UTILIZATION OF HIV SERVICES AMONG MEN-WHO-HAVE-SEX-WITH MEN IN NAIROBI COUNTY, KENYA.

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NOVEMBER, 2016
DECLARATION

Student’s Declaration

This thesis is my original work and has not, to the best of my knowledge, been presented for degree in any other college, university, and institution or examination body.

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DEDICATION

I dedicate this work to my God for giving me strength, health, and sound mind through this course. I also dedicate this work to my family for the giving me the necessary moral and financial support to undertake the project.
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Sincere thanks to my knowledgeable, experienced and able supervisors, Dr. Andrew Yitambe and Dr. Peterson Warutere, for their guidance in this thesis from the beginning to the end. I will always be grateful to them for the confidence, support, belief and patience they have instilled in me.

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# TABLE OF CONTENTS

DECLARATION .......................................................................................................................... ii  
DEDICATION .......................................................................................................................... iii  
ACKNOWLEDGEMENT ......................................................................................................... iv  
LIST OF FIGURES ............................................................................................................... viii  
LIST OF TABLES ................................................................................................................ ix  
DEFINITION OF OPERATIONAL TERMS ...........................................................................x  
ABBREVIATIONS AND ACRONYMS .................................................................................... xii  
ABSTRACT ............................................................................................................................ xiii  

**CHAPTER ONE: INTRODUCTION** .....................................................................................1  
1.1 Background of the Study ................................................................................................. 1  
1.2 Statement of the Problem ............................................................................................... 3  
1.3 Justification ................................................................................................................... 5  
1.4 Research Questions ........................................................................................................ 5  
1.5 Research Objectives ....................................................................................................... 6  
1.5.1 Main Objective .......................................................................................................... 6  
1.5.2 Specific Objectives .................................................................................................... 6  
1.6 Hypothesis ..................................................................................................................... 7  
1.7 Significance of the Study and Anticipated Output ......................................................... 7  
1.8 Limitations and Delimitations of the Study ................................................................. 7  
1.9 Conceptual Framework ................................................................................................. 8  

**CHAPTER TWO: LITERATURE REVIEW** .........................................................................11  
2.1 Introduction .................................................................................................................... 11
<table>
<thead>
<tr>
<th>Chapter 2: Utilization and Utilization Patterns of HIV Services ..........</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3 MSM Knowledge, Perceptions and Experiences in Utilization HIV Services ..........</td>
<td>14</td>
</tr>
<tr>
<td>2.4 Role of Health System Factors in HIV/AIDS Services Utilization ..........</td>
<td>16</td>
</tr>
<tr>
<td>2.5 Summary of Gaps ...................................................................</td>
<td>19</td>
</tr>
</tbody>
</table>

**CHAPTER THREE: MATERIALS AND METHODS .........................20**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Research Design .................................................</td>
</tr>
<tr>
<td>3.2</td>
<td>Location of the Study ............................................</td>
</tr>
<tr>
<td>3.3</td>
<td>Target Population ................................................</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Inclusion Criteria .................................................</td>
</tr>
<tr>
<td>3.3.2</td>
<td>Exclusion Criteria .................................................</td>
</tr>
<tr>
<td>3.4</td>
<td>Sampling Techniques and Procedures ..........................</td>
</tr>
<tr>
<td>3.5</td>
<td>Sample Size and Sample Size Determination ................</td>
</tr>
<tr>
<td>3.6</td>
<td>Data Collection Tools .............................................</td>
</tr>
<tr>
<td>3.7</td>
<td>Pre-testing of Study Instruments .............................</td>
</tr>
<tr>
<td>3.8</td>
<td>Reliability and validity of Study Instruments .............</td>
</tr>
<tr>
<td>3.9</td>
<td>Data Collection Techniques and Procedures .................</td>
</tr>
<tr>
<td>3.10</td>
<td>Data Analysis .......................................................</td>
</tr>
<tr>
<td>3.11</td>
<td>Care and Protection of Research Participants ...............</td>
</tr>
<tr>
<td>3.12</td>
<td>Ethical Considerations ............................................</td>
</tr>
</tbody>
</table>

**CHAPTER FOUR: RESULTS ..................................................28**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Introduction .......................................................</td>
</tr>
<tr>
<td>4.2</td>
<td>Socio-demographic characteristics of study respondents ....</td>
</tr>
<tr>
<td>4.3</td>
<td>HIV Service Utilization Patterns among MSM ................</td>
</tr>
<tr>
<td>4.4</td>
<td>MSM Knowledge on HIV/AIDS ....................................</td>
</tr>
<tr>
<td>4.5</td>
<td>Sexual Behaviours among MSM ..................................</td>
</tr>
</tbody>
</table>
4.6 Health System Factors among MSM .................................................................................. 47

CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS ................................................. 54

5.1 Introduction .................................................................................................................. 54
5.2 Discussion of Findings ............................................................................................... 54
5.3 Conclusions ................................................................................................................ 62
5.4 Policy Recommendations ......................................................................................... 63
5.5 Recommendation for Further Research .................................................................... 64

REFERENCES .................................................................................................................................. 65

APPENDICES .................................................................................................................................. 71

Appendix I: Consent Form ................................................................................................. 71
Appendix 2: Survey Questionnaire for MSM health services utilization ...................................... 74
Appendix 3: Key Informant Interview Guide ........................................................................... 79
Appendix 4: Map of the Study Area (Njiru Sub-County) ......................................................... 80
Appendix 5: Ethical Review Letter from KUERC ................................................................. 81
Appendix 6: Research Authorization letter from Nairobi County Government ....................... 82
LIST OF FIGURES

Figure 4.1: Age, Marital status and Education of study respondents .............................29
Figure 4.2: Emloyment and Average Monthly Income of study respondents .................30
Figure 4.3: Level of utilization of HIV services ..........................................................30
Figure 4.4: HIV testing, status and treatment ............................................................31
Figure 4.5: HIV services sought .................................................................................32
Figure 4.7: Health Facilities used ..............................................................................33
Figure 4.8: Persons to whom sexual identities is disclosed .............................................35
Figure 4.9: Sexual Orientation of identities used .............................................................34
Figure 4.10: Knowledge regarding HIV transmission ....................................................36
Figure 4.11: Knowledge on HIV/AIDs prevention .........................................................37
Figure 4.12: Knowledge on HIV/AIDs transmission and prevention .............................37
Figure 4.14: Access to health information ....................................................................38
Figure 4.15: Vulnerability to HIV infection .................................................................40
Figure 4.16: Engagement in sex for a pay .................................................................41
Figure 4.17: Engagement in sex for a pay .................................................................42
Figure 4.18: Type of sex practised ..............................................................................43
Figure 4.19: Existence of multiple sexual partners .......................................................44
Figure 4.20: Number of sexual partners .....................................................................45
Figure 4.21: Friendliness of HIV service delivery facilities .........................................50
Figure 4.22: Satisfaction with HIV service delivery facilities .....................................51
LIST OF TABLES

Table 4.1: Knowledge on HIV/AIDS in relation to utilization of HIV services ..............39
Table 4.2: Influence of MSM Knowledge on utilization of HIV services ....................40
Table 4.3: Sexual behavior in relation to HIV service utilization.............................46
Table 4.4: Influence of sexual behavior on HIV services utilization .........................46
Table 4.5: Health System Factors.................................................................47
Table 4.6: Health system factors in relation to utilization of HIV services .................52
Table 4.7: Influence of health system factors on HIV service utilization ....................53
DEFINITION OF OPERATIONAL TERMS

**Bisexual**
Having sexual partners of both the same and the opposite sex.

**Gay man**
A man who has romantic, sexual and/or intimate feelings for other men. ‘Gay’ is generally a more commonly used term for homosexual. The term *men who have sex with men* (MSM) should be used unless individuals or groups self-identify as gay.

**Health service**
Any form of curative service offered to an MSM who might be suffering from STI (HIV and non HIV infection) at a health facility.

**Health service utilization**
The number of visits/consultation made (at least once) by an individual in the last six months with a public health facility.

**Heterosexuality**
The sexual orientation in which an individual has romantic or sexual feelings towards members of the opposite sex.

**Homophobia**
Discrimination, stigma, fear or hatred based on homosexuality, directed at gays, lesbians, bisexuals and transgender people.

**Homosexuality**
The sexual orientation in which an individual has romantic or sexual feelings towards members of the same sex.
MSM Men who have sex with men. This term includes not only men who self-identify as gay or homosexual and have sex only with other men but also bisexual men as well as men who self-identify as heterosexual but have sex with other men.

Public health facility This is a health facility structure owned by the County government or National government in Kenya.

Sexual behavior The manner in which people express their sexuality. Examples of this behavior can include physical or emotional intimacy and sexual contact.

Sexual orientation The term used to describe the set of emotional, physical and romantic feelings an individual has towards others. These feelings and behaviors are usually directed towards men or women, or both men and women.

Sexually transmitted infection Infection transmitted and acquired through sexual contact.

90-90-90 Target This stands for year 2020 UNAIDS target of 90% of all people living with HIV Knowing their HIV status, 90% of all people with diagnosed HIV infection receiving sustained antiretroviral therapy and 90% of all people receiving antiretroviral acquiring viral suppression.
ABBREVIATIONS AND ACRONYMS

FGDs  Focus Group Discussion
KII  Key informant interview
MARP  Most at risk population
MOH  Ministry of Health
MoPHS  Ministry of Public Health and Sanitation
MSM  Men who have sex with men
NACC  National Aids Control Council
NASCOP  National AIDS and STI control program
NLTP  National Leprosy and tuberculosis program
SDGs  Sustainable Development Goals
TB  Tuberculosis
UNAIDS  United Nations Programme on HIV/AIDS
WHO  World Health Organization
ABSTRACT

The new constitution promulgated in 2010 clearly state every Kenyan without discrimination is entitled to the highest attainable quality of health care, which is not reflected with the current challenges men-who-have-sex with men continue to face in the sexual health service utilization. Kenya struggles in its response to this ongoing crisis amongst MSM in many areas including disease prevention, treatment, and HIV related stigma, prejudice, and discrimination. Currently little information is reported on MSM health services utilization. The wider spread of STIs including HIV beyond the MSM community is real hence need for urgent intervention. Therefore, the overall aim of this study was to assess HIV services utilization among MSM in Njiru Sub-County, Nairobi County. This study used a descriptive cross-sectional study design employing both quantitative and qualitative methods of data collection. Snowballing sampling technique was used to sample 149 respondents who participated in this study while purposive sampling design was used to select and interview 15 key informants. Descriptive, chi-square and binary regression was used to analyze quantitative data from study survey using SPSS while qualitative data from key informants was analyzed thematically using Nvivo. On utilization, findings revealed that 86% of MSM had sought HIV services within the last 6 months. Self-reported HIV prevalence rate among MSM was 53%. On patterns of utilization, NGOs programs and outreaches were the most preferred centers due to their user-friendliness. In relation to knowledge, 86% of MSM had correct knowledge on HIV transmission and prevention. There was a statistically significant relationship between access to health information on transmission and prevention of HIV/AIDS (p=0.001) and utilization of HIV services. In terms of sexual behavior, 67% of the MSM had engaged in unprotected sex with about 63% of MSM engaging in sex for a pay. There was a statistically significant relationship between exposure to unprotected sex (p=0.010), regular use of condoms during sex (p=0.05), involvement in sex for a pay (p=0.021) and utilization of HIV services. In relation to health system factors, about 50% of MSM had experienced stigma, discrimination and dismissive attitude from health staff when seeking HIV services. There was a statistically significant relationship between denial of services based on sexual orientation (p=0.001), mistreatment by health staff (p=0.043), experience of discrimination at service delivery points (p=0.025), discrimination by community members (p=0.025), awareness of anti-same sex laws (p=0.004), privacy and confidentiality (p=0.022), friendliness of health staff (p=0.001), access to adequate HIV/AIDS information (p=0.036), perceived quality of HIV services (0.032) and utilization of HIV services. In conclusion, there was a high HIV prevalence rate among MSM partly due to their risky sexual behaviours. There is a high risk of vertical and horizontal HIV transmission among the group due to existence of multiple male and female sexual partners. Currently, MSM are facing increasing stigma, discrimination and dismissive attitude which limit their ability to demand and utilize HIV services. Therefore, there is need to enhance programs which advocate and promote safe sexual behaviours among MSM, reduce stigma and discrimination of MSM to enhance their willingness to use HIV services.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The new constitution promulgated in 2010 clearly state every Kenyan without discrimination is entitled to the highest attainable quality of health care, which is not reflected with the current challenges men-who-have-sex with- men continue to face in health service utilization. Kenya struggles in its response to this ongoing crisis amongst MSM in many areas: disease prevention, treatment, and HIV related stigma, prejudice, and discrimination. Currently little information is reported on HIV health services utilization among MSM. Despite the above most same-sex practicing Africans live in highly stigmatizing and discriminatory settings, which put them at risk of emotional and/or physical harm and increasing sexual service utilization barriers.

General denial of MSM existence and associated stigma has discouraged Africans from conducting MSM research for fear that others would ridicule them or even question their sexual orientation (Blackwell et al., 2013). In most African countries except South Africa, same-sex sexual behavior is criminalized. The Kenya Penal Code, in sections 162 to 165, specifies that “unnatural offences or act are against the order of nature (which include homo sexual offence)” may be penalized with up to fourteen years in prison (Yatich, 2013). African MSM, therefore, rarely publicly declare their sexual orientation which impedes their ability to consume sexual health services and other services provided. This has impeded provision of user friendly health services and targeted
programs for the MSM which has contributed to increasing HIV prevalence and risky behaviors among this key population.

According to UNAIDS (2014), the association of punitive laws and poor health outcomes for key populations across the world and especially Sub-Saharan Africa; Less than half of people living with HIV among key populations in these countries know their HIV status. Removing laws and policies that impede testing and treatment efforts for key populations is essential to achieving the 90-90-90 HIV treatment target. For instance, In Kenya, men who reported only having sex with other men were reported to have HIV prevalence of 43% (Sanders et al., 2007).

MSM also experience stigma in multiple and overlapping ways; MSM describes stigmatizing experiences stemming from religious sources, communities, family and friends, and from the medical establishment. Moreover, it is revealed that homophobia and HIV-related stigma are related (IGLHRC, 2007). Stigma and discrimination, in the broader social environment but especially in health care settings, deter many members of key populations from learning their HIV status or accessing life-saving prevention and treatment services (UNAIDS 2014).

Surveys through the People Living with HIV Stigma Index indicate that members of key populations commonly experience disapproval, rejection and sub-optimal services in health care settings. These hidden populations commonly confront hostility, judgmental or dismissive attitudes when they attempt to access health services (Gender Dynamix,
The denial of existence of this group and lack of targeted services continues to jeopardize the overall efforts to combat the AIDS epidemic in Sub-Saharan Africa such as in Kenya (IGLHRC, 2007). It is on this basis that this study sought to assess HIV health service utilization among MSM in Njiru Sub-County so as to provide insight and contextual information for this highly stigmatized population with policy implications.

1.2 Statement of the Problem

Globally, less than one out of 20 men who have sex with men (MSM) have access to HIV prevention and care especially in Africa where stigmatization, discrimination, and criminalization of homosexual behavior persists, and where the existence of MSM has been publicly denied at all levels including by some heads of state (UNAIDS; 2014). It is estimated that HIV has a disease burden of over 34 million people with MSM contributing at least 5-10% of all HIV infections worldwide (UNAIDS, 2014).

Although HIV burden and prevalence in Kenya has been declining over time (from 13.4% in 2000 to 5.6% in 2013), HIV prevalence among the key population remains high compared to the general population (UNAIDS, 2014). For instance, it is estimated that 5.6% of adults are infected with HIV (KAIS 2012), with about 18.2% per cent of all new HIV infections attributed directly or indirectly to MSM in Kenya (Kenya AIDS Response Progress Report, 2014). A study indicated that Herpes simplex virus type two (HSV-2) prevalence among men in both Nairobi and Mombasa is at 37.8% and 39.7% respectively (Blackwell, et. al, 2013). Further, about 60% of MSM in Nairobi are bi sexual and 22% of MSM reported having at least one child (Population council, 2009) which constitutes a
serious public health problem; a study by Yatich (2013) found that over 50% of MSM have multiple sexual partners, women and are bisexual men, indicating that the sexual networks of MSM extend to the general population. Condom and use of water based lubricants is low (24%) among the MSM (Population Council, 2009).

Despite of the higher risk for HIV acquisition among the key populations, key populations are often the least likely group to access HIV services. For instance, a global survey found that only 14% of men who have sex with men living in low-income countries reported having meaningful access to HIV treatment services (Arreola et al. 2012). This means that a large proportion of the MSM don’t use the available HIV services which undermines efforts to eradicate HIV/AIDS pandemic. This has been attributed to disapproval, rejection, punitive laws, discrimination, stigma, hostility, judgmental, dismissive attitude by health professionals and sub-optimal services delivery in health care settings (Gender Dynamix, 2012, UNAIDS, 2014).

This has been linked to increasing burden of HIV among the key populations and specifically MSM. For example, according to Baral et al. (2013), men who have sex with men worldwide are 19 times more likely to be living with HIV than adult men overall. In developing countries such as Kenya, it will not be possible to achieve the 90-90-90 target by focusing on mainstream service systems only (UNAIDS, 2014). Tailored approaches and strategies, developed collaboratively with key populations themselves, are needed to achieve treatment goals for the key populations heavily affected by the HIV/AIDS pandemic including investments in community infrastructure. This will provide a remedy
to the slow progress in universal health coverage especially in relation to HIV/AIDS prevention and management efforts for the MSM. Therefore, this study aims to assess utilization of HIV services among MSMs to inform targeted policies and interventions to scale service utilization.

1.3 Justification
Nairobi County was selected because of its high MSM populations; estimated to be about 3000-10000 (NASCOP 2013). In regards to utilization of HIV services, there was insufficient documentation on HIV service utilization among the MSM in Kenya and more specifically Nairobi County which continues to undermine progress towards the 90-90-90 target, the SDG goals and universal health coverage agenda. Understanding health services utilization for this group is fundamental in designing tailored strategies for the achievement of local, national and multi-bilateral development goals especially on health such as SDGs.

1.4 Research Questions
The research objectives were translated into the following research questions:

1. What is the pattern of HIV service usage among MSM living in Nairobi County, Kenya?

2. What is the level of knowledge on HIV services utilization among MSM living in Nairobi County, Kenya?
3. What sexual behaviors influence HIV services utilization among MSM living in Nairobi County, Kenya?

4. What health system factors influence HIV services utilization among MSM living in Nairobi County, Kenya?

1.5 Research Objectives

1.5.1 Main Objective

To establish utilization of HIV health services among Men having Sex with Men in Nairobi County.

1.5.2 Specific Objectives

The study addressed four specific objectives:

1. To establish the pattern of HIV services usage among MSM living in Nairobi County, Kenya

2. To determine level of knowledge on HIV services utilization among MSM living in Nairobi County, Kenya

3. To establish the sexual behavior of MSM influencing utilization of HIV services in Nairobi County, Kenya

4. To determine health system factors influencing HIV health services utilization among MSM living in Nairobi County, Kenya
1.6 Hypothesis

There is no association between knowledge, sexual behavior, health system factors and utilization of HIV services among MSM living in Nairobi County.

1.7 Significance of the Study and Anticipated Output

This study provided useful insight on health service utilization for HIV services among the MSM. This information is key in driving policy guidelines and programme designs and interventions for this hidden group with an aim of scaling up their service utilization as well as adoption of healthy behaviours in relation to HIV pandemic. The study findings contributed in informed planning, delivery and advocacy of targeted and high quality HIV services for the MSM in Njiru Sub-County and similar environs. Moreover, the study added to the rare global research evidence for documentation, referencing and further research.

1.8 Limitations and Delimitations of the Study

The study focused on MSM in Njiru sub-county due to limitation of time and resources. Therefore, the study findings could not be generalized to MSM residing in rural areas of Kenya. Additionally, due to the hidden nature of the respondents, a snowballing approach was used to identify and reach study respondents.
1.9 Conceptual Framework

The conceptual framework below illustrates the relationship between the independent variables and the dependent variable of the study (Utilization of HIV services among MSM).

- The independent variables of the study were:
  
  o HIV services utilization patters. The elements to be studied will include:
    points of HIV service use, type of services sought, reasons for utilization and
disclosure of identity
  
  o Sexual behaviours. The elements studied in this variable included:
    Unprotected sex, sex for a pay, use of condoms, type of sex and multiple
sexual partners
  
  o Knowledge on HIV/AIDs. The variable will incorporate three elements:
    knowledge on HIV transmission, Knowledge on HIV prevention and exposure
to HIV prevention information
  
  o Health system factors. The elements studied under this variable included;
    stigma and discrimination, staff attitude, access to services, access to
information, privacy and confidentiality, laws/policies and perceived service
quality
The dependent variable of the study was HIV services utilization. This variable will be measured by the proportion of MSM who had used HIV services within the last six (6) months.
Independent variable

Patterns of HIV Service Usage
Sexual services points, type of services, reasons for utilization, disclosure of sexual identity

Sexual Behaviors
Unprotected sex, sex for a pay, use of condoms, type of sex and multiple sexual partners

Knowledge on HIV/AIDs
- HIV transmission
- HIV prevention

Health System Factors
Health worker’s attitude, Access, Privacy and confidentiality, past experiences, health policies, availability, Social support networks

Dependent variable

Utilization of HIV services
- Use of HIV services
- Non-use of HIV services

Source: Adapted from Arreola et al. (2012)

Figure 1.1: Conceptual model
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction.
This chapter discusses similar and related literatures on MSM HIV services utilization. The literatures discuss HIV service utilization and utilization patterns among MSM, perceptions and experiences of MSM on HIV service utilization and factors related to health service utilization among MSM.

2.2 Utilization and Utilization Patterns of HIV Services
While the global response to the HIV pandemic has progressed over the decades both in scale and in efforts to reach diverse and vulnerable groups, stigma and discrimination still follow affected individuals in many settings (Lancet Infectious Diseases, 2010). Stigma and discrimination, in the broader social environment but especially in health care settings, deter many members of key populations from learning their HIV status or accessing life-saving prevention and treatment services (UNAIDS 2014). Surveys through the People Living with HIV Stigma Index indicate that members of key populations commonly experience disapproval, rejection and sub-optimal services in health care settings. Transgender individuals commonly confront hostile, judgmental or dismissive attitudes when they attempt to access health services (Gender Dynamix, 2012).

In sub-Saharan Africa, same-sex practices are highly stigmatized and in many countries, criminalized. While the HIV epidemic has mainly been driven by heterosexual and
vertical transmission in Africa, data on the disproportionate burden of HIV among MSM continues to emerge (IGLHRC, 2007; Baral et al., 2009). In Zambia, a survey among MSM found that 33% of the participants self-reported infection with HIV, compared to a national adult HIV prevalence of 15.2% (Baral et al., 2009). In Kenya, men who reported only having sex with other men had an HIV prevalence of 43% (Sanders et al., 2007). However, according to UNAIDs (2009), Prevalence statistics indicated that 23 percent of MSM in Mombasa and 25 percent in Nairobi are HIV positive. Most Sub-Saharan countries in this study have generalized HIV epidemics, but data on the proportion of cases among MSM is unknown. In Kenya, same-sex practices are criminalized most Sub-Saharan countries, and only a few governments such as South African, have funds allocated to prevention programs for MSM (Baral et al., 2009).

HIV among MSM in these settings may go undetected as men avoid situations in which their sexuality and/or HIV infection status may be disclosed due to perceptions of discrimination or stigma that may result from such disclosures. For instance, among participants enrolled in an exploratory study among MSM in Malawi, 30% reported fear of discrimination and stigma if they were to disclose their sexuality to others, despite that the majority of participants felt comfortable with their sexual orientation (Ntata et al., 2008) and in Bangkok, 25% of drug users surveyed reported avoiding health care due to the fear of compulsory treatment (Kerr et al., 2014).

Similarly, the above-noted global survey of men who have sex with men found that experience of homophobia was the single most important factor diminishing health care
utilization for this population (Arreola et al., 2012). Baral and colleagues reported that only 9% had ever disclosed to a health care worker (Baral et al., 2009). As a result of such anticipated stigma, men who engage in same sex behavior may therefore be too fearful to seek medical care or information on HIV and prevention measures.

In South Africa, where discrimination on the basis of sexual orientation is constitutionally prohibited, non-gay identified MSM avoided disclosing sexual practices to healthcare workers after witnessing and/or learning of verbal abuse experienced by gay men in STI clinics. Moreover, gay identified MSM avoided seeking sexual health services, often at the expense of their health, or sought non-stigmatizing services (Lane et al., 2008). Access to and utilization of HIV prevention and care by MSM is often influenced by layered stigma, associated with stigma related to both sexuality and HIV diagnosis. In addition, MSM have increased vulnerability to sexually transmitted infections (STIs) such as chlamydia, gonorrhea and syphilis as well. Studies have identified that sores or lesions caused due to STIs pave the way for HIV transmission among MSM through the anal route (Sean, 2013).

According to the Population Council’s (2008), 75 percent of MSM in Nairobi reported condom use during their last anal sex act and 21 percent reported having only one male sexual partner during the past year. In addition, 57 percent reported taking an HIV test—of which 98, percent received their test results—more than double the rate of the general population as reported by Demographic and Health Surveys (DHS) in 2003.
2.3 MSM Knowledge, Perceptions and Experiences in Utilization HIV Services

Comparing perceived and experienced stigma levels between HIV-positive MSM and HIV-positive men who had sex with women in Cape Town, South Africa, it was found that while MSM and men who have sex with women had similar levels of internalized AIDS stigma, HIV-positive MSM experienced higher levels of discrimination compared to the men who had sex with women, suggesting the multi-faceted stigma experienced by men with same-sex behaviors and HIV-positive status (Cloete et al., 2008). Perceived and experienced stigma not only impact access to health care services, but also limit the information MSM receive on HIV transmission and prevention to that which is specific to heterosexuals.

In Sub-Saharan Africa, many MSM have reported incorrect information about HIV transmission. In Sudan, 55% of MSM thought prevention methods for sex with a woman did not apply to anal sex, and in Zambia, 73% of MSM thought anal sex was safer than vaginal sex (Zulu, 2006). From a clinical standpoint, perceived stigma may impact how one responds to infection. Concealing one’s sexuality places greater stress on an individual and has been associated with lower CD4 T-cell count and overall poorer health among HIV-positive MSM. Disclosing both sexual orientation and HIV-positive status have independently shown an increase in CD4 cell counts, linking psychological distress to immune functioning due to improved sexual health services utilization (Strachan et al., 2007). It has been noted that stigmas including HIV/AIDS related stigma makes it difficult for MSM to talk about their health concern and to even disclose their sexual
orientation compounds it further. Stigma fuels misinformation and contributes to MSM denial of their risk status perception and ultimate health seeking behavior (Yatich, 2013).

In some countries such as Kenya and Tanzania, laws banning male-to-male sexual contact exist and are enforced. As a result, many MSM perceive this to be a major barrier in health service utilization. This creates several barriers to accessing health care services among this key group. It has been observed that countries that have decriminalized MSM behavior and offered legal protections to MSM such as South Africa, receive as a benefit, more MSM coming forward for prevention, testing and treatment (NASCOP, 2012). This criminalization behavior of MSM contributes to secrecy, marginalization, and reduced access to sexual health services (PAHO, 2011). Irrespective of the law, African public opinion ranks as the most homophobic in the world in international opinions surveys – on average 85–99% of African people consider that homosexuality should not be accepted by society (Ottosson, 2010).

Many MSM have also reported harassment and abuse associated with their sexual orientation when seeking health services. Some have reported denial and bad names “labels” from health care workers during episodes of care. This has affected adversely self-esteem and confidence of the MSM resulting to self-medication and or avoidance of formal sexual health services. Existence of MSM criminalizing laws has been cited as a key barrier in the access of sexual health services for this key population. MSM have continued to perceive service delivery points as un-friendly to their needs (NASCOP, 2012).
2.4 Role of Health System Factors in HIV/AIDs Services Utilization

Poor access to care can lead to an underutilization of services, such as HIV voluntary counseling and testing, and ultimately to low self-awareness of HIV sero-status. A recent HIV vaccine preparedness trial in Kenya reported a baseline HIV prevalence of 25% among MSM, all of whom were previously unaware of their HIV-positive status (van and Sanders, 2008). In South Africa and Kenya, MSM reported that perceived stigmatization due to HIV-positive status and/or their sexuality presented a barrier to seeking health care services (Sharma et al., 2008; Lane et al., 2008). Stigma and discrimination remains as one of the most potent barriers to the utilization of HIV prevention and treatment services, among the MSM (Himanshu & Priyanka, 2014).

There exists need to address homosexual stigma in the general population with joint accountability and responsiveness and designing the interventions to maintain a focus towards homosexuality and homosexual stigma, which might help avoiding internalizing the negative consequences that follow addressing their overall health as well (Ramirez-Valles et al., 2013). Health providers and staff are not well trained and educated on the specific knowledge, attitudes, and skills necessary for working with MSM. Additionally, there are no MSM-friendly clinics in most developing countries such as Kenya; the staff should be trained for confidential record-keeping, providing nonjudgmental, non-discriminatory treatment services and counselling on disclosure of HIV status and sexuality to family and peers. MSM peer outreach and engagement in HIV care and treatment services (Chakrapani et al, 2011; Himanshu & Priyanka, 2014). There are also
limited supportive peer norms and support networks for the MSM which hampers service utilization (Chakrapani et al, 2011).

According to Riggle et al., (2008), Disclosure as a gay man to oneself and to others is an important step for having a positive identity key in sexual health service utilization. MSM reports that belonging to the MSM community and social networks to be a positive aspect. Support from others of your “own tribe” was important and the commonality of experience (i.e., being gay) was a powerful coping mechanism. According to the study, many MSM experience rejection from their families of origin due to their sexual orientation resulting to creation of families of choice as a strategy of connecting with others due to part of being a sexual minority. This has been hypothesized to influence their information seeking behaviours.

According to population council report (2008), confidentiality was cited as the most important concern of MSM seeking health care in the Council’s Nairobi study. In addition, HIV service providers are often not trained or equipped to meet the specific HIV prevention and treatment needs of MSM. Health care providers have been reported to discriminate against, stigmatize, or even refuse to serve MSM, increasing their reluctance to seek health care. Further, existing HIV-related information generally does not address risks related to homosexual transmission. At the present time, very few African countries such as Kenya include MSM in their national plans for HIV control, and almost none allocate HIV-control resources to provide services for MSM specifically.
In 2008, 46 African countries reported that no health services were available for MSM including non-recognition of civil organization providing health services to MSM. The exclusion of key populations is often institutionalized in national laws and policy frameworks. MSM are routinely criminalized throughout the world, with compulsory detention a common practice in many countries; 78 countries criminalize same-sex sex; and transgender individuals routinely struggle to obtain legal recognition of their gender identity or protection from violence and employment discrimination (UNAIDS, 2014).

Enactment of anti-gay legislation can trigger extensive abuse and violence against men who have sex with men, a climate that is fundamentally incompatible with community empowerment, robust service uptake, and the development of a relationship of trust and mutual respect between individuals and their health care providers. The association of punitive laws and poor health outcomes for key populations is vividly evident in Asia and the Pacific (UNAIDS, 2014). For instance, removing laws and policies that impede testing and treatment efforts for key populations is essential to achieving the 90-90-90 target. A recent analysis by a team of health experts determined that decriminalization of sex work would reduce by 33-46% the number of new HIV infections among sex workers over the coming decade (Shannon et al., 2014).
2.5 Summary of Gaps

The chapter has examined past studies on HIV services utilization among MSMs in Kenya, Sub-Saharan Africa and globally. Reviews have shown that few studies were done in Kenya with no study focusing entirely on the MSM because most of the reports examined the different hidden groups who include commercial sex workers, lesbianism and drug addicts. This meant that most of the study results available cannot be conclusively generalized for the MSMs who have unique needs and values which impacts their health service utilization approaches.

Past studies had not adequately researched and reported on HIV services utilization rate among the group. Existing literatures present scanty information on their health care use behaviours and needs. There was also inconclusive exploration on the sexual behaviours of the group especially the risky behaviours where reports indicate a new trend in which young men are lured into sex escapades for a pay. This presents a new research opportunity that this study sought to establish and establish the role of pay in influencing safe sexual behaviours such as use of condoms.

On knowledge of individuals, reviews have established gaps on earlier studies in regards to how MSMs access information and its validity in regard to anal sex since most of the available documentations focus on heterosexuals. This information will provide an opportunity for designing and or scaling up relevant information useful to the unique needs of the group. Finally, the study examined the health system characteristics for health service delivery within the context of social structures.
CHAPTER THREE: MATERIALS AND METHODS

3.1 Research Design

The assessment used a cross-sectional descriptive study design employing use of qualitative and quantitative techniques of data collection so as to provide a snapshot of the study populations.

3.2 Location of the Study

The study covered Njiru sub County which has a general population of 356,681 and diverse social class people. It is located to the east of Nairobi capital covering the following area; Dandora, Kariobangi south, Mowlem/Umoja 3, Saika, Njiru, Mihang’o, Utawala, Ruai and Kamulu (See Appendix 4, map of Njiru Sub county).

3.3 Target Population

The assessment targeted a total of 608 MSM in Njiru community (Njiru Sub-County). In addition, the supervisors at the sub county health office, local MSM mobilizers and the allied stakeholders (Key informants) participated in the key informant interviews for the study. These key informants provided reliable and credible insight on HIV health services utilization for the MSM in the Sub-County.
3.3.1 Inclusion Criteria

The study respondents who participated in this study were required to:

1. Give informed consent to participate in the study
2. Be Men-who-have-sex-with-men. Bi-sexual were also included in the study
3. Be residents of Njiru Sub-County for at least 6 months

3.3.2 Exclusion Criteria

The study excluded participants who:

1. Were too sick to participate in the study based on self-report. Two respondents were excluded using this criterial
2. Respondents who were below 18 years old. One respondent was excluded for being less than 18 years old.

3.4 Sampling Techniques and Procedures

The study was a community based study. Njiru Sub County was selected using purposive sampling design due to two main reasons: (1) its current efforts of implementing intervention programme targeting MSM and (2) a third of the MSM in Nairobi County are estimated to live in Njiru Sub-County. However, due to the hidden nature of the study population, the study respondents were selected using a snowballing sampling/respondent driven sampling design. First, the researcher identified MSM mobilizers in the community who lead the researcher to the MSM. The MSM provided useful leads to other MSM in the community through their own networks. This helped identify other
MSM living in secrecy due to the sensitivity, confidentiality and privacy of their social networks.

3.5 Sample Size and Sample Size Determination

The quantitative sample size was determined using a formula by Fisher et al., (1998) as shown:

\[
\text{n} = \frac{Z^2 p (1-p)}{d^2}
\]

Where:

n= Sample size

Z=Standard Normal deviation (1.96 for a 95% confidence level)

P=the proportion of the population having the characteristic being measured, p=0.14 (according to Arreola et al. 2012, only 14% MSM are able to access health care in developing countries such as Kenya)

d=the level of accuracy desired, or the sampling error (Often set at 0.05).

\[
\text{n} = \frac{1.96^2 \times 0.14 \times 0.86}{0.05^2} = 186 \text{ Respondents}
\]

Since the population of MSM in Njiru Sub County is less than 10,000 (male population 15 years and above is101,369) (AWP, 2014) of which KAIS 2012 puts an estimate of 0.6% of men are MSM (608);
The sample size was adjusted using the formulae:

\[ nf = \frac{n}{1 + \left(\frac{n}{N}\right)} \]

Where:

- \( nf \) = the final sample size, when the population is < 10,000
- \( n \) = the sample size of the populations of the 10,000 or more
- \( N \) = the size of the total population from which the sample is drawn, Hence:

\[ nf = \frac{186}{1 + \left(\frac{186}{608}\right)} = 142 \text{ Respondents} \]

To cater for non-response, an allowance of 10% (14) was added which translated to a sample size of 156 respondents (MSM). The researcher issued 160 questionnaires. However, only 149 questionnaires were correctly filled and returned which represented a response rate of 93%.

In addition, the researcher interviewed 15 key informants who included: MSM program supervisors (coordinators), public health facilities in-charges and health care workers/providers especially in sexual health service units. Key informant interviews were conducted until the point of saturation was reached.

### 3.6 Data Collection Tools

All MSM who gave free consent to participate in the study were interviewed using a pre-tested structured questionnaire (Appendix II). Key informants for the study who included
program supervisors, public health facilities in-charges and health care workers were interviewed using a key informant interview guide (Appendix III).

3.7 Pre-testing of Study Instruments

Pre-testing of the study instruments was done in Westlands Sub County which is a distance from the selected study area. The purpose of pre-testing was to establish a common understanding of the tool by the research team and to determine the approximate time required to complete one questionnaire for purposes of ascertaining clarity and objectivity of questions. Following the pre-test, questions found to be unclear were revised and reframed. The lead researcher closely supervised the research assistants and supervisors during the data collection exercise by being available to provide guidance during the whole process of data collection in the field.

3.8 Reliability and validity of Study Instruments

During pre-testing of study tools, respondents were debriefed to test understanding and adequacy of research instruments. During debriefing, respondents were asked what they thought each question was asking. The respondents were asked if there are words that they did not understand or any expressions that they found unacceptable or offensive. Respondents were also asked to suggest items they thought should be included based on their understanding of the theme of the study. Subsequently, the interview tools were revised to reflect the corrections made. The responses by the respondents were compared for internal consistency and hence, reliability.
In terms of validity, the content, scope, response format and placement of questions in the data collection tools was carefully organized in relation to the objectives of the study inorder to enhance validity of the data collection instruments.

3.9 Data Collection Techniques and Procedures

Data was collected using a pre-tested questionnaire for the MSM and a pretested interview guide for the key informants. During survey data collection, the researcher obtained a list of MSM mobilizers from the sub-county health office. The respondents of the study were informed (through the sub-county office and MSM mobilizers) two weeks earlier of the study, its purposes, and its objectives and how to participate in the study. The MSM mobilizers helped to mobilize the participants as well as lead researchers to a suitable venue where they meet the MSM identified. The researchers sought their consent (Appendix 1) to participate in the study. Once the consent was given, the researchers administered the semi-structured questionnaire to selected respondents.

Three research assistants were recruited and trained to assist in carrying out data collection. Training was designed to equip research assistants with skills and knowledge for successful field data collection and management. The content of the training included an overview of the research including the problem investigated, research objectives, study methods, respondent’s interaction and handling techniques, ethical consideration, data quality assurance and field data management. A diploma in a health related discipline and evidence of prior experience in conducting research/programs among key population were the key requirements for selection.
The research assistants allowed the selected respondents about 30 minutes to fill the questionnaire before picking them for data entry and cleaning process. However, the research assistants were available to assist any respondent who needed assistance in filling the questionnaire. For the key informant’s interviews, the lead researcher conducted a 20-minute interview for each of the selected key informants who gave consent to participate in the study using a key informant interview guide (Appendix 111). Consent from the key informants to use voice recorders to facilitate capturing of the interview responses and for analysis purposes was also sought before recording the interviews. At the end of each interview, the lead researcher made summary of the key notes from the interview.

3.10 Data Analysis

The quantitative data from the study questionnaires was coded, entered into data screen, cleaned and analyzed using SPSS version 20. Descriptive statistics, chi-square and binary regression were used in the analysis of this data. Statistical inference was inferred at 5%. The qualitative data from the key informant interviews was also coded, entered, clean and analyzed using Nvivo computer software. The data was analyzed and reported based on the key objectives of the study.

3.11 Care and Protection of Research Participants

The researcher observed due diligence in caring and protecting all research participants for the study. First, informed consent to participate in the study was obtained from all eligible study respondents. The researcher administered an informed consent form which
detailed the purpose, risks and benefits associated with the study to ensure that respondents were able to make informed decision in regard to participating in the study (Appendix 1). For purpose of protecting the respondents from possible risks associated with unintentional exposure of their identities, confidentiality and privacy was ensured and maintained throughout the study. In addition, neutral venue preferred by the participants was used to conduct the interviews. This minimized exposure of the respondents to risks of exposure.

3.12 Ethical Considerations

The researcher ensured that the ethical requirements of carrying out the study were adhered to. The researcher sought ethical clearance and approval from Kenyatta University Board of Post Graduate studies, the National Council for Science, Technology and innovations and Local administrative offices (County and sub-county facility and community). For purposes of confidentiality and privacy of respondents, the identities of the respondents involved in the study was duly protected by ensuring that the names of the participants were not indicated in the data collection tools. Data collected from the field was kept in a lockable box to ensure security and confidentially and only the PI had access to the contents thereof.
CHAPTER FOUR: RESULTS

4.1 Introduction

This chapter presents the findings of the study based on research objectives. The researcher issued 160 questionnaires to study respondents but 149 questionnaires were correctly and returned which represented a response rate of about 93%. Therefore, this section will represent Descriptive, Chi-square and Binary regression analysis and qualitative results of the study. The descriptive results are presented first then followed by Chi-square and Binary regression. Chi-square and Binary regression analysis of the study variables was done to determine the influence of study variables on the utilization of HIV services. Qualitative results from KII were integrated with quantitative results for easier understanding and validation. The results are presented as follows: socio-demographic characteristics of the respondents, level of utilization of HIV services, HIV services utilization patterns, Sexual behaviours and health system factors.

4.2 Socio-demographic characteristics of study respondents

4.2.1 Age, Marital Status and Education Level

Figure 4.1 presents summary of the age, marital status and education level of respondents. Respondents were aged between 18 and 40 years old. About half (49.7%; 74) of the respondents were aged 23-28 years. In general, almost all the respondents (97.3%; 145) were youths. Majority of the respondents 87.9%; 131) were single while only 9.7% of them were married. Majority of the respondents (59.7%, 85) had attained at least a college level of education and or above.
Figure 4.1: Age, Marital status and Education of study respondents

4.2.2 Employment and Average Monthly Income

Figure 4.2 presents summary of the employment and monthly income level of respondents. Majority of the respondents (76%; 51) had no employment. Only a small proportion of the respondents (11.4%; 17) were employed for a pay while 37.6% of the respondents were self-employed. Majority of the respondents (103; 75.9%) were earning less than KES 10,000 as the average monthly income from informal as well as formal jobs. Only 2% (3) of the respondents were earning over KES 30,000 as the average monthly income.
4.3 HIV Service Utilization Patterns among MSM

4.3.1 HIV Services Utilization by MSM

Majority of the respondents (129, 86.6%) had sought HIV services in the last 6 months while 20 (13.4%) of the respondents had not sought any HIV service in the last 6 months (Figure 4.3).
According to key informants, HIV utilization among MSM has improved overtime due to implementation of programs targeting risk high populations including MSM. The following statement from a health care provider explains:

“...Yeah, there has been a significant improvement in use of HIV services by the MSM. Some NGOs have implemented HIV prevention and management programs with a key focus on key population like MSM which has improved uptake of VCT services significantly...”

### 4.3.2 HIV Testing, Status and Treatment among MSM

Figure 4.4 presents summary of results for HIV testing, status and treatment. Majority of respondents (77%; 115) had ever tested for HIV in their lifetime.

<table>
<thead>
<tr>
<th>Ever tested for HIV</th>
<th>Yes</th>
<th>77%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>23%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ever diagnosed with HIV</th>
<th>Yes</th>
<th>53%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>47%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Being treated for HIV/AIDS</th>
<th>Yes</th>
<th>52%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>48%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.4: HIV testing, status and treatment among MSM

Of those who tested for HIV/AIDs, 53% had been diagnosed with HIV while 47% were HIV negative. Of the 61 respondents who tested HIV positive, 77% were under
HIV/AIDS treatment while 23% were not. According to key informants, use of VCT services among MSM is increasing. A substantial proportion of the MSM have been counselled and tested for HIV. However, uptake of HIV services is still low due to fear of discrimination and associated stigma as explained in the following statement from a HIV/AIDS program supervisor:

“...We cannot say we have met our target in terms of HIV service use...Although a good number of them are using the services, stigma and discrimination associated with the practice has kept the uptake of the service low. A lot needs to be done to scale up the services...”

4.3.3 HIV Services Sought by MSM

Majority of the responses (53%) indicated that HIV/AIDS testing and counseling was the most sought HIV service in the last six months prior to the study.

Figure 4.5: HIV services sought by MSM

HIV/AIDS treatment was the least sought HIV service within the last 6 months. Key informant’s results showed that although many MSM seek HIV testing, uptake of HIV treatment was low as illustrated by the following quote from a health care worker:
“...Yes, many have sought HIV testing but uptake of HIV treatment among those who test positive is not encouraging...”

The main reasons cited for motivating respondents to seek HIV services included: need for HIV/STI post exposure prophylaxis after having unsafe/unprotected sex, perceived quality of service, diagnosis of a partner with HIV and severity of the problem.

4.3.4 Type of the Health Facilities Used by MSM

Majority of the respondents (40%; 68) sought HIV services from NGO programs while the least proportion of them (4%; 6) sought the services from FBOs (Figure 4.6).

![Figure 4.7: Health Facilities used by MSM](image)

MSM preferred NGOs programs and outreaches services more than HIV services from formal health system such as public, private and FBO facilities as expounded in the following statement from a HIV/AIDS program supervisor:
“...I find them using services provided by NGO programs more than other main stream services. You know NGOs programs are targeted to such groups and are therefore more sensitive to their needs...”

4.3.5 MSM Disclosure of Identity

Majority of the respondents (81; 54%) had disclosed their identity to health professionals (Figure 4.8). Most MSM (143; 92.3%) disclose their identity as Gays. Bisexuals and homosexual’s identities are not frequently used (Figure 4.9).

![Figure 4.8: Persons to whom MSM disclose their sexual identity]
Figure 4.9: Sexual Orientation Identities used by MSM

According to key informants, most MSM don’t reveal their sexual orientations especially to the public and their close families. Disclosure of sexual orientation is dependent on context such as the problems, people around etc. A statement from a facility in-charge interview explains:

“...MSM are considered to a hidden group...Most of them don’t reveal their sexual orientation unless to their colleagues in their social groups and the health staff. However, disclosure to health staff is in many times dependent on the nature of the problem, trust among other issues...”
4.4 MSM Knowledge on HIV/AIDs

4.4.1 MSM Knowledge on HIV/AIDS Transmission

Figure 4.10 summarizes results of knowledge regarding HIV transmission.

<table>
<thead>
<tr>
<th>Can HIV can be transmitted through:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal sex with a woman</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>11%</td>
</tr>
<tr>
<td>Yes</td>
<td>89%</td>
</tr>
<tr>
<td>Anal sex with a woman</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>23%</td>
</tr>
<tr>
<td>Yes</td>
<td>77%</td>
</tr>
<tr>
<td>Anal sex with a man</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>4%</td>
</tr>
<tr>
<td>Yes</td>
<td>96%</td>
</tr>
</tbody>
</table>

Figure 4.10: MSM Knowledge regarding HIV transmission

Majority of the respondents (96%; 143) correctly answered that HIV can be transmitted through anal sex with a man. Further, 115 (77.2%) of the respondents knew that HIV can be transmitted through anal sex with a woman. However, 22.8% of the respondents did not know that HIV infection can occur through anal sex with a woman. In relation to vaginal sex, 89% of the respondents correctly answered that HIV infection can be transmitted through vaginal sex compared to 11% who didn’t know that HIV infection can be transmitted through vaginal sex with a woman.
4.4.2 MSM Knowledge on Prevention of HIV Infection

Majority (122; 82%) of the respondents were knowledgeable on how to prevent HIV transmission. However, 27 (18%) were not knowledgeable on how to prevent HIV/AIDS (Figure 4.11).

Figure 4.11: MSM Knowledge on HIV/AIDS Prevention

Overall, 132 (89%) of the respondents had correct knowledge regarding HIV/AIDS transmission (Figure 4.12).

Figure 4.12: MSM Knowledge on HIV/AIDS transmission and prevention
Efforts have been scaled up in educating MSM on transmission and prevention of HIV/AIDS. There exist forums and programs which focus on disseminating information on HIV/AIDS transmission, prevention and general awareness. A statement from a program supervisor expounds:

“...We frequently organize forums and meetings with the MSM to share with them and educate on transmission and prevention of HIV/AIDS. Most of them attend these forums. The forums are organized in manner that ensures privacy of the participants and enhances openness in discussing issues of concern without fear. These programs have been successful to a greater extent in improving their knowledge on HIV/AIDS...”

4.4.3 Access to Health Information on HIV Prevention among MSM

Figure 4.13 presents results on access to health information on HIV prevention. 94% the respondents had received information on how to prevent HIV infection from a man.
Majority of the respondents (106, 71%) had received health information on how to prevent HIV from a woman. On heterosexual transmission, 43 (29%) of the respondents had not received health information on how to prevent HIV infection from a woman. Key informant’s findings showed that although MSM have access to health information on HIV/AIDS, the hidden nature of the group makes or creates a challenge in ensuring sufficient access to information as expressed by the quote below:

“...I would not say that they have sufficient access to information especially with the illegality and hidden nature of the group. The stigma and discrimination associated with the group limits their ability to seek and demand for the services...”

4.4.4 MSM Knowledge on HIV/AIDS in Relation to HIV Services Utilization

Table 4.1 provides a summary of binary regression results for knowledge on HIV/AIDS transmission and prevention in relation to utilization of HIV services. Knowledge on HIV/AIDS transmission and prevention was significantly associated with utilization of HIV services (p<0.001, df=1). In addition, access to health information on transmission and prevention of HIV/AIDS was significantly associated with use of HIV services (p<0.001, df=1).

Table 4.1: MSM Knowledge on HIV/AIDS in relation to utilization of HIV services

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chi-square</th>
<th>df</th>
<th>Sig.</th>
<th>95% C.I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge on Transmission of HIV</td>
<td>51.258</td>
<td>1</td>
<td>0.000</td>
<td>0.171 0.365</td>
</tr>
<tr>
<td>Knowledge on Prevention of HIV</td>
<td>49.602</td>
<td>1</td>
<td>0.000</td>
<td>0.184 0.384</td>
</tr>
<tr>
<td>Access to health Information on transmission and prevention of HIV/AIDS</td>
<td>56.334</td>
<td>1</td>
<td>0.000</td>
<td>0.099 0.258</td>
</tr>
</tbody>
</table>
However, when the variables were subjected to regression analysis, access to health information on transmission and prevention of HIV/AIDs was positively associated with utilization of HIV services \((p<0.001, \text{df}=1)\). Knowledge on HIV transmission and prevention was not significantly associated with utilization of HIV services \((p>0.05)\) (Table 4.2).

Table 4.2: Influence of MSM Knowledge on utilization of HIV services

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I.for EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge on Transmission of HIV</td>
<td>.067</td>
<td>.015</td>
<td>1</td>
<td>.903</td>
<td>.935</td>
<td>.319</td>
</tr>
<tr>
<td>Knowledge on Prevention of HIV</td>
<td>.467</td>
<td>.775</td>
<td>1</td>
<td>.379</td>
<td>.627</td>
<td>.221</td>
</tr>
<tr>
<td>Access to health Information on transmission and prevention of HIV/AIDs</td>
<td>1.736</td>
<td>13.900</td>
<td>1</td>
<td>.000</td>
<td>.176</td>
<td>.071</td>
</tr>
</tbody>
</table>

4.5 Sexual Behaviours among MSM

4.5.1 MSM Vulnerability to HIV Infection

Figure 4.15 summarizes results on vulnerability to HIV infection. On risky sexual behavior, 100 (67\%) of the respondents had engaged in unprotected sex.

Figure 4.15: Vulnerability to HIV infection among MSM
Of the 95 respondents who had engaged in unprotected sex, 79% sought health assistance while 21% didn’t seek any health assistance from qualified health professionals. Qualitative results from key informants’ interview revealed existence of increased risks of HIV infection among the group due to existence of unsafe sexual behaviours. Some practice unprotected sex without even being aware of their partner’s HIV status. A quote from a health care provider explains:

“...Some of them admit they don’t use any condom and they don’t know the HIV status of their sexual partners. Acceptance of condoms not only among MSM but also among the general population remains a big challenge in the fight against HIV/AIDS...”

4.5.2 Engagement in Sex for a Pay among MSM

Majority (63.1%; 94) engaged in sex for a pay (Figure 4.16).

![Figure 4.16: Engagement in sex for a pay among MSM](image-url)

- 37% Engage in sex for a pay
- 63% Don’t engage in sex for a pay
Qualitative results revealed that increase in number of MSM is mainly due to practice of sex for a pay especially among the youthful and unemployed cohorts as explained in the following statement from a facility in-charge:

“...Unemployment has escalated this problem to high levels. Majority of young men are engaging in paid sex with other men for pay. So many youths including those in colleges and universities have indulged in this act as a source of income. Why don’t you wonder why so many young men are driving big car and living largely without any source of income? I believe recent investigations by media have unveiled this vice. We need to act with speed...”

4.5.3 Regular Use of Condom During Sex among MSM

Only 64% (96) of the respondents used condom regularly during sex while 36% (53) didn’t use condom regularly during sex (Figure 4.17).
Key informants interview results revealed use of condoms during sex is still a challenge among MSM as quoted from a health care provider:

“...We encourage them to use condoms and lubricants. We also give them condoms and lubricants at times but some of them are yet to appreciate the risk associated with unprotected sex...The biggest challenge is those who are paid for sex because the client can demand for unprotected sex in exchange for better pay...”

4.5.4 Sex Role among MSM

Results indicated that 64 (43%) practiced both receptive and insertive anal sex. 19% of the respondents practiced receptive sex while 38% practiced insertive sex (Figure 4.18).

![Bar Chart](image_url)

Figure 4.18: Type of sex practiced by MSM

Qualitative results revealed that type of sex depends on the nature of relationship between partners. MSM who engage in sex for a pay practice receptive sex mostly while those in
stable relationship practice a mix of both receptive and insertive as explained by the following statement from a program supervisor:

“...Those who get paid to have sex play the role of a woman in most circumstances but you find those with committed relationship practice both the role of a man and a woman...”

4.5.5 Number of Sexual Partners among MSM

Respondents were asked if they had more than one sexual partner. Majority of the respondents (104; 70%) had multiple sexual partners while only 45 (30%) had only one sexual partner (Figure 4.19).

![Figure 4.19: Existence of multiple sexual partners among MSM](image)

In relation to male sexual partners, 42% (62) had only one male sexual partner. However, 58% of the respondents had more than one male sexual partner. In relation to female sexual partners, 48% of the respondents had no female sexual partner while 22% had
only one female sexual partner. 29% of the respondents had more than one female sexual partner (Figure 4.20).

![Figure 4.20: Number of sexual partners among MSM](image)

Qualitative results indicated existence of multiple sexual partners; both male and female partners as explained by the following statement from a program supervisor:

“...Yeah, many are those who have more than one sexual partner. You find some have even serial female partners which increase risks of cross and vertical infection...”

### 4.5.6 MSM Sexual Behavior in Relation to Utilization of HIV Services

Table 4.3 summarizes chi-square results for sexual behavior in relation to utilization HIV service. Exposure to unprotected sex, practice of sex for a pay, regular use of condom
during sex, type of sex practiced and existence of multiple sexual partners were significantly associated with use of HIV services ($p<0.001$, df=1).

Table 4.3: MSM Sexual behavior in relation to HIV service utilization

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chi-square</th>
<th>df</th>
<th>Sig.</th>
<th>95% C.I. for EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to unprotected sex</td>
<td>46.890</td>
<td>1</td>
<td>0.000</td>
<td>0.191 - 0.399</td>
</tr>
<tr>
<td>Practise of sex for pay</td>
<td>52.477</td>
<td>1</td>
<td>0.000</td>
<td>0.170 - 0.361</td>
</tr>
<tr>
<td>Regular use of condom during sex</td>
<td>49.327</td>
<td>1</td>
<td>0.000</td>
<td>0.172 - 0.371</td>
</tr>
<tr>
<td>Type of sex practised</td>
<td>49.051</td>
<td>1</td>
<td>0.000</td>
<td>0.317 - 0.524</td>
</tr>
<tr>
<td>Existence of multiple sexual partners</td>
<td>49.871</td>
<td>1</td>
<td>0.000</td>
<td>0.148 - 0.340</td>
</tr>
</tbody>
</table>

Table 4.4 summarizes binary regression results of sexual behavior in relation to HIV service utilization. When the results were subjected to logistic regression, exposure to unprotected sex ($p=0.010$, df=1) was positively associated with utilization of HIV services. On the other hand, regular use of condoms during sex ($p=0.05$, df=1) and involvement in sex for a pay ($p=0.021$, df=1) were negatively associated with utilization of HIV services.

Table 4.4: Influence of MSM sexual behavior on HIV services utilization

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to unprotected sex</td>
<td>1.335</td>
<td>0.521</td>
<td>6.565</td>
<td>1</td>
<td>0.010</td>
<td>0.263</td>
<td>0.095 - 0.731</td>
</tr>
<tr>
<td>Sex for pay</td>
<td>-0.120</td>
<td>0.537</td>
<td>0.050</td>
<td>1</td>
<td>0.21</td>
<td>1.128</td>
<td>0.394 - 3.231</td>
</tr>
<tr>
<td>Regular use of condoms during sex</td>
<td>-1.050</td>
<td>0.536</td>
<td>3.838</td>
<td>1</td>
<td>0.050</td>
<td>0.350</td>
<td>0.123 - 1.000</td>
</tr>
<tr>
<td>Existence of multiple sex partners</td>
<td>-0.348</td>
<td>0.516</td>
<td>0.456</td>
<td>1</td>
<td>0.500</td>
<td>0.706</td>
<td>0.257 - 1.940</td>
</tr>
<tr>
<td>Receptive Anal sex</td>
<td>-0.600</td>
<td>0.705</td>
<td>0.724</td>
<td>1</td>
<td>0.395</td>
<td>0.549</td>
<td>0.138 - 2.187</td>
</tr>
<tr>
<td>Insertive Anal sex</td>
<td>-0.270</td>
<td>0.496</td>
<td>0.296</td>
<td>1</td>
<td>0.586</td>
<td>0.763</td>
<td>0.289 - 2.019</td>
</tr>
</tbody>
</table>

Type of sex practiced and existence of multiple sex partners was not significantly associated with utilization of HIV services ($p<0.05$).
4.6 Health System Factors among MSM

4.6.1 Health system Factors among MSM

Table 4.5 summarizes results of the health system factors studied. 46% of the respondents were denied services due to their sexual orientation. Although majority of respondents (60%) had not experienced mistreatment by health staff during service delivery, 40% reported being mistreated by health staff during service delivery.

Table 4.5: Health System Factors among MSM

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denied services based on sexuality</td>
<td>Yes</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>77</td>
</tr>
<tr>
<td>Mistreated by staff</td>
<td>Yes</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>82</td>
</tr>
<tr>
<td>Experienced service delivery descrimination</td>
<td>Yes</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>67</td>
</tr>
<tr>
<td>Experienced community descrimination</td>
<td>Yes</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>62</td>
</tr>
<tr>
<td>Awaare of law against same sex</td>
<td>Yes</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>55</td>
</tr>
<tr>
<td>Provision of privancy and confidentiality</td>
<td>Yes</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>49</td>
</tr>
<tr>
<td>Friendliness of health staff</td>
<td>Yes</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>32</td>
</tr>
<tr>
<td>Treated with respect and dignity by health staff</td>
<td>Yes</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>42</td>
</tr>
<tr>
<td>Acess to adequate information on HIV/AIDs</td>
<td>Yes</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>36</td>
</tr>
<tr>
<td>Easy Access to HIV/AIDs services</td>
<td>Yes</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>34</td>
</tr>
<tr>
<td>Perceived quality of HIV services</td>
<td>Yes</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>42</td>
</tr>
</tbody>
</table>

Results showed that 74 (52%) of the respondents had experienced discrimination during service delivery at a health facility with an almost equal proportion of respondents (57%)
reporting discrimination from community members, where they reside due to their sexuality. In relation to legal frameworks, 60% of the respondents were aware of laws prohibiting same sex relationships but 40% of them were not aware of any legal restrictions. In terms of privacy, 64% of the respondents said they were accorded sufficient privacy and confidentiality in HIV service delivery. In regard to staff friendliness, 71% of the respondents reported that health staffs were friendly with an almost equal proportion (77%) saying that health staff treated them with respect and dignity.

About 75% of the respondents said they had access to adequate health information and easy access to HIV services. In terms of quality, 71% of the respondents perceived the HIV services provided to be of good quality while 29% didn’t perceive them to be of acceptable quality standards.

Qualitative results from Key informants’ revealed that health systems to play a key role in utilization of HIV and other related health services among Key populations such as MSM. Findings indicated that stigma and discrimination towards MSM deterred their ability to demand and use services. The following interview quote from a facility in-charge explains:

“...There exist some levels of discrimination and stigma towards MSM in health service delivery points and community in general. This makes them live in fear and secret which limits their willingness to demand for
Qualitative results also showed that, perceived service quality, staff attitude and ability to provide sufficient privacy and confidentiality inform decisions on use of health services. MSM value health systems which treat them with dignity and respect as illustrated in the following statement derived from a health care provider interview:

“...Privacy and confidentiality is paramount. If they don’t trust or have confidence in the impartiality of the health system and the staff, they cannot use the services...”

4.6.2 User Friendliness of HIV Service Delivery Centers Towards MSM

Respondents were asked to categorize user-friendliness of service delivery points. Results showed that NGO programs offered more user friendly HIV services (112, 75%) than other health facilities (Figure 4.21).
Figure 4.21: Friendliness of HIV service delivery facilities towards MSM

4.6.3 MSM Satisfaction with HIV Services Offered in Service Delivery Centers

Respondents were asked to state their satisfaction with health services from different service delivery points. Results revealed that majority of respondents (121; 81%) with the quality of services offered in NGO programs than any other service delivery points.
4.6.4 Health System Factors in Relation to Utilization of HIV Services among MSM

Table 4.6 presents a summary of results on health system factors in relation to utilization of HIV services. All the health system factors studied (denial of services based on sexuality, mistreatment by health staff, experience of discrimination during service delivery, community discrimination, awareness of anti-same sex laws, privacy and confidentiality, staff friendliness, treatment with respect and dignity by health staff, access to adequate HIV/AIDS information, ease of access to HIV services and perceived quality of services) were significantly associated with utilization of HIV services (p<0.001)
Table 4.6: Health system factors in relation to utilization of HIV services among MSM

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chi-square</th>
<th>df</th>
<th>Sig.</th>
<th>95% C.I.</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial of services based on sexuality</td>
<td>48.325</td>
<td>1</td>
<td>0.000</td>
<td>0.245</td>
<td>0.455</td>
<td></td>
</tr>
<tr>
<td>Mistreatment by health staff</td>
<td>46.209</td>
<td>1</td>
<td>0.000</td>
<td>0.265</td>
<td>0.480</td>
<td></td>
</tr>
<tr>
<td>Experience of service delivery discrimination</td>
<td>50.542</td>
<td>1</td>
<td>0.000</td>
<td>0.182</td>
<td>0.380</td>
<td></td>
</tr>
<tr>
<td>Experience of community discrimination</td>
<td>49.179</td>
<td>1</td>
<td>0.000</td>
<td>0.199</td>
<td>0.403</td>
<td></td>
</tr>
<tr>
<td>Awareness of Anti-same sex laws</td>
<td>46.792</td>
<td>1</td>
<td>0.000</td>
<td>0.201</td>
<td>0.411</td>
<td></td>
</tr>
<tr>
<td>Provision of privacy and confidentiality</td>
<td>47.494</td>
<td>1</td>
<td>0.000</td>
<td>0.174</td>
<td>0.378</td>
<td></td>
</tr>
<tr>
<td>Friendliness of health staff</td>
<td>48.618</td>
<td>1</td>
<td>0.000</td>
<td>0.156</td>
<td>0.352</td>
<td></td>
</tr>
<tr>
<td>Accordance of respect and dignity by health staff</td>
<td>49.512</td>
<td>1</td>
<td>0.000</td>
<td>0.167</td>
<td>0.364</td>
<td></td>
</tr>
<tr>
<td>Access to adequate HIV/AIDs information</td>
<td>49.177</td>
<td>1</td>
<td>0.000</td>
<td>0.157</td>
<td>0.353</td>
<td></td>
</tr>
<tr>
<td>Ease of access to HIV services</td>
<td>50.125</td>
<td>1</td>
<td>0.000</td>
<td>0.153</td>
<td>0.346</td>
<td></td>
</tr>
<tr>
<td>Perceived quality of services</td>
<td>50.287</td>
<td>1</td>
<td>0.000</td>
<td>0.159</td>
<td>0.353</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.7 presents binary regression results on health system factors influence on HIV service utilization. When the results were subjected to binary regression, denial of services based on sexual orientation (p=0.001, df=1), mistreatment by health staff (p=0.043, df=1), experience of discrimination at service delivery points (p=0.025, df=1), discrimination by community members (p=0.025, df=1) and awareness of anti-same sex laws (p=0.004, df=1) were negatively associated with utilization of HIV services. On the other hand, provision of privacy and confidentiality (p=0.022, df=1), friendliness of health staff (p=0.001, df=1), access to adequate HIV/AIDs information (p=0.036, df=1) and perceived quality of HIV services (0.032, df=1) were positively associated with utilization of HIV services.

However, according respect and dignity to MSM by health staff and ease of access to HIV services were not significantly associated with utilization of HIV services (p<0.05).
<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for EXP(B)</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial of services based on sexuality</td>
<td>-0.268</td>
<td>0.732</td>
<td>0.134</td>
<td>1</td>
<td>0.001</td>
<td>0.765</td>
<td>0.182</td>
<td>3.209</td>
<td></td>
</tr>
<tr>
<td>Mistreatment by health staff</td>
<td>-0.225</td>
<td>0.837</td>
<td>0.072</td>
<td>1</td>
<td>0.043</td>
<td>0.799</td>
<td>0.155</td>
<td>4.116</td>
<td></td>
</tr>
<tr>
<td>Experience of service delivery discrimination</td>
<td>-0.535</td>
<td>0.736</td>
<td>0.529</td>
<td>1</td>
<td>0.025</td>
<td>1.708</td>
<td>0.403</td>
<td>7.231</td>
<td></td>
</tr>
<tr>
<td>Experience of community discrimination</td>
<td>-0.525</td>
<td>0.685</td>
<td>0.588</td>
<td>1</td>
<td>0.050</td>
<td>0.591</td>
<td>0.155</td>
<td>2.263</td>
<td></td>
</tr>
<tr>
<td>Awareness of Anti-same sex laws</td>
<td>-0.120</td>
<td>0.679</td>
<td>0.031</td>
<td>1</td>
<td>0.004</td>
<td>0.887</td>
<td>0.234</td>
<td>3.357</td>
<td></td>
</tr>
<tr>
<td>Provision of privacy and confidentiality</td>
<td>0.236</td>
<td>0.780</td>
<td>0.091</td>
<td>1</td>
<td>0.022</td>
<td>1.266</td>
<td>0.274</td>
<td>5.845</td>
<td></td>
</tr>
<tr>
<td>Friendliness of health staff</td>
<td>1.135</td>
<td>0.745</td>
<td>2.323</td>
<td>1</td>
<td>0.001</td>
<td>0.321</td>
<td>0.075</td>
<td>1.384</td>
<td></td>
</tr>
<tr>
<td>Accordance of respect and dignity by health</td>
<td>0.570</td>
<td>0.813</td>
<td>0.492</td>
<td>1</td>
<td>0.483</td>
<td>0.566</td>
<td>0.115</td>
<td>2.782</td>
<td></td>
</tr>
<tr>
<td>Access to adequate HIV/AIDS information</td>
<td>0.362</td>
<td>0.821</td>
<td>0.194</td>
<td>1</td>
<td>0.036</td>
<td>1.436</td>
<td>0.287</td>
<td>7.185</td>
<td></td>
</tr>
<tr>
<td>Ease of access to HIV services</td>
<td>0.825</td>
<td>0.712</td>
<td>1.345</td>
<td>1</td>
<td>0.246</td>
<td>0.438</td>
<td>0.109</td>
<td>1.768</td>
<td></td>
</tr>
<tr>
<td>Perceived quality of services</td>
<td>0.232</td>
<td>0.673</td>
<td>0.119</td>
<td>1</td>
<td>0.032</td>
<td>1.261</td>
<td>0.337</td>
<td>4.717</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section presents discussion, conclusions and recommendations of the study based on the study objectives.

5.2 Discussion of Findings

The section discusses study results in relation to other past studies as well as interpretation of the study results in the context of the study. The discussion is based on study objectives as follows: utilization of HIV services, sexual behaviors, knowledge on HIV transmission and prevention and health system factors in relation to HIV service utilization among MSM.

5.2.1 HIV Service Utilization Patterns

The study revealed that in the last 6 months, uptake of HIV services stood at 77% which compares favorably to KDHS (2013-14). The high uptake of HIV services and testing is due to targeted programs and outreach aimed at reducing prevalence and incidence of HIV infections among key populations such as MSM. However, the high prevalence of HIV among the MSM (53%) remains a challenge in the fight against HIV/AIDS. This is comparatively higher than that of a HIV vaccine preparedness trial in Kenya carried out by (Van and Sanders, 2008) which reported a baseline HIV prevalence of 25% among MSM, all of whom were previously unaware of their HIV-positive status and another
Kenyan study in which men who reported only having sex with other men had an HIV prevalence of 43% (Sanders et al., 2007).

This also compares with a study in Zambia which found that 33% of the MSM self-reported infection with HIV, compared to a national adult HIV prevalence of 15.2% (Baral et al., 2009). However, according to UNAIDs (2009), Prevalence statistics indicated that 23 percent of MSM in Mombasa and 25 percent in Nairobi are HIV positive. Most Sub-Saharan countries in this study have generalized HIV epidemics, but data on the proportion of cases among MSM is unknown. Further, 23% of the HIV positive MSM were not under any treatment. This is due to high stigma and discrimination against MSM which hampers their ability to access and use life-saving HIV prevention and treatment services from formal health systems. Uptake of HIV services among MSM remains unsatisfying due to fear of discrimination and associated stigma. This agrees with another study (Gender dynamix, 2012) which reported that such a situation make HIV go undetected hence causing serial infections within the group and in general population due to existence of multiple female sexual partners.

The study found MSM demand and use of HIV services to be motivated by need for HIV/STI protection/ prevention after having unsafe/unprotected sex, perceived quality of service, and diagnosis of a partner with HIV and severity of the problem. This contrast a global survey study finding which found experience of homophobia to be the single most important factor diminishing health care utilization among MSM (Arreola et al., 2012). MSM have high preferences for HIV services offered by NGO programs and outreaches
compared to formal health systems especially Faith-Based Organizations and Public Health Facilities. This is because NGOs programs take into account the needs and preferences are of these key populations during program design which enables them to deliver services that are tailored to their needs (Arreola et al., 2012).

Similar to Ntata et al. (2008), disclosure of MSM sexual orientation is based on trust for keeping the issue a secret and providing the mutual benefit sought in the disclosure. This concurs with another study where MSM feared discrimination and stigma if they were to disclose their sexuality to others which made majority of participants to feel comfortable with non-disclosure of their sexual orientation (UNAIDs, 2014). Contrary to findings by Baral and colleagues who reported that only 9% of MSM had ever disclosed to a health care worker (Baral et al., 2009), this study found that most MSM disclosed their identity to health professionals with an aim of getting necessary professional help and support. However, few disclose their sexual orientations to close family members and other people for fear of stigma, discrimination, rejection and judgmental attitudes. According to this study, many MSM experience rejection from their families of origin due to their sexual orientation resulting to creation of families of choice as a strategy of connecting with others due to part of being a sexual minority.

Disclosing both sexual orientation and HIV-positive status have been independently shown to increase in CD4 cell counts, linking psychological distress to immune functioning due to improved sexual health services utilization (Strachan et al., 2007). As a result, due to anticipated and perceived stigma, men who engage in same sex behavior may therefore be too fearful to seek medical care or information on HIV and prevention
measures which is similar to a study in Bangkok by Kerr et al., 2014 who found drug users surveyed reported avoiding health care due to the fear of HIV testing and treatment. This makes the group exists and operates in utter secrecy for their safety and comfort.

Disclosure of sexual orientation to oneself and to others is an important step for having a positive identity key in sexual health service utilization (Riggle et al., 2008). Belonging to the MSM community and social networks is perceived to be a positive aspect. Support from others and the commonality of experience (i.e., being gay) is perceived to be an effective coping mechanism.

5.2.2 Knowledge Toward HIV/AIDS Transmission and Prevention

In this study, a substantial proportion of MSM (over 10%) reported incorrect information about HIV transmission and prevention. 23% of MSM thought transmission and prevention of HIV methods when having sex with a man don’t apply to anal sex with a woman. This could be explained by the finding that about 30% of the MSM don’t receive health education/information on HIV from a woman (heterosexual sex) can be transmitted and prevented despite many of them having multiple female sexual partners. This was in line with a study done in African setting which found that 55% of MSM thought prevention methods for sex with a woman did not apply to anal sex while 73% of MSM thought anal sex was safer than vaginal sex (Zulu, 2006).

Perceived stigma may impact how one not only responds to infection but also accesses health information regarding HIV/AIDS. Concealing one’s sexuality places greater stress
on an individual ability to demand for health information hence the overall poorer knowledge among MSM compared to the rest of population which is not hidden which has a negative effect on the level of knowledge acquired by an individual. Further, negative attitude and stigmas towards MSM makes it difficult for them to talk about their health concern which increases the chance of them possessing wrong information and knowledge regarding the HIV/AIDS pandemic. Past studies report stigma to fuels misinformation and contributes to MSM denial of their risk status perception and ultimate health seeking behavior (Yatich, 2013).

5.2.3 Sexual Behaviors

The study revealed that 67% of MSM had engaged in unprotected sex. Of whom, 21% didn’t seek any health assistance from qualified health professionals. This creates high risks of HIV infection among the group due risks of vertical and horizontal HIV transmission (Himanshu & Priyanka, 2014). Some MSM don’t use any condom during sex even when they don’t know the HIV status of their sexual partners. Acceptance of condoms not only among MSM but also among the general population remains a big challenge in the fight against HIV/AIDS. This is partly due to some MSM engaging in sex for a pay.

According to the study, unemployment has escalated this problem especially where young men are engaging in paid sex with other men for pay. Many youths including those in colleges and universities have indulged in this act as a source of income. This happens against the revelation that many MSM don’t use condom regularly during sex. Demand for unprotected sex by clients especially in cases of paid sex has remained a barrier in the
fight against HIV/AIDS prevention and management. This concurs with a study by Baral et al. (2012) who reported that incentive for higher pay among sex workers motivate them not to use condoms during sex with their sexual partners/clients.

The situation is made worse by the revelation that most MSM have multiple male and female sexual partners. This agrees with a study done by the Population Council’s (2008) which found existence of multiple sexual partner’s increases risk of cross-infection of HIV due to unsafe sex practices. According to findings by Van & Sanders (2008), existence of multiple sexual partners put the general population at higher risks since many MSM are also heterosexual hence posing risks of HIV transmission to the population.

5.2.4 Health System Factors in Relation to Utilization of HIV Services

This study has found that stigma and discrimination towards MSM influences utilization of HIV services. MSM have reported denial of services and unfriendliness among staff based on their sexual orientation which affects negatively their willingness to use HIV services. This is in support with past study (Lancet Infectious Diseases, 2010) which reported existence of stigma and discrimination in health care setting especially among MSM and Lesbians. Resultantly, this deters many MSM from knowing their HIV status or accessing life-saving prevention and treatment services (UNAIDS 2014).

Similar to a survey done by Gender dynamix (2012), this study indicated that MSM commonly experience disapproval, rejection and sub-optimal HIV services in health care
settings especially from mainstream health system with exception of NGO programs and outreaches which target these key populations. As a result, the study found that MSM experience hostile, judgmental or dismissive attitudes when they attempt to access HIV health services.

The study revealed that anti-same-sex laws adversely affect demand for HIV services among the MSM. This agrees with review findings which found same sex practices to be not only highly stigmatized but also criminalized in many countries, criminalized (Baral et al., 2009). As a result, many MSM live in fear and secret to avoid the wrath of the punitive anti-same-sex laws. This has fueled up the level of stigma, discrimination, judgmental and dismissive attitude confronted by the MSM during service delivery and at community level. In Kenya, same-sex practices are criminalized same as most Sub-Saharan countries, and only a few governments such as South African, have funds allocated to prevention programs for MSM (Baral et al., 2009).

This has made it difficult to not only implement successful HIV prevention, control and management programs targeting key population, but it has also made it difficult for the acceptance of such programs by the community due to high levels of stigma reinforced by anti-same-sex laws. MSM were reported to avoid seeking sexual health services, often at the expense of their health, or sought non-stigmatizing services (Lane et al., 2008). This has increased vulnerability to sexually transmitted infections (STIs) such as chlamydia, gonorrhea and syphilis as well (Sean, 2014).
Existence and reinforcement of laws banning male-to-male sexual contact creates a major barrier in HIV service utilization. A study done by NASCOP (2012) observed that countries that have decriminalized MSM behavior and offered legal protections to MSM such as South Africa, receive as a benefit, more MSM coming forward for prevention, testing and treatment. This crimination behavior of MSM has contributed to secrecy, marginalization, and reduced access to sexual health services (PAHO, 2011). This study results concurs with Ottosson (2010) who reported that irrespective of the law, African public opinion ranks as the most homophobic in the world in international opinions surveys where on average 85–99% of African people consider that homosexuality should not be accepted by society

In this study, MSM reported harassment and abuse associated with their sexual orientation when seeking health services. Some reported experiences of service denial and bad names “labels” from health care workers during episodes of care which affects adversely their self-esteem and confidence hence resulting to self-medication and or avoidance of formal sexual health services.

This study agrees with other study which found poor access to care to lead to underutilization of services, such as HIV voluntary counseling and testing, and ultimately, low self-awareness of HIV sero-status (Sharma et al., 2008; Lane et al., 2008; Himanshu & Priyanka, 2014). Lack of adequate training and education of health providers and staff on the specific knowledge, attitudes, and skills necessary for working with MSM continues to increase level of stigma and dismissive attitude towards the
MSM which limits their ability to demand and use available services. As a result, NGO programs and clinics which are tailored to MSM needs and preferences are perceived to the main friendly medical centers for service delivery compared to other formal health systems. MSM distrust the ability of the formal health systems to maintain their privacy and confidentiality which exposes them the threats of stigma and discrimination hence the low HIV service uptake in these health facilities (Chakrapani et al, 2011; Himanshu & Priyanka, 2014).

5.3 Conclusions

Based on the study findings, this study makes the following conclusions:

a) **HIV Service Utilization Patterns**

Despite high utilization of HIV services among MSM, there is room for improvement. HIV prevalence rate among MSM remains high at 53% with a substantial proportion of MSM living in secrecy due to associated stigma and discrimination. MSM prefer NGOs programs due to their perceived value of friendliness and sensitivity to their service needs.

b) **Knowledge on HIV/AIDS**

A substantial proportion of MSMs are knowledgeable on HIV transmission and prevention. There is inadequate access to health information on transmission and prevention of HIV infection especially infection from women which negatively impacts utilization of HIV services.
c) Sexual Behaviors

There is high level of risky sexual behaviors among MSMs. A substantial number of MSM engage in unprotected sex, have multiple sexual partners and practice of sex for a pay which increases risk of HIV transmission.

d) Health System Factors

There exists discrimination, stigma, mistreatment and dismissive attitude during service delivery on disclosure of their sexual orientation among MSMs. Denial of services, mistreatment by health staff, experience of discrimination and awareness of anti-same sex laws are key factors which influence utilization of HIV services.

5.4 Policy Recommendations

a) Recommendation for Policy Action

Based on the study conclusions, the study recommends that the Ministry of Health at the national and county level, partners and other key health care stakeholders to:

1. Enact and scale up policies which create stigma-free service delivery environments with friendly, qualified and trained staff to adequately respond to the needs of key populations especially in public health sector

2. Improve targeted strategies which will increase the availability and access to quality strategic HIV information to MSM through various channels such as outreaches, bulletins, sensitization seminars and other IEC materials
3. Enhance access to condoms and lubricants (i.e. condom dispensing at strategic points) as well as support and scale up creation of income generating opportunities for unemployed youths to reduce sex for pay practices and related risky sexual behaviour

4. Government and other strategic stakeholders should encourage multi-sectoral approach, develop and implement customized training to health staff to facilitate creation of user-friendly service delivery for the MSMs. This will help reduce discrimination, dismissive attitude and enhance patient’s confidence in service utilization

5.5 Recommendation for Further Research

The study makes the following recommendations for further study:

- Assessment of predictors of HIV service utilization among MSM in Kenya
- Impact of stigma and discrimination on health service utilization among MSM in Kenya
- Health information seeking behaviour among MSM in Kenya
REFERENCES


Gender Dynamix, amf AR (2012). Transgender access to sexual health services in South Africa: findings from a key informant survey.


Yatich, C. (2013). Factors contributing to increased risk of HIV infection among men who have sex with men in Kisumu City: http://hdl.handle.net/11295/63244

APPENDICES

Appendix I: Consent Form

Researchers’ Statement

Goodmorning/afternoon, my name is Anthony Kiplagat B. Antony. I am a Masters student at Kenyatta University. Today, I am here to carry out a study on *Utilization of HIV services among Men who have Sex with Men in Njiru Sub-County*. This form will give you information you need, so that you can make a decision on whether to participate or not to in the study. There are no wrong or right answers. You will be given time to consider if you would like to be in the study. Please read the form well and ask where you don’t understand. Please be honest and truthful in answering the questions. I assure you that the information you give will be totally confidential and you will not be required to identify yourself by name.

**Purpose**

The information obtained from this study will be used to inform policy on HIV/AIDs service delivery and utilization among Men-who-have-sex-with-Men in Njiru Sub-county.

**Procedure:**

You will be interviewed using a self-administered questionnaire (You will be assisted in case you are unable to read or write). The interview will last for about half an hour and participants will be required to give answers to all the questions. Participants will have the opportunity to make suggestions and give information on HIV/AIDs service delivery for Men-who-have-sex-with-Men.

**Risks**

To protect people from learning your participation in this study, all information you will give us will be kept confidential within our research team. All the data will be stored in a password protected computer.
Benefits

There is no financial compensation or other personal benefits accruing from participating in the study. However, your participation and/or answers to the questions may provide useful insights into improving HIV/AIDS service delivery for Men-who-have-sex-with-Men.

Confidentiality and privacy

No names will be used on any of the reports from the study. All the respondents will be given different identification numbers and the information relating to each participant will be strictly confidential, available only to the study team. Notes and any other recordings done will be destroyed once summary is prepared. The data collected from the field will be kept in a lockable box for which only the principal researcher will have access.

Voluntary participation

Your participation is voluntary, and you may therefore refuse to answer any question or stop the interview at any time without suffering any consequences.

Instructions:

When you sign below, it shows that you have agreed to participate in the study. If you do not understand any part of the information that has been read to you/you have read, be sure to ask questions. Do no sign until you have understood all that is expected or required.

I wish to take part in the study entitled: Utilization of HIV services among Men-Who-Have-Sex-with-Men (MSM) in Njiru Sub-County, Nairobi County, Kenya. I understand that I may at any time during the study withdraw my consent without any consequences. I have understood the information given in this sheet and I give my consent to be interviewed.

Respondent number …………… Signature…………………….. Date…………

Name of the researcher: ………………………Signature……………..Date…………
CONTACTS

If you require further information, please contact the following:

1. Chairman, Kenyatta University Ethics Review Committee, P.O BOX 43844-00100, Nairobi
   Email: chairman.kuerc@ku.ac.ke, Tel: 8710901/12

2. The Chairman, Department of Health Management & Informatics
   Kenyatta University, P.O BOX 43844-00100, Nairobi
   Email: healthmanagement2012@gmail.com

3. Principal Researcher, P.o Box, 25857-00100, Nairobi
   Email: bakiplagat@gmail.com, Tel: 0721 593122
Appendix 2: Survey Questionnaire for MSM health services utilization

You have been selected to participate in this study whose objective is to collect data on utilization of HIV health services among MSM in Nairobi County. The information collected will be used to inform policy and program decisions for improving delivery and user friendliness of the services provided in this County. Your confidentiality and privacy will be ensured. The study will not reveal or use your name in any part of this study whatsoever. Please feel free to participate and ask any question you may have. Please note that there is no right or wrong answer.

Identification panel


2. What is your marital status?

3. What is your highest education level?

4. Please indicate your current form of employment?

5. Please tick below your average monthly income in Kenyan shilling?

6. In the last 6 months, have you ever sought HIV services from a VCT or a health facility?  [1] Yes  [2] No
7. If yes, which of the following HIV services have you ever sought from a VCT or a health facility?  
   [1] HIV Testing and Counselling  
   [4] other(s) [Please specify]  
   …………………………………………………………………………………………….  

8. Which of the following health facilities have you ever sought HIV health services from?  
   [1] Public Health Facilities  
   [2] Private Health Facilities  
   [3] Faith based health facilities  
   [5] NGO health programs  
   [6] Other (s) [Please specify]  
   …………………………………………………………………………………………….  

9. Tick whether any of the following reasons make or would encourage you to seek HIV/AIDS services?  

<table>
<thead>
<tr>
<th>Reason</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity of sexual/genital problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sickness of a sexual partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for STI/HIV protection after having unprotected sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnosis of a sexual partner with HIV/AIDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy of access to the services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of the services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost/affordability of the services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of the services provided</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggestion/referral from friends/colleagues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (please specify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. __________________________________________________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. __________________________________________________________________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. Please rank user friendliness of the HIV service delivery points shown below? [Tick appropriately]

<table>
<thead>
<tr>
<th>HIV service points</th>
<th>Not friendly</th>
<th>Friendly</th>
<th>I can't tell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public health facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private health facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faith-based health facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGO health programs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Please rank your satisfaction with HIV service delivery points shown below? [Tick appropriately]

<table>
<thead>
<tr>
<th>HIV service points</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Not satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public health facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private health facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faith-based facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGO health programs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Have you ever disclosed your MSM sexual identity/orientation to any of the following: Yes No
   a) Immediate family members [Your close family members]
   b) Extended family members
   c) Health professionals during service delivery

13. If you have ever disclosed your sexual identity/orientation, which identity did you use? [Tick appropriately]
   i) Gay
   ii) Homosexual
   iii) Bisexual
   iv) Heterosexual
   v) Transgender

14. Tick the appropriate answer to each of the statements in the table below? (please tick appropriately for each question)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you ever been diagnosed with an STI?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever been sought for an STI treatment?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever been treated for an STI?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever received recommendations to test for HIV?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever tested for HIV?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever been diagnosed with HIV?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you currently being treated for HIV?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever been afraid to seek HIV services?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever been denied health services based on your sexuality [sexual identity/orientation] as a MSM?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has you ever been mistreated by health workers due to your sexuality</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Have you ever been black mailed because of your sexuality?  
Have you ever experienced discrimination during service delivery due to your sexuality?  
Have you ever been discriminated in the community due to your security?  
Are you aware of any law prohibiting sex with same sex person like MSM?  
Are MSM accorded sufficient privacy and confidentiality in HIV services?  
Are the Health staffs friendly?  
Do health staff respect and treats you with dignity?  
Do you have access to adequate health information on HIV/AIDs?  
Can you easily access HIV/AIDs services in the health facilities?  
Are HIV/AIDs services readily available at the health facility  
Are the services provided at the facility of high quality?  
Do friends/colleagues encourage you to seek HIV/AIDs services  
Have you ever had unprotected sex?  
If Yes above, did you seek health assistance from a health provider?  
Do you have many [multiple] sexual partners?  
Do you belong to a social group consisting of MSM?  
Do you regular use protection [condoms] during sex?  
Are you paid to have sex with another man?  
15. What type of sex do you practice:  
   a) Receptive anal sex [i.e. assume role of a female during sex]  
   b) Insertive anal sex [i.e. Assume role of a male during sex]  
   c) Both receptive and insertive anal sex

16. Can you get HIV from:  
   a) Anal sex with a man?  
   b) Anal sex with a woman?  
   c) Vaginal sex with a woman?  
17. State whether each of the following statement is true or false  
   a) Condoms reduce chances of getting HIV infection during sex  
   b) You can reduce risks of HIV infection by sharing piercing objects like needles  
   c) One can reduce HIV infection by having one faithful sex partner  
18. Have you ever received information on:  
   a) How to prevent HIV from a man?  
   b) How to prevent HIV from a woman?  
19. Does HIV have a cure?  
20. How many of the following sexual partners do you currently have? (Tick appropriately)  
[5] None

21. What is your current HIV status?  
   [1] HIV Positive  
   [2] HIV Negative  
   [3] I do not know

22. If you currently do not know your HIV status, would you be willing to get tested?  
   [1] Yes  
   [2] No

23. If No in Question 21 above, please give the reason(s):
   I. 
   II.  
   III.  

THANK YOU FOR YOUR COOPERATION
Appendix 3: Key Informant Interview Guide

Position…………………………………………Date………………………………………

Questions:

1. In your own view, what is the demand and use of HIV service by the MSM? Which HIV services are mainly demanded? Do the MSM disclose their status when seeking sexual health services?

2. In your own view, is the current service delivery organized in accordance to needs of the MSM? Are there guidelines for providing user friendly HIV services specifically to MSM? If yes, how have the guidelines operationalized? Probe for MSM service provision guidelines, service review reports)

3. From your own experience, what are the main factors that explain/influence utilization HIV services among MSM in this community? Probe for past experiences, privacy, confidentiality, harrassment, education and awareness programs, social support networks, HIV status, staff attitudes, education level, income level and personal beliefs
Appendix 4: Map of the Study Area (Njiru Sub-County)

Map of Kenya

Map of Nairobi County

Map of Njiru Sub-County

Source: Google maps
Appendix 5: Ethical Review Letter from KUERC

KENYATTA UNIVERSITY
ETHICS REVIEW COMMITTEE

Our Ref: KU/R/COMM/31/561

Kiplagat Anthony Bundi,
Kenyatta University,
P.O Box 45844, Nairobi.

Dear Bundi,

APPLICATION NUMBER FKI/386/1 565. "UTILIZATION OF HIV SERVICES AMONG MEN WHO HAVE SEX WITH MEN IN NJIRU SUB-COUNTY, KENYA" - VERSION 2

1. IDENTIFICATION OF PROTOCOL
The application before the committee is with a research topic, "Utilization of HIV services among men who have sex with men in Njiru Sub-County, Kenya" - Version 2 dated 30th September, 2015.

2. APPLICANT
Kiplagat Anthony Bundi

3. STUDY SITE
Njiru Sub-County Nairobi, Kenya

4. DECISION
The committee has considered the research protocol in accordance with the Kenyatta University Research Policy (section 7.2.1.3) and the Kenyatta University Ethics Review Committee Guidelines AND APPROVED that the research may proceed for a period of ONE year from 16th October, 2015.

5. ADVICE/CONDITIONS
i. Progress reports are submitted to the KU-ERC every six months and a full report is submitted at the end of the study.
ii. Serious and unexpected adverse events related to the conduct of the study are reported to this board immediately they occur.
iii. Notify the Kenyatta University Ethics Committee of any amendments to the protocol.
iv. Submit an electronic copy of the protocol to KUERC.

If you accept the decision reached and advice and conditions given please sign in the space provided below and return to KU-ERC a copy of the letter.

[Signature]

PROF. NICHOLAS K. GIKONYO
CHAIRMAN ETHICS REVIEW COMMITTEE

[Signature]

Dated this day of 22/11/2015.

cc. Vice-Chancellor
Appendix 6: Research Authorization letter from Nairobi County Government

NAIROBI CITY COUNTY

Telegrams: "PRO-MINHEALTH", Nairobi
Telephone: Nairobi 217131/3131401
Fax: 217148

COUNTY HEALTH SERVICES

Ref. No. CHS/PH/109/50

Mr. Kiplagat B. Anthony
Nairobi City County
Nairobi

RE: AUTHORITY TO CONDUCT A COMMUNITY BASED STUDY ON
UTILIZATION OF HIV SERVICES AMONG MEN-WHO-HAVE SEX WITH MEN
IN NJIRU SUB COUNTY

Following your application dated 24th August, 2015 for authority to carry out "A
community based study on utilization of HIV services among men-who-have sex with
men in Njiru Sub County". The assessment will be conducted during the months of
August and October 2015.

I am pleased to inform you that you have been authorized to undertake assessment in
Nairobi County in the listed facilities/pharmacies. (See the attached list)

On completion of the assessment you are expected to disseminate the finds to the county
operational research team and two hard copies and one copy in PDF of the findings to our
assessment.

Mr Raphael K Muli,

For County Director of Medical Services

Ce

DMOIfs

- Nairobi County
- Medical Officer I/C :Mama Lucy, Mbagathi, Pumwani Hospital,
- Private facilities/Pharmacies