FACTORS INFLUENCING HIV/AIDS COUNSELLING AND TESTING UPTAKE
AMONG MEN IN KENYA: A CASE OF KIANDUTU SLUMS, THIKA

BY

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2013
DECLARATION

This research project report is my original work and has not been presented for degree award in any other University.

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Date 26th November 2013
Sila Jacinta K.
L50/60511/2010

This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

In memory of my late father Bernard Sila Kilonzo, who was a firm believer in my capability, may God rest his soul in eternal peace. To my loving husband Festus Kisinga for your financial, emotional and spiritual support, to my wonderful children Dennis, Gracelda and Victor for your understanding and patience.
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# TABLE OF CONTENT

<table>
<thead>
<tr>
<th>Chapter/Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECLARATION</td>
<td>ii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>ix</td>
</tr>
<tr>
<td>ABBREVIATIONS AND ACRONYMS</td>
<td>x</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>xi</td>
</tr>
<tr>
<td>CHAPTER ONE: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Background of the Study</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Statement of the Problem</td>
<td>3</td>
</tr>
<tr>
<td>1.3 Purpose of the Study</td>
<td>4</td>
</tr>
<tr>
<td>1.4 Objectives of the Study</td>
<td>4</td>
</tr>
<tr>
<td>1.5 Research Questions</td>
<td>4</td>
</tr>
<tr>
<td>1.6 Significance of the Study</td>
<td>4</td>
</tr>
<tr>
<td>1.7 Delimitation of the Study</td>
<td>5</td>
</tr>
<tr>
<td>1.8 Limitations of the Study</td>
<td>5</td>
</tr>
<tr>
<td>1.9 Basic Assumptions of the Study</td>
<td>5</td>
</tr>
<tr>
<td>1.10 Definition of Significant Terms</td>
<td>5</td>
</tr>
<tr>
<td>1.11 Organization of the Study</td>
<td>6</td>
</tr>
<tr>
<td>CHAPTER TWO: LITERATURE REVIEW</td>
<td>7</td>
</tr>
<tr>
<td>2.1 Introduction</td>
<td>7</td>
</tr>
</tbody>
</table>
2.2 Influence of Socio-Demographic Characteristics on Uptake of HIV/AIDS Counselling and Testing .......................................................... 7
2.3 Influence of Socio-Cultural Factors on HIV/AIDS Counselling and Testing ......... 9
2.4 Influence of Health Service Factors on HIV/AIDS Counselling and Testing .......... 10
2.6 Theoretical Framework ........................................................................ 12
2.7 Conceptual Framework ....................................................................... 15
2.8 Summary of the Literature Review ...................................................... 17

CHAPTER THREE: RESEARCH METHODOLOGY ........................................ 18
3.1 Introduction ......................................................................................... 18
3.2 Research Design .................................................................................. 18
3.3 Target Population ................................................................................ 18
3.4 Sample Size and Sampling Technique ............................................... 18
3.5 Research Instrument ........................................................................... 19
3.6 Validity of the Research Instrument .................................................. 20
3.7 Reliability of the Research Instrument .............................................. 20
3.8 Data Collection Procedure .................................................................. 21
3.9 Data Analysis Techniques .................................................................. 21
3.10 Ethical Considerations ....................................................................... 22
3.11 Operationalization of Variables ........................................................ 22

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION . 25
4.1 Introduction .......................................................................................... 25
4.2 Demographic Characteristics ................................................................ 25
4.3 Socio-Demographic Characteristics .................................................... 28
4.4 Socio Cultural Factors .......................................................... 29
4.5 Health Service Factors ......................................................... 30
4.6 Correlation Analysis ............................................................ 32

CHAPTER FIVE: SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS ............................................................. 34
5.1 Introduction .................................................................. 34
5.2 Summary of Findings ....................................................... 34
5.3 Discussion of Findings ....................................................... 35
5.3.1 Socio-Demographic Characteristics and HIV Counselling and Testing Uptake .... 35
5.3.2 Socio-Cultural Factors and HIV Counselling and Testing Uptake ...................... 35
5.3.3 Health Service Factors and HIV Counselling and Testing Uptake ...................... 36
5.3 Conclusions ................................................................... 36
5.4 Recommendations .......................................................... 36

REFERENCES ........................................................................... 38

APPENDICES ........................................................................... 43
Appendix 1: Letter of Transmittal ................................................. 43
Appendix 2: Questionnaire for Men in Kiandutu Slums-Thika ................. 44
Appendix 3: Interview Schedule for the Health Workers ........................... 47
LIST OF FIGURES

Page

Figure 1: Conceptual framework .................................................. 16
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 3.1:</td>
<td>Reliability Analysis</td>
<td>21</td>
</tr>
<tr>
<td>Table 3.2:</td>
<td>Operational Definition of variables</td>
<td>23</td>
</tr>
<tr>
<td>Table 4.1:</td>
<td>Distribution of respondents by age</td>
<td>26</td>
</tr>
<tr>
<td>Table 4.2:</td>
<td>Highest Academic Qualification</td>
<td>26</td>
</tr>
<tr>
<td>Table 4.3:</td>
<td>Number of years lived in Kiandutu-Thika</td>
<td>27</td>
</tr>
<tr>
<td>Table 4.4:</td>
<td>Use of VCT in The last Five Years</td>
<td>27</td>
</tr>
<tr>
<td>Table 4.5:</td>
<td>Socio-Demographic Characteristics</td>
<td>28</td>
</tr>
<tr>
<td>Table 4.6:</td>
<td>Factors Influencing Uptake of VCT services Among Men</td>
<td>28</td>
</tr>
<tr>
<td>Table 4.7:</td>
<td>Socio Cultural Factors</td>
<td>29</td>
</tr>
<tr>
<td>Table 4.8:</td>
<td>Factors Influencing Uptake of VCT services Among Men</td>
<td>29</td>
</tr>
<tr>
<td>Table 4.9:</td>
<td>Health Service Factors</td>
<td>30</td>
</tr>
<tr>
<td>Table 4.10:</td>
<td>Factors Influencing Uptake of VCT services Among Men</td>
<td>31</td>
</tr>
<tr>
<td>Table 4.11:</td>
<td>Correlation Matrix</td>
<td>32</td>
</tr>
</tbody>
</table>
# ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immunodeficiency Syndrome</td>
</tr>
<tr>
<td>ART</td>
<td>Antiretroviral Therapy</td>
</tr>
<tr>
<td>CBO</td>
<td>Church Based Organization</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>IDUs</td>
<td>Injecting Drug Users</td>
</tr>
<tr>
<td>IMB</td>
<td>Information-Motivation-Behaviour</td>
</tr>
<tr>
<td>KDHS</td>
<td>Kenya Demographic Health Survey</td>
</tr>
<tr>
<td>MOE</td>
<td>Margin of Error</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MOHSS</td>
<td>Ministry of Health and Social Services</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Care</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<tr>
<td>STD</td>
<td>Sexually Transmitted Diseases</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>VCT</td>
<td>Voluntary Counseling and Testing</td>
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<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
ABSTRACT

Voluntary HIV Counselling and Testing (VCT) is one of the key strategies in the prevention and control of HIV/AIDS in Kenya. However, the utilization of VCT services particularly among men is low. The major barriers to VCT use among men were poor utilization of VCT services due to poor access, stigma and confidentiality of services. Despite the array of delivery approaches and the advantages of VCT, uptake in sub-Saharan Africa is disappointingly low with reports of 12% to 56% among couples or the general public. The purpose of this study was to establish the factors influencing HIV/AIDS counselling and testing uptake among men in Kenya by focusing on Kiandutu slums in Thika. The objective of the study was to establish the influence of socio-demographic characteristics, socio-cultural factors and health service factors on HIV/AIDS counselling and testing uptake among men in Kiandutu slums. This research problem was studied through the use of a descriptive survey research design. The target population of this study was 7213 men aged between 15 and 49 years in Kiandutu slums. The study also included 24 health care officers in Kiandutu slums. The study then used simple random sampling to select 365 men in Kiandutu slums. The study also selected all the 24 healthcare workers in Kiandutu slums. The sample size of this study was therefore 389 respondents. Qualitative data was collected by use of interview guides while quantitative data was collected by use of semi-structured questionnaires. The quantitative data in this research was analyzed by descriptive statistics such as the frequencies percentages, mean and standard deviation using statistical package for social sciences (SPSS V 21.0). The research also conducted a correlation analysis. The study found that there is a positive and significant relationship between HIV/AIDS counselling and testing uptake among men and socio-demographic characteristics, socio-cultural factors and health service factors of magnitude 0.628, 0.778 and 0.632 respectively. The positive relationship indicates that there is a correlation between the factors and HIV/AIDS counselling and testing uptake among men. The study concludes that one issue of particular relevance is stigma surrounding both the HIV testing process and the disclosure of an HIV-positive status. The stigmatizing nature of HIV/AIDS is a factor that influence delayed HIV testing by at-risk persons. The study recommends that there is a need of promotion of VCT through sound and viable information and counselling interventions by involving mass media, colleges, mass organizations and parents.
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

HIV/AIDS has become a major public health concern worldwide. Its impact threatens the very existence of human race. HIV/AIDS has been shown to impact on men and women differently. In the absence of effective treatment and/or vaccine, behaviour change remains the most viable way of controlling and preventing the pandemic. Voluntary Counselling and Testing (VCT) has been shown to play a major role in behaviour change for both seronegative and seropositive persons, which lead to safer sexual practices. Although the first case of HIV was reported; in 1984, VCT uptake has been low (Ajzen, 2001).

According to the National AIDS and STD Control Programme, HIV/AIDS “still remains the biggest social, economic and development challenge” in Kenya. Since the first case of HIV was discovered in Kenya in 1984 the prevalence has risen steadily (National AIDS and STD Control Programme, 2005). In the year 2000, with a population of just over 30 million and an HIV prevalence of 9% in adults, Kenya saw an estimated 110,000 deaths from HIV/AIDS (Ministry of Health, 2001) with the virus targeting the most productive portion of the population - those between the ages of 15 and 49 years. It was not until that year, after more than 15 years of devastation, that the Kenyan government finally recognized HIV/AIDS as a national disaster (Bassett, Giddy, Nkera, Wang, Losina, Lu, Freedberg and Walensky, 2007).

One reason for high prevalence rates is that most people are unaware of their HIV status, which poses a major challenge in preventing HIV transmission and providing effective care to infected persons. In the year 2000, with only three stand-alone testing sites in the entire country, the government of Kenya decided to employ a new intervention technique and included the use of Voluntary Counselling and Testing (VCT) services in public health care settings, dedicating itself to the opening of over 350 sites by the end of 2004. They were indeed successful as by 2007 Kenya had established over 700 centres nationwide and had serviced a total of 1.2 million Kenyans. While earlier Kenyan HIV prevention campaigns had focused on awareness, behaviour change and proper condom use, knowledge of one’s HIV status was rarely ever
advocated and at most, only 14% of the Kenyan population had ever been tested for HIV (Matovu and Makumbi, 2007).

Voluntary Counselling and Testing is a crucial intervention strategy for HIV, promoting safe behaviour, providing personalized support, and serving as an entry point for care and treatment. VCT is largely aimed at the asymptomatic individual and offers those wishing to be tested for HIV pre and post-test counselling as well as on-site rapid HIV testing (Taegtmeyer, Kilonzo, Mungala, Morgan, & Theobald, 2006). By informing clients of their HIV serostatus and creating personalized HIV prevention plans, VCT centres can provide the support necessary to change risky sexual behaviours and prevent the transmission of HIV (Voluntary HIV-Counselling & Testing Efficacy Study Group, 2000). Since their implementation, VCT programs have demonstrated their ability to promote safe sexual behaviours and provide care and support services among adults (Matovu, Gray, Makumbi, Wawer, Serwadda, Kigozi, Sewankambo, & Nalugoda, 2005; Sangiwa, Balmer, Furlonge, Grinstead, Kamenga & Coates, 1998). In spite of this progress, up to 80% of Kenyans aged 15 to 54 still do not know their HIV status (National AIDS and STD Control Programme, 2005) and the particular successes and challenges of VCT in Kenya must be further scrutinized before the system can be improved. When considering the vast amount of resources that have gone into making VCT widely available and accessible, the remaining barriers to the uptake of VCT must be identified.

HIV Voluntary Counselling and Testing (VCT) is now widely accepted as the cornerstone of HIV prevention programmes in many countries because of its multiple benefits (Baiden, Akanlu, Hodgson, Akweongo, Debpuur and Binka, 2007). Furthermore, VCT is the gateway to comprehensive HIV care and support including access to antiretroviral therapy. Newer approaches of VCT delivery including routine HIV counselling and testing, home-based VCT, use of community-based lay counsellors, couple counselling and testing, and same-day mobile VCT, have been added to the traditional VCT delivery systems of free standing, health unit based, and outreach VCT services (Arthur, Ngatia, Rachier, Mutemi, Odhiambo and Gilks, 2005).

Kenya has witnessed remarkable developments in the area of HIV counselling and testing over the last four years. Voluntary Counselling and Testing has been successful in scaling access to
counselling and testing with over 900 VCT sites established as at December 2007 (JAPR 2007, NASCOP). This strategy has targeted a client initiated, supply of services approach. Increasingly focus has shifted to creating demand for testing through mobilization and mobile VCT. Further the development and launch of guidelines for provider initiated HIV testing has accelerated the rate of testing in Kenya. The two approaches opt-in and opt-out testing has been successfully combined to provide options for accelerated expansion of national HIV counselling and testing programmes.

1.2 Statement of the Problem

Voluntary HIV Counselling and Testing (VCT) is one of the key strategies in the prevention and control of HIV/AIDS in Kenya (JAPR, 2007). However, the utilization of VCT services particularly among men is low (Matovu and Makumbi, 2007). The major barriers to VCT use among men were poor utilization of VCT services due to poor access, stigma and confidentiality of services.

Despite the array of delivery approaches and the advantages of VCT, uptake in sub-Saharan Africa is disappointingly low with reports of 12% to 56% among couples or the general public (Were et al., 2006). Furthermore, there is very little information on VCT uptake among men, and also on the factors that influence it. It is not known whether factors that influence VCT uptake in the general population such as socio-demographic characteristics, socio-cultural factors, health service factors and knowledge and perceptions are also operational in VCT uptake by men only (Matovu and Makumbi, 2007). Men's utilization of VCT is important because in many societies including those in Kenya, men are the heads of households and control decisions and resources that are essential for HIV prevention and care. As Kenya gears to consolidate gains in HIV prevention, it is vitally important that men are fully involved in the HIV prevention and control strategies. The justification of the study area is that between October 2012 and September 2013 a total of 3889 men and women were tested at the Kiandutu level 111 health centre. Men who were tested were 1302 compared to 2587 women who tested in the same period almost double the number of men tested. Previous studies on uptake of VCT were conducted by Balkheisa (2012) on youth in Garissa County and also by Okech (2012) on utilization of HBTC services by adolescence in Juakali settlement Marurui Roysambo Division. None was conducted on men. It was against this background that the researcher was motivated to conduct a study to determine
the factors influencing low HIV/AIDS counselling and testing uptake among men in Kenya by focusing on men of Kiandutu Slums in Thika.

1.3 Purpose of the Study

The purpose of this study was to establish the factors influencing HIV/AIDS counselling and testing uptake among men in Kenya by focusing on Kiandutu slums in Thika.

1.4 Objectives of the Study

The specific objectives of this study were;

1. To establish how socio-demographic characteristics influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums

2. To assess how socio-cultural factors influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums

3. To determine how access to health services influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums

1.5 Research Questions

The study sought to answer the following research questions;

1. How do socio-demographic characteristics influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums?

2. How do socio-cultural factors influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums?

3. How does access to health services influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums?

1.6 Significance of the Study

To the healthcare workers, the study may be of great importance as it may provide information on how Socio-cultural factors, Socio-demographic characteristics, Health service factors and Knowledge influence low HIV/AIDS counselling and testing uptake among men in Kenya.
To the government and policy makers the study may provide information on the factors influencing low HIV/AIDS counselling and testing uptake among men in Kenya which can be used to formulate more policies so as to enhance HIV/AIDS counselling and testing uptake among men in Kenya.

The results of this study may provide insight and information thus building the body of knowledge in the field of HIV/AIDS counselling and testing uptake among men. It may therefore be of interest to other researchers who may want to conduct research on this important concept. The study may also provide a base upon which secondary material on factors influencing low HIV/AIDS counselling and testing uptake among men in Kenya may be drawn.

1.7 Delimitation of the Study

The scope of this study covered factors influencing low HIV/AIDS counselling and testing uptake among men in Kenya. The study was limited to men aged between 15 - 49 years in Kiandutu slums since men between these ages are the most sexually active and well conversant with the subject matter of the study. The study was also limited to men between 15 and 49 years and healthcare workers in Kiandutu slums.

1.8 Limitations of the Study

There were expected challenges during data collection where some target respondents may fail to give the required information due to fear of victimization and attitude towards this study. The researcher however worked at winning the confidence of those involved in this research by giving them the reasons for the research and assuring them of confidentiality.

1.9 Basic Assumptions of the Study

The researcher assumed that the cited respondents are knowledgeable of the subject matter of this study. The researcher also assumed that external factors would not arise as this would affect the process of data collection and hence the completion of the project.

1.10 Definition of Significant Terms used in the study

Health service factors: These are factors related to the service offered in a health care which include distance to VCT site, travel times, availability of VCT service, confidentiality, and quality of service.
**Health care workers:** These are individuals that provide preventive, curative, promotional or rehabilitative health care services in a systematic way to individuals, families or communities.

**HIV Counseling:** This is a confidential dialogue between a client and a counsellor aimed at enabling the client to cope with stress and take personal decisions related to HIV/AIDS. The counselling process includes evaluating the personal risk of HIV transmission, and discussing how to prevent infection.

**Socio-cultural factors:** These are factors characterizing the relationships and activities of the population of a specific region or operational environment.

**Socio-demographic characteristics:** Pertaining to or characterized by a combination of sociological and demographic characteristics. These include age, marital status, occupation, education level, type of marriage, religion and income.

**Stigma:** AIDS-related stigma and discrimination refers to prejudice, negative attitudes, abuse and maltreatment directed at people living with HIV and AIDS.

1.11 **Organization of the Study**

The study project is organized into five chapters, each of which contains specific information. Chapter one contains the introduction to the study. It gives background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the Study, delimitations of the study, limitations of the Study and the definition of significant terms. On the other hand, chapter two reviews the literature based on the objectives of the study. It further looked at the conceptual framework and finally the summary. Chapter three covers the research methodology of the study. The chapter describes the research design, target population, sampling procedure, tools and techniques of data collection, pre-testing, data analysis, ethical considerations and finally the operational definition of variables. Chapter four covers data analysis, presentation and interpretation. Chapter five covers the summary of findings, discussion, conclusions and recommendations.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides information from publications on topics related to the research problem. It examines what various scholars and authors have studied/written about factors influencing HIV/AIDS counselling and testing uptake among men. The chapter presents the relevant theory and also offers a conceptual framework on which the study is based. The chapter covers the influence of socio-demographic characteristics, socio-cultural factors and health service factors on HIV/AIDS counselling and testing followed by the theoretical framework, the conceptual framework and finally the summary of the literature review.

2.2 Influence of Socio-Demographic Characteristics on Uptake of HIV/AIDS Counselling and Testing

Hutchinson and Mahlalela (2006) in Eastern Cape, South Africa found that older men (35 years or more) were less likely to use VCT than younger men. Older men who tend to be more conservative and may not accept VCT readily are more likely to be rural subsistence farmers, less educated, and less informed about HIV and VCT. Furthermore, they are more likely to be married, with less risky sexual behaviour, and thus with a lower perception of HIV risk. Because of their lower education and stronger roots to tradition, they are more likely to hold fatalistic attitudes about HIV and to prefer to remain in a state of denial regarding their HIV status.

Gender has been found to be a significant predictor in the uptake of VCT (Sherr, Lopman, Kakowa, Dube, Chawira, Nyamukapa, Oberzaucher, Cremin and Gregson, 2007). Adult men are more likely than their female counterparts to report psychological deterrents to utilization of VCT yet have been found to require reassurance of their HIV status more frequently (Sherr et al., 2007). In a study conducted by Liou and Contento (2001) the authors conclude that gender is a factor when determining the willingness of participants to have VCT, with only 57% of male respondents willing to have VCT in contrast to 83% of females. However, there is very little information on VCT uptake among men, and also on the factors that influence it. It is not known whether factors that influence VCT uptake in the general population are also operational in VCT
uptake by men only (Bassett, Giddy, Nkera, Wang, Losina, Lu, Freedberg, & Walensky, 2007). Men utilization of VCT is important because in many societies including those in Kenya, men are the heads of households and control decisions and resources that are essential for HIV prevention and care. As Kenya works to consolidate gains in HIV prevention, it is vitally important that males are fully involved in HIV prevention and control strategies.

According to MOHSS (2008c), one third of all clients tested for HIV were men. New Start data and National HIV Testing Day results indicate that amongst all clients tested 40% were men. In a survey conducted in Keetmanshoop, Walvisbay Rundu and Oshakati, males were also less likely to have been tested than females of the same age but the prevalence of testing also decrease with increase in age (Parker and Connolly, 2007). These figures confirm the gender differences in uptake of VCT between men and women and indicate the need for a response targeting men in Namibia. Women accessed HIV counseling and Testing services more in public facilities through reproductive health services including PMTCT. Men prefer testing at New Start Centers because they trusted counsellors and their privacy was assured. In Kenya men also preferred to be tested at stand alone VCT sites as compared to public testing facilities especially those who are not married (Taegtmeyer, Kilonzo, Mung’ala, Morgan and Theobald, 2006). It is common belief in African societies that men are superior and should dominate women (Bwambale et al, 2008). In Kenya and Malawi women's decision to be tested was greatly influenced due to financial dependency on partners (Taegtmeyer et al, 2006).

Brown et al (2005) in a study conducted amongst Ovambo men and women in Namibia found that traditionally, masculinity is often associated with money and property, as this is a sign of wealth. Masculinity often affects health behaviours, because men have to appear to be strong, and seeking health care services, including VCT is a sign of men's weakness (Brown et al, 2005). This was confirm by a study conducted by Steinitz, Pool, Nyanzi and Whitworth (2009) among PLWHA in Namibia, found that more male than female respondents did not seek treatment after testing positive. Similarly, more males than females started but stopped treatment. This also differed with the level of education
2.3 Influence of Socio-Cultural Factors on HIV/AIDS Counselling and Testing

One issue of particular relevance is stigma surrounding both the HIV testing process and the disclosure of an HIV-positive status. The stigmatizing nature of HIV/AIDS is a factor that affects delayed HIV testing by at-risk persons (Genberg, Kawichai, Chingono, Sendah, Chariyalertsak, Konda, & Celentano, 2007) and influences the acceptability of testing (Kipp, Kabagambe & Konde-lelu, 2002). Stigma and discrimination account for a considerable portion of the barriers to VCT uptake in populations in Zimbabwe (8% of respondents; Sherr et al., 2007), Uganda (51.7%; Bwambale et al, 2008), and Nigeria (48%, Iliyaso, Abubaka, Kabir and Aliyu, 2006). In fact, many people fear the psychosocial consequences of testing positive for HIV/AIDS particularly when it may lead to loss of social status (Brown, Mcintyre, & Trujillo, 2003). Participants in a Ugandan study report that many people avoid utilizing VCT services for fear of being seen by family, friends or neighbours, and consequently raising suspicions about promiscuity or infidelity (Bwambale et al., 2008).

While some Kenyans have reportedly lost employment, faced violence or rejection from their partners or spouses, and have generally been discriminated against and isolated by society after disclosing HIV positive status, the stigmatizing nature that surrounds an HIV-positive result brings forth fear in those wanting to seek testing (Spielberg, Kurth, Gorbach & Goldbaum, 2001). In the absence of HIV treatment acceptability or availability, many adults do not see the benefits of testing, as testing itself, regardless of the outcome, may be putting a person at risk of loss of social status (Brown et al., 2003; Parker & Aggleton, 2003). Adults who have not been tested hold higher level of AIDS-related stigma and negative attitudes towards testing than do individuals who have previously had VCT (Hutchinson & Mahlalela, 2006). Yet, previous studies have indicated that routinely offering HIV counselling and testing services might be effective in reducing stigma and discrimination in the community (Matovu & Makumbi, 2007).

Men in particular are greatly affected by stigma-related barriers to seeking VCT with over half of men in a Ugandan study stating they feared to test for HIV solely because of stigma (Bwambale et al., 2008). Men are most worried about the effects of being labelled HIV-infected because of the potential loss of social privileges. Fear of meeting familiar people in HIV testing clinics drives men to prefer being tested in distant clinics, although this is not always feasible nor convenient for many (Bwambale et al., 2008). While knowledge about HIV/AIDS is necessary
to combating AIDS-related stigmas, more targeted intervention strategies need to be upheld. Public health laws, social marketing, anti-stigma campaigns, community mobilizations and the use of mass media are needed to change societal beliefs about people living with AIDS (Kalichman & Simbayi, 2003).

In Voluntary counseling and testing facilities people are nevertheless encouraged to disclose their HIV serostatus because it is believed that it reduces stress and anxiety as well as improving access to HIV prevention, treatment, care and support services (Matovu & Makumbi, 2007). The household surveys mentioned earlier conducted in some of the areas in Namibia; found that many people living with HIV disclose their HIV status to family members to be able to access ART. The first edition of National ART guidelines launched in 2003 requires that eligible PLWHA accessing HAART should have a designated treatment supporter. PLWHA mostly prefer family members’ as treatment supporters (Parker and Connolly, 2007). Experience has shown that this is a very difficult criterion for some patients to meet.

A review conducted in developing countries among HIV positive women suggested that disclosure offers benefits not only to the individual but it may also lead to safer sexual practices which in turn reduces the risk of HIV transmission to partners (Parker and Connolly, 2007). One study conducted in Uganda among men found that they do not want to disclose their HIV status to their partners mainly because they fear denial of their sexual rights (Bwambale et al, 2008). Decision to disclose are often affected by fear for rejection, abandonment, stigma, violence, losing financial support and accusations of infidelity hinders disclosure in HIV positive women (Sherr et al, 2007).

2.4 Influence of Health Service Factors on HIV/AIDS Counselling and Testing

The most important concerns are access to VCT services, confidentiality and quality of HIV results. Access to VCT services and to health services in general is a nationwide problem. The concerns of access overlap with those for confidentiality. Confidentiality is a major issue among the men, to the extent that many would prefer to test for HIV in a distant clinic where the staffs do not know them, but which of course would raise issues of access. As has been reported elsewhere, confidentiality is an important factor that may reduce VCT utilization (Hutchinson &
Mahlalela, 2006). Stigma and confidentiality are closely linked and the greater the stigma of a condition, the greater the need for confidentiality.

Men also have concerns about the quality of HIV results. This concern is not about the performance of the HIV test but rather about the integrity of the health workers in providing accurate HIV results. Specifically, men fear that health workers are bribed to falsify HIV results (Kauth, 2000). To complicate the situation even more, men do not believe in discordant HIV results and view this as further evidence of corruption. Another angle to the issue of quality is the high drop out between pre-test counseling and HIV testing.

The perceived ease or difficulty in visiting an HIV counselling and testing facility is also evident in previous literature. Factors such as access, cost, waiting time, confidentiality, location of VCT and quality of VCT are large issues that affect VCT uptake (Bwambale et al., 2008). Previous studies have described that males over the age of 15 in South Africa are most heavily influenced by the characteristics of the VCT services themselves (Hutchinson & Mahlalela, 2006). Factors such as location of VCT, presence of rapid testing and home visiting for palliative care are significant influences in VCT uptake (Sherr et al., 2007). In Uganda, men who had ever undergone VCT stated the main reasons for choosing a particular site were confidentiality, proximity, and convenience (Bwambale et al., 2008). Because the traditional VCT centre relies on the individual to actively seek HIV counselling and testing, this approach to care rests on awareness of the availability of the service as well as the individual’s conscious choice to return to the centre to receive test results. Where health systems are weak and resources are limited, individual attitudes and personal perceptions of the available VCT services create further barriers to testing (Matovu & Makumbi, 2007) therefore having a considerable impact on the eventual uptake of VCT (Kalichman & Simbayi, 2003).

In South Africa, the motivation to use VCT is low because, correctly or incorrectly, people do not view themselves as being at risk for HIV/AIDS, even in high prevalence areas or in high-risk behaviour groups (Hutchinson & Mahlalela, 2006; Kilewo, Kwesigabo, Comoro, Lugalla, Mhalu, Biberfeld, Wall, & Sanstrom, 1998). High risk groups tend to be less likely to participate in VCT (Matovu et al., 2005) possibly for fear of learning a positive test result (Spielberg et al., 2001). However, only 9.1% of participants in a Ugandan study perceived themselves to be at a
high risk of HIV yet the study found the majority of men, especially single men, reported themselves to be at high risk for HIV because of multiple sexual relationships (Bwambale et al., 2008). In fact, a significant proportion of men in the Ugandan study reported engaging in risky sexual behaviour including having multiple sexual partners and unprotected sexual intercourse. Multiple sexual partners was reported to be a common practice and appeared to be a manifestation of male dominance in society. However, in spite of the risky sexual behaviour, the men reported very low perception of risk, especially in the oldest cohort.

In Zambia, individuals willing to seek VCT were more likely to be at high risk and were more likely to test positive (Fylkesnes & Siziya, 2004). One possible explanation for the apparent discrepancy between multiple sexual partners and risk perception may be that multiple sexual partners are a societal norm and men do not perceive it as risky behaviour. Secondly, lack of HIV knowledge may further decrease perception of HIV risk in these men.

2.6 Theoretical Framework

HIV infection is an international public health concern. Cases of HIV incidences worldwide still remain a challenge to health efforts. While a lot of funds have been injected in the prevention of new infections, challenges still abound. Structural systems that create bottlenecks that inhibited access to related services are reducing currently. However, access to HIV counselling and testing has been inhibited by many factors: Lack of funds to roll out major campaigns, lack of justifiable data to inform exact HTC needs in the various areas, legislations outlawing some practices like IDUs, Gay relationships and sex work-which make it difficult to reach these populations, lack of systems to support IEC dissemination, gender based inequalities etc. Infection with HIV is an adverse health outcome of profound personal, family and social importance. It threatens the limited gains in health that have been achieved in several areas of the developing world and neither vaccine nor therapy for widespread use is likely to become available for at least several years. The HIV global effort may be long term and likely to last beyond our generation. For effective outcomes, HIV prevention and control programs must be integrated with primary health care (Admassu and Fitaw, 2006).

Every country has a strategy spelling out their approach to intervening against HIV and the policies that inform and support their strategy. In Kenya, HIV interventions are based on its
The Kenya National AIDS strategic plan III. The plan has four key impact results by the year 2013: number of new infections reduced by at least 50%, AIDS-related mortality reduced by 25%, reduction in HIV-related morbidity and reduced socio-economic impact of HIV at household and community level.

To achieve these results, the plan seeks to achieve 80% correct knowledge of HIV status across the whole country. As a behavioural intervention, HTC supports KNASP III pillar three- The Community-based HIV Programmes Pillar which seeks enhance community engagement and capacity and strengthen social transformation into an HIV competent society. This depends on assessing KAP of communities and mitigating appropriately. However, in Kenya, one challenge has been low male involvement in HIV programs. This is likely to affect the gains in SRH interventions where women have been the dominant participants. Yet men have more power in decisions in many a household in Kenya.

The Theory of Planned Behaviour (Ajzen, 2001), built upon the earlier Theory of Reasoned Action, focuses on the theoretical constructs that are concerned with individual motivational factors as determinants of the likelihood of performing a specific behaviour. The central factor of the theory is the individual’s intention to perform a given behaviour. Intentions capture the motivational factors that influence behaviour and are indications of how much of an effort people are willing to exert in order to perform behaviour. As a general rule, the stronger the intention to engage in behaviour, the more likely should be its performance. The TPB was designed to explain intention only if the behaviour in question is under volitional control – if the person can decide at will to perform or not perform the behaviour. The theory predicts that the intention to perform behaviour is a function of three salient beliefs: the person’s attitude, subjective norms and perceived behavioural control.

The three predictors influence subsequent behaviour indirectly through behavioural intention. The theory specifies that the determinants of attitudes, subjective norms and perceived behavioural control combine multiplicatively and that one of the strengths of the Theory of Planned Behaviour is its broad applicability. The theory has been able to account for a considerable proportion of the variance in intention and behaviour in previous literature.

Attitudes have been the most widely researched aspect of the TPB and continue to receive attention from social and cognitive psychologists (Ajzen, 2001). Attitudes toward performing
behaviour reflect favourable or unfavourable evaluation of the particular behaviour. Attitude toward the behaviour— in this case, uptake of VCT— is determined by individuals’ beliefs about the outcome of performing the behaviour (behavioural beliefs; belief that VCT uptake is associated with certain attributes) weighed by the extent to which these outcomes are valued (belief outcomes; value attached to VCT uptake).

Subjective norms refer to the perceived social pressure to perform the behaviour. They are governed by perceptions of whether significant others think that one should perform the behaviour (normative beliefs; belief about whether each referent approves or disproves of VCT) and one's motivation to comply with the wishes of significant others (motivation to comply; motivation to do what each referent thinks is right). With regard to norms, individuals differ in the weight they place on subjective norms as influencers; these also vary across behaviours (Ajzen and Fishbein, 2000). In other words, some adolescents may give importance to their attitude about the behaviour when deciding to engage in behaviour, while other adolescents may give more importance to what they think others think they should do.

Perceived behavioural control reflects the perceived ease or difficulty associated with behaviour performance and with behavioural intention, and unlike attitudes or subjective norms, is posited to directly predict behavioural achievement. This construct of the theory is intended to account for situations where an individual has less than complete control over the behaviour and includes two components. The first component is “facilitating conditions” which reflect the availability of resources needed to engage in behaviour. This might include access to the time, money and other resources required to engage in behaviour. The second component is self-efficacy and refers to the individual’s self-confidence in his/her ability to perform behaviour. Ajzen argues that a person will expend more effort to perform a behaviour when his or her perception of behavioural control is high. Beliefs about the presence of factors that might hinder the behavioural achievement (control beliefs; perceived likelihood of occurrence of each facilitating/constraining condition) and perceived ability to control factors that might hinder the behavioural achievement (power of control; perceived effect of each condition in making VCT uptake difficult/easy) provide the basis for perceived behavioural control.
According to the theory, an individual’s intention to perform a specific behaviour is a direct determinant of whether he or she will act. To accurately assess the behaviour, one must take into account the target, time, context and behaviour on which the intent is being judged (Ajzen & Fishbein, 2000). The theory’s validity is therefore achieved through empirical support for the relationships among attitudes, subjective norms, perceived behavioural control and their relative path weights that lead to intention.

2.7 Conceptual Framework

A conceptual framework is a research tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to communicate this. A conceptual framework is used in research to outline possible courses of action or to present a preferred approach to an idea or thought. According to Ajzen (2001), a conceptual Framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical/ synthetical aspects of a process or system being conceived. The interconnection of these blocks completes the framework for certain expected outcomes.

Independent Variables are changes that occur in an experiment that are directly caused by the experimenter. The independent variables in this study are as follows and are shown in the figure 1 below: socio-demographic characteristics, socio-cultural factors and access to health services. On the other hand, a dependent variable is a variable dependent on another variable: the independent variable. A dependent variable is what you measure in the experiment and what is affected during the experiment. The dependent variable responds to the independent variable. The dependent variable is: HIV/AIDS counselling and testing uptake among men.
This study sought to establish the factors influencing low HIV/AIDS counselling and testing uptake among men in Kenya by focusing on of Kiandutu slums in Thika. The independent variables in this study are socio-cultural factors, socio-demographic characteristics and health service factors while the dependent variable is HIV/AIDS counselling and testing uptake among men. The policy and legal framework including policies and guidelines are the moderating variables while perceived benefit, previous sexual behaviour and attitude are the intervening variables.


2.8 Summary of the Literature Review

Gender has been found to be a significant predictor in the uptake of VCT. Men utilization of VCT is important because in many societies including those in Kenya, men are the heads of households and control decisions and resources that are essential for HIV prevention and care. Masculinity often affects health behaviours, because men have to appear to be strong, and seeking health care services, including VCT is a sign of men's weakness.

Factors that influence uptake of VCT may be based in part on past experience with being tested for HIV, but they will also be influenced by second-hand information about the testing process, by the experiences of acquaintances and friends, and by other factors that increase or reduce the perceived difficulty of attending a VCT clinic.

The stigmatizing nature of HIV/AIDS is a factor that affects delayed HIV testing by at-risk persons. Men in particular are greatly affected by stigma-related barriers to seeking VCT. The perceived ease or difficulty in visiting an HIV counselling and testing facility is also evident in previous literature. Factors such as access, cost, waiting time, confidentiality, location of VCT and quality of VCT are large issues that affect VCT uptake.

Most of the literature reviewed is from other countries whose strategic approach and socio-demographic factors are different from that of Kenya. Given that one challenge in Kenya has been low male involvement in HIV programs especially VCT, this study therefore sought to fill this gap by establishing the factors that influence uptake of HIV/AIDS counselling and testing among men in Kiandutu Slums.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction
This chapter presents methodology in line with the research questions of the study. In this chapter the research methodology is be presented in the following order, research design, target population, sample size and sampling technique, data collection method, validity, reliability, data analysis ethical issues and an operationalization of variables table is also presented

3.2 Research Design
This research problem was studied through the use of a descriptive cross-sectional survey research design. According to Cooper and Schindler (2003), a descriptive study is concerned with finding out the what, where and how of a phenomenon. Descriptive survey research design is chosen because it enables the researcher to generalise the findings to a larger population. Gill and Johnson (2006) also observed that descriptive surveys address specific characteristics of a selected population of subjects at a point in time, for the purpose of comparing the relationship between variables. Thus, this study addressed specific characteristics of the men in a bid to establish the factors influencing HIV/AIDS counselling and testing uptake.

3.3 Target Population
The target population of this study were men residing in Kiandutu slums in Thika, Kiambu County. Kiandutu slum being the largest slum in former Central Province of Kenya has a population of 20,000 people of which 12,000 are men (Census Survey, 2009). 7213 of them are aged between 15 and 49 years. The target population also included 24 health care officers in Kiandutu slums (District health office, 2012).

3.4 Sample Size and Sampling Technique
The researcher used Mugenda and Mugenda (2003) formula to select the sample size of the study. A 95% confidence level with + 5% margin of error (MOE) is desired for this study. The margin of error is a statistic expressing the amount of random sampling error in a survey's results. The unadjusted sample size (n') required for + 5% MOE using the conservative proportion (p) of p=0.5 (or 50%) is:
Where:

\[ Z \text{ is the } Z \text{ – value } = 1.96 \quad P \text{ Population proportion } 0.50 \]

\[ Q = 1-P \]

\[ \alpha = \text{level of significance} = 5\% \]

\[ n = \frac{1.96 \times 1.96 \times 0.5 \times 0.5}{0.05 \times 0.05} \]

\[ n = 364 \]

Adjusted sample size \( n^{'} = \frac{384}{1+(384/7213)} \]

Approx = 365

The researcher then used simple random sampling to select 365 men in Kiandutu slums. In addition all the men to be selected in this study must be between 15 – 49 years in age since they are the most sexually active (Kenya AIDS Indicator Survey (KAIS), 2007; National Public Health Laboratory Services (NPHLS) 2011). The research also selected all the 24 healthcare workers in Kiandutu slums. The sample size of this study was therefore 389 respondents.

3.5 Research Instrument

The researcher collected both qualitative and quantitative data. Qualitative data was collected by use of interview guides while quantitative data was collected by use of semi-structured questionnaires.

The questionnaire was structured to include both closed, open-ended and matrix questions to allow variety. The structured questions are normally close ended with alternatives from which the respondent is expected to choose the most appropriate answer (Mugenda & Mugenda, 2003). The main advantage of this type of questions is that they are easy to analyse and require a lower investment in terms of time and money. Unstructured questions are open-ended and present the respondent with the opportunity to provide their own answers. These types of questions are easy
to formulate and allow the respondent to present their feelings on the subject matter enabling a greater depth of response (Mugenda & Mugenda, 2003).

Interviewing involves the collection of data through talking to respondents or interviewees and recording their responses. Face to face interview was used in this study to collected data from healthcare workers. Face-face interviews is a method which the investigation follows a rigid procedure and seeks answers to a set of pre-conceived questions through personal interviews.

### 3.6 Validity of the Research Instrument

Validity was assessed through content and construct validity. Content validity is a measure of the degree to which data collected using a particular instrument represents a specific domain or content of a particular concept. Content validity is established through the extensive process of item selection and refinement in the development of the instrument. The content validity was extensively pre-tested with the specialists in the field including the VCT counsellors and with my supervisor. Particular attention was given to wording, structure, sequence and overall presentation of the items in the questionnaire.

### 3.7 Reliability of the Research Instrument

Reliability is ensured by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. The questionnaire was then piloted with 15 men randomly selected from the sample size. Interviews were conducted with these respondents to determine whether there was any problem with the questionnaire format. On the basis of their comments, changes were made to the questionnaire to clarify wordings and increase readability. The pre-testing procedure was important to establish content validity (Chwelos et al., 2001). In order to test the reliability of the instruments, internal consistency techniques was applied using Cronbach’s Alpha. The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. Coefficient of 0.6-0.7 is a commonly accepted rule of thumb that indicates acceptable reliability and 0.8 or higher indicated good reliability (Mugenda, 2008). The pilot data wasn’t included in the actual study.

A pilot study was carried out to determine reliability of the questionnaires. The pilot study involved the men residing in Kiandutu slums in Thika, Kiambu County. Reliability analysis was subsequently done using Cronbach’s Alpha which measures the internal consistency by
establishing if certain item within a scale measures the same construct.

Gliem and Gliem (2003) established the Alpha value threshold at 0.6, thus forming the study’s benchmarked. Cronbach Alpha was established for every objective which formed a scale. The table shows that socio demographic factors had the highest reliability ($\alpha=0.815$), followed by socio-cultural factors ($\alpha=0.810$) and access to health services ($\alpha=0.715$). This illustrates that all the three variables were reliable as their reliability values exceeded the prescribed threshold of 0.6.

Table 3.1: Reliability Analysis

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach's Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio demographic factors</td>
<td>0.815</td>
<td>5</td>
</tr>
<tr>
<td>Socio-cultural factors</td>
<td>0.810</td>
<td>6</td>
</tr>
<tr>
<td>Access to health services</td>
<td>0.715</td>
<td>7</td>
</tr>
</tbody>
</table>

3.8 Data Collection Procedure

This refers to the means the researcher used to gather the required data or information. The study used both secondary and primary data. The researcher used both questionnaires and an interview guide. The researcher administered the questionnaire individually to all respondents and wait for them to fill. The researcher exercised care and control to ensure all questionnaires issued to the respondents are received and to achieve this, the researcher maintained a register of questionnaires. The researcher also booked appointments with healthcare workers for the interviews.

3.9 Data Analysis Techniques

Data analysis is a process used to make sense of the data. The type of data analysis tool used is dependent on the type of data, that is; is the data qualitative or quantitative. The quantitative data in this research was analyzed by descriptive statistics using statistical package for social sciences (SPPSV 21.0). Descriptive statistics includes mean, frequency, standard deviation and percentages and cross tabulation to profile sample characteristics and major patterns emerging
from the data. Qualitative data was analysed using content analysis. Data was then presented in frequency tables. The research also conducted a Pearson’s correlation analysis to establish the relationship between variables.

3.10 Ethical Considerations

According to Kerridge, Lowe and McPhee (2005), ethics involves making a judgment about right and wrong behaviour. Ethics as noted by Minja (2009) is referred to, as norms governing human conduct which have a significant impact on human welfare. In this study, confidentiality was of concern as the information relevant to the study is personal. In this regard, the names of the respondents were not being disclosed. In addition, where a response could have been attributed to specific individuals the said information was maintained in strict confidence.

3.11 Operationalization of Variables

The operational definition of variables was shown by Table 3.1
Table 3.2: Operational Definition of variables

<table>
<thead>
<tr>
<th>Objective</th>
<th>Independent variable</th>
<th>Indicators</th>
<th>Measurement scale</th>
<th>Type of analysis</th>
<th>Analysis tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>To establish the influence of socio-demographic characteristics on HIV/AIDS counselling and testing uptake among men in Kiandutu slums</td>
<td>Socio-demographic characteristics</td>
<td>Age, Education, Level of income, Awareness of the service availability</td>
<td>Ordinal, Ordinal, Nominal</td>
<td>Mean, Percentage</td>
<td>Descriptive, Correlation</td>
</tr>
<tr>
<td>To establish how socio-cultural factors influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums</td>
<td>Socio-cultural factors</td>
<td>Religious beliefs, Community Beliefs and taboos, Norms, Values</td>
<td>Nominal, Nominal, Nominal</td>
<td>Mean, Percentage</td>
<td>Descriptive, Correlation</td>
</tr>
<tr>
<td>To determine the influence of health service factors on HIV/AIDS counselling and testing uptake among men in Kiandutu slums</td>
<td>Health service factors</td>
<td>Access to VCT services, Confidentiality, Quality of HIV results, Attitude of health staff, Accuracy of test, Space of facilities, Privacy</td>
<td>Ordinal, Interval, Ordinal</td>
<td>Mean, Percentage</td>
<td>Descriptive, Correlation</td>
</tr>
<tr>
<td>HIV/AIDS counselling and testing uptake among men</td>
<td>Dependent Variable</td>
<td>Ever visited VCT Ever disclosed status to partner. Ever discussed HIV status with partner.</td>
<td>Nominal</td>
<td>Mean Percentage</td>
<td>Descriptive Correlation</td>
</tr>
</tbody>
</table>
CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction
This chapter discusses the interpretation and presentation of the findings. This chapter presents analysis of the data on the factors influencing HIV/AIDS counseling and testing uptake among men in Kenya by focusing on Kiandutu slums in Thika. The chapter also provides the major findings and results of the study.

4.1.1 Response Rate
The study targeted a sample size of 389 respondents from which 300 filled in and returned the questionnaires making a response rate of 77.12%. This response rate was excellent, representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent.

4.2 Demographic Characteristics
The study sought to establish the background information of the respondents including respondents’ age bracket, highest academic qualification, number of years lived and use of VCT.

4.2.1 Age bracket
The study sought to establish the respondents’ age bracket.
Table 4.1: Distribution of respondents by age

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-20</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>21-25</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td>26-30</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>31-35</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>36-40</td>
<td>105</td>
<td>35</td>
</tr>
<tr>
<td>41-45</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>46-49</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100.0</td>
</tr>
</tbody>
</table>

According to the findings, 35% of the respondents were aged between 36-40 years, 25% of the respondents were aged between 31-35 years, 15% of the respondents were aged between 21-25 years, and 10% of the respondents were aged between 26-30 years, while 5% of the respondents were aged between 15-20 years, 41-45 years and 46-49 years respectively.

4.2.2 Highest Academic Qualification

The study also sought to establish the highest academic qualification of the respondents.

Table 4.2: Highest Academic Qualification

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>46</td>
<td>15.6</td>
</tr>
<tr>
<td>Secondary</td>
<td>67</td>
<td>22.2</td>
</tr>
<tr>
<td>Diploma</td>
<td>20</td>
<td>6.7</td>
</tr>
<tr>
<td>Degree</td>
<td>100</td>
<td>33.3</td>
</tr>
<tr>
<td>Masters</td>
<td>67</td>
<td>22.2</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100.0</td>
</tr>
</tbody>
</table>

According to the findings, 33.3% of the respondents indicated that they had a degree, 22.2% of the respondents indicated that they had a secondary and masters certificate, respectively, 15.6% of
the respondents indicated that they had a primary certificate while 6.7% of the respondents indicated that they had a diploma certificate.

### 4.2.3 Number of years lived in Kiandutu-Thika

**Table 4.3: Number of years lived in Kiandutu-Thika**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 3 years</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>4-5 years</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>6-10 years</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>210</td>
<td>70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

From the findings, 70% of the respondents indicated that they had lived in Kandutu-Thika for over 10 years, 15% of the respondents indicated that they had lived in Kandutu-Thika for between 6-10 years, 10% of the respondents indicated that they had lived in Kandutu-Thika for below 3 years while 5% of the respondents indicated that they had lived in Kandutu-Thika for between 4-5 years.

### 4.2.4 Use of VCT in The last Five Years

The study sought to find out whether the respondents had used VCT in the last five years.

**Table 4.4: Use of VCT in The last Five Years**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>276</td>
<td>92</td>
</tr>
<tr>
<td>No</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

According to the findings, 92% of the respondents had visited the VCT in the last five years while 8% of the respondents indicated that they hadn’t visited the VCT in the last five days.
4.3 Socio-Demographic Characteristics

The study sought to establish how socio-demographic characteristics influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums.

Table 4.5: Socio-Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>4.0707</td>
<td>1.05135</td>
</tr>
<tr>
<td>Level of education</td>
<td>4.2020</td>
<td>.86516</td>
</tr>
<tr>
<td>Level of income</td>
<td>4.0707</td>
<td>.85690</td>
</tr>
<tr>
<td>Awareness of the service availability</td>
<td>4.3434</td>
<td>1.09033</td>
</tr>
</tbody>
</table>

According to the findings, the respondents indicated that awareness of the service availability and the level of education influenced uptake of VCT among men in Kiandutu to a great extent as shown by a mean score of 4.3434 and 4.2020 respectively. The respondents also indicated that the age and level of income influenced uptake of VCT among men in Kiandutu to a great extent as shown by a mean score of 4.0707 respectively.

Table 4.6: Factors Influencing Uptake of VCT services Among Men

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>27</td>
<td>9</td>
</tr>
<tr>
<td>Education</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Level of income</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Service availability</td>
<td>168</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

According to the findings, 56% of the respondents indicated that awareness of the service availability influenced uptake of VCT services among men, 25% of the respondents indicated that education influenced uptake of VCT services among men, 10% of the respondents indicated that level of income influenced uptake of VCT services among men while 9% of the respondents indicated that age influenced uptake of VCT services among men.
**4.4 Socio Cultural Factors**

The study sought to assess how socio-cultural factors influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums.

**Table 4.7: Socio Cultural Factors**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious beliefs</td>
<td>4.5960</td>
<td>1.14214</td>
</tr>
<tr>
<td>Community beliefs and taboos</td>
<td>4.5960</td>
<td>1.01107</td>
</tr>
<tr>
<td>Norms</td>
<td>4.3434</td>
<td>1.20510</td>
</tr>
<tr>
<td>Values</td>
<td>4.6162</td>
<td>1.06625</td>
</tr>
<tr>
<td>Attitudes and perceptions</td>
<td>4.6162</td>
<td>1.20510</td>
</tr>
</tbody>
</table>

According to the findings, the respondents indicated that values and attitudes and perceptions influenced the uptake of voluntary counseling and testing among men in Kiandutu to a very great extent as shown by a mean score of 4.6162 respectively. The respondents also indicated that religious beliefs and community beliefs and taboos influenced the uptake of voluntary counseling and testing among men in Kiandutu to a very great extent as shown by a mean score of 4.5960 respectively. The respondents further indicated that norms influenced the uptake of voluntary counseling and testing among men in Kiandutu to a great extent as shown by a mean score of 4.3434 respectively.

**Table 4.8: Factors Influencing Uptake of VCT services Among Men**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious beliefs</td>
<td>105</td>
<td>35</td>
</tr>
<tr>
<td>Community beliefs and taboos</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Norms</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>Values</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td>Attitudes and perceptions</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
According to the findings, 35% of the respondents indicated that religious beliefs influenced uptake of VCT services among men, 25% of the respondents indicated that community beliefs and taboos influenced uptake of VCT services among men, 20% of the respondents indicated that norms influenced uptake of VCT services among men, 15% of the respondents indicated that values influenced uptake of VCT services among men while 5% of the respondents indicated that attitudes and perceptions influenced uptake of VCT services among men.

### 4.5 Health Service Factors

The study further sought to determine how health service factors influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums.

**Table 4.9: Health Service Factors**

<table>
<thead>
<tr>
<th>Service Factor</th>
<th>Mean</th>
<th>Stdev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of access to VCT services</td>
<td>4.7576</td>
<td>.61392</td>
</tr>
<tr>
<td>Confidentiality</td>
<td>4.5606</td>
<td>.65857</td>
</tr>
<tr>
<td>Quality of HIV results</td>
<td>4.6333</td>
<td>.64550</td>
</tr>
<tr>
<td>Attitude of health staff</td>
<td>4.4848</td>
<td>.75503</td>
</tr>
<tr>
<td>Accuracy of test</td>
<td>4.3939</td>
<td>.85944</td>
</tr>
<tr>
<td>Space of facilities</td>
<td>4.3636</td>
<td>.78817</td>
</tr>
<tr>
<td>Privacy</td>
<td>4.5394</td>
<td>.65857</td>
</tr>
</tbody>
</table>

According to the findings, the respondents indicated that ease of access to VCT services, quality of HIV results, confidentiality and privacy influenced the uptake of VCT services among men to a very great extent as shown by a mean score of 4.7576, 4.6333, 4.5606 and 4.5394 respectively. The respondents further indicated that attitude of health staff, accuracy of test and space of facilities influenced the uptake of VCT services among men to a great extent as shown by a mean score of 4.4848, 4.3939 and 4.3636 respectively.
Table 4. 10: Factors Influencing Uptake of VCT services Among Men

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to VCT services</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>Confidentiality</td>
<td>105</td>
<td>35</td>
</tr>
<tr>
<td>Quality of HIV results</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Attitude of health staff</td>
<td>21</td>
<td>7</td>
</tr>
<tr>
<td>Accuracy of test</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Space of facilities</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Privacy</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100.0</td>
</tr>
</tbody>
</table>

According to the findings, 35% of the respondents indicated that confidentiality influenced uptake of VCT services among men, 25% of the respondents indicated that accuracy of test influenced uptake of VCT services among men, 20% of the respondents indicated that access to VCT services influenced uptake of VCT services among men, 7% of the respondents indicated that attitude of health staff influenced uptake of VCT services among men, 5% of the respondents indicated that quality of HIV test and privacy influenced uptake of VCT services among men, respectively while 3% of the respondents indicated that space of utilities influenced uptake of VCT services among men.
### 4.6 Correlation Analysis

In order to establish the relationship between the various factors and HIV/AIDS counselling and testing uptake among men, Pearson product moment correlation analysis was used. A correlation is a number between -1 and +1 that measures the degree of association between two variables. The correlation coefficient value (r) ranging from 0.10 to 0.29 is considered to be weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong. A positive value for the correlation implies a positive. A negative value for the correlation implies a negative or inverse association.

**Table 4.11: Correlation Matrix**

<table>
<thead>
<tr>
<th></th>
<th>HIV/AIDS counselling and testing uptake among men</th>
<th>Socio-demographic characteristics</th>
<th>Socio-cultural factors</th>
<th>Health service factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIV/AIDS counselling and testing uptake among men</strong></td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Socio-demographic characteristics</strong></td>
<td>Pearson Correlation Sig. (2-tailed)</td>
<td>.628</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Socio-cultural factors</strong></td>
<td>Pearson Correlation Sig. (2-tailed)</td>
<td>.778 .503</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Health service factors</strong></td>
<td>Pearson Correlation Sig. (2-tailed)</td>
<td>.632 .843 .677</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

The data presented on socio-demographic characteristics, socio-cultural factors and health service factors were computed into single variables per factor by obtaining the averages of each
factor. Pearson’s correlations analysis was then conducted at 95% confidence interval and 5% confidence level 2-tailed. The table above indicates the correlation matrix between the factors (socio-demographic characteristics, socio-cultural factors and health service factors) and HIV/AIDS counselling and testing uptake among men.

According to the correlation matrix, there is a positive and significant relationship between HIV/AIDS counselling and testing uptake among men and socio-demographic characteristics, socio-cultural factors and health service factors of magnitude 0.628, 0.778 and 0.632 respectively. The positive relationship indicates that there is a correlation between the factors and HIV/AIDS counselling and testing uptake among men.

According to the correlation matrix, there is a positive and significant relationship between HIV/AIDS counselling and testing uptake among men and socio-demographic characteristics, socio-cultural factors and health service factors of P-value of 0.021, 0.007, 0.002 and 0.027 respectively at 5% level of significance and 95% level of confidence. The positive relationship indicates that there is a correlation between the factors and HIV/AIDS counseling and testing uptake among men.

The correlation findings infers that all the factors positively and significantly influenced HIV/AIDS counseling and testing uptake among men with socio-cultural factors having the highest effect on HIV/AIDS counseling and testing uptake among men, followed by health service factors, while socio-demographic characteristics had the lowest effect on HIV/AIDS counseling and testing uptake among men. This notwithstanding, all the factors were significant (p-value <0.05) at 95% confidence level with the most significant factor being socio-cultural factors.
CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter presents a discussion of the findings, and conclusions drawn from the findings and finally recommendations for practice and further research on the problem. The purpose of this study was to determine the factors influencing HIV/AIDS counseling and testing uptake among men in Kenya by focusing on Kiandutu slums in Thika.

5.2 Summary of Findings
The study deduced that awareness of the service availability and the level of education influenced uptake of VCT among men in Kiandutu to a great extent. The study also found that age and level of income influenced uptake of VCT among men.

The study established that values and attitudes and perceptions influenced the uptake of voluntary counseling and testing among men in Kiandutu to a very great extent. The study further deduced that religious beliefs and community beliefs and taboos influenced the uptake of voluntary counseling and testing among men in Kiandutu to a very great extent. It was further clear that norms influenced the uptake of voluntary counseling and testing among men in Kiandutu to a great extent.

The study deduced that ease of access to VCT services, quality of HIV results, confidentiality and privacy influenced the uptake of VCT services among men to a very great extent. It was clear that attitude of health staff, accuracy of test and space of facilities influenced the uptake of VCT services among men to a great extent. The study also revealed that past experience, AIDS related stigmas, experiences of acquaintances and friends as well as societal values affected the uptake of VCT among men. There is a positive and significant relationship between HIV/AIDS counselling and testing uptake among men and socio-demographic characteristics, socio-cultural factors and health service factors.
5.3 Discussion of Findings

This section looks at the research findings relative to what had been documented previously by researcher indicating whether the findings are in agreement or they contradict earlier studies.

5.3.1 Socio-Demographic Characteristics and HIV Counselling and Testing Uptake

The study found that awareness of the service availability, the level of education, age and level of income influenced uptake of VCT among men. In a survey conducted in Keetmanshoop, Walvisbay Rundu and Oshakati, males were also less likely to have been tested than females (Parker and Connolly, 2007). These figures confirm the gender differences in uptake of VCT between men and women and indicate the need for a response targeting men in Namibia. Women accessed HIV counseling and Testing services more in public facilities through reproductive health services including PMTCT. Men prefer testing at New Start Centers because they trusted counsellors and their privacy was assured. In Kenya men also preferred to be tested at stand alone VCT sites as compared to public testing facilities (Taegtmeyer, Kilonzo, Mung’ala, Morgan and Theobald, 2006). This was confirmed by a study conducted by Steinitz, Pool, Nyanzi and Whitworth (2009) among PLWHA in Namibia, found that more male than female respondents did not seek treatment after testing positive. Similarly, more males than females started but stopped treatment.

5.3.2 Socio-Cultural Factors and HIV Counselling and Testing Uptake

The study established that values, religious beliefs, community beliefs and taboos, attitudes and perceptions as well as norms influenced the uptake of voluntary counseling and testing among men. This is in line with Spielberg, Kurth, Gorbach & Goldbaum (2001) who explains that some Kenyans have reportedly lost employment, faced violence or rejection from their partners or spouses, and have generally been discriminated against and isolated by society after disclosing HIV positive status, the stigmatizing nature that surrounds an HIV-positive result brings forth fear in those wanting to seek testing. Bwambale et al., (2008) explains that men are most worried about the effects of being labelled HIV-infected because of the potential loss of social privileges. Fear of meeting familiar people in HIV testing clinics drives men to prefer being tested in distant clinics, although this is not always feasible or convenient for many.
5.3.3 Health Service Factors and HIV Counselling and Testing Uptake

The study deduced that ease of access to VCT services, quality of HIV results, confidentiality, privacy attitude of health staff, accuracy of test and space of facilities influenced the uptake of VCT services among men. This concurs with Hutchinson & Mahlalela (2006) who postulates that the most important concerns are access to VCT services, confidentiality and quality of HIV results. Access to VCT services and to health services in general is a nationwide problem. The concerns of access overlap with those for confidentiality. Confidentiality is a major issue among the men, to the extent that many would prefer to test for HIV in a distant clinic where the staffs do not know them, but which of course would raise issues of access. As has been reported elsewhere, confidentiality is an important factor that may reduce VCT utilization. Stigma and confidentiality are closely linked and the greater the stigma of a condition, the greater the need for confidentiality.

5.3 Conclusions

From the findings, the study concludes that one issue of particular relevance is stigma surrounding both the HIV testing process and the disclosure of an HIV-positive status. The stigmatizing nature of HIV/AIDS is a factor that affects delayed HIV testing by at-risk persons.

The study also concludes that the most important concerns are access to VCT services, confidentiality and quality of HIV results. Access to VCT services and to health services in general is a nationwide problem. The concerns of access overlap with those for confidentiality.

Finally, the study concludes that the factors that influence uptake of VCT may be based in part on past experience with being tested for HIV, but they will also be influenced by second-hand information about the testing process, by the experiences of acquaintances and friends, and by other factors that increase or reduce the perceived difficulty of attending a VCT clinic.

5.4 Recommendations

The study recommends that there is a need of promotion of VCT through sound and viable information and counseling interventions by involving mass media, colleges, mass organizations and parents. Health institutions should provide voluntary HIV counseling and testing services.
during extra working days and hours. Men friendly VCT services have to be expanded and the existing facilities need to be strengthened to address the need of youth in the town. There is also a need for an interactive system integrating men in the normal VCT service provision together with continuous education of operators to increase VCT uptake.

Scaling up of tailor-made VCT promotion messages that target male adolescents understanding of masculinity (that masculinity should not mean dominance and control over their girlfriends) and positive health-seeking behavior. This should be coupled with the involvement of adult males as role models as well as readily available clinical personnel at facilities in order to ensure continuity of services at all times.
REFERENCES


39


Kenya AIDS Indicator Survey (KAIS), (2007)


National Public Health Laboratory Services (NPHLS) (2011)


APPENDICES

Appendix 1: Letter of Transmittal

Sila Jacinta K.
P.O BOX 4244
Thika
TO

Dear Sir/Madam,

Re: Request for permission to collect data

I am undertaking a Master of Arts in Project Planning and Management at University of Nairobi.
I am carrying out a study entitled; “FACTORS INFLUENCING HIV/AIDS COUNSELING AND TESTING UPTAKE AMONG MEN IN KENYA –A CASE OF KIANDUTU SLUMS-THIKA”. I have selected your organization/ ward for data collection.
I hereby request to be allowed to administer questionnaires to you and some of the members of this Organization which will assist me to complete my study. The information shall be used for the academic purpose only.
Thank you in advance
Yours sincerely,

Sila Jacinta K.
Appendix 2: Questionnaire for Men in Kiandutu Slums-Thika

Instructions

Please tick (√) in the appropriate box or fill in the empty spaces. Kindly respond to all questions freely and honestly. Your response will be kept strictly confidential and your names are not required.

Section A: Demographic Information (Tick one)

1. Age in years
   - 15-20 □
   - 21-25 □
   - 26-30 □
   - 31-35 □
   - 36-40 □
   - 41-45 □
   - 46-49 □

2. What is your highest academic qualification?
   - Primary □
   - Secondary □
   - Diploma □
   - Degree □
   - Masters □
   - Others (specify) _______________________

3. For how many years have you lived in Kiandutu-Thika
   - Below 3 years □
   - 4-5 years □
   - 6-10 years □
   - Over 10 years □

4. Have you ever used VCT services for the last five years?
   - Yes □
   - No □
Section B: Factors influencing differential uptake of HIV/AIDS Counselling and Testing services among Men

Socio-demographic characteristics

1) In your opinion, to what extent do the following characteristics influence the uptake of Voluntary Counseling and Testing among men in Kiandutu?

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Very great extent</th>
<th>Great extent</th>
<th>Moderate extent</th>
<th>Little extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awareness of the service availability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2) On a scale of 1-5 how do the factors rated above influence uptake of VCT services among men?

a) Age [ ]
b) Education [ ]
c) Level of income [ ]
d) Awareness of the service availability [ ]

Socio-cultural factors

3) In your opinion, how do the following socio-cultural factors influence the uptake of voluntary counseling and testing among men in Kiandutu?

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Very great extent</th>
<th>Great extent</th>
<th>Moderate extent</th>
<th>Little extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Beliefs and taboos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes and perceptions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4) On a scale of 1-5 how do the factors rated above affect uptake of VCT services among men in Kiandutu?

a) Religious beliefs [   ]

a) Community beliefs and taboos [   ]

b) Norms [   ]

c) Values [   ]

d) Attitudes and perceptions [   ]

.........................................................................................................................................................

Health service factors

5) In your opinion, how do the following health service factors influence the uptake of Voluntary Counseling and Testing among men in Kiandutu?

<table>
<thead>
<tr>
<th>Health service factors</th>
<th>Very great extent</th>
<th>Great extent</th>
<th>Moderate extent</th>
<th>Little extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of access to VCT services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidentiality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of HIV results</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude of health staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy of test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Space of facilities??</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6) On a scale of 1-5 how do factors rated above influence uptake of VCT services among men?

a) Access to VCT services [   ]

b) Confidentiality [   ]

c) Quality of HIV results [   ]

d) Attitude of health staff [   ]

e) Accuracy of test, [   ]

f) Space of facilities [   ]

g) Privacy [   ]
Appendix 3: Interview Schedule for the Health Workers

1. How can you describe the level of HIV/AIDS counselling and testing uptake among men in Kiandutu slums?
2. In your view, what are some of the factors affecting the HIV/AIDS counselling and testing uptake among men in Kiandutu slums?
3. How do socio-demographic characteristics influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums?
4. How do socio-cultural factors influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums?
5. Are health services accessible in Kiandutu slums?
6. How do health services influence HIV/AIDS counselling and testing uptake among men in Kiandutu slums?