ACCESS TO AND UTILIZATION OF HIV VOLUNTARY COUNSELLING AND TESTING AMONG MEN IN TANZANIA

Esther Nkola
Tanzania

49th International Course in Health Development
September 19, 2012 – September 6, 2013

KIT (ROYAL TROPICAL INSTITUTE)
Development Policy & Practice/
Vrije Universiteit Amsterdam
ACCESS TO AND UTILIZATION OF HIV VOLUNTARY COUNSELLING AND TESTING AMONG MEN IN TANZANIA

A thesis submitted in partial fulfilment of the requirement for the degree of Master of Public Health

BY

Esther Nkola
Tanzania

DECLARATION:

Where other people’s work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

The thesis; ‘Access to and Utilization of HIV Voluntary Counselling and Testing among Men in Tanzania’ is my own work.

Signature...

49th International Course in Health Development (ICHD)
September 19, 2012 – September 6, 2013
KIT (Royal Tropical Institute)/ Vrije Universiteit Amsterdam
Amsterdam, the Netherlands

September 2013

Organized by:
KIT (Royal Tropical Institute), Development Policy & Practice
Amsterdam, the Netherlands

In co-operation with:
Vrije Universiteit, Amsterdam/ Free University of Amsterdam (VU)
Amsterdam, the Netherlands
**TABLE OF CONTENTS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Figures</td>
<td>iv</td>
</tr>
<tr>
<td>Dedication</td>
<td>v</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>vi</td>
</tr>
<tr>
<td>List of Abbreviations</td>
<td>vii</td>
</tr>
<tr>
<td>Definitions</td>
<td>ix</td>
</tr>
<tr>
<td>Abstract</td>
<td>x</td>
</tr>
<tr>
<td>Introduction</td>
<td>xi</td>
</tr>
<tr>
<td><strong>Chapter 1: Background information on Tanzania</strong></td>
<td>1</td>
</tr>
<tr>
<td>1.1 Geography</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Demography and Economic Profile</td>
<td>1</td>
</tr>
<tr>
<td>1.3 Health situation in Tanzania</td>
<td>2</td>
</tr>
<tr>
<td>1.3.1 Major health problems</td>
<td>2</td>
</tr>
<tr>
<td>1.3.2 Leading causes of Morbidity and mortality among men</td>
<td>2</td>
</tr>
<tr>
<td>1.4 Health care system</td>
<td>3</td>
</tr>
<tr>
<td>1.4.1 Organization of Health System</td>
<td>3</td>
</tr>
<tr>
<td>1.4.2 Organization of Health service delivery</td>
<td>3</td>
</tr>
<tr>
<td>1.4.3 Health financing</td>
<td>5</td>
</tr>
<tr>
<td>1.4.4 Human Resource for Health</td>
<td>5</td>
</tr>
<tr>
<td>1.5 HIV situation in Tanzania</td>
<td>6</td>
</tr>
<tr>
<td>1.6 VCT for HIV in Tanzania</td>
<td>7</td>
</tr>
<tr>
<td><strong>Chapter 2: Problem statement, objectives and Methodology</strong></td>
<td>9</td>
</tr>
<tr>
<td>2.1 Problem statement</td>
<td>9</td>
</tr>
<tr>
<td>2.2 Study Objectives</td>
<td>11</td>
</tr>
<tr>
<td>2.2.1 General objective</td>
<td>11</td>
</tr>
<tr>
<td>2.2.2 Specific objectives</td>
<td>11</td>
</tr>
<tr>
<td>2.3 Methodology</td>
<td>11</td>
</tr>
<tr>
<td>2.3.1 Search strategy</td>
<td>11</td>
</tr>
<tr>
<td>2.3.2 Limitations</td>
<td>12</td>
</tr>
<tr>
<td>2.4 Conceptual framework for the study</td>
<td>12</td>
</tr>
<tr>
<td>2.4.1 Andersen Framework for health seeking behaviour</td>
<td>13</td>
</tr>
<tr>
<td>2.4.2 The modified framework</td>
<td>14</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Chapter 3: Factors affecting access and utilization of VCT services</td>
<td></td>
</tr>
<tr>
<td>among men</td>
<td></td>
</tr>
<tr>
<td>3.1 Environmental factors</td>
<td>19</td>
</tr>
<tr>
<td>3.1.1 National health Policy</td>
<td>19</td>
</tr>
<tr>
<td>3.1.2 National HIV and AIDS Policy</td>
<td>19</td>
</tr>
<tr>
<td>3.1.3 VCT and PITC guidelines</td>
<td>20</td>
</tr>
<tr>
<td>3.2 Predisposing factors</td>
<td>21</td>
</tr>
<tr>
<td>3.2.1 Individual’s demographic factors</td>
<td>21</td>
</tr>
<tr>
<td>3.2.2 Social factors</td>
<td>22</td>
</tr>
<tr>
<td>3.2.3 Health belief</td>
<td>23</td>
</tr>
<tr>
<td>3.3 Enabling Factors</td>
<td>24</td>
</tr>
<tr>
<td>3.3.1 Availability</td>
<td>24</td>
</tr>
<tr>
<td>3.3.2 Accommodation</td>
<td>25</td>
</tr>
<tr>
<td>3.3.3 Accessibility</td>
<td>26</td>
</tr>
<tr>
<td>3.3.4 Acceptability</td>
<td>26</td>
</tr>
<tr>
<td>3.3.5 Affordability</td>
<td>27</td>
</tr>
<tr>
<td>3.3.6 Quality of care</td>
<td>27</td>
</tr>
<tr>
<td>3.4 Need factors</td>
<td>28</td>
</tr>
<tr>
<td>3.4.1 Perceived benefits of VCT</td>
<td>28</td>
</tr>
<tr>
<td>Chapter 4: Best practice from other countries aiming to improve access</td>
<td></td>
</tr>
<tr>
<td>to and utilization of VCT among men</td>
<td>29</td>
</tr>
<tr>
<td>4.1 HIV testing for men in ANC setting in Kenya</td>
<td>29</td>
</tr>
<tr>
<td>4.2 Engender Health’s MAP program in South Africa</td>
<td>30</td>
</tr>
<tr>
<td>4.3 South Africa: The gentle men’s club</td>
<td>31</td>
</tr>
<tr>
<td>Chapter 5: Discussion</td>
<td>32</td>
</tr>
<tr>
<td>5.1 Factors influencing both men and women</td>
<td>32</td>
</tr>
<tr>
<td>5.2 Factors specifically to men regarding access and utilization of</td>
<td>33</td>
</tr>
<tr>
<td>VCT services</td>
<td></td>
</tr>
<tr>
<td>5.3. Best practices</td>
<td>35</td>
</tr>
<tr>
<td>Chapter 6: Conclusion and recommendations</td>
<td>36</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>6.1 Conclusion.......................................</td>
<td>36</td>
</tr>
<tr>
<td>6.2 Recommendations...............................</td>
<td>37</td>
</tr>
<tr>
<td>References............................................</td>
<td>39</td>
</tr>
<tr>
<td>Annex 1: Map of Tanzania..........................</td>
<td>46</td>
</tr>
<tr>
<td>Annex 2: Counselling and testing Algorithm for VCT in Tanzania.</td>
<td>47</td>
</tr>
<tr>
<td>Annex 3: Original Andersen’s conceptual framework on health service utilization</td>
<td>48</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1: Organization of health system and levels of provision of health services in Tanzania
Figure 2: Health work force status by level of facility in the public health sector in Tanzania
Figure 3: HIV prevalence by age
Figure 4: Percentage of HIV testing and counselling in Tanzania
Figure 5: The modified conceptual framework of access to and utilization of VCT services
Figure 6: VCT as an entry point for prevention and care
DEDICATION

I dedicate this thesis to my dearest husband and my lovely son for their spiritual and moral support, and their encouragements throughout my studies and life.
ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to the Netherland Fellowship Program (NUFFIC) for granting me this scholarship opportunity, and for their financial support made me possible to attend and be part of the 49th ICHD/MPH course.

I am grateful to my husband for continuously supporting and encouraging me to upgrade myself academically and for being there for me whenever I needed his support throughout my study period, and also for taking over all the family responsibilities on my absence. I also want to extend special thanks to all family members for their prayers, support and encouragement. My gratitude also goes to my son for his patience and support.

I wish to acknowledge the ICHD course administrators, coordinators and various facilitators at Royal Tropical Institute (KIT) who shared their knowledge and experience during the course.

To my thesis advisor and back-stopper, thank you for your availability, guidance, and patience as you never gave up on me. Your analytical and critical approach and inputs you gave me during the process of writing this document.

Lastly, Special thanks go to my sister-in-law for taking care of my family and my son during my absence. Your care and love will never pass unnoticed.
### LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>ANC</td>
<td>Antenatal care</td>
</tr>
<tr>
<td>ART</td>
<td>Anti-Retroviral Therapy</td>
</tr>
<tr>
<td>CHF</td>
<td>Community Health Fund</td>
</tr>
<tr>
<td>CHMT</td>
<td>Council Health Management Team</td>
</tr>
<tr>
<td>CVDs</td>
<td>Cardiovascular diseases</td>
</tr>
<tr>
<td>DHMT</td>
<td>District Health Management Team</td>
</tr>
<tr>
<td>FBO</td>
<td>Faith Based organization</td>
</tr>
<tr>
<td>FP</td>
<td>Family Planning</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product Gross</td>
</tr>
<tr>
<td>HCT</td>
<td>HIV Counselling and Testing</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immune Deficiency Virus</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, Education and communication</td>
</tr>
<tr>
<td>IMCI</td>
<td>Integrated Maternal and Child Initiative</td>
</tr>
<tr>
<td>MAP</td>
<td>Men as Partners</td>
</tr>
<tr>
<td>MoHSW</td>
<td>Ministry of Health and Social Welfare</td>
</tr>
<tr>
<td>NACP</td>
<td>National Aids Control Program</td>
</tr>
<tr>
<td>NBS</td>
<td>National Bureau of Statistics</td>
</tr>
<tr>
<td>NCDs</td>
<td>Non Communicable Diseases</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-Governmental Organizations</td>
</tr>
<tr>
<td>OIs</td>
<td>Opportunistic Infections</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Care</td>
</tr>
<tr>
<td>PHCSDP</td>
<td>Primary Health Care Service Development Programme</td>
</tr>
</tbody>
</table>
PITC  Provider Initiated Testing and Counselling
PLHIV  People Living with HIV
PMTCT  Prevention of Mother-to-Child Transmission
PPASA  Planned Parenthood Association of South Africa
RCH  Reproductive and Child Health
RHMT  Regional Health Management Team
SRHS  Sexual Reproductive Health Services
SSA  Sub-Saharan Africa
STI  Sexually Transmitted infection
TACAIDS  Tanzania Commission for AIDS
TB  Tuberculosis
TDHS  Tanzania Demographic Health Survey
THMIS  Tanzania HIV and Malaria Indicator Survey
UN  United Nations
UNAIDS  Joint United Nations Programme on HIV and AIDS
UNICEF  United Nations International Children’s Emergency Fund
URT  United Republic of Tanzania
USAID  United States Agency for International Development
VCT  Voluntary Testing and Counselling
VU  Vrije Universiteit
WHO  World Health Organization
DEFINITIONS

**Acceptability**: The match between how responsive health service providers are to the social and cultural expectations of individual users and communities (Peters et al. 2008).

**Utilization**: People making use of a particular service; characterized by type of health service, purpose and unit of analysis (Andersen & Newman 2005).

**Access**: Actual health services utilization and everything that enables or hinders the utilization of health services such as environment and system, consumers and providers characteristics (Andersen, 1995).

**Affordability**: The relationship between the price of services and the willingness and ability of users to pay for those services, as well as to be protected from the economic consequences of health costs (Peters et al. 2008).

**Availability**: Refers to having the right type of service available to those who need it that meet demands of those who would use the services, as well as having the appropriate type of services providers and materials (Peters et al. 2008).

**Provider Initiated Testing and Counselling**: Refers to HIV testing and counselling which is recommended by health care provider to persons attending health care facilities as a standard component of medical care. The major purpose of such testing and counselling is to enable specific clinical decisions to be made and/or specific medical services to be offered that would not be possible without knowledge of the person’s HIV status (WHO 2007).

**Voluntary Counselling and Testing**: Voluntary HIV counselling and testing (VCT) is the process by which an individual undergoes counselling enabling him or her to make an informed choice about being tested for HIV. This decision must be entirely the choice of the individual and he or she must be assured that the process will be confidential (UNAIDS 2000).

**Gender**: Refers to the social conceptualization of man and woman based on social differences and relations between them that are changeable over time, and have wide variations across cultures. They are context-specific and can be modified (TACAIDS 2010).
ABSTRACT

In Tanzania, despite efforts to increase VCT services, the percentage of men having been tested for HIV remains low. The total number of people getting tested for HIV has increased between 2007 and 2012. According to THMIS 2012, 47% of men and 62% of women have been tested for HIV and received their results during the year of 2012.

The aim of the study was to explore factors affecting access to, and utilization of VCT services among men in Tanzania, and review the best practices on VCT from other countries in order to provide recommendations to increase access and utilization of VCT services among men.

The methodology was a literature review using a modified conceptual framework adapted from the Andersen Behavioural Model of Health Services Utilization. Gender was included in the framework as a cross cutting issue which applies to all factors affecting utilization of VCT services.

The results of this study suggest factors specifically influencing men regarding access and utilization of VCT services include; stigma, cost, low acceptability of health services provided due to lack of male-friendly services and confidentiality, long waiting time, and negative attitude by healthcare providers towards men and low perceived need for health care seeking. Masculinity and HIV risk perception also has an influence in VCT utilization.

In order to improve the uptake of VCT services, HIV testing services should be made available to all facilities as well as male friendly health services. Mobile clinics for VCT services should be made available at places where men are working and socializing. Special clinics and programs targeting men are crucial to increase the uptake of VCT among men.

Key words: VCT, HIV, Gender, Utilization, Access

Words count: 11,566
INTRODUCTION

Prior to joining the training department at the Ministry of Health and Social Welfare at Morogoro School of Public Health as a nurse tutor, I was working as a registered nurse at the HIV Care and Treatment Clinic and VCT at the Pangani district hospital in Tanga region; it’s on the east coast of Tanzania.

I joined the master’s program of the Royal Tropical Institute (KIT) to gain and expand my knowledge on public health and to use it to enhance my work experience, as well as to maintain a position of leadership in the HIV response.

In Tanzania, HIV prevalence is 5.1%. Although there is an increase in HIV testing, only 47% of men have been tested for HIV compared to 62% of women. Nevertheless, one third of women and half of men have never been tested for HIV (TACAIDS 2012).

Despite efforts to increase VCT services, the percentage of men having been tested for HIV remains low. Currently little is known about factors associated with men’s testing behaviour. No studies have been done to assess factors influencing HIV testing among men. I would like to conduct a study on factors affecting access to, and utilization of VCT for HIV among men in Tanzania.

It is my intention to explore, identify and analyse these factors for the purpose of providing an answer and formulate recommendations of what should be done to improve male utilization of VCT services in Tanzania. The study is literature review, based on literature available on the subject, as well as on personal experience, the results of which will be shared with the Ministry of Health and Social Welfare.

This paper covers six chapters whereby chapter one provides background information on Tanzania, including health sector information related to VCT utilization. Chapter two describes the problem, objectives and methodology. The study findings are explained in chapter three, and lessons learned from other countries are presented in Chapter Four. Discussion of the findings is in Chapter five, where chapter six contains the conclusion and recommendations.
CHAPTER 1: Background Information on Tanzania

1.1 Geography

The United Republic of Tanzania is located in East Africa, bordering Kenya and Uganda in north-east and north respectively, the Democratic Republic of Congo, Burundi and Rwanda to the west, and in the south it borders with Malawi, Zambia, and Mozambique. The Indian Ocean constitutes the border to the East. Tanzania covers approximately 945,087 square kilometres. About 60,000 square kilometres of land surface is covered by water (Annex 1) (National Bureau of Statistics, NBS 2011).

1.2 Demographic and economic profile

The population of Tanzania is 43,625,354 with a population growth rate of 2.9% per year. The total fertility rate is 5.4 children born per woman and the life expectancy at birth for male and female lies between 52 and 55 years, and the under-five mortality rate is 81 per 1,000 live births (World Bank 2012, NBS 2010).

Tanzania is one of the low-income African countries in the word. The main sources of economy are based on tourism and agriculture (World Bank, 2012). The country has a Gross Domestic Product (GDP) growth rate of 6 per cent per year. About 57 per cent of the population is living below the poverty line (World Bank 2012, MOF 2010).

Education and literacy levels

Adult total literacy rate in Tanzania is 69.4% among the population aged 15 years and above. However, there is gender inequality with higher literacy levels in males than in women of the same age; 77.5% and 62.2% respectively (World Bank 2012).

Socio-cultural aspects

Tanzania’s population consist of more than 130 tribes that speak different languages, thereby creating diversity in cultures and norms (World Bank 2012).
1.3 Health situation in Tanzania

1.3.1 Major health problems

Among adults, the three main causes of death are malaria, AIDS and tuberculosis, where among children under-five they are malaria, pneumonia and anaemia, bacterial diarrhoea and chronic malnutrition (NBS 2011). Malaria has been the leading cause of morbidity and mortality in Tanzania for many years, contributing up to 40 percent of all outpatient attendance and 30 percent of disease burden, and is the leading cause of deaths below and above 5 years of age (TACAIDS 2012, Kwesigabo et al, 2012a).

TB continues to be a major public health problem, with the national prevalence of 459 per 100 000 per year, and incidence of 312 per 100 000 per year. TB is one of the most common opportunistic infections among people infected with HIV and therefore the increase of TB is associated with the spread of HIV. In 2008, 51 per cent of tested TB patients were found to be HIV positive (WHO 2011).

Non communicable diseases (NCD) are still the major cause of morbidity and mortality in Tanzania and contribute significantly to the disease burden, especially among adult populations. Four main types of NCDs are cardiovascular diseases (CVD) (like hypertension and stroke), cancer, chronic respiratory diseases (such as asthma) and diabetes. The main risk factors for NCDs are smoking, harmful use of alcohol, unhealthy diet and low physical activity, which are all factors prevalent in both rural and urban communities (Mayige et al. 2012).

Positive trends on different health indicators have been reported over the past ten years. Notably, there has been a decrease in the Under Five Mortality and Infant Mortality rates. Between 1996 and 2010, under-5 mortality decreased from 137 to 81 per 1000 live births, and infant mortality decreased from 88 to 51 per 1000 live births. Maternal mortality ratio remains high; 454 per 100,000 live births in 2010 (MoHSW 2008b, Kwesigabo 2012a).

1.3.2 Leading causes of Morbidity and mortality among men

Men are more likely to die from HIV and AIDS, malaria, intended and unintended injuries, pulmonary tuberculosis, diarrhoea, stroke, cancer (prostate cancer), pneumonia or liver disease (Ae-Ngibise et al. 2012).
1.4 Health system

1.4.1 Organization of Health System

Administrative set-up of the health system in Tanzania consists of three levels; the National level which is the Ministry of Health and Social Welfare (MoHSW) with the responsibility of policy formulation and development of guidelines. The regional level in line with the Regional Health Management Team (RHMT) interprets these policies into actions and provides technical support and supervises the implementation at district level. The third level is the District health system, which is responsible for implementation of policies, plans and guidelines in terms of health service delivery reaching at the community level. District Health Management Team (DHMT) oversees council health services including dispensaries, health centres and district hospitals. Council Health Management Teams (CHMTs) is the lowest level. This structure enables healthcare to be initiated at the local level (MoHS 2003, Musau et al. 2011, Babbel 2012).

1.4.2 Organization of Health service delivery

Health services are delivered through the decentralized system, and health services are provided at three main levels namely the primary, secondary and tertiary levels. The primary level comprises of community/village health posts, dispensaries, and health centres. Community health posts are aimed at providing health services at family (household) level. The dispensary provides primary health care within the catchment’s of 6,000 - 10,000 population and supervises village health posts. A health centre provides more advanced level of health services than a dispensary. It serves a population of 50,000 - 100,000. Approximately 90 per cent of Tanzanians live within 10 kilometres of a Primary Health Care (PHC) facility. PHC services are delivered through district hospitals, health centres and dispensaries (MoHSW 2008b, Manzi et al. 2012, Kwesigabo et al 2012b).

The secondary level consists of the first level of referral serving populations of up to 250,000 people. It consists of district hospitals, whether government or NGO/ FBO owned, and regional hospitals. These hospitals usually have specialised medical personnel and staff (Manzi et al 2012). The tertiary level is the second level of referral, serving populations of up to 1,000,000 people. They include National referral hospitals and advanced specialized hospitals. Tertiary hospitals are mostly teaching hospitals with more advanced technologies and highly skilled staff. When patients cannot be adequately managed at this level, referrals of patients outside the country are done at this level (MoHSW 2010).
In 2006, there were 4,679 dispensaries, 481 health centres and 219 hospitals both public and private. Health care services are provided by both public and private health facilities, whereby the public sector contributes 56% of health service delivery, and the private sector to 44% of all health care services provided in the country (MoHSW 2007a, MoHSW 2008b). The health sector faces a number of challenges which include; poor communication and transport infrastructure, shortage of drugs and medical supplies, and shortage of trained health staff (Kwesigabo et al 2012b).

**Figure 1:** Administrative organization of health system and levels of provision of health services in Tanzania.

(Kwesigabo et al. 2012b)
1.4.3 Health financing

Health care system is financed through different payment strategies including public taxes, donor funding and out of pocket payments. The total government expenditure is high as a per cent of GDP (29%), share of government spending allocated to health is 14% and government expenditure on health as a per cent of GDP is 4% (WHO, 2010). User fees are one of the strategies where people pay for services in the form of cost sharing with the exemptions to vulnerable groups including children under five, pregnant women and the elderly. Exemptions were developed to increase access of health services to those who cannot afford to pay for the services delivered. National health insurance fund for public employees contribute through payroll taxes. Community Health Fund (CHF) works with rural health facilities, it provides access to health care without paying user fees at the point of service, contributing 15% of the total revenue within the health sector. Services in the private sector are available for those who have a private insurance scheme and can afford to pay out of pocket (Musau et al. 2010).

1.4.4 Human Resource for Health

Shortage of trained staff is a major challenge (Kwesigabo et al. 2012b). Factors contributing include low output of qualified staff, lack of attractive retention schemes, poor payments, mal-distribution and migration to other countries after training (MoHSW 2008c). It is reported that only 35% of the required personnel is in place to provide health care services. The doctor-patient ratio is 1: 25,000 patients, which is far below the WHO recommended standards ratio of one medical doctor per 10,000 patients; 1:10,000 (MoHSW 2008c). Distribution of health workers does not match the needs of the population, as most of the health workforce is concentrated in urban areas, resulting into an imbalance of health workers between urban and rural areas (Kwesigabo et al. 2012b, Manzi et al. 2012).

A recent study done in Tanzania on human resources for health in 5 districts, found that the MoHSW staff guideline recommended 441 clinical officers and 854 nurses for the facilities in these districts. However, only 20% of the recommended clinical officers and 14% of recommended nurses were employed (Manzi et al. 2012).
**Figure 2:** Health worker force status by level of facility in the public health sector, Tanzania (2006).

![Health Workforce Status by Level of Facility](image)

(MoHSW 2008c)

### 1.5 HIV situation in Tanzania

Tanzania has a generalized HIV epidemic and is among the Sub Saharan African countries with high prevalence of HIV infection. Since the first three HIV infection cases were reported in 1983, an HIV epidemic has spread all over the country (MoHSW 2009). In 2011, about 1.6 million people in Tanzania were living with HIV. Among these, about 1.3 million were people aged 15 years and above (UNAIDS 2012). From 2004 to 2012, the national HIV prevalence in Tanzania decreased from 7 percent to 5.1 percent; women in this category are at higher risk with prevalence of 6.2% compared to 3.8 % among men (TACAIDS 2012). HIV prevalence for women attending ANC in 2010 was 6.9%. HIV prevalence generally increases with age for both women and men. Women have a higher HIV prevalence than men at all age groups (figure 3).
Heterosexual transmission is the major route of HIV infection accounting for 80% of all new infections followed by Mother to child transmission (MTCT) accounting for approximately 20% to 45% of infants that will be infected if there is no intervention (UNGASS 2012, MoHSW 2012). The number of people infected with HIV remains steady due to new HIV infections, population growth, and the availability of anti-retroviral treatment (ART). By June 2012, the number of clients on ART was 626,444, exceeding the estimated target of 440,000 clients by 2011 (MoHSW 2012).

1.6 Voluntary Counselling and Testing for HIV in Tanzania

Voluntary Counselling and Testing (VCT) is a process in which an individual undergoes confidential counselling enabling to learn about his/her status and make an informed choice about getting tested for HIV (MoHSW 2005).

VCT services in Tanzania have been available in public sectors since 1989. Initially, Faith based Organizations (FBOs) and non–Governmental Organizations (NGOs) were the main providers of these services. The primary goal was to ensure a universal access to HIV prevention, treatment, and care and support services for people living with HIV.
(PLHIV). The introduction of free antiretroviral treatment (ART) in 2004 led to expanded VCT services (Mayhood et al. 2010). VCT services are available within all public facilities. By 2010, there were 2,137 established VCT services in public health facilities with 5,002 trained counsellors.

VCT as an entry point to prevention and care links with other HIV related services including: prevention of mother to child transmission, Sexual Transmitted Infections (STIs), management of Opportunistic infections (OIs), access to ART, access to condoms, family planning, promotion of behaviour change, psychological support, and community support groups (UNAIDS 2000).

Tanzania HIV and AIDS Indicator survey indicates that trends of HIV testing and receiving results among women age 15-49 years, has increased from 37% in 2007 to 62% in 2012. Similarly, among men the rate has increased from 27% in 2007 to 47% in 2012 (TACAIDS 2012). However there are still more than 50% of the men who have never been tested.

**Figure 4:** Percentage of HIV testing and counselling in Tanzania between 2007- 2012

![HIV Testing and Counselling](image_url)

(TACAIDS 2012)
Chapter 2: PROBLEM STATEMENT, OBJECTIVES AND METHODOLOGY

2.1: Problem Statement

Globally, in 2011, 34 million people were estimated to be living with HIV, with about 2.5 million new HIV infections reported to be mostly heterosexually transmitted. It is estimated that there are 3.3 million children living with HIV, 230,000 children died due to AIDS and approximately 17.3 million are AIDS orphans. Around 88% of these live in Sub-Saharan Africa (UNAIDS 2012).

Sub-Saharan Africa (SSA) remains the region most heavily affected by HIV and AIDS. In 2011 an estimated 23.5 million people were living with HIV in SSA which is 69% of HIV burden globally, there were an estimated 1.8 million new infections with HIV, and 1.2 million adults and children died due to AIDS. Women in SSA remain to be more infected by HIV epidemic, accounting for 58% of all people living with HIV (UNAIDS 2012).

In Tanzania about 1.6 million people are estimated to be living with HIV and about 1.3 million people from the age of 15 years and above are living with HIV (UNAIDS 2012). The national HIV prevalence among adults with the ages between 15 and 49 is 5.1% while prevalence among females and males reported to be 6.2% and 3.8% respectively (TACAIDS 2012).

VCT remains critical in the efforts to reach the goal of universal access to prevention, treatment, care and support (MoHSW 2011). VCT services have been available since 1989. Counselling was limited to convey test results and there were no clear records of the number of people counselled and tested (MOHSW 2005). The introduction of free Antiretroviral Treatment (ART) in 2004 led to the expansion of VCT services and motivation of people to get tested (Mayhood et al. 2010).

Tanzania HIV and AIDS Indicator Survey 2011-2012 (THMIS) indicates the number of women aged 15-49 years getting HIV tested and receiving results has increased. However there is lower HCT coverage for men coupled with men’s reluctance to undertake HCT: in 2011 about 37% of men compared to 62% of women in Tanzania have been tested for HIV and received their results. Next to that approximately one third of women and half of men have never been tested for HIV (TACAID, 2012). Increased male involvement as well as couples HIV counselling and testing during ANC is essential. However, there is a lack and inadequate understanding of the importance of participating in ANC/PMTCT among men, coupled with their low participation in RCH services (TACAIDS 2010). In Tanzania participation by men in antenatal HIV testing and counselling is low at 5% (Kalembo et al 2012).
In 2011, a national HIV voluntary counselling and testing campaign was conducted, aiming to motivate more Tanzanians to get tested and know their HIV status. The exercise was targeting 4,000,000 people to be voluntarily tested. The campaign was successful as 3,496,886 (87%) people were tested and received the results. Majority (58%) of the clients tested and receiving their results were women (MoHSW 2011).

UNAIDS, (2012), reports that surveys conducted between 2004 and 2011 in 14 SSA countries found a significant increase in the percentage of adults who had been tested for HIV and received their results. The increase was linked with gain in ART, PITC, Rapid test technology and home-based testing campaigns. HIV testing rates among these countries tended to be higher among women than among men, because of increased availability of HIV testing in antenatal clinics (UNAIDS 2012).

In Tanzania, Malawi and Uganda, studies show that uptake of VCT remains low due to stigma, distance to health facilities, low quality of VCT services, gender inequalities, fear of positive results, and negative reactions to disclosure (Wringe et al. 2008).

Despite efforts to increase VCT services, the proportion of men ever having been tested for HIV remains low. Little is known about factors associated with men’s testing behaviour (Stephenson et al. 2012). Moreover, In Tanzania, there is limited information on male participation in ANC HIV-VCT. It is known that men access VCT mostly when they are already sick. Sickness has been seen as a sign of weakness for many men, which is a negative perception that has resulted in a reluctance of seeking care among men (Mills et al. 2012). Understanding factors associated with men’s testing behaviour is a very important aspect in supporting men’s sexual health (Stephenson et al. 2012).

This study aims at assessing factors influencing HIV testing among men in Tanzania. The results of this study highlight the need to recognize the impact of the factors that influence men’s HIV testing seeking behaviour. The results will provide recommendations to the MoHSW to harness these factors in the design of programs that are aimed at encouraging the uptake of VCT and ensure that more men have access to and utilize VCT services.
2.2 Study objectives

2.2.1 General objective

To identify factors affecting access to, and utilization of VCT for HIV among men in Tanzania, in order to provide recommendations to increase access and utilization of VCT services among men.

2.2.2 Specific objectives

1. To examine demographic, socio-cultural and economic factors related to access and utilization of VCT services among men in Tanzania.

2. To assess factors related to the health system influencing access to and utilization of VCT services among men in Tanzania and relevant other countries.

3. To analyse the best practice from other countries in VCT interventions among men, and determine how they could be used in Tanzania.

4. To provide to the Ministry of Health and key stakeholders involved in HIV programs recommendations for strategies to improve access and utilization of VCT services among men in Tanzania.

2.3 Methodology

2.3.1 Search Strategy

Literature search was performed to identify published studies on the access and utilization of VCT for HIV among men in Tanzania and other SSA countries. Review of articles within the period between 2000 and 2013 was systematically searched in electronic databases published in English using search engines including: PubMed, Google, Scopus, Google Scholar, and KIT library. Review was done on reports from international organizations and local non-governmental organizations for HIV programs. Government website like MoHSW, NACP, and TACAIDS were consulted. WHO, UNAIDS, UNICEF and World Bank websites were accessed and reviewed.
The key-words used are: HIV, AIDS, Voluntary, Counselling, Testing, Tanzania, Zanzibar, accessibility, access, utilization, affordability, afford, acceptability, accept, Men, Women, Gender, socio-cultural, demographic factors, health seeking behaviour, factors, determinants, evidence, effect, intervention, Quality of care, VCT, HCT, PICT.

2.3.2 Limitations

Due to constraint of time, the researcher limited the study to literature review. An in-depth exploration could have come up with more information if primary data were collected from VCT clinics and community. Lack of enough evidence of best practice intervention programs designed specifically to increase male utilization of VCT services in Tanzania or other African countries. This limited the discussion to three evidences of intervention programs, even though there were a good number of studies on the VCT services utilization or accessibility from Tanzania and other sub-Saharan Africa countries. However, only a small number of these studies reviewed men utilization while the majority of them concentrated more on the general population.

2.4 Conceptual framework for the study: 

To describe the factors affecting HIV Voluntary Counselling and Testing (VCT) among men in Tanzania, literature review was done to search for suitable conceptual frame-work to guide the analysis of the study. I came across four conceptual frameworks. The conceptual frameworks developed by Andersen (1995), Weiser et al. (2006), Bwambale et al. (2008), Peters et al. (2008) and Andersen and Newman (2005) fit most with the design of this study, as they relevantly analyse factors affecting access and utilization of health services including VCT services. However, this study will use the Andersen health seeking behaviour model.

The conceptual frame work developed by Weiser et al, 2006 was the hypothesized model for predictors of HIV testing. This model, which was applied in Botswana, emphasized on issues about HIV knowledge, HIV risk behaviours, access to high quality medical care, HIV-related stigma, and socio-economical characteristics. However, the model lacks government policy and strategies as one of the factors that can also affect HIV testing.

The second conceptual framework, developed by Bwambale et al (2008), is about VCT utilization by men and possible predictor variables. This was applied in Uganda and it describes socio-demographic factors, socio-cultural factors, health services, and knowledge and perception. The model did not describe environmental factors which include policies, strategies and guidelines. The third conceptual frame work was about assessing access of health services, and was developed by Peters et al, 2008. In this conceptual framework, the main dimensions of access were
described: accessibility, availability, affordability and acceptability. Policy and macro environment were also included. This model however, did not describe health behaviour, and outcome of the health services use. Lastly, a framework for viewing health services utilization by Andersen and Newman, 2005 was also reviewed. This framework presented the importance of characteristics of health services delivery system, changes in medical technology and social norms, individual determinants of utilization, and health service system. In addition, the model suggested evaluating the utility of various individual determinants of health service utilization used in the framework in order to achieve equitable distribution of health services in the United States. However, this model is not suitable for the context of Tanzania, as it was developed in the context of United States.

The Andersen’s conceptual framework explores and explains access and utilization of health services by the community, and aims to describe an interaction between the external environment, predisposing factors, enabling factors and need factors, use of VCT services, and the outcome of utilization of VCT. The reason for choosing this framework is that it reflects multiple influences on health services utilization and knowing the health status, by including chance to evaluate the influence of outcome, perceived needs and health behaviour of the client. To explore the factors affecting participation in VCT services by men in Tanzania, Andersen’s health service utilization model will be adapted and applied (Annex 3).

2.4.1 Andersen Framework for health seeking behaviour

Andersen framework for health service utilization was developed in 1960 to assist the understanding of why people use health services and provide measures of access and utilization of health care. The framework aimed to study the utilization of health services among the general population and suggests that access to and utilization of health services is determined by environmental factors, predisposing factors, enabling factors, and need factors in the access to health care services, while use of health services and satisfaction are the outcomes (Andersen 1995).

Environmental factors represent the whole context within which health care service is provided and utilized, including the health care system and the external environment surrounding it. Predisposing factors include the socio-cultural factors which suggest the likelihood that an individual will need health services. Biological features that presents before illness, including demographic (age, sex, gender). Health belief (attitude, values and knowledge towards health care system that might influence their perception of need and use of health services), and social structure including education, occupation, social interaction, culture and social networks. Enabling factors include issues related to aspects of obtaining health care and conditions and making health service resources available, meaning that an individual is able to pay for the services. The services
must also be available and to the people, as well as knowledge about health services; how to get those health services and make use of the health services, where, Need factors explain the perceived and evaluated needs of the individual. Health behaviour indicates personal health practice and use of health services and finally the health outcomes which include improved health status and consumer satisfaction of the services which in turn affect predisposing, enabling and need factors likewise health behaviour (Andersen, 1995, Andersen and Newman, 2005).

2.4.2 The modified framework

During the adaptation of the framework, the model was modified to make it suitable for the study. The application of the Andersen model in the context of Tanzania can be useful in identifying factors that enable or prevent men to use VCT services. The modified framework consists of the following factors: Environmental factors which include: National health policy, HIV and AIDS policy and VCT guidelines which are the underlying causes of the entire model and directly affect the service utilization and health situation outcome.

Predisposing factors; age, education, sex and fear of HIV positive results, knowledge and attitude towards HIV and VCT services, social factors include HIV related stigma and discrimination at the individual level, gender, HIV status disclosure. Health belief factors about HIV which include: HIV risk perception, Knowledge about HIV/AIDS and attitude towards VCT. Enabling factors include: availability, affordability, acceptability, accessibility, accommodation, quality of VCT services. Need factors; the author takes the perceived benefits of VCT services and left the evaluated need which represents the health care provider evaluation about clients health status and their need for health services. Gender is a cross cutting issue which applies to all factors. Unequal power balance in gender relations increases men’s behaviour of being reluctant in health seeking. Despite the greater power they have, prevailing norms of masculinity where they believe and expect that they are more knowledgeable, prevents them from seeking information and health services. Gender differences in the uptake of VCT have an impact on VCT access and utilization.
2.5 Concepts applied in the study

2.5.1 Concept of Access and utilization

Access is defined as an entry into, or use of health care services. Likewise, Penchansky and Thomas defines access as an association between the demand side and the supply side, that means a ‘fit’ between the clients who are seeking health services and the providers who are providing health services. They also described access into five dimensions (five ‘As’): Availability, Accessibility, Acceptability, Accommodation and Affordability (McLaughlin & Wyszewiansk 2002). Peter et al, 2008 also defined access as timely use of health services according to individual need. As defined by Andersen (1995), access means that services are available whenever the patient needs them. Two main aspects are considered in access; structural organization and geographical
accessibility, which include time and physical distance needed to get care. This is the definition that I used for this study.

Andersen and Newman (2005) describe utilization of health services as characteristics of bringing people who are in need of health services into the health system. Utilization of health services are characterized based on three criteria: type, purpose and unit of analysis. The type of utilization indicates kind of services provided and who (doctors or counsellors) provide the health services, and site or place (health facilities or outreach activities) where the health services including VCT are provided. The purpose of the service could be primary care, which is the prevention of illness, where secondary care refers to treatment or counselling and testing for HIV, and finally tertiary care for providing stabilization for long term illnesses. Unit of analysis refers to contact to health services, volume of services provided and continuum of care referring to the degree of linkage with other health services.

2.5.2 Concept of VCT

Approaches to HIV counselling and testing are grouped as Health facility-based and Community-based approach service. In health facility based approach, VCT and PITC are provided. Client-initiated HIV counselling and testing, also known as Voluntary Counselling and Testing (VCT), is a process whereby client make the decision to know their HIV status through counselling and testing. Provider initiated Testing and counselling (PITC) is the health care provider who initiates or recommends HIV testing and counselling to the client attending the health care facility as a standard component of medical care (MoHSW 2008a, WHO 2012).

Home–based HCT is another approach which can be implemented in a variety of settings with various approaches, such as home- based (door-to-door) HCT services, Mobile and outreach HCT clinics, work place clinics, schools, and services during events e.g. sport events (WHO 2012).

Voluntary Counselling and testing provides an opportunity to access accurate and comprehensive information on HIV/AIDS, and enables to confidentially find out and understand the risk of HIV infection, know the sero-status, know ways of HIV prevention and make an informed decision about HIV testing (MoHSW 2008a). During the process of VCT, pre-test counselling should be offered before taking an HIV test, in order to prepare the client for the test by giving clear information about HIV and HIV testing. Post-test counselling should always be offered soon after the communication to the patient of the HIV test results to help clients understand their test results and initiate adaptation to their sero-positive or negative status (MoHSW 2008a). VCT can act as an entry point for
treatment, care and support services as shown in figure 6 (UNAIDS 2002).

**Figure 6:** VCT as an entry point for prevention and care.

(UNAIDS 2002)
2.5.3 Concept of gender and health seeking

Gender refers to the widely shared expectations and norms within a society about appropriate male and female behaviour based on characteristics, roles and social differences and relations between them. Gender is a social conceptualization of man and woman based on social differences and relations between them that are changeable over time and have wide variations across culture. Roles, attitudes, beliefs and behaviours of men and women when they are sick or worried about ill-health, leads to different processes for seeking health care (Gupta, 2002).

Utilization of health services by women and men differs according to the health problem for which care is required. Women have higher health service utilization and report more fears of ill-treatment than men (Obermeyer et al. 2009). Women’s greater use of health services are influenced by family planning, child birth, child related issues, PMTCT services, and the different social construction of disease (Mills et al. 2012).

2.6 Men’s Health seeking behaviour in relation to HIV/AIDS

Health seeking behaviour is any action individuals take when they perceive that they have a health problem or are ill, for the purpose of finding an appropriate treatment or health care. Generally men’s health seeking behaviour is low compared to women (Smith et al. 2006).

Social constructions of masculinity, whereby men believe they are more powerful and more knowledgeable than women, act as an important factor influencing on health and illness. It implicates men’s reluctance to seek information and health care (Peacock et al. 2008). Male involvement in HIV, pregnancy, antenatal and PMTCT programs is a major barrier to effective programme implementation, as the involvement is low. This is because dominant social norms create expectations implying that pregnancy and antenatal care are for the women’s domain (Ditlopo et al. 2007). Moreover, timing of ANC/PMTCT activities and long waiting times at the clinic were in conflict with men’s daily activities more than women (Morfaw et al. 2013). One study in Tanzania reviewed that, social and cultural norms and spread of attitude that female reproductive health is not a male responsibility, was found as a barrier for male involvement in ANC and PMTCT services (Kalembo et al. 2012).
Chapter 3: FACTORS AFFECTING ACCESS AND UTILIZATION OF VCT SERVICES AMONG MEN IN TANZANIA

In this chapter, factors related to government policies and guidelines affecting utilization of VCT services among men in Tanzania will be discussed, as well as factors related to health system that influence VCT utilization using the four dimensions of access to health care services, including the quality of care.

3.1 Environmental factors

Environmental factors consist of: National health policy, Health care system, HIV and AIDS Policy, and VCT guideline.

3.1.1 The National Health Policy

The National Health policy was last revised in 2003. It aims to provide directions to improve and sustain the health status of all Tanzanians, by reducing morbidity, mortality and disability and raising life expectancy. The policy facilitates the provision of equitable, quality and accessible health care services. The Ministry of Health and social welfare (MoHSW) has to ensure effective health care delivery, quality health care, and preventive and rehabilitative health care services at all levels in order to raise and improve health of all people (URT 2001).

3.1.2 National HIV and AIDS Policy

The national HIV and AIDS Policy were last revised in 2010. The Policy support the provision of HIV testing and counselling services, which should be made available, accessible and considered as a fundamental human right for Tanzanians in order to know their HIV status. Moreover, it emphasizes that HIV counselling and testing must be voluntary and confidentiality and HIV testing must be carried out following an informed consent (MoHSW 2007b). However, the policy recognizes that utilization of VCT services is higher in women than in men, despite the fact that both women and men have been given equal rights to utilize health services (URT, 2001). The policy also considers that male partner involvement increases the effectiveness of SRH services including PMTCT. This is supported by a study done in Tanzania that, part of PMTCT national policy is male involvement in VCT and in overall prevention of mother to child transmission of HIV as pregnant women are encouraged to inform and encourage their partners to come along to ANC clinics for HCT (Msuya et al. 2008). The Policy also emphasises on the rights of People living with HIV (PLWHIV) to access treatment, health care, and support and legal protection against discrimination (URT 2001).
3.1.3 VCT and PITC guidelines

A national guideline for voluntary counselling and testing was developed in 2005 to provide guidance to all health facilities in administering quality VCT services. The guidelines emphasize that there shall be no discrimination based on gender or sexual orientation in providing access and provision of VCT services (MoHsw 2005). Availability of ART and care increased the need for VCT services in the country. MoHSW issued Provider initiated testing and counselling (PITC) guidelines to initiate HIV testing in clinical settings with priorities in settings such as ANC, TB, STI clinics, and family planning clinics, PMTCT and adolescents (MoHSW 2007b). The guidelines also emphasize HIV test results should always be kept confidential (URT 2001).

3.2 Predisposing Factors

This part will discuss the individual’s demographic characteristics, and social and health belief factors that can impact VCT services.

The predisposing factors, according to Andersen (1995) and as they have been adapted for this study include; age, education, knowledge and attitude towards HIV, and VCT services and social interactions.

3.2.1 Individual’s demographic factors

Age

In Tanzania, young women and men aged 20-24 years are more likely to have been tested for HIV including receiving their results, compared to young women and men aged 15-19. Among youth aged 15-24 years, almost half of young women and one-third of young men have been tested for HIV and received their results. Young people below 18 years cannot take an HIV test without the consent of their parents (NBS 2010).

In a study done in Uganda, VCT services utilization was observed to be higher among younger men aged 35 years and below, than their counterparts. The main reason was that younger men were worried of being engaged in high risk practices and fear of being infected (Bwambale et al. 2007).

Educational level

Findings from Tanzania HIV and Malaria Indicator Survey (THMIS 2012) show that HIV testing increased along with the level of education. Findings show that 54% of men with secondary education have been ever tested for HIV and received their results, compared with 32% of men with no education (TACAIDS 2012). Furthermore, studies in Uganda found that men with less education were less likely to use VCT services. One reason
was that, because of their lower education they remained in denial with their HIV status, especially when suspecting to be HIV-infected (Bwambale et al, 2008).

**Marital status**

Studies in Tanzania show that a higher proportion of married, divorced or widowed women presented awareness and readiness to test for HIV than men (Mossdorf et al. 2010). However, a variation was observed among females that showed the desire for VCT utilization was higher in women who had never been married or those who had been separated or divorced (Wringe et al. 2008).

A study conducted in rural Malawi revealed that low uptake of VCT was common amongst married individuals. In many societies people in long relationship and married couples consider themselves not at risk of contracting HIV because they feel they can trust each other (Kranzer et al. 2008).

**Sex**

As stated earlier, a remarkable increase in the uptake of VCT was observed in both men and women aged 15-49 in THMIS 2012 compared to THMIS 2007. Although an increase in uptake of VCT was observed in THMIS 2012, only 47% of men have been tested compared to 62% of women (TACAIDS 2012).

Women access HCT services more in public health facilities through RCH clinics. In Burkina Faso, women were reported to have greater motivation to use HIV services and easier access through perinatal care than men, who were reported to have difficulties of access or were reluctant to use HIV services (Obermeyer et al 2009).

**Fear of positive results**

Fear of HIV test results was one of the reasons for people not to be tested for HIV (Mugisha et al. 2010). In Uganda a study by Bwambale et al. (2008), showed that people did not want to get tested because they were worried and feared the positive results and their negative consequences. Nuwaha et al. (2002) in their study found that negative consequences of a positive HIV test result include hopelessness, premature death due to anxiety and stress, and sometimes suicide. In addition, stigma from society and rejection from friends, relatives, and their sexual partners was also mentioned as negative impacts of HIV positive test results. Another study in Burkina Faso reported that both men and women feared abandonment by partners, friends and families, in addition women feared losing means of livelihood (Obermeyer et al. 2009).
3.2.2 Social factors

HIV-related Stigma

In Tanzania, attitudes towards people living with HIV/AIDS, stigma and discrimination related to HIV/AIDS are still widespread among Tanzanian adults (TACAIDS 2012). Delaying care seeking and failure to disclose HIV status owing to fear of being isolated or rejected are results of stigma (Leta et al. 2012).

According to Meiberg and colleagues in their study on fear of stigma as barrier to VCT in South Africa it was shown that clients were afraid to become isolated or rejected by family members after disclosure of their HIV status. Bwambale et al. (2008) and Kalembo et al. (2012) in their studies reported that, men preferred to be tested for HIV in health facilities which were outside their areas of residence or where they were not known by people and health workers as they feared to be labelled HIV-infected and therefore lose their social privileges and status.

Culture

Cultural stereotypes also influence men to ignore screening for illness and preventive health care, and to delay in seeking treatment for symptoms. These results in low utilization of health care services aimed at early intervention. Consequently, poor health-seeking behaviour results in poor health care use among men, which limits their access to information and restricts opportunities for health promotion and prevention (Smith et al. 2006).

Patriarchal masculine characteristics, such as superiority, independence, self-reliance and dominance, act as a barrier to men appropriately accessing and using health services (Smith et al, 2006). Decisions regarding health seeking behaviour are dominated by men. In Uganda for example, it was reported that wrong perceptions among men (who believed that if their partners are tested positive, they are also automatically positive) were more likely to negatively influence men from using VCT services (Bwambale et al. 2008). Men are more responsive to the influence of social norms and have different motivations for testing than women (Stephenson et al. 2012).
Gender

Many studies show that gender relations and differences in decision making affect women’s access to and use of health services. However, both gender differences and gender inequality can give rise to inequalities between men and women in both health status and access to health care. Norms and masculinity where men expect to be more powerful, knowledgeable and experienced than women put them at risk because such norms prevent them from seeking information and services (Gupta 2000).

Disclosure

Disclosure of HIV status to sexual partners facilitates risk reduction within the partnership and increases access to health care services as well as social support for people living with HIV/AIDS (Katz et al, 2009a). Studies in Uganda, Malawi and Nigeria showed that utilization of PMCT by women was influenced by fear of disclosure of HIV results to their spouse (Kalembo et al, 2012). Couple HIV counselling increased HIV prevention and disclosure more than individual HIV counselling among men and women (Katz et al, 2013). Likewise, studies in Uganda show that men did not want to disclose their HIV positive status to their partners, because they fear denial of sexual intercourse. Additionally men who tested HIV positive were less likely to disclose their results than those who tested HIV negative (Katz et al 2009a).

3.2.3 Health belief

Health belief implies the individual’s knowledge, values and attitudes about health, diseases, and use of health services that may affect the individual’s needs and utilization of health services. People will take the right action towards their health if they perceive that they are susceptible for the disease (Andersen, 1995).

HIV risk perception

Studies on uptake of voluntary counselling and testing conducted in Tanzania found that high perceived risk of HIV motivated both men and women to go for VCT. A perceived high risk of HIV was associated with higher risk sexual behaviours (Wringe et al. 2008). Bwambale et al. (2008) in their study done in Uganda found that majority of men were at a higher risk of HIV, because of multiple sexual relationships. Similarly another study in Uganda found that most men went got HIV tested because they had experienced signs and symptoms of HIV, had lived a risky life style, or had a sex partner who died from HIV (Mugisha et al. 2010).
However, VCT utilization increased when an individual had had a higher number of sexual partners and high-risk partners in the past, this applied to both men and women (Isingo et al. 2012). Women are additionally worried about their sex partner’s life styles (Mugisha et al. 2010).

### Knowledge about HIV and existing VCT services

Tanzania HIV and Malaria Indicator Survey (THMIS 2012) show that knowledge of HIV is universal throughout the country whereby almost all respondents have heard of AIDS and knows where to go for HIV test.

Studies in Malawi, Uganda and Nigeria showed that adequate and current knowledge about HIV and knowledge of testing sites are the key reasons for VCT utilization (Jereni & Muula 2008, Gage & Ali 2005, Lliyasu 2006). Men are slightly more likely than women to know about different HIV prevention methods.

### 3.3 Enabling Factors

This section will discuss factors related to health services and how they can influence male VCT utilization using the five dimensions of access to health care services which include availability, affordability, accessibility, acceptability, accommodation and Quality of VCT services. There are factors which affect both women and men. Factors specifically influencing men regarding access and utilization of VCT services include; Affordability, Acceptability, Accommodation (opening hours) and quality of care.

#### 3.3.1 Availability

**HIV counselling and testing services**

Provision of VCT services in the public sector of Tanzania started in 1989. Availability of VCT services gradually increased. Currently VCT services exist in both public and private hospitals, NGOs, FBOs health facilities, stand-alone facilities, as well as mobile and outreach services. In 2010, there are more than 2,137 VCT sites and more than 5,002 counsellors who have been trained. This is not enough in relation to the general population. However, as mentioned earlier, there is an unequal distribution of health facilities, where there are more in the urban areas, and not all health facilities have VCT services. Although there is expansion of VCT services in the country, irregular supply of HIV test kits, limited infrastructure, weak referral system and stigma were challenges in the provision of VCT services (MoHSW 2005). Public health facilities provide rapid HIV testing services and same day test results. Counselling and
testing algorithms are provided to be used and guide the health care providers in the process of HIV testing (Annex 2) (MoHSW, 2005).

Special services like Reproductive health services support more women than men; men are reporting difficulties in accessing this service and even those services that are directly aimed at men, for example STI services fail to respond adequately to men’s needs (Peacock et al. 2008). Institutionalization of reproductive health services favouring women has yielded services that are not welcoming men, which is contributing to men’s negative perception of reproductive health as “women’s health” and clinic space as “women’s space” (Ramirez-Ferrero & Lusti-Narasimhan 2012).

Human resources

Shortage of skilled staff in Tanzania is the main challenge to provide health services (Musau et al. 2010). Mugisha et al (2011) in their study found that there were limited staffs for VCT; in addition the few who were available were required to offer emergency health services while clients for VCT were left without been attended (Mugisha et al. 2011). Sebudde and Nangendo (2009) on their study found that, although the majority of staff was trained, they were few compared to the demand.

Infrastructure

As stated earlier, limited infrastructure in Tanzania is one of the challenges in the provision of health services. Existing facilities cannot cope with the demand of service needed. In Uganda, lack of space in ANC clinics, and an increased number of women attending the ANC, discouraged men form attending ANC with their partners as they have to wait for a long time before they are attended (Kalembo et al. 2012). In addition, another study from South Africa revealed that ANC clinics did not accommodate pregnant women and their partners due to lack of space (Ditekemena et al. 2012).

3.3.2 Accommodation (Opening hours)

In Tanzania, VCT clinics are accessible during working hours starting from 08hrs to 16hrs. VCT are not available after working hours and during weekends which also can affect the utilization of VCT among men. 24 studies from peer-reviewed journal from SSA on barriers of male involvement in PMTCT (Smith et al. 2012), found that lack of time for ANC/PMTCT and long waiting time affected men’s use of ANC services. Similarly, studies in South Africa and Kenya show that, work and commitments prevented male partners from attending ANC services (Ditekemena et al. 2012, Katz et al. 2009b). This is because many men are busy during the working hours and it affects men’s normal daily activities. Another study was done in Zambia reviewed that, VCT clinics
were opened on the weekends for men who were busy during weekdays, but still few men attended (Msuya et al 2008).

3.3.3 Accessibility

Geographic accessibility is the physical distance or travelling time from where an individual, the health services consumer, is to the health facility (Peters et al. 2008).

HIV policy considered that VCT services should be available to everyone (Kakoko et al. 2007). 90 per cent of Tanzanians live within 10 kilometres of a health facility, yet not all health facilities have VCT services. Studies in Tanzania show that VCT services are more available in urban areas than in rural areas (Manzi et al. 2012). Unequal distribution will negatively affect VCT access and utilization, particularly to people living in rural areas.

In South Africa and Uganda, distance to the health facility, poor roads, and undeveloped transport systems were found to be factors hindering men from being involved in PMTCT services (Kalembo et al. 2012).

3.3.4 Acceptability

In Tanzania men’s participation in antenatal HIV testing is low at 5% (Kalembo et al 2012). In Zambia men were four times more likely to accept VCT if offered at an alternative clinic, were easily accessible, offer high quality in services with linkage to ARV care and treatment (Msuya et al. 2008). Furthermore, negative attitude of health care providers hampered male participation in ANC clinics. For example, one study in Uganda showed that rude behaviour by health care providers was as a hindrance to men in participation in PMTCT services. Likewise, harsh and critical languages directed to pregnant women from health care providers was a barrier to male participation in ANC (Byamugisha et al. 2010). Mistreatment of men by health care providers also discouraged men from returning for PMTCT activities (Ditekemena et al. 2012).
3.3.5 Affordability

According to Peters et al, 2008, affordability is also referred to as financial accessibility. It involves the cost of utilizing services, travel to the health facility, waiting time, and ability for the individual to pay for those services.

HIV services are free of charge in public health facilities. Before introducing free testing, high testing cost was the major barrier to VCT. However, in Tanzania, private health facilities providing VCT services that receive free test kits from the government, charge fees to cover administrative costs. Also in private hospitals patients have to pay other charges like entry fee or consultation fee (MOHSW 2008a). In South Africa, men find it hard to access health services due to socio economic difficulties and lack of money to pay for transport to health facilities (Peacock et al, 2008). In Malawi, due to socio-economic difficulties men could not afford to attend ANC with their partners (Kalembo et al. 2012).

3.3.6 Quality of care

Privacy and confidentiality

Breaching of confidentiality has a serious impact on VCT uptake; men lose their trust in the service provided which can result into a client being stigmatized and discriminated (MoHSW 2005). Any staff member who breaches confidentiality is violating the professional code of conduct and may be subjected to legal action (MoHSW 2009). According to Bwambale et al. (2008) and Kalembo et al. (2012), lack of confidentiality creates barriers to seek VCT among men. Moreover, men preferred to be tested in distant clinics where they were not known by people and health providers, as they fear breach of confidentiality by health providers.

Work overload among health services and taking care of male partners in ANC is considered as an additional work for them, this compromise quality of work (Ditekemena et al. 2012). Lack of adequate space in some of the facilities to provide VCT services compromises quality, as privacy is not always ensured; this demotivated both men and women from attending VCT services (Kalembo et al. 2012).
3.4 Need factors

The need factors are the most direct motivation for health services utilization from functional and health problems that generate the need for health care services. According to Andersen (1995), there are two types: the perceived and evaluated needs. As stated earlier, perceived needs will be included.

3.4.1 Perceived need of VCT services

Low perceived need for VCT services can result into low utilization of VCT services. Nuwaha et al. (2002) reported that in Uganda lack of awareness on the need for VCT services reduces the number of people utilizing VCT. Perceived benefits for VCT were related to treatment and prevention of HIV. Participants indicated that they could start ART as soon as they know their HIV status; moreover pregnancy was also mentioned as one reason to go for VCT (Meiberg et al. 2008).
Chapter 4: BEST PRACTICE AIMING TO IMPROVE ACCESS TO AND UTILIZATION OF VCT SERVICES AMONG MEN

In this chapter I will present three best practices from Kenya and South Africa which I found to be best practices for VCT that can improve access and utilization of VCT services among men in Tanzania. The selection of these countries based on two criteria: namely, the countries have similar epidemic situation, thus; generalized HIV epidemic and low income countries. These best practices were; HIV testing men in antenatal settings, gentle men’s clubs and HIV testing through a mobile VCT program. Lessons learned will be used to make recommendations to be implemented and adapted in Tanzania.

4.1 Kenya: HIV testing for men in antenatal care setting

One of the best practices in VCT was recommended in a study from Kenya. This study was conducted between 2001 and 2002, and investigated HIV testing among men in the antenatal clinic and understanding male – non disclosure. Women attending ANC clinic were enrolled in the study of antenatal couple counselling and they were encouraged to come with their male partners at the clinic for VCT. After a written informed consent at the initial attendance to the clinic, men were enrolled into the study and VCT was conducted individually or as a couple with the female partner. During the study, 3137 women attended at the clinic, among these, 2104 (67%) women were enrolled into the study and accepted HIV testing. Among these women, 1993 (95%) informed their male partners the availability of HIV testing at the clinic (Katz et al. 2009a).

Outcome: Although 1993 (95%) men were informed about ANC, only, 313 (16%) men accompanied their partners to the ANC and among these, 297 (95%) received HIV testing, of whom 183 (62%) were counselled individually and 31 (10%) were HIV positive. Of the 183 of men who were counselled individually and accepted to be tested, only 106 (58%) returned with their partners for follow-up after two weeks and reported to share their positive results with their partners.

Lesson learned: ANC is more likely to increase uptake of VCT among men. HIV testing at ANC facilitates partners to understand the importance of knowing HIV status, sharing HIV test results and to promote couple counselling and HIV testing.

This intervention was not successful as men did not seem to accept to participate at ANC despite of majority 1993 (95%) were informed about availability of ANC by their partners, only 313 (16%) men accompanied their partners. However, on the other hand although few men accepted to
attend ANC, but majority of these men were tested for HIV and shared their test results to their partners and returned for follow-up. To my opinion, this is a best practice to be adapted if both partners will understand the importance of male participation in ANC. Male participation in ANC has an advantage and opportunity for ANC-VCT for men and couple counselling. Men tested in ANC setting have a greater likelihood of disclosing HIV test results and increases communication within partners. Efforts to increase male participation in ANC would be necessary to take advantage of the opportunity for ANC-VCT and couple counselling to be encouraged.

4.2 South Africa: Engender Health’s MAP Program: Mobile VCT program.

The second best practice is a VCT program for men in South Africa, which related to mobile and outreach base activities. South Africa has generalized HIV epidemic with an HIV prevalence of 17% amongst adults aged between 15-49 years, and has the largest HIV epidemic in the world.

In 1998, EngenderHealth in collaboration with a local partner, Planned Parenthood Association of South Africa (PPASA) initiated a Men As Partners (MAP) program. The purpose of the MAP program was to address issues of preventing gender based violence and to encourage men to encourage male involvement in reproductive health and in HIV/AIDS related prevention, care and support activities. Socio-economic status was identified as the main determinant for exposure to HIV/AIDS, with poverty and social inequalities as leading cofactors in HIV transmission. These factors led people to not be able to access health services. In 2008, EngenderHealth initiated and utilized a mobile VCT program to provide HIV testing to men at their home and work location, using male counsellors and offering male friendly VCT services. The mobile team attracted men to test for HIV because the services were easily accessible from their living and working places. VCT was promoted as a key strategy to empower men in adopting sexual behaviour and as an entry point to care (Ditlopo et al, 2007).

Lesson learned/outcome: EngenderHealth's mobile VCT unit was staffed mainly by men; between 2008 and 2009 the program successfully reached 13,995 people, of which 10,245 were men. The program also conveyed behaviour change messages, partnership with public, private sector groups, and created linkages with community partners to engage men in SRHS, PLHIV care. Moreover, male clients who tested HIV-negative were referred to MAP preventive programmes for on-going counselling and support, while clients who were tested HIV-positive were referred to relevant service providers for treatment, care and other medical attention.
4.3 South Africa: The gentle men’s club

The gentle men’s club was a new intervention introduced to improve men’s HIV counselling and testing at University campus in South Africa. The club was initiated in 2010 to increase HCT among male students at the university. In order to join the club, one of the strategies was to require the student to take a confidential HIV test. Many students in South Africa engage themselves in high risk practice and most male students did not test for HIV, and therefore HCT amongst male students was low and more female than male students utilized RHS. Consequently, the gentlemen’s club was implemented to increase HCT uptake and motivate male students on behaviour and life style changes (Matlala et al, 2012).

This innovation increased club membership and made increased in the number of male students attending HCT.
CHAPTER 5: DISCUSSION

This chapter will discuss the study findings and how they influence men’s use of HIV testing services, using the conceptual framework. The findings will be discussed with respect how they influence men specifically and how they influence both men and women as part of the general population.

5.1 Factors influencing both men and women regarding VCT access and utilization

Environmental factors

Distribution of health facilities and health workers does not match the needs of the population. The shortage of staff is more in rural than urban areas, where a majority of 73% of the population of Tanzania live. This affects access and utilization of VCT services, since uptake is high in the urban areas.

Unavailability of health workers increases workload, resulting in long waiting times and shorter counselling sessions, which hamper both men and women from attending the services. However, women face the same problems but are less affected than men as they have learned to cope with these problems, that they face all the time when they need RH and child health services for either themselves or their children, contrary to men who are less used to using public services and prefer private services.

Predisposing factors

Low risk perception affects the decision to take an HIV test. Studies on uptake of voluntary counselling and testing conducted in Tanzania found that high perceived risk of HIV motivated both men and women to go for VCT.

Fear of positive results was also a barrier for VCT utilization. Some of the reasons include; fear of death, rejection from families and partners, and stigma. Both men and women are afraid to disclose their HIV status to their partners. In addition, couple counselling facilitates disclosure within partners than individual counselling. Increased male involvement in SRHS, ANC and PMTCT services in couple counselling, encouraged and increased communication between partners.

Enabling factor

Breaching of confidentiality has a serious impact for VCT uptake for both men and women. Breaching of confidentiality is unacceptable and violating human rights.
5.2 Factors specifically influencing men regarding access and utilization of VCT services

Environmental factors

Findings from this study suggest that clear policies and guidelines on HIV prevention and AIDS management are available and implemented. Despite some of its setbacks they are important in promoting access to health services including VCT services. National health policy is available and it emphasizes that health services including VCT should be available to everyone. There is no documented finding showing discrimination based on gender or sexual orientation. Male involvement is mentioned in the policies particularly in PMTCT policy, and the health providers should encourage pregnant women to bring their male partners to ANC clinics for VCT. However, male involvement in PMTCT services is still low.

My findings from this study show that the set-ups of health facilities and RCH services and special services like FP, PMTCT and ANC, are female-oriented even when men supposedly are also encouraged to attend. As these services are not male friendly, they contribute to men’s negative perception of RCH clinics as women’s clinics. Moreover, men reported difficulties in accessing these services due to negative attitudes among health providers and non-friendly services. STI services on the other hand are available and usually more acceptable for men, yet these also fail to respond adequately to men’s needs because of stigma.

Predisposing factors

Findings from this study have shown that both young men and women represented the largest group of people tested for HIV and received their results. However the findings indicate that men had low uptake of VCT in both groups.

Level of education was found to influence utilization of VCT services among men. Findings from Tanzanian studies showed that men with secondary education and above were more likely to go get tested for HIV, than those with no education. In Uganda, uneducated men were constantly in denial of their HIV status even when suspecting being HIV infected, and this ultimately resulted in their low VCT uptake. Furthermore, studies in Uganda found that men with less education were less likely to use VCT services. Although education has shown to influence the use of VCT, more men did not get tested, due to their cultural beliefs. In addition to this, men relied on their partners HIV test results, in which they believe that if their partners are tested HIV negative, they are also negative or vice versa, this negatively influences men from using VCT services. At the same time, men are slightly more likely than women to know about different HIV prevention methods. Likewise gender roles and norms and masculinity, where by men belief that they are superior and
more knowledgeable than women, implicates men’s reluctance to seek health information and health care.

Stigma and discrimination related to HIV/AIDS, which is prevalent in many Tanzanian communities, results in low access to and utilization of VCT services among individuals of both sexes. Although stigma affects both men and women, men seem to be affected more as they are afraid to be known by other people that they are HIV positive and of losing their prestige in society. As a result of this they decide to get tested in a private facility. Addressing stigma and empowering the communities with knowledge to understand the issues around stigma increases testing practices.

**Enabling factors**

In Tanzania 57% of the population live below the poverty line which limits their ability to access health services. VCT services are provided free of charge in public health facilities. However, transport cost to the health facility and poverty prevent many individuals, who are in need of services. Likewise, men are the decision makers in the decision on how to spend their income. Men distrust in public facilities, yet when seeking private services they are confronted with much higher costs. On top of this they have additional responsibilities to source money in order to take care of their families.

Acceptance of health service provided depends on quality of VCT services. This study shows perceived poor quality of care and negative attitude of health care providers towards men hinders VCT utilization resulting in low acceptability and utilization of health services including VCT by men.

**Need Factors**

Lack of knowledge about HIV and misconception that person who looks health cannot transmit HIV. Men who think that they are health are less likely to seek for VCT services. Men usually delay to seek health services they only access VCT services when they are already sick and also start treatment at a later stage than women. My findings show that, even if people are infected they will not perceive the need for seeking health care. Low perceived need leads to low utilization of health care services including VCT services.

Gender roles and norms also indicated an implication in health care seeking. Masculinity is also implicated in men’s responses to disease, valuing and denial of vulnerability. Gender sensitivity is of great importance.
5.3: Best practice

Three programs from Kenya and South Africa discussed in this study provide a diverse vision and interesting designs and implementations to HIV programs, specifically in order to increase men’s utilization of VCT services. The program from Kenya is practical; ANC is an important setting to promote male involvement in VCT and couple counselling, which promotes disclosure between partners. The program from South Africa can be adopted and implemented through the support of the MoHSW and other partners for sustainability, since mobile and outreach activities need funds in order to make the program sustainable. Mobile VCT strategy, if implemented properly, is more likely to increase access to and utilization of VCT services. Gentlemen’s club also from South Africa, was an innovative idea to increase HCT uptake by male students, and it served as a platform to address health and social issues particularly to university students who engage in high risk practices. These approaches can be adapted in Tanzania, particularly in targeting men, and can increase male involvement in SRH, HIV services and facilitate to prevent gender norms and roles that encourage men to view health-seeking behaviour as a sign of weakness. Such gender roles leave men vulnerable to HIV/STI infection.

There are important relations and linkages between the various factors despite the fact that the study findings were presented as independent factors. For example, stigma and discrimination which are faced by individuals living with HIV or suspected of being HIV-infected are related to social factors of fear for being tested positive for HIV. Furthermore, the health services factor of confidentiality and fear of being identified by other members of the community while attending VCT centres is very much linked to the negative image towards use of VCT services. Culture and gender are also related to low utilization of health services.
Chapter 6: Conclusions and Recommendations

6.1 Conclusions

This study has discussed and provided an understanding of, environmental, predisposing, enabling and need factors that contribute to low utilization of VCT services by men compared to women. As the study reviewed, there is a lower HCT coverage for men, which is coupled with men’s reluctance to undertake HCT. 47% of men compared to 62% of women in Tanzania have tested for HIV and received their result.

The study suggests that there are factors specifically influencing men regarding VCT access and utilization, as well as factors that influence both men and women regarding VCT access and utilization. Apart from a weak health system, other environmental factors are interrelated with social factors. The availability of VCT services in Tanzania is an opportunity for utilization of health services among men. However, cost, stigma, low quality of care and confidentiality, negative attitude of health care providers towards men, low perceived need for seeking health care and non-male friendly services are issues affecting the utilization of VCT services among men.

Social factors such as stigma and discrimination, which prevail in many Tanzanian communities and fear of positive results, play an important role in influencing both men and women. Long distance to the health facility, lack of transport and shortage of staff also may result in both men and women not attending VCT services. The access and utilization of VCT services can increase by understanding and addressing these factors.

Best practice from other countries on VCT among men can still be adapted and implemented in Tanzania.

Based on the conceptual framework used for this study, the main factors determining VCT utilization by men are predisposing and enabling factors, which are strongly associated with VCT service utilization. The framework was suitable for this study. However gender was added as a crosscutting issue in discussing the factors.
6.2 Recommendations

The following recommendations are proposed to improve uptake of VCT services in the general population, but more specifically among the male population, based on the findings of this study.

Ministry level

- MoHSW and partners should facilitate meaningful involvement of men in HIV and AIDS programs in order to enable more men seeking and accessing health services, changing men’s attitude, practice and behaviour in order to eradicate harmful definitions of masculinity.

- MoHSW and other NGOs should initiate and implement special clinics, programs targeting men, and behaviour change campaigns should be initiated and implemented to increase men’s awareness on the risk behaviours.

- MoHSW should develop public private partnership for VCT service to public and private facilities to increase VCT services and make services more available and accessible to those in need.

- MoHSW and partners should establish support groups specifically for men, in order to ensure that more men are joining the groups.

Service delivery level

- Heath care providers should increase VCT uptake in both men and women, couple counselling should be promoted. This will provide opportunity for couples to learn their HIV status and to enhance disclosure and increase communication within partners.

- Mobile VCT services should be available and provided where men live and socialize outside working hours.

- Consideration should be given to gender in creation of HIV and AIDS service provision and referral to support groups.

- In order to win the trust of people who fear breaching of confidentiality by health care providers, health care providers should ensure confidentiality as among the rights of clients attending VCT services.
• Health care providers and other partners should create community awareness and reduce fear of positive results and stigma through conducting campaigns containing strong messages targeting both men and women.
REFERENCE


MOHSW. (2008c) Human resource for health strategic plan 2008-2013


UNAIDS, 2012, Regional Fact sheet, UNAIDS.

United Republic of Tanzania (URT), Prime Minister’s Office (PMO) 2001, National HIV and AIDS Policy, Tanzania Commission for AIDS (TACAIDS), Dar es Salaam.

United Republic of Tanzania (URT), Prime Minister’s Office (PMO) 2010 ‘Gender Operational Plan for the HIV Response in Tanzania Mainland 2010-2012, TACAIDS,Dar e Salaam.


ANNEXES

Annex 1: Map of Tanzania

(TACAIDS 2012)

Figure 2: Counselling and Testing Algorithm recommended for use in VCT sites in Tanzania

Pre-test Counseling

First HIV Rapid test (screening test)

Positive test result

Second HIV Rapid test (confirmatory test)

Positive test result
  Counsel for positive result
  Report Positive

Negative test result
  Report Negative

Negative test result
  Counsel for negative result

Report results as indeterminate (Repeat 1st rapid test in 6 weeks)

Second HIV Rapid test (confirmatory test)

Positive test result
  Counsel for positive result
  Report Positive

Negative test result
  Report result as INCONCLUSIVE

Refer to Referral Laboratory

(MoHSW 2005)

(Andersen 1995)