Hochschule für Angewandte Wissenschaften Hamburg
Hamburg University of Applied Sciences

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Faculty of Life Sciences, Health Sciences Department

Barriers to HIV-Testing within the African Community in Hamburg, Germany

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Bachelor Thesis

For the Degree of Bachelor of Science (B.Sc.) in Health Sciences

Author:

Marina Linet

Bieberstraße 1

20146 Hamburg, Germany

Matriculation Number: 2128154

Supervisor:

Prof. Dr. Christine Färber **(**HAW-Hamburg)

Consulting/ Advising:

Johann Fontaine **(**Aids counselling centre (CASA Blanca), Hamburg)

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List of abbreviations

AIDS: Acquired Immune Deficiency Virus

ANC: Ante-Natal-Clinics

ART: Antiretrobiral Therapy/ Treatment

ARV: Antiretrovirals

BASS Line: African Health and Sex Survey in England

CASA Blanca: Centre for and Sexually Transmitted Diseases in Altona

CDC: Centre of Disease Control

CR: Capture Recapture

FGM: Female Genital Mutilation

GARPR: Global AIDS Response Progress Reporting

IFWS: Indigenous Field Workers Sampling

MISSA: A sexual Health Study on and with Africans in Hamburg

MSM: Men who have Sex with Men

NARHS: National HIV/AIDS Reproductive Health Survey

PaKoMi: Study on Participation and Co-operation in the HIV prevention with Migrants

PULP: Pretoria University Law Press

RDS: Respondent-driven Sampling

RKI: Robert Koch Institute

STDs: Sexually Transmitted Diseases

STIs: Sexually Transmitted Infections

UNAIDS: The Joint United Nations Programme on HIV/AIDS

UNDP: United Nationd Development Programme

UNICEF: United Nations Children's Funds

WHO: World Health Organization

1.0 Motivation and Purpose

A few years ago, Emily Oster´s paper published by the National Bureau of Economic Research entitled: HIV and Sexual Behaviour Change: Why Not Africa? hit the newspaper headlines in Kenya. Having been reading excerpts of the paper from the newspaper, when I was introduced to the project "*Café Afrika*", Emilys research quickly came to my mind. Emily Osters research showed that despite high rates of HIV in Sub-Saharan Africa, and the corresponding high mortality risk associated with risky sexual behaviour, behavioural response has been limited. So just like Ms Oster, I wanted to understand why Africans in Hamburg were not testing for HIV/AIDS.

Café Afrika was launched by an organization called *"Aids Hilfe Hamburg"* with the aim of *awakening awareness* towards HIV/AIDS within the African Community in Germany through organizing prevention activities within Hamburg. The Hamburg based organization runs several projects which are directed towards mitigating the spread of HIV/AIDS in Hamburg. Their Motto is "Prevention through Information and Prevention is better than Cure". I decided to attend the training events that were being offered to voluntary workers in Café Afrika and subsequently became an active member of the HIV prevention project.

Meeting other Africans to discuss this very sensitive topic remains an uphill task. Against the background that most people prefer to remain silent. My experience in "Café Afrika" actually stimulated my interest and curiosity to investigate the attitude and general knowledge of the larger African community in Hamburg towards HIV/AIDS. In collaboration with other members of the "Café Afrika" we devised community-based prevention work, thereby distributing condoms and disseminating flyers containing information about HIV/AIDS. Although our target group was mainly Africans, we periodically distributed condoms to other people whom we suspect to be within the "active sex" life.

After working in Café Afrika for two years, which also marked the end of my fifth semester at the University of Applied Sciences in Hamburg, I was required to complete an internship as a partial fulfilment of my bachelor's thesis.

I decided to apply for an internship at an AIDS counselling centre called CASA Blanca which stands for: **C**entre for **A**IDS and **S**exual transmitted diseases in **A**ltona.

CASA Blanca offers free and voluntary HIV tests and counselling as well as tests on other sexual infections like Gonorrhoea and Chlamydia.

As an intern with CASA Blanca, I assisted with “street work” which involved going to bars and nightclubs of Hamburg in search of commercial sex workers and distributing condoms as well as flyers about HIV/AIDS. I was also involved in HIV counselling, releasing HIV test results and assisted with reception and administrative tasks,which involved welcoming and registering new clients.

At the reception it was notable that most clients who came irrespective of the issue were from Eastern Europe.Very few Africans visited CASA Blanca for testing purposes.

During the internship, I was aware of the many Africans resident in Hamburg, but I was unaware of the exact number. After doing my research, I found the statistics held by the “Statistikamt Nord”, which stated that: at the end of December 2010, approximately 24,793 Sub-Saharan-Africans lived in Hamburg (Statistikamt Nord 2011).

With regard to the Africans who visited CASA Blanca, the statistics from 2012 to 2014 shows that: In 2012, 80 Africans visited CASA Blanca for HIV/AIDS testing, 181 came in 2013 and 286 came in the following year. Evidently most Africans who went to CASA Blanca for a test were there upon a doctor’s recommendation and very few came voluntarily.

This fact led to the idea of finding out what the barriers to HIV testing are. I was motivated to work on this topic given my passion for health promotion within my community. Conducting a survey would equally lend me the opportunity to apply statistical methods I gained throughout my studies and through my voluntary work. Therefore, this thesis also aims towards finding ways of decreasing the number of HIV undiagnosed persons within the African community in Hamburg through highlighting useful information that can be used in the health sector to implement disease control strategies.

2.0 Structure of the thesis

This thesis discusses and sheds light on the barriers to HIV testing within the African community in Hamburg. It is based on a study conducted in Hamburg with migrants from Sub-Saharan-Africa. However, the thesis also reviews other topics and sub-topics, which are relevant, in order to understand the main topic. The first to third chapters will focus on the motivation and purpose of the thesis, introduction as well as the structure of the thesis. The fourth chapter introduces introduces HIV, its acquisition and the modes of HIV transmission in Sub-Saharan-Africa.

In the fifth chapter, three cultural drivers of HIV transmission in Sub-Saharan-Africa are discussed. Culture plays an important role in understanding, how members of the target group relate to each other, why they carry on certain practices and how that influences their perception of sexuality as well as prevention strategies such as HIV-Testing.

In the sixth chapter, the situation of the HIV epidemic in Sub-Saharan-Africa using three countries as case studies is reviewed: Nigeria, South Africa and Uganda. These three countries were chosen based on geographical as well as statistical reasons. Nigeria represents West Africa, Uganda (East Africa) and South Africa represents the southern part of Sub-Saharan-Africa. According to UNAIDS statistics of 2013, these three countries account for 48% of all new infections in the world. Subsequently, a review of the factors influencing the spread of HIV in those countries becomes inevitable.

Chapter seven form the central part of the thesis. It begins with a short description of the African Community in Germany, the Aids statistics in Germany with the focus on Sub-Saharan-Africans. This is then narrowed down to Sub-Saharan resident in Hamburg. Chapter eight focuses on the study “barriers to HIV testing in the African Community in Hamburg” (methods). The results of the study are found on the ninth and the conclusion on the penultimate chapter. The work ends in the twelfth chapter with a brief recommendation on the study.

3.0 Introduction

HIV/AIDS forms one of the central aspects in the field of health promotion worldwide. Most public health sectors work towards encouraging HIV testing and linking infected persons to proper medical care. In 2006, the Centre of Disease Control (CDC) made key recommendations for HIV testing for patients within the age group of 13 to 64 in all health care settings. Among these recommendations, persons at high risk for HIV infection were advised to undertake HIV testing at least once in a year. It also emphasized on the importance of voluntary HIV/AIDS testing and continues to strongly support HIV prevention through counselling in conjunction with HIV testing (CDC 2006). According to UNAIDS, among the 35 million people living with HIV, ***19 million*** are ***unaware*** of their ***HIV status*** (UNAIDS 2014). This underscores the urgency to understand the barriers to HIV testing within different communities, especially in the Sub-Saharan-African migrant communities. The benefits of HIV testing lies in the early detection of the virus, which is the key to slowing the spread of HIV (MIHS 2013). Also, individuals who are aware of their status, are less likely to transmit the virus (MIHS 2013).

4.0 HIV Virus

"HIV" stands for "Human Immunodeficiency Virus" (Gallant 2012, p. 12). The theory of the genesis of HIV and its worldwide spread remains unclarified to date. Among the most popular theories is the "Hunter- Monkey" theory which states that the HIV virus was passed from "monkey to human" in the Congo-Basin. This theory indicates that monkeys are the carriers of HIV-Virus but have some natural system to stop it's out-break. The Hunter-Monkey theory states that this virus was then passed to humans when the hunters killed a monkey and ate its flesh (Jenkins 2009, p. 39). It has not yet been proved that HIV/AIDS can be contracted via "Oral-Sex". This leaves the "Hunter-Monkey" theory appear more like a hypothesis than a valid scientific theory.

The deficit of this theory lies in the fact that it is uncertain whether consuming monkey flesh could lead to the transmission of the virus. If the "Hunter-Monkey" theory were to be accepted, then we must equally accept that other sex-related maladies can be contracted orally and processed into blood circuit via our digestive tract. This chapter reviews the effects of HIV virus to the immune system, types of HIV viruses , the worldwide statistics as presented by the Joint United Nations Programme on HIV/AIDS (UNAIDS), mode of acquisition as well as transmission especially in Sub-Saharan Africa.

The HIV virus destroys the immune system leaving the body incapable of fighting diseases. It does this by finding its way into the bloodstream and destroying the T cells, which are known as the helper cells. T cells belong to the leukocytes and are produced in the bone marrow. They have the role of protecting the body from infections or fighting against pathosis (Mallick 2015). The more the virus attacks the T-cells, the less protection the T-cells offer to the body. The HIV virus is the cause of AIDS, which is known as the Acquired Immunodeficiency Syndrome (Linton 2015, p. 663).

The period of time between HIV infection and the development of AIDS varies from one individual to another (Sharma 2006, p.18). There are two types of HIV virus, namely: HIV 1 and 2. The following table shows a few contrasts between these types.

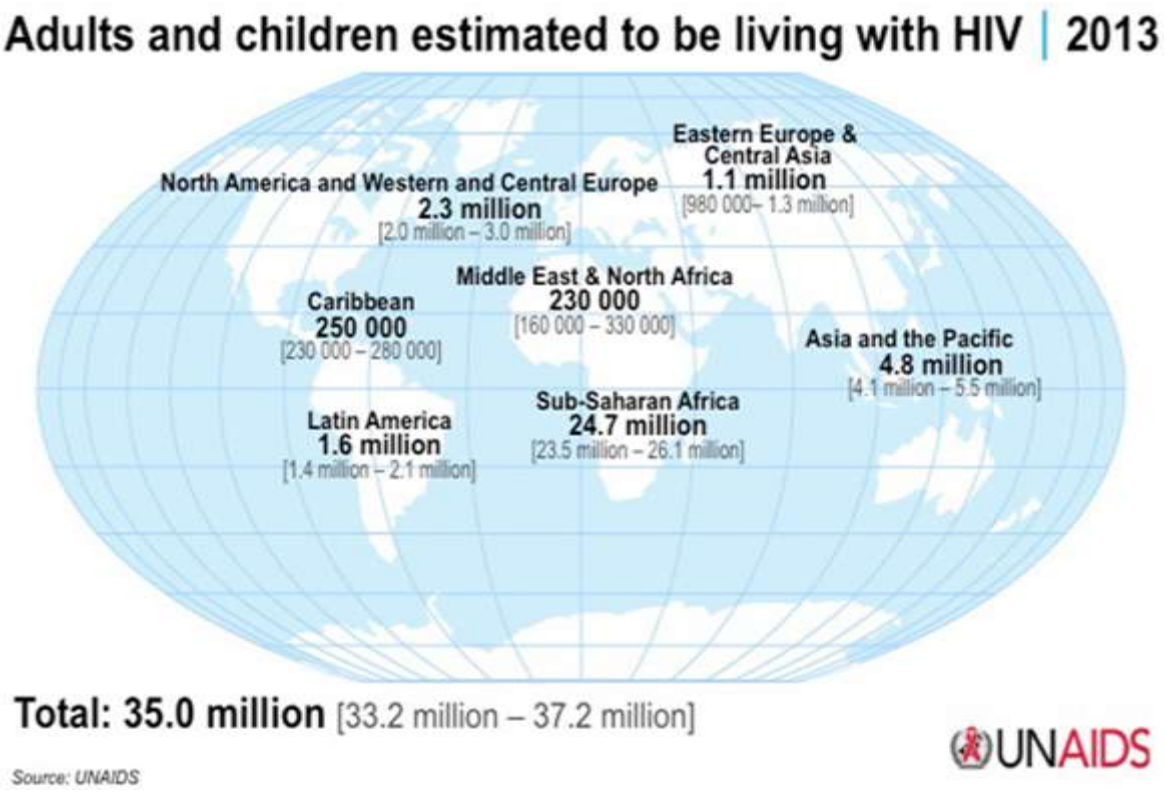
Table 1: Types of HIV

HIV 1	**HIV 2**
Discovered in 1983	Discovered in 1986
Spread worldwide, prevalence in most countries	Confined primarily to West Africa especially Gambia, Senegal and Guinea Bissau
Shorter Incubation /Median time from infection to full Out-break of AIDS	Median time from infection to AIDS acquisition longer
Reduced mortality rate	Higher mortality rate
Associated with higher mother transmission rate	Lower heterosexual transmission rate

Source: (Nelson 2005, p. 527f)

UNAIDS reports approximately 35 million people living with HIV/AIDS worldwide in the year 2014. The number of new infections in the same year was 2.1 million including 240, 000 children under 15 years of age. Most of these children live in Sub-Saharan-Africa and were infected through vertical transmission (UNAIDS 2014). The figure below shows adults and children estimated to be living with HIV/AIDS in the year 2013.

Figure 1: Adults and children estimated to be living with HIV



Even though HIV/AIDS poses a threat in many countries, the UNAIDS report of 2013, shows a decline of new infections in different regions, for example in the Caribbean, Latin America and in the South as well as South-East of Asia. The number of new HIV infections in the Caribbean declined by more than a half from 2001-2012. Latin America also experienced a decrease in the number of new infections by 11% during that period. About 400,000 new infections were recorded in the South and the South East of Asia in 2001 compared to 270,000 new cases recorded in the year 2012 (UNAIDS 2013).

The decline of new infections is attributed to the increased number of people receiving Antiretroviral Therapy (ART). The WHO reports that 12.9 million people receiving ARVs by the end of 2013, of which 11.7 million are from middle and low income countries (WHO 2015). The mother-child-transmissions decree has reduced due to the increase in ART intake. In low and middle income countries, 970,000 women received ARV in 2013 (WHO 2015).

The change of sexual behaviour like condom use has also influenced the HIV incidence rates for instance many gay men in western countries use condoms to protect themselves from contracting HIV. In big cities such as New York, Paris, San Francisco and others, the percentage of gay men living with HIV decreased to a low point of less than 2% in 2003 (Aggleton, Daries & Hart 2003, p. 18). In developing countries such as Uganda, Nigeria and Kenya, condoms promotion and HIV prevention projects have been included as part of HIV prevention strategies to help lower the incidence rates (Celentano & Beyer 2008, p. 234).

4.1 HIV acquisition and transmission

The most common mode of acquiring HIV is through unsafe sexual intercourse (NIH 2012), which the WHO defines as sex between a susceptible person and a person who has an STD without taking preventive measures like using a condom. Unsafe sexual intercourse can be anal, vaginal or oral. This involves heterosexuals; two men; or, in rare cases, two women (Goldman et al. 2012, p. 507). Anal Sex (when the penis penetrates the anus of a man or a woman) is the highest sexual risk behaviour (CDC 2014).

HIV is transmitted through exposure to contaminated fluids like blood (ca. 5-10% of all HIV/AIDS infections globally occur due to infected blood transfusion (Pizer & Mayer 2006, p. 460), semen, pre-seminal fluids, rectal and vaginal fluids (CDC 2014). The Centre of Disease Control explains that, for a transmission to occur, the fluids must come in contact with mucous membrane or damaged tissue or injected directly into the blood stream through the use of needles and syringes (CDC 2014).

HIV infection progresses to AIDS in different phases. The first phase, which is also called the acute infection stage, is the process whereby the virus penetrates into the body and replicates itself (CDC 2013). This process can be rapid within the first week of the virus transmission. During this phase, the virus concentration in the blood, semen, vaginal secretion is very high. This makes an individual infectious to a sexual partner (V.K & Ahluwala 2005, p. 11).

The second phase in the HIV transmission varies from one person to another, due to the fact that the HIV virus can remain in the body for four years without showing visible symptoms, a stage known as clinical latency stage (CDC 2013). It is also a stage where infected persons develop symptoms like itchy hair follicles, fungal or bacterial infections

and dermatological disorders. These symptoms might deteriorate in the third stage if antiretroviral drugs are not administered. In the fourth stage, which is also known as the last fatal stage in the development of the Full-Blown AIDS, the immune system is completely destroyed (Nix 2013, p. 496).

4.2 Modes of HIV transmission in Sub-Saharan-Africa

The most dominant means of transmission in Sub-Saharan-Africa is through heterosexual contact. HIV/AIDS is widely spread in this region. The World Health Organization (WHO) reports that Sub-Saharan-Africa is home to more than 10% of the world's population and to more than 60% of all HIV-infected persons in the world. In the year 2005, Sub-Saharan-Africa recorded an estimated number of 3.2 million new infections. The risk of HIV acquisition in this region is more widespread among women than men (WHO 2006). Ten countries account for 81% of all HIV infections in Sub-Saharan-Africa: Ethiopia, Kenya, Malawi, Mozambique, Nigeria, South Africa, Uganda, Tanzania, Zambia and Zimbabwe (UNAIDS 2013).

In Southern Africa, the drivers of the HIV epidemic are polygymous relationships as well as having multiple sexual partners. Others key factors are unemployment and labour migration. Labour migration plays a significant role in the transmission of HIV in southern Africa and it is a factor that is nothing new to countries such as Mozambique, where people move to South Africa for employment, indulge in extra marital sexual relationships, acquire HIV/AIDS and upon their return home, infect their spouses (Avogo & Agadjanian 2013).

Despite being more populous compared to Southern Africa,West Africa is moderately afftected by HIV/AIDS. (Avert 2014). The driver of HIV transmission here is commercial sex, which accounts for 10-32% of all new infections. Apart from that, natural disasters in this region have also predisposed the spread of HIV as well as other diseases (World Diseases Report 2008, p. 145).

The second most affected region after Southern Africa is East Africa (Avert 2014). However, the rate of HIV transmission in this region has declined in the last two decades. Promiscuity and having multiple sexual partners is also a problem in this region. Adolescent risky sexual behaviours, extra marital sexual practices and poverty are among the several HIV transmission facilitators in East Africa (Hickey 2007, p. 176).

5.0 Cultural drivers of HIV transmission in Sub-Saharan-Africa

The term “culture” is derived from the Latin word *colere*, meaning to “cultivate” (Yu 2010, p. 50). Culture generally refers to how a particular group of people live. This includes their social, political and economic activities. A culture can be inherited and passed from one generation to another (Waweru 2011, p. 6). There are multiple cultures in Africa and distinguishing them from one another is not easy. Underlying this difficulty are the many similarities in the African communities that live in a close proximity, even though they might have different ideologies (Hickey 2007, p. 50).Africa is also a vast continent with different religious, social and educational backgrounds that shape how the people live. The history of different African cultures is sometimes reflected in the character of the people (Chambers 2013, p. 4). Despite the diversity of the African cultures, there are particular practices that are widespread amongst various cultures that promote the spread of HIV/AIDS that will be discussed on this chapter. These practices include Female Genital Mutilation (FGM), polygamy and early marriages among others.

5.1 Female Genital Mutilation

FGM is also referred to as female circumcision. It is the partial or total removal of the external female genitalia (WHO 2014). This practice is common in 28 countries in Sub-Saharan-Africa as well as other countries in the Middle East (Wanjama, Kimani & Lodiaga 2007, p. 49). FGM is associated with an increased transmission of HIV/AIDS. During the FGM “surgery”, crude instruments are shared without sterilization and contaminated blood is easily transmitted from one person to another (WHO 2015). The unsanitary conditions associated with this surgery leave a woman not only with haemorrhage (excessive bleeding) and vulnerable to HIV/AIDS but also to other infections like and tetanus as well as physical and psychological consequences (WHO 2015).

Approximately 6000 young girls go through this process daily and about 2 million experience FGM every year worldwide (Monjok et al. 2007, p. 34). The following table shows the mode of HIV transmission and possible relationships with FGM.

Table 2: HIV Transmission & FGM

Modes of transmission	**Description**	**Potential for HIV transmission via female genital mutilation**
Sexual Intercourse		
Vaginal-penile	Vaginal intercourse after type 111FGM (infibulation) can be painful and causes tears and bleeding, with the potential danger of blood sharing between partner	yes
Anal-penile	Anal intercourse may be practised if the infibulated female experiences too much pain	yes
Oral Sex	Oral sex involving vaginal and oral orifices as well as penile and oral orifices	No
Injecting Drug Use (IDU)	The introduction of drugs into the biological system including needle	No, unless the mutilated female is sharing / also using drugs with sex partner
Exchange of blood		
Tattoo practice	Tattoo markings with same instrument as part of FGM practices	yes
IM injection	Intramuscular injection in Africa, using the same injection needle for many mutilation patients in rural areas	yes
Unsterile/Non-Surgical instruments	Using the same crude instruments to perform FGM	yes
Blood transfusion	Blood transfusion of unscreened blood in rural Africa after severe haemorrhage following FGM	yes

Source: (African Journal of Reproductive Health 2007)

5.2 Polygamy

Polygamy is the practice of having more than one spouse at a time. Many African cultures are known for their extended or polygamous families. This practice is linked to the patriarchal system and has existed for a considerable period of time in Africa (Ajayi 2003, p. 81). It is one of the African practices responsible for accelerating the spread of HIV infection. One infected person in a polygamous family puts all the other members of the family at risk (Social Science & Medicine 2001).

In some Kenyan tribes for instance, the customary law states that a widow should be taken care of and provided for by the husband's family (Waithera 2011, p. 28). This increases the risk of HIV transmission when the individual inheriting a widow, or the widow is infected (Waithera 2011, p. 28).In most cases, the inheritance process takes place with no room for HIV testing before the first sexual contact. Some women are unable to protect themselves against such practices, due to cultural demands. In the history of civil wars in Africa, scores of men were killed and, as a result of this, there were more women than men in most communities and this encouraged the practice of polygamy (Hickey 2007, p. 182).

5.3 Early Marriages

In some parts of Africa, parents encourage early marriages in the hope of getting financial as well as social benefits (UNICEF 2005). Some men also believe that marrying a girl at an early age will protect them from HIV, so they seek younger wives as a means of protecting themselves against HIV infection. However, girls involved in early marriages face significant risks of HIV. This is due to the early exposure to unprotected sex (Bruce & Clark 2004). Early marriages have also caused young girls to drop out of school earlier, thus limiting the development of girls on matters pertaining to education (Ness & Lin 2015, p. 75).

In a traditional African set-up, a wife is expected to bear a child after getting married. Some are denied access to contraceptives, including the pill and condoms and, due to the inequality of authority in such marriages the women are unable to negotiate for safer sex practice (Bruce & Clark 2004).

Biologically, adolescent girls are more prone to contract HIV, as their vaginas are not well lined with protective cells and, therefore, the cervix may be easily damaged. This increases the vulnerability to HIV infection. In most African countries, where HIV prevalence is high, most teenage girls are five to six times more likely to be infected with HIV than teenage boys (Sweetman 2003, p. 48).

Bruce and Clack (2009) examined data collected in Demographic and Health Surveys from 31 countries in South, East, and West Africa as well as Latin America, the Caribbean, Asia and the Middle East, in order to determine the exposure of adolescent girls to HIV through early marriages. They found out that 80% of unprotected sexual intercourse among adolescent girls occurred within marriage.

6.0 HIV/AIDS in Africa

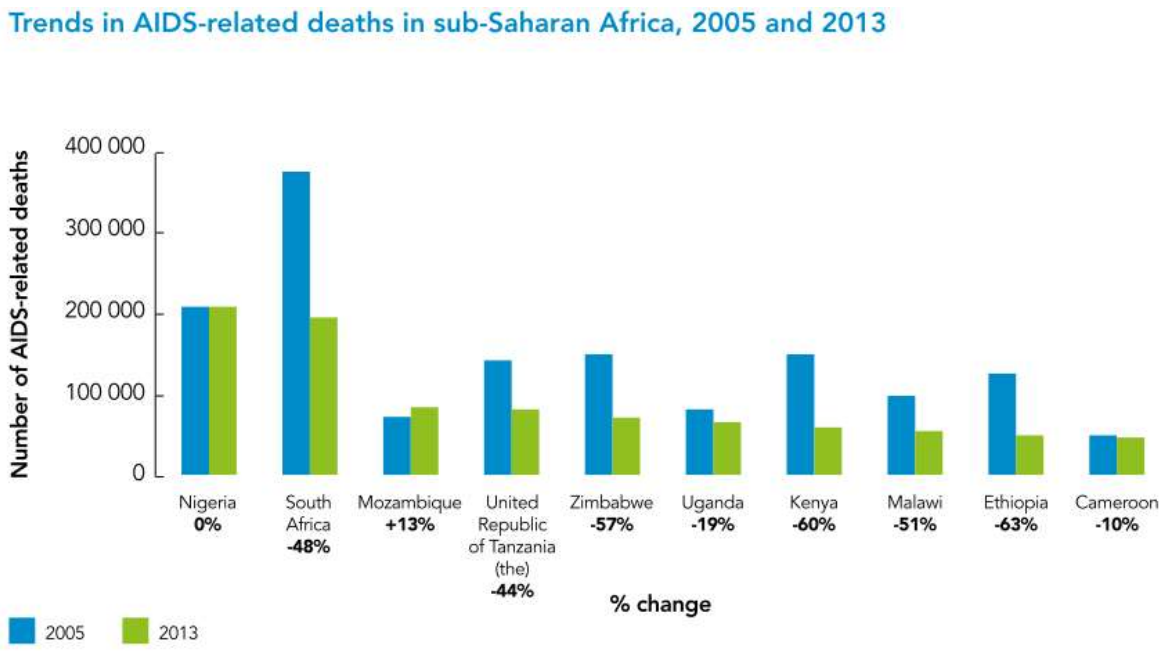
This chapter reviews HIV/AIDS situation in Africa using Nigeria, South Africa and Uganda as case studies.

The HIV/AIDS pandemic in Africa,especially in Sub-Saharan Africa,has led to adverse consequences not only in the health sector but in the economic, education and social sectors (AVERT 2014). The prevalence of HIV/AIDS varies from one region to another. By the year 2013, UNAIDS reported an estimated number of 24.7 million people living with HIV in Sub-Saharan-Africa. This figure is equivalent to about 71% of all persons living with HIV worldwide. The following graphic shows the trends of AIDS-related deaths in the top ten countries that count for 81% of all infected persons in Sub-Saharan-Region (UNAIDS 2013, p. 28)

Figure 2.1

Trends in AIDS-related deaths

Figure 2: Trends in AIDS-related deaths in sub-Saharan Africa 2005 and 2013



Source: (UNAIDS 2013)

As evidenced by the graphic, the numbers of AIDS-related deaths between the years 2005 and 2013 decreased. This success is due to the prompt increase in the number of people taking antiretroviral therapy as well as the increase of HIV prevention measures such as condom use. UNAIDS reports that 48% of all new infections worldwide are taking place in Nigeria, South Africa and Uganda, therefore it is important to briefly examine these three countries in order to identify factors that enhance the prevalence of HIV/AIDS (UNAIDS 2013).

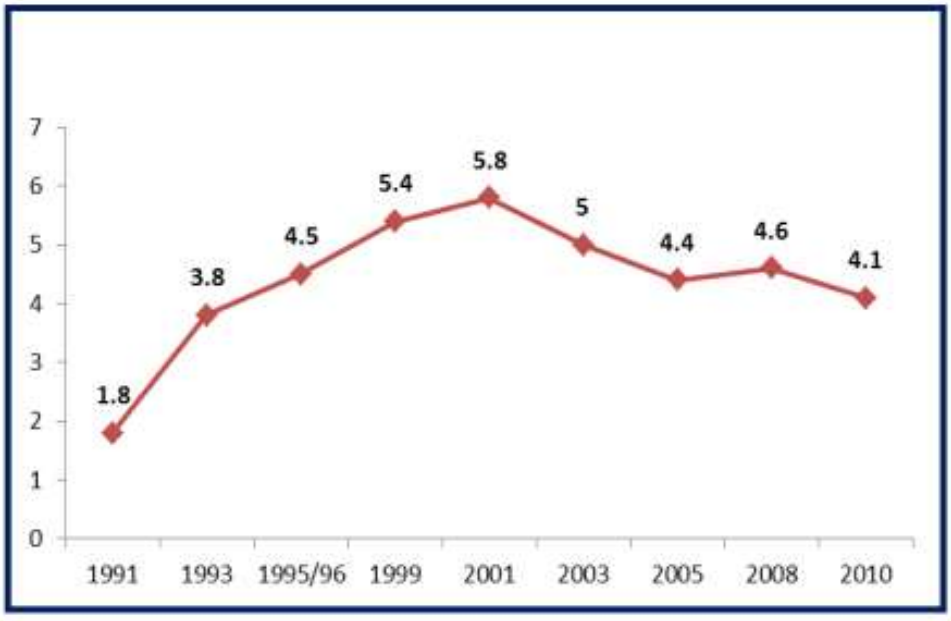
6.1 Nigeria

Nigeria lies in West Africa and is bordered in the North by Niger and in the East by Cameroon and the Eastern Republic of Chad. The country has a surface area of about 923,768 square kilometres. It is well known as a land rich in natural resources. Nigeria has a unique population and historical background as well as different local languages with distinct cultural norms and practices (UNDP 2012).

Statistics show that Nigeria has the largest population in Africa (Nwankwo & Ibeh 2014, p. 48). In July 2013, it had 177,071,561 citizens (GARPR 2014, p. 8). The official language of the country is English but, since there are 250 ethnic groups, there are also over 500 local languages, for instance Hausa, Igbo and Yoruba. 50% of Nigerians citizens live in urban areas (GARPR 2014, p. 9).

In 1986, the first case of HIV/AIDS was reported in Nigeria. The WHO recommended Ante-Natal-Clinics (ANC) Surveillance, in order to assess the trends of the outbreak. According to the ANC's surveillance data, HIV prevalence increased from 1.2% to 5.8% between the years 1991 and 2001. This prevalence later declined to 4.4% in the year 2005 and slightly decreased by 0.2% in the year 2010. Figure 2.2 shows the national median HIV prevalence trend in 1991-2010 (GARPR 2014, p. 18)

Figure 3: National median HIV prevalence trend in ANC 1991-2010

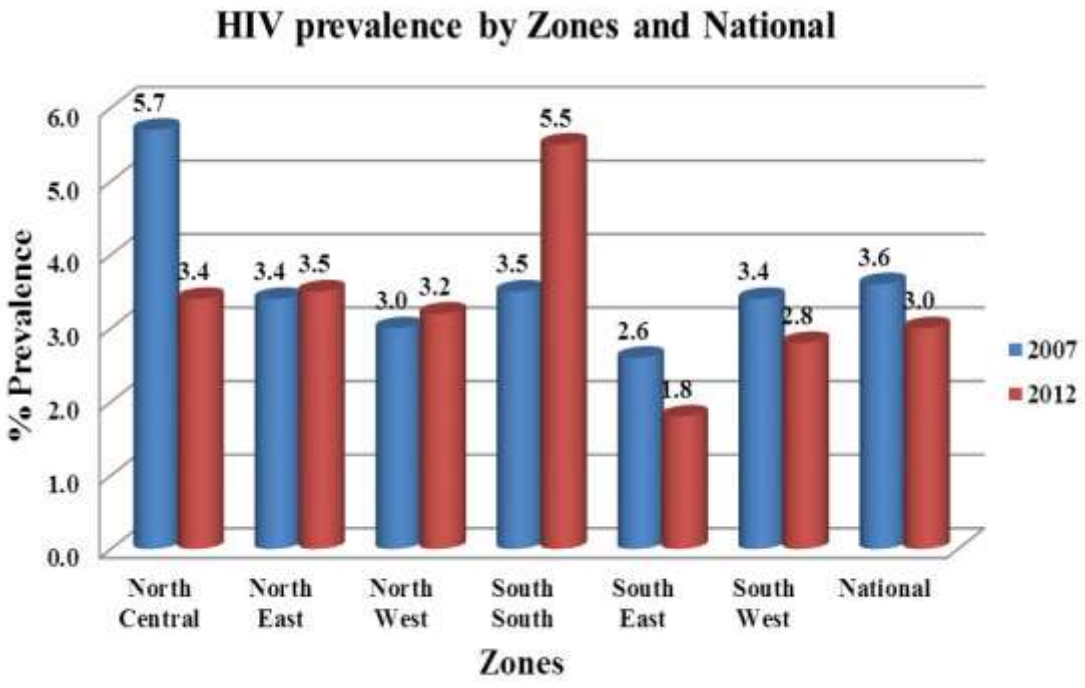


Source: (GARPR 2014)

From 2005 to 2013, around 3,229,759 million people lived with HIV in Nigeria and 210,031 infected persons died from AIDS (GARPR 2014 p. 13). The spread of HIV/AIDS in Nigeria has occurred mostly through heterosexual contact. Heterosexual contact accounts for up to 80% of all HIV cases in the country. The second most common mode of HIV transmission is through mother to child, followed by infected blood transfusion (PULP 2008, p. 278).

The highest experienced prevalence in the year 2012 was among individuals aged 35-39 and the lowest was recorded by persons aged 15-19. Geographically, the highest prevalence was recorded in the "South South" Zone. See figure 4

Figure 4: HIV prevalence by Zones and National



Source: (GARPR 2014)

Some of the main factors which have exacerbated the spread of the HIV virus in Nigeria are: individuals having multiple sexual partners, poor health services for PLWHIV-Persons Living with HIV/AIDS and other related diseases, gender inequality, poverty, stigma and discrimination surrounding infected persons (Forsyth & Copes 2014, p. 327).

The pandemic has also posed a threat to the country as a whole. The Nigerian health systems are strained and therefore offer ineffective and insufficient services, so many orphans are left behind and the prevalence of HIV infected women continues to rise

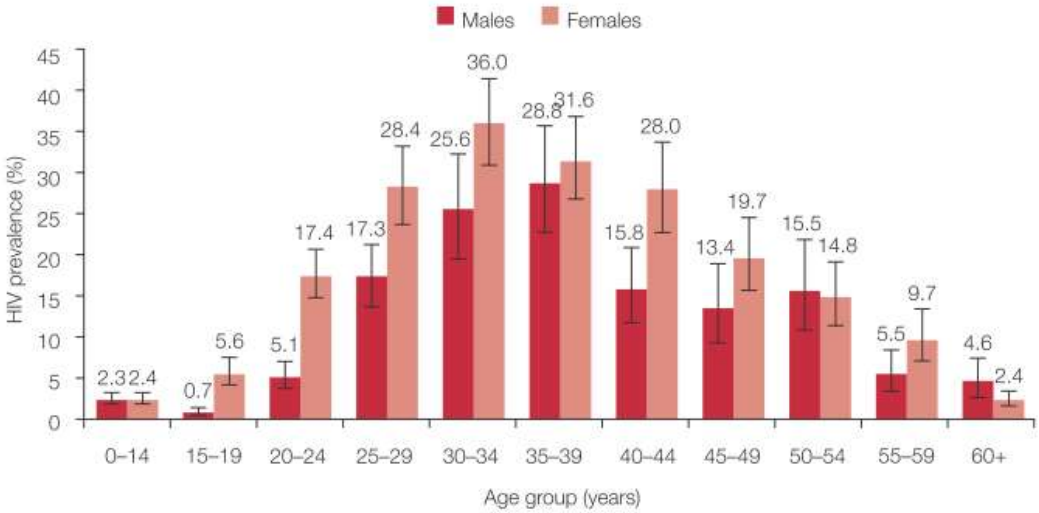
(Adetula 2010, p. 63). The most vulnerable members of the population in Nigeria includes commercial sex workers, drug addicts and men who have sex with other men (Aggleton et al. 2013, p. 144).

6.2 South Africa

South Africa had a total population of 50.8 million in 2011, 52% of whom were women. About 29.7% of South Africa's population is aged 14 years and younger and 65% of the population fall within the age group of 15 to 64 years old. Only 5.3% of the population are above 65 years (Ross & Cagney 2013).

In the early 1980's, there were a few hundred cases of HIV in South Africa. This, however, changed dramatically over the course of the next few decades, as AIDS rapidly spread in the urban areas and later on within the rural areas (Karim & Karim 2005, p. 31). Like Nigeria, the predominant mode of HIV transmission is through heterosexual contact. UNAIDS estimates that in 2013, around 6,800,000 million people were living with HIV in South Africa (UNAIDS 2013). As in most countries in Sub-Saharan-Africa, more women are affected by the HIV epidemic than men. Figure 2.4 shows, according to the South African National Survey of 2012, that the prevalence of women in the age group of 20-24 is three times higher than that of men within the same age category. See figure 5

Figure 5: HIV prevalence by sex and age, South Africa 2012



Source: (Human Sciences Research Council 2014)

The determinants of the HIV epidemic in South Africa are majorly behavioural factors such as having unprotected sex as well as multiple partners. Biological factors like the high prevalence of Sexually Transmitted Diseases (STDs) also influence the epidemic.

Other factors that apply to South Africa, Uganda, Nigeria as well as most Sub-Saharan-Countries are: poverty, commercial sex, inequality of women, illiteracy, stigmatization and discrimination (Allen 2000, p. 9).

6.3 Uganda

Uganda lies is in East Africa and issub-divided into four regions: Eastern, Western, Northern and Central regions. These four administrative regions are further divided into districts, counties and sub-counties. The Northern region is the largest but has the smallest population compared to other regions (Mwakikagile 2009, p. 7).

The HIV epidemic was first reported in Uganda in the 1980's on the shores of Lake Victoria and spread faster in the urban areas and along the highways. It reached other districts by 1986 resulting in a generalized epidemic (Beraho 2008, p. 32). The generalized HIV epidemic is defined by the UNAIDS as such, when the HIV prevalence rate is higher than 1% of the general population. Like other countries in Sub-Saharan-Africa, unprotected sex with persons living with HIV is the most common means of HIV transmission, with mother-to-child transmission being one of the routes of HIV transmission (Beraho 2008, p. 32).

From 2007 to 2013, the number people infected by HIV increased from 1.2 to 1.5 million. Studies have identified the key drivers of the epidemic. Some of these are low level education, which makes it harder for many individuals to understand facts about the infection, unwillingness to disclose sexual status among partners and alcohol consumption, which is associated with careless sexual activity in the country like having multiple sexual partners and unprotected sex. Another key driver of the HIV epidemic in Uganda is adolescent sex. This has contributed to a large proportion of HIV cases in Uganda (Progress Report 2014, p. 15). See the table below.

Table 3: Sexual experience among adolescents 15-19 years

	1995	2000	2006	2011
Females 15-19 years:				
Had first sex by 15 years	23.8	14.2	11.8	12.2
Had first sex between 15-19 years	37.8	37.9	31.2	32.9
Never had sex	38.4	47.9	57.0	54.9
Never married	50.2	67.7	77.6	77.3
Married younger than 18 years	14.2	6.6	3.0	3.2
Had sex in the 4 weeks prior to survey	40.9	30.0	19.7	18.7
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**
Males 15-19 years:				
Had first sex by 15 years	19.2	15.5	13.9	17.9
Had first sex between 15-19 years	28.4	23.2	21.4	22.2
Never had sex	52.4	61.3	64.7	59.9
Had sex in the 4 weeks prior to survey	18.9	NR	9.3	7.5
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**

Source: (Progress Report 2014)

Following the AIDS indicator survey of 2011 in Uganda, the HIV prevalence among the eligible population of 20,649,497 was 7.3%. The epidemic affects young women disproportionately. The prevalence of women with HIV living in urban areas is much higher than those in the rural areas (Progress Report 2014, p. 15). Female sex workers and men who have sex with other men are the most at risk populations. However, homosexuality is a crime in Uganda (Clinard & Meier 2015, p. 408). The only country that protects the rights of homosexuals in Africa is South Africa (Gunda 2010, p. 38). It was also the first country to legalize same sex marriage in 2007 (Wilhelm 2004, p. 472). In other countries like Nigeria for example, Sharia law enables punishment of homosexuality through death by stoning (Steiner, Alston & Goodman 2008, p. 781). This particular law applies to Muslims in the 12 northern states in Nigeria that have adopted Sharia law (Human Rights Watch 2004, p. 97). Due to the rejection and hostility towards homosexuality in various African communities, it is difficult to obtain data regarding this topic and almost impossible to specify the prevalence of HIV infection among the group in various regions in Africa (Silker 2007, p. 7).

7.0 African Community in Germany & HIV/AIDS

The following chapter is the start of the central part of the thesis. It focuses on the African Community in Germany, especially the "Micro Compact Community" from Sub-Saharan-Africa in Hamburg and the situation of HIV/AIDS in this particular community. It also describes the relevant findings of two studies on HIV/AIDS conducted in Hamburg with the same target group.

Germany had a population of about 82 million in 2011. Out of that figure, the number of registered migrants from Africa was 276,070 of all 1.61 million migrants in Germany (bpb 2012). While the guest workers were welcomed in Germany in the mid-80s, most African immigrants were confronted with legal and political issues that restricted their access to residency and labour market (Klara et al. 2011, p. 243). Due those restrictions, the African migrants opted for new strategies of obtaining legal status in Germany. The German Federal Statistics Office (2004) shows that the majority of African migrants came to Germany as students or asylum seekers. The African Community in Germany is a very significant group in terms of HIV/AIDS.

According to HIV statistics, about 73,000 cases were registered in Germany in 2011. This includes 59,000 men and 14,000 women. HIV transmission is high among MSM (ca. 46,500), followed by heterosexual contact (ca. 10,500) and persons from high prevalence countries (ca. 9,000). The following table shows the status at glance in 2011(RKI 2011).

Table 4: HIV/AIDS in Germany-Basic Estimates (as of end of 2011)*

Table: HIV/AIDS in Germany – Basic Estimates (as of end of 2011*)

HIV Prevalence	
Persons living with HIV	***~ 73.000***
Men	~ 59.000
Women	~ 14.000
Among these: Children	~ 200
.. by mode of transmission	
Men who have sex with men (MSM)	~ 46.500
Heterosexual contact	~ 10.500
Originating from HIV a high prevalence country	~ 9.000
Injecting drug use (IDU)	~ 6.800
Haemophilia / blood transfusion	~ 450
Mother-to-child transmission	~ 420
HIV Incidence	
New infections	***~ 2.700***
Men	~ 2.300
Women	~ 400
.. by mode of transmission [in per cent]	
MSM	74 %
Heterosexual contact	20 %
IDU	6 %
Mother-to-child transmission	< 1 %
New cases of advanced immune deficiency or AIDS	***~ 1.000***
Men	~ 900
Women	~ 110
Of these: Children	< 10
HIV-related deaths	***~ 500***
Persons living with HIV on antiretroviral treatment	***~ 52.000***
Cumulative figures	
HIV infections since the beginning of the epidemic	***~ 100.000***
HIV-related deaths since the beginning of the epidemic	***~ 27.000***

Source: Robert Koch Institute annual estimate (published in November 2011)

According to the statistics above, 74% of all new infections in Germany are through male homosexual contact, 20% through heterosexual contact and 6% of the cases are associated with injecting drug users (RKI 2011).

In 2012, the number of persons living with HIV in Germany increased to around 78,000, of which 63,000 were male and 15,000 female (RKI). There was no significant increase in the number of children living with HIV (ca. 200 cases). Like the year 2011, the number of infected persons was higher among the MSM groups as other groups (ca. 17,000). The data of 2012 also shows that of all the HIV infections in Germany, 9,600 cases were acquired in Germany. The number of new infections in 2011 increased from 2,700 to 3,400 in 2012 (RKI 2012).

7.1 Sub- Saharan- Africans in Hamburg and HIV/AIDS

Sub-Saharan-Africans account for 10-15% of all persons living with HIV infections in Germany (RKI 2013). Approximately 6,600 PLWHIV in Hamburg by the end of 2013. Most of these persons were men (ca. 5,600). Women living with HIV account for almost 1,100. The MSM group has the highest HIV risk, statistics shows about 4,700 cases as compared to 1,400 cases among persons involved in heterosexual contact (RKI 2013).

The pilot study on sexual reproductive health among migrants from sub-Saharan-Africa residing in Hamburg, points out that, the reason for the spread of HIV among this group might be due to the existing barriers to HIV testing or access to the general health system in general. The study population consisted of 339 male and 252 female participants. The majority originate from Ghana, Togo, Cameroon and Nigeria. According to the study statistics, 34.4% men had other sexual partners apart from their stable sexual partner within a period of 12 months. The female participants had one stable sexual partner in a period of 12 years. Some male participants admitted to having more than 5 sexual partners in a year. Generally, men were found to be more sexually active than women, and therefore, had the highest rate of STI diagnosis (Santos-Hövener & Bremer 2014, p. 34).

Another study (PaKoMi) that focused on HIV prevention within the African community in Hamburg tested the knowledge of Africans on the topic HIV/AIDS. 263 African migrants in Hamburg participated in the study. The results of this study disclosed that most participants (95%) knew that HIV is the cause of AIDS and 99% knew that it can be sexually transmitted, 80% were aware that transmission through kissing and handshaking is not possible, while 10% were not sure and 8 % were unaware of this. 90% of the participants were also informed that the disease can be contracted in Germany and that one can have HIV without knowing (87%). In regard to HIV treatment, 80% knew that ARVs are available in Germany for persons infected with HIV/AIDS, 8% were unsure about this and 11% were totally unaware of this. A significant number (76%) also knew that, it is difficult to tell whether a person is having HIV/AIDS by their appearance. This study also showed that 59% were unaware of the free and anonymous HIV Testing in Hamburg. Regarding AIDS as a taboo topic, half of the participants said, AIDS is no longer a taboo and 42% thought that the topic is still a taboo in many African communities (PaKoMi Handbuch 2011, p. 81).

Overall, the study showed that Africans in Hamburg are well informed about HIV/AIDS. However gaps were identified in the transmission and treatment of HIV by ca. 20% of the participants. There is also an urgent need to develop strategies of disseminating information on HIV prevention and health care within the African community, since many are not informed of the free prevention services (PaKoMi Handbuch 2011, p.82).

8.0 Methods

The following chapter presents study methods to the survey "Barriers to HIV testing within the African Community in Hamburg" that was conducted in Hamburg from 10 February 2015 to 10 August 2015. It perhaps worth noting that the study differs from the two studies briefly presented in the seventh chapter.

The study of "Barriers to HIV testing within the African Community in Hamburg" focused on finding out the barriers to HIV testing and whether the African Community in Germany are aware of the existence of institutions like "CASA Blanca", where information about sexually transmittable diseases are made readily available. The survey also considered the following questions:

a. How many Africans from the target group have access to the health care system in Germany?

b. How good is the understanding of AIDS/HIV problematic among African community in Hamburg, which represents African continent in "Compact Form"?

c. How good is their willingness and readiness in getting information about HIV/AIDS as well as practicing "Prevention is better than Cure" policy?

The study began with a literature research on Sub-Saharan-Africa (culture, values, HIV epidemic and related topics). Several meetings with the staff in CASA Blanca were convened to discuss ways of preparing the questionnaire. The meetings aimed towards developing a user-friendly questionnaire based on common categorization of barriers and experiences from other studies. A standardized questionnaire was prepared using different studies/questionnaires as a basis for the survey. The table below presents the studies used in the questionnaire development.

Table 5: Studies used for questionnaire development

Study	**Questions**
MISSA Study	5, 12, 14, 15, 16, 28, 31, 57
BASS LINE 2008	14, 21, 47, 48
Hand in Hand Study	13, 17, 18, 20,25

The questionnaire was entitled "health promotion questionnaire" in order to ease access and it was translated into German for participants who do not speak English. A pre-Test was done by 10 people to find out whether the questions asked were clear and understandable.

After the necessary corrections and editing of the questionnaire, the final version was sectioned into four topics: general health questions, questions about CASA Blanca counselling centre, attitude toward HIV testing and socio demographic section. There was no question regarding, the legal status, since this would have been a barrier to the data collection. The data analysis was conducted through SPSS statistical programme in German version. Therefore, German words that appear in the thesis are translated into English.

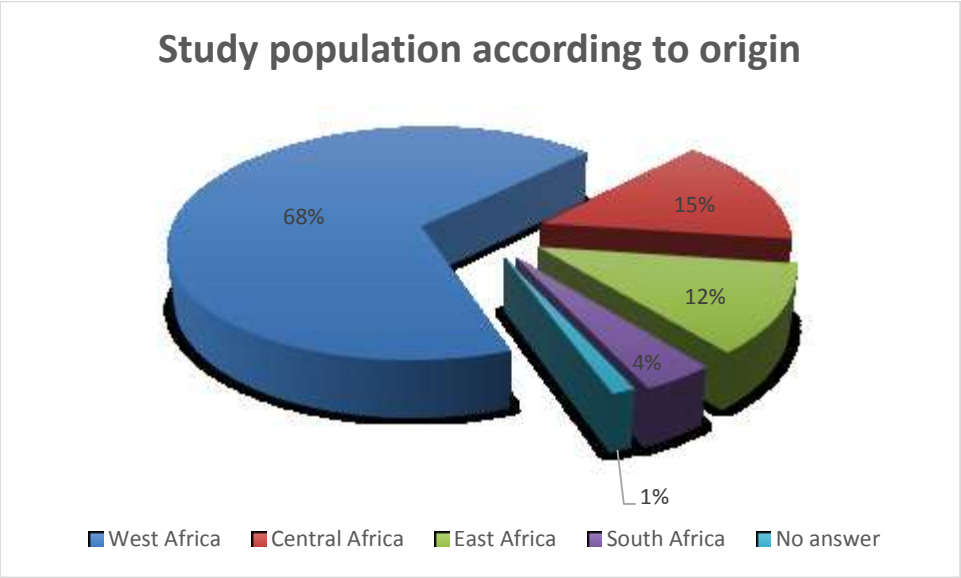
9.0 Results

This chapter presents the results of the study "Barriers to HIV testing within the African Community in Hamburg. In order to view the categories of barriers mentioned in the study, the questionnaire used for data collection is attached in the appendices.

9.1 Socio-demographic data

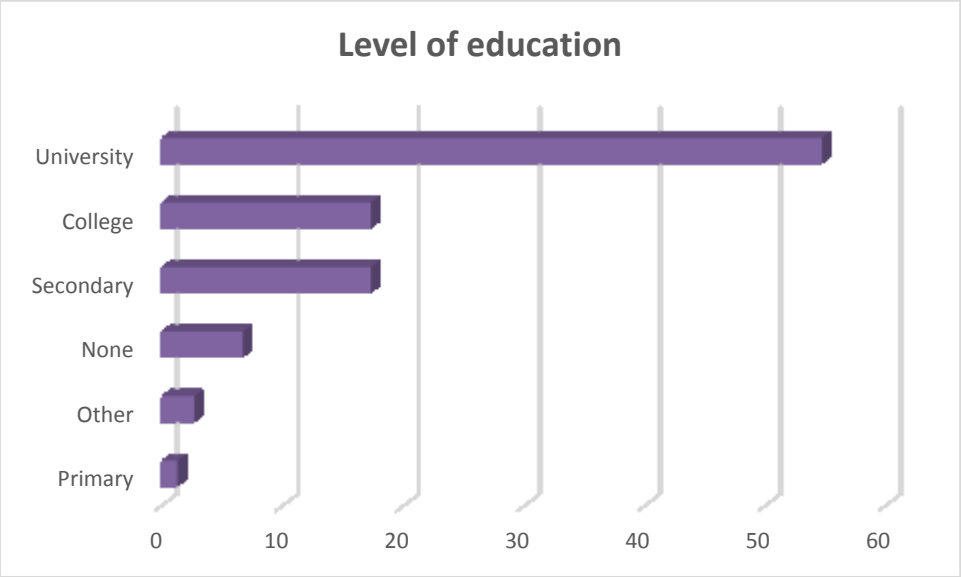
The results show that most participants in the survey originate from West Africa (68%), followed by Central Africa (ca. 15%) and East Africa (12%).

Figure 6: Study population according to origin



Most of them have stayed in Germany for a minimum period of one year and only 4% have resided in Germany for less than one year. They also have a very good level of education, since ca. 35% have college or secondary level of education, and ca. 55% have a university level of education. This equates to 90% of individuals with a very good level of education. See the figure below.

Figure 7: Study population according to level of education



The following table shows the distribution of study population according to age groups .

Table 6 Study population according to age group

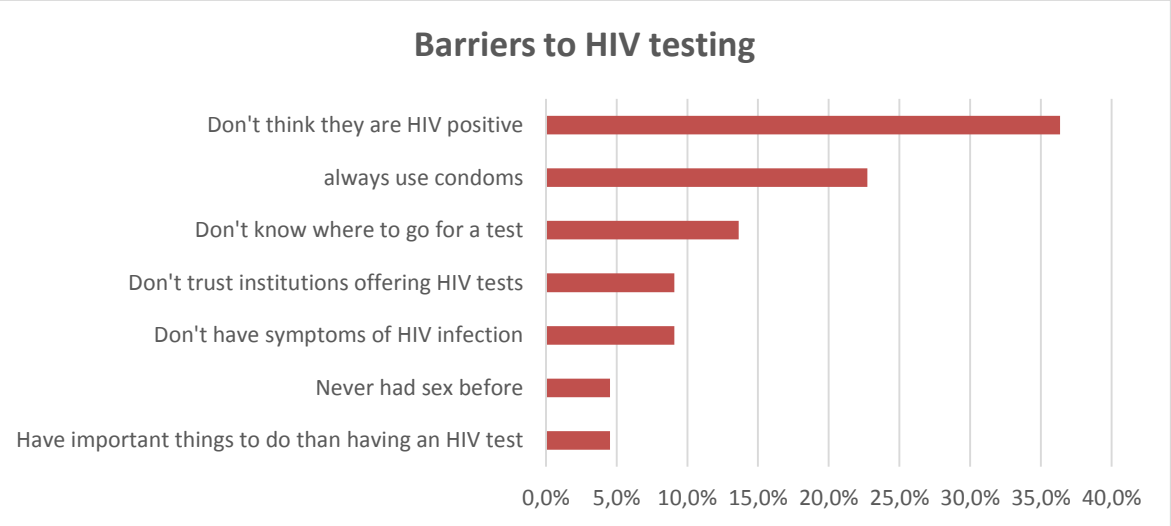
Age group	**Frequency**	**Percentage**
15-19	1	1.3%
20-29	28	37.3%
30-39	30	40.0%
40-49	10	13.3%
50-59	4	5.3%
60 and more	2	2.7%
Total	75	100.0%

The Gender distribution between male and female is as follows: female (52%) and male 48%. About 89% of the participants engage in heterosexual contact, 1% in homosexual contact and 9% did not want to mention their sexual behaviour.

9.2 Barriers to HIV testing

Regarding barriers to HIV testing, the analysis was conducted in three major blocks, namely, Block A, B and C. Block A consisted of five questions and recorded a significant number of 20 answers, Block B consisted of five questions and registered only one answer and C had four questions but registered only one answer, providing a total of 22 answers on barriers to HIV Testing in the African Community in Hamburg. The results in Block A revealed that 40% of the participants, do not go for HIV Testing, since they don't think, they are HIV positive, 25% said they always use condoms, 15% said they were unaware of where to go for a test and 10% said that, they don't have symptoms of HIV/AIDS. The other 10% indicated that, they don't trust institutions offering HIV tests. In Block B, one participant stated that HIV-Testing is not important, since there are other things to worry about. The answer in Block C indicated that one participant had never engaged in sexual activity before. The table below shows a summary of all the results recorded in Block A, B and C.

Figure 8: Summary of barriers to testing



The question about HIV-testing, revealed the number of participants who has been tested for HIV previously and the period the tests were conducted. 33 said they have been tested for HIV/AIDS in the past one year, 12 had the test two to three years ago and 7 had the test more than three years ago.

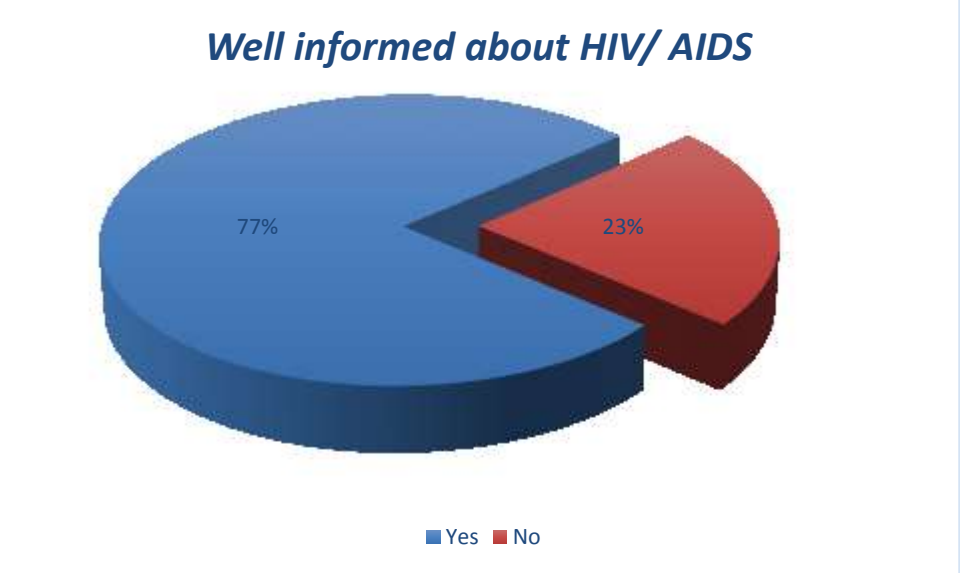
The participants were also asked whether they have ever heard about CASA Blanca and the following were the results: Ca. 69% have never heard of the counselling centre before and ca. 31% knew about the counselling centre.

Table 7: Know CASA blanca

Valid	Frequency	Percentage
Yes	23	30.7%
No	52	69.3%
Total	100.0	100.0%

The free HIV test services offered by CASA Blanca were known to 31 participants and 21, also knew that the counselling centre do not only offer free and anonymous HIV-Test but also pregnancy conflict counselling. Despite the fact that many participants had no idea what CASA Blanca is, a significant number (77.3%) was well informed about HIV/AIDS.

Figure 9: Well informed about HIV/AIDS Summary of barriers to testing



Of all the 75 participants, 67 (ca. 87%) were willing to get information on various services offered by CASA Blanca as well as on the topic HIV/AIDS. Ca. 19% of these requested for information on Hepatitis and vaccination, information on pregnancy tests (ca. 8%), safer sex (ca. 15%) and birth control pills (ca. 12%). About.13% needed information on personal problems and 16% required information on support for friends having STDs.

Table 8: Required Information

Required Information	**Percentage**
Information on HIV/ AIDS	17.9%
Information on Hepatitis & vaccination	18.6%
Information on pregnancy test	7.7%
Information on support for friends	16.0%
Information on safer sex	14.7%
Information on birth control pills	12.2%
Information on personal problems	12.8%
Total	100.0%

The survey also showed that ca. 36% of the participants are willing to get the information from Websites, ca. 23% through flyers and brochures, ca. 30% through Facebook as well as workshops and 12% required information through a fellow African.

Table 9: Ways of getting information

Ways of getting information	**Percent**
Through flyers & brochures	22.6%
Through a fellow African	11.8%
Through a website	35.5%
Through Facebook	15.1%
Through workshops	15.1%
Total	100.0%

The general health section of the survey showed that 99% of all the participants had a health insurance valid in Germany. Approximately 61% go to a doctor when having health problems, 5% seek help from friends, 18% browse the internet and about 1% opt for self-medication with an exception of 1% who visited an African traditional healer.

The study also revealed that, many Africans in Hamburg think that HIV is not a taboo in their communities.

Table 10: Is HIV/AIDS a taboo in your community?

Valid	**Frequency**	**Percent**
Yes	25	33.3%
No	50	66.7%
Total	75	100.0%

10.0 Discussion

In reference to the major questions reviewed in the methodology, the following is a summary of the respective answers. Ca. 99% of the participants have a health insurance valid in Germany, which indicates that they have a good access to the health care system. Their understanding of HIV/AIDS can also be categorized as good, since most of them are well informed about the disease. This correlates to their level of education. Approximately 90% of all the participants had at least a secondary school education. In respect to their willingness in practising "prevention is better than cure policy", their readiness to acquire different information on HIV and related topics is recorded as a positive factor towards implementing the policy. A similarity of the PaKoMi study mentioned before was noticed in the aspect of viewing HIV as a taboo in various African communities. Most participants (ca. 66%), indicated that HIV is no longer a taboo in their community, while ca. 33% admitted that the topic is still a taboo in Africa. Based on the empirical evidence gained while working with the African community, one can conclude that HIV/AIDS is still a problematic topic within several African communities. This fact is easily ruled out, but the difficulties in getting data on this topic and the reactions of individuals to sexual related questions as well as their hesitation to give out clear answers on this, indicate, that the topic is still considered as a taboo.

The most common barrier of HIV testing within the African Community in Hamburg as identified by the survey is the low perception of risk. Ca. 36% of the participants indicated, that they do not think they are HIV positive. The second common barrier is the assumption of being safe, due to regular use of condoms. Approximately 23 % of the participants, who always use condoms during sexual intercourse, presume to be safe and therefore do not go for HIV testing. The third common barrier is lack of awareness of health service providers.

Several studies like the BASS Line study conducted in England have identified other common barriers of HIV testing for instance, fear of deportation (ECDC 2011), lack of access to health care system and lack of community support for persons diagnosed with HIV/AIDS. The structural, cultural or economic repercussions of HIV diagnosis also create barriers to HIV testing. Many persons face stigma and discrimination after a HIV positive diagnosis (AVERT 2014). Communication and language problems are also key barriers to HIV testing among migrants (ECDC 2011).

Other studies mention lack of understanding in migrant communities about how HIV is transmitted, and barriers to accessing health care system for undocumented or illegal migrants. For instance, in some states in the United States of America, there are policies that do not support the provision of ARVs to migrants and refugees, irrespective of their legal status (ECDC 2012).

The last factor that was not included in the survey, but was mentioned by most participants is racism. Due to this factor, most individuals showed no interest in participating in the survey, quoting that most of the collected data is used for scientific work and less is done to address their day to day problems in the German society.

11.0 Conclusion

The study “barriers of HIV testing within the African community in Hamburg” did not reach “the hard to reach population” such as asylum seekers and African migrants with illegal status. This signalizes a form of bias. Most of the participants had a very good educational background as well as a good access to the health system. An article from (Shaghaghi, Bhopal & Sheikh 2011), reviewed a range of approaches that can be used in studies to recruit “ a hard to reach population” into research such as snowball sampling, capture re- capture method (CR), targeted sampling, respondent-driven sampling (RDS), indigenous field worker sampling (IFWS) among others. They then concluded that the degree of compliance with a study by “hard to reach population” depends on the technique recruited to collect data as well as the characteristics of that particular “hard to reach group”. On the other hand, the successful use of the technique chosen depends on the knowledge about specific characteristics of the target group (Shaghaghi, Bhopal & Sheikh 2011).

12.0 Recommendation

The following is a recommendation on how to improve the access of HIV prevention services as well as other health care services. The WHO recommends improving health information systems as well as reinforcing migrant friendly public health services that cater for health care standards for all vulnerable migrant groups (WHO 2006). For future research on projects with African migrant communities, cultural based interventions, more public awareness on free and anonymous health services should be created and more persons from the African community should be engaged in the health promotion. These can either be health specialists or voluntary workers with experience in the field of public health. There is also need for provision of funds from the ministry of health to support development programmes and projects within the African communities in Hamburg. Apart from that, piloting HIV testing programmes in regions where most migrants population reside for instance, might improve the easy accessibility and acknowledgement of such programmes.

Appendices

Appendix 1: Questionnaire page. 1

HEALTH PROMOTION QUESTIONNAIRE 16 April 2015

WHO AM I?

I am a student in the field of Health Sciences in the University of Applied Sciences in Hamburg. My motivation for doing this survey is my passion for contributing to the society through health promotion. It is a pleasure getting the opportunity to work with people from my community and I count on your assistance for a successful completion of this survey.

WHY CARRY OUT THIS STUDY?

The aim of this survey is to find out the barriers to HIV-Testing within the African Community in Hamburg. This survey will be evaluated anonymously. The participation is voluntary and you will need 5-10 minutes to answer all the questions. Please do not write your name or address on the questionnaire. Try to answer all questions and fill in the questionnaire just once.

General health questions

1. **What do you do when you have health problems? (you can give more than one answer)**

- o I go to a doctor
- o I go to a traditional healer
- o I ask help from my friends
- o I browse the Internet
- o I treat myself
- o I don't know where to go to
- o Other:_____

2. **Do you have a health insurance valid in Germany?**

- o Yes
- o No

Questions about CASA blanca

3. **Have you ever heard about CASA blanca (center for AIDS and other sexual transmitted diseases)?**

- o Yes
- o No

4. **Do you know that you can get tested for HIV and other sexual transmitted diseases like chlamydia, gonorrhea etc. free of charge and anonymously in CASA blanca?**

- o Yes
- o No

5. **Do you know CASA blanca offers pregnancy conflict counselling?**

- o Yes
- o No

6. **Which of the following services offered by CASA blanca would you like to get more information about? (you can give more than one answer)**

- o HIV-(AIDS) test
- o Hepatitis test and vaccination
- o Pregnancy Test
- o Support for friends with sexual transmitted diseases
- o Safer sex
- o Birth control pills
- o Personal problems

Please turn →

1

Appendix 2: Questionnaire page. 2

HEALTH PROMOTION QUESTIONNAIRE 16 April 2015

7. How would you like to get information about these services?

- o From flyers and brochures
- o From someone from my community
- o From websites
- o From social networks like Facebook
- o Through participation in a workshop

Attitude toward HIV Testing

8. Do you think you are well informed about HIV and other sexual diseases?

- o Yes
- o No

9. Have you ever been tested for HIV?

- o Yes
- o No
- o I don't know

9a. if yes: When was the last time you got tested for HIV?

- o Within the past 1 years
- o 2 years ago
- o 3 years ago
- o More than 3 years ago
- o Am not sure

9b. if no : Why have you not tested for HIV?

Block-A

- o I don't know where to go for a test
- o I don't think am HIV-positive
- o I always use condoms
- o I don't have symptoms of HIV-infection
- o I don't trust the institutions that do the testing

Block- B

- o I'm afraid I could be HIV-positive
- o Am afraid to be rejected by others in case I am positive
- o I don't know if I can get treatment
- o A test would be too expensive
- o It is not important to me (because I have other things to worry about)

Block- C

- o I don't believe that HIV exists
- o Am afraid to be deported if I am HIV-positive
- o I don't feel comfortable in a German speaking environment
- o I have never had sex

Others:_____

10. Is HIV/AIDS a taboo in your community?

- o Yes
- o No
- o I don't know

Please turn →

2

Appendix 3: Questionnaire page. 3

HEALTH PROMOTION QUESTIONNAIRE 16 April 2015

Apart from attitude towards testing, I would like to ask you one question about your sex life.

11. With whom do you have sexual contact with?

- o With women
- o With men
- o With women and men
- o With transsexual people
- o I don't want to answer this question

In question 12-18, I would like to ask you about yourself.

12. Gender

- o Male
- o Female
- o Transsexual

13. Status

- o Single
- o Married
- o In a stable relationship

14. Age

- o 15-19
- o 20-29
- o 30-39
- o 40-49
- o 50-59
- o 60 and more

15. Religion

- o Christian
- o Islam
- o Hinduism
- o Traditional-African
- o No religion/Atheist

16. Highest level of education

- o None
- o Primary
- o Secondary
- o College
- o University
- o Other:_____

17. Country of origin: _____

18. How long have you been living in Germany?

- o _____ years _____months
- o Since birth

Please turn →

3

Appendix 4: Questionnaire page. 4

HEALTH PROMOTION QUESTIONNAIRE 16 April 2015

WHAT ELSE IS IMPORTANT?

This study is supported by CASA blanca (Center for Aids and Sexual Transmitted Diseases in Altona). For any question, please contact us at:

Study Coordinator in Hamburg

Ms. Marina Linet

University of Applied Sciences Hamburg

Email: marina.linet@haw-hamburg.de

Study supervisor in Hamburg (University of Applied Sciences Hamburg)

Prof. Dr. Christine Färber

Department of Health Sciences

Email: christine.faerber@haw-hamburg.de

Study supervisor in Hamburg (Centre for Aids and sexual transmitted diseases)

Mr. Johann Fontaine

Email: johann.fontaine@bgv-hamburg.de

Thank you for your Participation.

4

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STATUTORY DECLARATION

I declare that I have authored this thesis independently, that I have not used other than the declared sources / resources and that I have explicitly marked all material which has been quoted either literally or by content from the used sources.

Marina Linet

Date_____ Signature_____