali refugee community, so as to generate debate and possibly rethink sexuality and human relations. It is assumed that to increase the level of knowledge on HIV/AIDS in this community a health education programme needs to be based in a language they can understand, disseminated through the radio and TV and re-oriented to reach this unique population.

Compounding the low levels of HIV and AIDS related knowledge is the complexity of discussing sexuality among the community and the religious implications of condom use, thus the sensitivity surrounding sex should also be taken into consideration. Moreover, local leaders, religious persons from the community and respected clan elders should be involved and encouraged to spearhead the advocacy campaign. That is, culturally sensitive and community specific intervention, advocating on socio-cultural issues should be emphasized to assist it rid itself of risky practices that could be arising from its culture.

To do this, the following are recommended:

1. Adjustments of the IOM's HIV counseling program

- a) Have counselling sessions that are gender, culture and as well as age disaggregated and also avoid the mixing of family members in one counselling group. This will provide more freedom of interaction among the clients.
- b) Have follow up counselling sessions or educational programs for the clients. Though clients did gain some significant HIV/AIDS related knowledge, much more is still needed to counteract the myths and misconceptions that exist in the community.
- c) Have both cultural and religious sensitive and acceptable methods of discussing and demonstrating the use of condoms. It emerged clearly that future use of condoms decreased after clients went through HIV/AIDS counselling sessions, thus the sessions probably produced the negative effect.

2. Development of a comprehensive HIV information programme targeting the Somali refugees and other urban refugees in Nairobi. This could be done by:

- a) Utilizing already existing educational radio programmes aired through the commonly tuned radio stations, such as IQRA FM, which broadcasts in Somali language. These could be used to educate the community and also dispel misconceptions that exist.
- b) Holding of HIV/AIDS education talks during sermons on Friday prayers at the mosque. These are attended by large audiences from the community and having such talks approved by the religious and community elders would carry a lot weight with community.
- c) The development of appropriate IEC materials in Somali and Arabic languages and distributing them at meeting points e.g. at the trading centers, market centers, mosque and centers where ceremonies and functions take place.

- d) Involving the MOH and other partners in reviewing the current hospital/institution based HIV/AIDS health education and adapting it into a community-based service.
- e) By developing a Nairobi migrants health strategic plan which will cater for the health needs of this community and migrants in Nairobi e.g. traders, transport workers, commercial sex workers, migrant workers etc.

This should be done in collaboration of all involved stakeholders including the MOH, other agencies, NGO's/ CBO's, Imams, women group leaders, political leaders, school and madrasa head teachers.

### 3. Reduction of HIV/AIDS stigma and discrimination:

- a) The communities HIV/AIDS awareness should be increased through all channels. Employing community based communication techniques that go beyond provision of information and engage the community in dialogue promoting community led solutions to the complex issues of HIV may have more success.
- b) Encourage support groups among religious and community leaders by visiting and helping sick persons (including AIDS patients) whether in hospital or at home.
- c) An important entry point stems from the large number of respondents willing to care for a family member with AIDS. Extending this attitude to non-family members infected with HIV will be crucial in combating fear and generalized stigma and discrimination. Efforts should focus on the positive attitudes expressed by those respondents moving the issues toward more contentious aspects such as HIV positive school teachers and food vendors.
- d) The findings of this report should be disseminated to community and religious leaders, women group leaders, government and non-governmental agencies active in HIV/AIDS control and District Health Management Teams.

#### 4. Discourage practices that have implications on the spread of HIV/AIDS:

- a) The study indicates that intensifying efforts to improve attitudes and practices toward condom use and availability will be challenging and essential towards ensuring that prevalence rates remain low. Engaging population groups who appear to have a more positive attitude, such as the youth, should be considered. Identifying innovative ways to make condoms more available in this community, taking into consideration the outward negative attitude, will be crucial in the success of this aspect of any programme. Any strategy will need to be fully led by opinion leaders in the community.
- b) Kadhis and other religious leaders should be involved in issues such as high divorce rate. It could be suggested that registration of all marriages be made mandatory at the kadhis office. This could decrease arbitrary divorces and enforce the stipulated conditions and criteria for divorce.
- c) Education on the dangers of traditional surgical procedures that are carried out under non-sterile conditions should be given. This should be accompanied by training of prominent traditional surgeons and TBA's who carry out these procedures on how to carry these procedures under clean and sterile environment.
- d) Practices that reduce the risk of HIV infection e.g. abstinence, faithfulness to one's partner, fasting and other religious teachings that discourage sex outside marriage.
- e) Given the low percentage who considered themselves at risk of HIV, it is important to emphasize the importance of universal knowledge of HIV status and the importance for individuals to take informed action based on this information. This needs to be supported by improved access to services including counseling, testing and home-based services that are language, culturally and religious sensitive. This recommendation comes in light not only of findings related to HIV associated risk but also given that sexual relations prior to marriage may occur, with the perceived age of sexual debut being lower for both boys and girls.

**Areas for possible research:**

1. Identifying cultural acceptable information, education and communication strategies that are culturally and religiously accepted that maybe used to pass health information including information relating to sexuality.
2. Explore other data collection methods such as Audio computer Assisted Self interviewing (ACASI), this methodology has proven to be a highly successful means of gathering information on sensitive or personal topics and would reduce any social desirability bias - particularly with respect to condom knowledge, attitudes, and interest of youth.
3. Further research to compare the knowledge, perceptions and behaviors associated with HIV/AIDS between urban refugees and refugees settled in camps who might have greater access to HIV/AIDS information.
4. A follow up long term study is also proposed to find out any behavioral changes resulting from information received during HIV and AIDS counseling sessions among this community.

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## APPENDIX 1: STATEMENT OF CONSENT

Introduction:

"My name is .....I'm working for/studying at .....We're interviewing people here at the IOM clinic, in order to find out about the knowledge, Perceptions and behavior associated with HIV and AIDS in your community so as to understand how to serve you better.

**Confidentiality and consent:**

"I'm going to ask you some very personal questions that some of you might find difficult to answer. Your answers are completely confidential. Your name will not be written on this form, and will never be used in connection with any of the information you tell me. You do not have to answer any questions that you do not want to answer, and you may end this interview any time you want to. However, your honest answers to these questions will help us better understand how effective this program is to addressing your needs. We would greatly appreciate your help in responding to this survey. The survey will take about 20-30 minutes to ask the questions. Would you be willing to participate?"

I have been explained the purpose of the study and hereby agree/refuse to take part in this study.

(Signature/thumb print of interviewer,  
certifying that informed consent has been given)

Date

Investigator

Date

**APPENDIX 2: IDENTIFICATION NUMBER SURVEY INDIVIDUAL QUESTIONNAIRE ON KNOWLEDGE, ATTITUDE, BELIEFS AND PRACTICES**

\_\_\_\_\_

Date of interview :— ( day) (month) (year)

Respondent's serial number:

Interviewer's name:

Checked by ~~supervisor~~ \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**SECTION 1: PERSONAL/SOCIO-DEMOGRAPHIC CHARACTERISTICS**

Q 1.1 Sex of respondent: Male • Female •

Q1.2 Age (in years): .....Don't know •

Q1.3 How many years have you been displaced?

Number of years

Q1.4 Have you lived in a camp? If yes, which camp?

Yes •

No •

Q 1.5 Current marital status: a) Married •

b) Single •

c) Widowed •

d) Divorced •

Q 1.6 If married, divorced or widowed, at what age did you first get married?

Age in years ..... Don't know      D

Q1.7 How many wives do you have now? (For married men)

Number

How many of these wives:

a) Never married before?

Number

b) Did you marry as divorcees?

Number

c) Did you marry after being widowed?

Number

d) Did you inherit?

Number

Q1.8 How many wives does your husband have? (For married women)

Number

How many of these wives:

a) Were never married before?

Number

b) Were married after having been divorced?

Number

c) Were married after having been widowed?

Number

d) Were inherited?

Number

Q1.9 What is the highest level of school you have attended?

a) None      •

b) Lower primary (standard 4 and below)      D

c) Upper primary (above standard 4)      •

d) Secondary      D

e) Post secondary      •

f) Religious •

## SECTION 2: KNOWLEDGE ON HIV/AIDS

Q2.1 Have you ever heard of HIV?

a) Yes •      b) No •      c) No response    D

Q2.2 Have you ever heard of AIDS?

a) Yes •      b) No •      c) No response    D

Q2.3 How did you know about HIV/AIDS? (Multiple answers possible)

- a) TV
- b) Radio -
- c) Friends
- d) Husband/wife
- e) Health workers
- f) Civil society organizations
- g) Government officials -
- h) Parents
- i) School
- j) Religious leaders -
- k) Community leaders
- l) International agencies like UNHCR
- m) Don't remember
- n) Others (specify)

Q2.4 How does somebody become infected with HIV/AIDS? (More than one answer is possible).

- a) Unprotected sex with infected persons —
- b) Transfusion with infected blood
- c) Sharing injections and other skin piercing instruments
- d) From mother to child
- e) Mosquito bites
- f) Touching an HIV+ person

- g) Passing of body fluids
- h) Only through the will of God
- i) Don't know

Q2.5 How can you tell if a person has HIV/AIDS? (More than one answer is possible)

- a) Loss of weight
- b) Skin rash
- c) Frequent illnesses
- d) Coughing for a long time
- e) From HIV test results
- f) Other (specify)
- g) Don't know
- h) You cannot tell
- i) No response

Q2.6 Can someone looking healthy be having the HIV virus?

- a) Yes •
- b) No •
- c) Maybe •
- d) Don't know •
- e) No response •

Q2.7 Can someone who is looking healthy infect another person with the HIV virus?

- a) Yes •
- b) No •
- c) Maybe •
- d) Don't know •
- e) No response •

Q2.8 Have you ever discussed HIV/AIDS with anybody?

- a) Yes •
- b) No •
- c) No response •

Q2.9 How would one find out his/her own HIV status? (More than answer possible)

- a) By taking a HIV test
- b) By falling sick
- c) You can never know
- d) Others (specify)
- e) Don't know
- f) No response

Q2.10 Can AIDS be cured?

- a) Yes •
- b) No •
- c) Don't know •
- d) No response •

Q2.11 If yes, how? (multiple responses possible)

- a) Prayers
- b) Traditional medicine
- c) Modern medicine
- d) others
- e) No response

Q2.12 What can a person do to protect himself or herself from getting infected with HIV?

(More than one answer is possible)

- a) Abstinence from sex
- b) Being faithful



- c) Using condoms
- d) Not sharing skin piercing instruments
- e) No casual sex
- f) Pray to God
- g) Nothing at all
- h) I don't know.

Q2.13 Can people reduce their risk of contracting HIV by doing the following?

(Read out these issues loud and indicate the answers).

	<b>YES</b>	<b>NO</b>	<b>DON'T KNOW</b>
Having a good diet			
Using condoms			
Avoiding public toilets			
Avoiding touching PLWHA			
Avoiding sharing food with PLWHA			
Remaining faithful to husband/wife			
Avoiding sex outside marriage			
Abstaining from sex			
Making sure any injection they have is done with a sterile needle			

Q2.14 Can a pregnant woman transmit HIV/AIDS to her child?

- a) Yes      •              b) No              •              C) Don't know      •

Q2.15 If Yes, what can she do to reduce the risk of transmission of HIV to her live-born child? (More than answer is possible)

- a) Take medication
- b) Don't breastfeed
- c) Don't know      ·
- d) Other (specify)
- e) No response

Q2.16 Have you ever heard or seen a condom?

- a) Heard •                      b) Seen •                      c) Neither seen nor heard •

Q2.17 which places or persons do you know where you can obtain condoms? (Multiple responses is possible)

- a) Shop
- b) Pharmacy/drug store
- c) Market
- d) Clinic
- e) Health centre/hospital
- f) Community health worker
- g) Friends
- h) Guest house/hotel
- i) Other (specify)
- j) Don't know
- k) No response

Q2.18 Why do people use condoms? (Multiple responses are possible)

- a) Protect against HIV/AIDS
- b) Protect against STI
- c) Protect against pregnancy
- d) Other (specify)
- e) No response

Q2.19 Are you able to obtain a condom every time you need one?

- a) Yes •
- b) No •
- c) Don't know •
- d) No response •

### SECTION 3: ATTITUDE

Q3. Would you use a condom in future?

- a) Yes •                      b) No •                      c) Don't know •

Q3.2 If yes, why would you use condoms in future? (more than one answer is possible)

- a) protect against HIV/AIDS
- b) protect against STI
- c) protect against pregnancy
- d) other (specify)
- e) No response

Q3.3 What do you think about people who use condoms?

- a) they are responsible
- b) they are protective
- c) they are promiscuous/loose
- d) No opinion
- e) Other (specify).

For questions 3.4 to 3.9 read the questions and their answer options aloud to the respondent and fill in appropriately:

**SA** - Strongly Agree

**A** - Agree

**N** - Neutral

**D** - Disagree

**SD** - Strongly Disagree

	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
Q3.4 The use of condoms by young boys and girls who want to have sex should be discouraged					
Q3.5 Transmission of HIV will still occur even when condoms are used when having sex?					
Q3.6 Legal partners can use condoms					
Q3.7 Persons with HIV/AIDS should be cared for by their family members until they die					

Q3.8 The following things should be done in caring for and supporting HIV infected and AIDS patients

	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
a) Arrange for counseling services					
b) Changing and washing soiled bed sheets and clothing of a person with HIV/AIDS					
c) Help the sick (HIV infected) to keep his/her wound covered with a bandage or clothing					
d) Help clean split blood from an infected person with a disinfectant					

e) Keeping HIV infected person comfortable and protecting them from problems that can make them feel worse					
f) Helping them to be as independent as possible					
g) Keeping them within the community and family groups for as long as possible					

	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
Q3.9 All people who want to get married (or remarrying) should have HIV testing					

Q3.10 If a teacher has HIV, but not sick, should she be allowed to continue teaching in school?

- a) Yes •
- b) No •
- c) Don't know •
- d) No response •

Q3.11 If you knew that the shopkeeper or food vendor you normally go to was HIV positive, would you buy food from him/her

- a) Yes •
- b) No •
- c) No response •

Q3.12 How do you feel about people with HIV/AIDS?

- a) Sympathize with them
- b) They deserve it
- c) Nothing
- d) They are immoral/bad people
- e) Have never seen any
- f) Other (specify)
- g) No response

Q3.13 What is it about HIV/AIDS that you are most afraid of?

#### **SECTION 4: BELIEFS**

Q4.1 Who do you think is at risk of getting infected with HIV/AIDS? (more than one answer is possible)

- a) town dwellers
- b) those who take miraa
- c) prostitutes
- d) persons who are not married
- e) persons with many sexual partners
- f) young people
- g) those in contact with infected persons

Q4.2 What are your chances of getting HIV/AIDS?

- a) No chance
- b) Good chance
- c) Don't know
- d) others (specify)

Q4.3 If none, why do you think that you have no risk of getting HIV/AIDS?

- a) Use of condoms •
- b) No blood transfusions •
- c) No injections •
- d) I abstain from sex totally •
- e) I am faithful to my partner •

Q4.4 Do you think that you need to change your behavior/practice(s) in the future order to reduce your risk of becoming infected with HIV (or infecting Others)?

- a) Yes •
- b) No •
- c) Don't know •

Q4.5 Give reason(s) for your answer.

## SECTION 5: PRACTICES

For the following questions, please fill in the table

Q5.1	Have you had any of the following traditional practices done on you or somebody you know?	YES	NO	DON'T KNOW
	a) Haemorrhoidectomy			
	b) Circumcision			
	c) Tonsillectomy			
	d) Uvulectomy			
	e) Female genital cauterization			
Q5.2	In your opinion, are the procedures in the above practices carried out under sterile conditions?			
Q5.3	Are the instruments used in the above procedures sterile?			
Q5.4	Do persons who perform the ritual ablution of the dead use gloves?			
Q5.5	Have you ever used a condom for any purpose?			
Q5.6	Can you afford to buy a condom every time you need one?			
Q5.7	Would you feel embarrassed to buy a condom in a public place?			
Q5.8	Have you ever discussed the use of condoms with anybody?			
Q5.9	Can you advise your friends to use condoms			



**Q5.10 At what age do most girls in this community start engaging in sexual activity with men?**

**Age in years**

**Q5.11 At what age do most boys in this community start engaging in sexual activity with girls?**

**Age in years      t**

### **APPENDIX 3: FOCUS GROUP DISCUSSION GUIDELINES (TOOL 2)**

Good morning everyone

My name is Dr. Christine Kisia currently undertaking a postgraduate course at the University of Nairobi, Department of Community Health. I would like to welcome all of you to this discussion and thank you for coming. Our topic of discussion is HIV/AIDS in the Somali refugee community. You are free to give your views and all the information you will give is valuable and would help to improve our understanding of the disease in this community and will also contribute significantly to the development of an effective community response for prevention and control of HIV/AIDS.

All the information you will provide will be held in strict confidence.

Name of interviewer:

Type of contact person/group:

Number of participants:

Age range:

Date of interview:

#### **1. Preamble**

- Where are the common health problems in this community?

#### **2. Knowledge**

- What do you know about HIV/AIDS?
- How does one contract HIV?

#### **3. Attitude**

- What is the magnitude of HIV infection in this community? Is it seen as a problem?
- In your opinion what kinds of people get HIV infection?
- How does the community perceive people who are HIV positive?
- How do you view people with HIV/AIDS infection going about their status?

- What is your view on people going for voluntary HIV testing?
- Should individuals go for testing before marrying?

#### **4. Practices**

- What preventive measures can one take to avoid getting HIV infection
- What is your opinion about the use of condoms?
- What do you think should be done to reduce the spread of the disease?
- What are the cultural factors that predispose people in this community to HIV/AIDS?

#### **APPENDIX 4: GUIDELINE FOR KEY INFORMANT INTERVIEW (TOOL 3)**

Good morning

My name is Dr. Christine Kisia currently undertaking a postgraduate course at the University of Nairobi, Department of Community Health. I would like to welcome you to this discussion and thank you for availing yourself. Our topic of discussion is HIV/AIDS in the Somali refugee community. You are free to give your views and all the information you will give is valuable and would help to improve our understanding of the disease in this community and will also contribute significantly to the development of an effective community response for prevention and control of HIV/AIDS.

I also have a cassette recorder to record the discussions so that I do not miss any views during analysis and writing of the report. All the information you will provide will be held in strict confidence.

Name of interviewer:

Date of interview

Venue

Key informant

- 1. What is the magnitude of HIV/AIDS in this community?**
  
  
  
  
  
  
  
  
  
  
- 2. Do you think that this community has adequate knowledge on HIV/AIDS?**
  - Modes of transmission?
  
  
  
  
  
  - Methods of prevention?
  
  
  
  
  
  
  
  
  
  
- 3. What do you think is their attitude to?**

- Condom use,
- People infected with **HIV/AIDS**,
- HIV/AIDS testing?

**What factors/practices do you think/see?**

That facilitates the spread of HIV/AIDS in this community?

That reduces the spread of HIV infection in this community?