ASSESSMENT OF THE EFFECTIVENESS OF VOLUNTARY COUNSELING AND TESTING (VCT) IN REDUCING HIV TRANSMISSION AMONG ADOLESCENT SECONDARY SCHOOL STUDENTS IN TANZANIA: A CASE STUDY OF KIBAHA TOWNSHIP, COAST REGION

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SOCIAL WORK OF THE OPEN UNIVERSITY OF TANZANIA

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CERTIFICATION

The undersigned certifies that he has read the entire work and hereby recommends for acceptance by the Open University of Tanzania a dissertation titled: **"*Assessment of the Effectiveness of Voluntary Counseling and Testing (VCT) in Reducing HIV Transmission Among Adolescent Secondary School Students in Tanzania: A Case Study of Kibaha Township, Coast Region*",** in partial fulfillment of the requirements for the degree of Master of Social Work of the Open University of Tanzania.

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Prof. Slyvester Kajuna

(Supervisor)

……

Date

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DECLARATION

I, **Happiness Samwel Mairo**, do hereby declare that, this dissertation is my own work and that it has never been submitted anywhere by any person in either a whole or part of it for the Master of Social Work Degree or in any other field or award related to this.

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Signature

……

Date

DEDICATION

This research report is dedicated to all my family members and friends who offered me unconditional endless love, encouragement and support throughout the course of writing this dissertation.

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ABSTRACT

This study assesses the effectiveness of Voluntary Counseling and Testing (VCT) in reducing transmission of HIV among adolescent secondary school students. The research use a case study approach and both qualitative and quantitative methods to unveil the attitude of secondary school students towards VCT, analyze barriers towards VCT among adolescent secondary school students, and examine the success of VCT in reducing HIV/AIDS transmission among adolescent secondary school students. The results show that more than 90% of the respondents were satisfied with counseling sessions, compared to about 10% who argued the sessions were unsatisfying. The analysis of barriers reveals that, the long distance to the health center hinders youth to attendance to VCT. Lack of health care provider confidentiality is also among the obstacles for youth to seek VCT, where more than half of the respondents reported it was important for them to be sure that their health status would remain confidential if they have to visit VCT. The study also shows all respondents understand the importance of VCT in helping youth to understand their health status of the respondents. The results also show that counseling lead to improved nutritional support and post- test clubs for people with HIV. These studies therefore provide evidence for the need to continue to invest and improve VCT centres. It calls upon government, non-governmental organization and private entities to put emphasis on establishing VCT centres close to the people.

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LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
HIV	Human Immune Virus
CDC	Centers for Diseases Control and Prevention
HTC	HIV Counseling and Testing
STI	Sexual Transmitted Infections
SPs	Service Providers
VCT	Voluntary Counseling and Testing
TACAIDS	Tanzania Commission for Acquired Immune Deficiency Syndrome
TB	Tuberculosis
THMIS	Tanzania HIV/AIDS and Malaria Indicator Survey
URT	United Republic of Tanzania
UNCTAD	United National Conference on Trade and Development
UNAIDS	United National Acquired Immune Deficiency Syndrome
UNESCO	United National Education Scientific and Cultural Organization

CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

This chapter introduces the subject matter starting at a global level, and then narrowing down to African and Tanzanian context. The background and contextualization of the topic Tanzanian setting helps to build a case for the study, establish problem statement, and formulate research questions.

1.2 Background of the Study

A youth is an individual aged between 10 – 24 years, who is within a period of transition from childhood to adulthood. Worldwide the terms “youth”, and “adolescent” are used interchangeably, often meaning the same thing but occasionally different (Mbeba et al 2012). According to the WHO statistics one in every five people is adolescent (10-19 years), estimating about 1.2 billion adolescents worldwide. Global aggregate data on the HIV epidemic in adolescents and youth in particular marks significant gaps and challenges. First, adolescent girls and young women face unique challenges and vulnerabilities and are at increased risk of HIV infection in many contexts. Globally, HIV prevalence remains nearly twice as high among young women and girls than it is among young men and boys, which is driven by the disproportionate number of young women and girls aged 15–24 years living with HIV in sub-Saharan Africa (UNAID, 2014).

According to Blum and Kristin (2005), about 1.7 million youth lose their lives due to accidents, pregnancy related complications and violence. Yet adolescent pregnancy,

HIV, and other STIs are major public health problems in the United States. In South Africa youth (15-24) have been identified as a high-risk group with HIV prevalence rates estimated at 7.1% (Shisana et al, 2014).Adolescents and youth represent a positive force in society. As young people pass through puberty and adolescence new health concerns arise which impacts on their sexual and reproductive health, at the same time youth are neglected by the health system (Kenya Youth Friendly Service Guideline, 2005).

Globally, sexually transmitted infections (STIs) including HIV/AIDS affect one in 20 young people (Kenya Youth Friendly Services Guideline, 2005). In Kenya STIs manifest most seriously among adolescent girls (15-19 years) and young women (20-24 years) are twice more likely to be infected than males in the same age group. While knowledge on AIDS is almost universal at over 90 percent for all ages and sexes, use of condoms for protection against infection is low; only one out of every 10 young women less than 24 years uses a condom compared to 40 percent of young men the same age.

According to UNAID, (2014), significant progress has been seen in the prevention of new HIV infections in youth aged 15–24 globally. Between 2001 and 2012, new HIV infections fell among young women and men aged 15–24 in every region except the Middle East and North Africa. In the Middle East and North Africa, new HIV infections among this age group increased by approximately 50% during this period (UNAID 2014). By contrast, in sub-Saharan Africa, the number of new HIV infections among young people declined by 36 % from 2001 to 2012 and by 55% in the Caribbean. Global, regional and even country data, however, do not adequately describe the heterogeneity

and reality of key locations and micro-epidemics; therefore, countries need to look closely at the epidemiology of their epidemics and focus responses accordingly (UNAID 2014).

In Tanzania young people (19-24) comprise 32% of the population who face challenges such as limited access to youth friendly services including information on growth, sexuality and family planning something that leads to youth sexual behavior resulting to high STI and HIV prevalence. Likewise, in 2016,an estimated 4.7% of adolescents aged 10 – 19 were living with HIV in Tanzania (UNAIDS REPORT 2017).

1.3 HIV Prevalence Rates in Tanzania and Kibaha

Tanzania had an estimated 1.6 million people living with HIV/AIDS as of the end of 2003 (UNAIDS, 2004). Although Tanzania prevalence rate is lower than some of the hardest hit countries in Sub-Saharan region, it is higher than the prevalence rate of the region overall (8.8% compared to 7.5%) (UNAIDS, 2004).

According to recent surveys, the knowledge of AIDS is widespread in Tanzania, with 99% of the people having heard of the disease (THMIS, 2005). Despite this high level of awareness and efforts made in fighting the disease through health education/promotion and care and treatment, the prevalence of HIV is still high (THMIS, 2005). Thus, increasingly youth's sexual involvement is becoming a subject of concern. Majority of youths engage in risk behaviors exposing them to unwanted pregnancies and sexually transmitted infections including HIV (Mwakagile, 2001).However, the factors underlying such risk behaviours are not well documented.

Young people are the greatest hope for stopping the epidemic, partly because they are more likely than adults to adopt and maintain safe behaviour. In 2013, 1.4 million people were living with HIV in Tanzania, equating to an estimated HIV prevalence of around 5%(Tanzania Ministry Health 2014). This accounts for 6% of the total number of people living with HIV in sub-Saharan Africa, and 4% of all people living with HIV globally (http://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/tanzania).

In 2013, 72,000 people were newly infected with HIV, and 78,000people died from an AIDS-related illness. (http://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/tanzania). Despite the numbers, Tanzania has done well to control the HIV epidemic over the last decade. However, evidence from various studies show that there is the increase of HIV among young especially adolescent youth.

The findings from HIV prevalence data obtained from blood samples voluntarily provided by women and men interviewed in the 2011-12 (THMIS 2012). Of the 20,811 eligible women and men aged 15-49, 90% of women and 79% of men provided specimens for HIV testing. Overall, 5.1% of Tanzanians aged15-49 are HIV-positive. HIV prevalence is higher among women (6.2%) than among men (3.8%), and the prevalence is higher in urban areas for both women and men than in rural areas (THMIS 2012). HIV/AIDS is one among a killer disease in all the regions including Coast. The study conducted by PEPFER,(2015) findings reveals that the rate of spreads of HIV/AIDS in Kibaha district is higher than the other districts of 7.25%.

1.3.1 The Role Played by Voluntary Counseling and Testing on Reducing the Spread of HIV/AIDS

Voluntary Counselling and Testing (VCT) programmers form an important component of both primary and secondary HIV prevention strategies. Early diagnosis of HIV infection has potentially significant to individual and public health benefits. VCT is very important in Tanzania as it allows individuals to learn their HIV status through pre and post-test counseling and HIV test. VCT is client-initiated, as opposed to provider-initiated testing and counseling (PITC) when health care providers initiate discussion of HIV testing with clients who are seeking health care for other reasons (USAID,2012).

Currently in Tanzania VCT are provided through stand-alone clinics or offered through community-based approaches, such as mobile or home-based HIV testing. On top of that, counseling for VCT may take place at the individual, couple, or group level. Previously VCT was originally implemented as an individual-level, clinic-based procedure. Different modalities evolved, including community-based and couple-based approaches, to increase access and uptake.

On top of that VCT has succeeded to motivate people to change their behaviors to prevent the acquisition and transmission of HIV, reduce anxiety over possible infection, facilitate safe disclosure of infection status and future planning, and improve access to HIV prevention and treatment services. From 2007-2008, the number of facilities offering VCT increased 35% globally (WHO, UNAIDS, and UNICEF 2009). VCT programmers have both positive impact to the individual and public health. Through VCT those who test negative, are encouraged to reduce their risk and can be referred to supplemental prevention services.In Tanzania through VCT Individuals who test

positive can be referred to appropriate follow-up services and have their health monitored. VCT programmes and early diagnosis play an important role in accessing potentially life-saving care among the people living with HIV.

Individuals who learn of their positive status are also likely to reduce risk-taking behaviors; thereby reducing the risk of onward transmission or becoming infected with other sexually transmitted infections (STIs). On top of that VCT played an important role as it help individual prevention strategies to reduce onward transmission of infection have obvious public health benefits. As a primary prevention tool VCT can be effective in helping people reduce their risk behaviours for HIV and other STIs.

1.3.2 Barriers towardsVCT Implementations

Stigma and the fear of testing positive are potential barriers to testing towards VCT implementations. Individuals are more likely to seek HIV testing when it is offered anonymously. Anonymity can be critical component for establishing trust and ensuring client demand for services. Policies that require mandatory testing or name reporting of HIV positive persons may also act as a barrier to test seeking. Clients are more likely to accept testing if the service providers have a “pro testing attitude” and stress the potential benefits for the individual such as peace of mind, treatment access and the welfare of partners and offspring. Despite decades of VCT implementation, additional research is needed to understand the best approaches for increasing uptake of VCT and reduction of HIV-related risks in the context of VCT, thus this study is going to investigate the effectiveness of VCT on reducing transmission of HIV among adolescent secondary school’s students. This study was carried out in Kibaha District in eastern Tanzania. The district is located between latitude 606’-7005’S and longitudes

38027’-39010’E. The Kibaha district has a total of a 1630km^2 and nine wards and 25 villages. Kibaha has a population estimated at 136,402 of which males are 68,479 and females 67,923, with a total of 30,417 households (Census, 2012).

1.3.3 HIVP revalence Rate at Kibaha

According to PEPFAR Tanzania COP15, HIV prevalence rate within Coastal region is 5.9% where Kibaha Town and Kibaha District HIV prevalence are 9.21% and 8.27% respectively, above the regional rates (Table1.1).

Table 1.1: HIV Prevalence in Coastal Region this is According to HIV Data Taken from 2015 to 2016 as Summarized in the Table Below

Region	District	HIV Prevalence
PWANI		5.9% Pwani region
	Mkuranga DC	6.18%
	Bagamoyo DC	4.31%
	Kibaha TC	9.21%
	Rufiji DC	4.45%
	Kisarawe DC	6.14%
	Kibaha DC	7.27%
	Mafia DC	4.59%

Source: PEPFAR Tanzania COP15

1.4 Statement of the Problem

Adolescents who learn that they are HIV positive are left confused and with a great sense of helplessness. They may have no idea how or when they contracted the disease. Some of the adolescents may have survived with the disease for many years without being diagnosed and without treatment, some of them may have contracted HIV from others at birth, others may have contracted HIV as the result of sexual abuse when they were very young. The way adolescents live, learn and earn as well as the behavior they

adopt they are at risk of becoming infected with HIV. Their risk is increased by poor reproductive health knowledge and the belief that they have a low risk of contracting HIV.

According to Shisana et al., (2014), adolescents are more likely to agree to be tested if it is recommended by a physician, and youth who are diagnosed at a health care facility are more likely to enter into HIV care in a timely fashion (Murphy et al. 2003). This argument is also reflected in the 2007 National Health Interview Survey which found that among adults who received an HIV test, more than 80% did so in doctors' offices, hospitals, emergency departments, and clinics compared with testing at HIV counseling and testing centers or STI clinics (CDC 2007). The use of acute care settings to improve testing rates is attractive to youth, because they are more likely to use urgent care settings for their health care needs (Miller, et al, 2014).In the years before diagnosis, many HIV infected adults seek care for HIV related symptoms in acute care settings. It is upon this situation; this study was formulated to find solutions that can help address challenges facing to VCTs to effectively foster government attempts at reducing transmission of HIV among adolescent secondary school students.

1.5 Rationales behind Conducting the Study

In Tanzania, HIV/AIDS has remained a serious health problem, second only to malaria, and is marked by a prevalence rate of more than 7.4% (Health Reforms 2001). About 1,894,160 individuals aged 15 years and above were estimated to be living with HIV in Tanzania during the year 2002 (Health Reforms 2001). HIV/AIDS is a public health problem and major development crisis that affects all sectors especially adolescent students of the secondary schools (Sivalon, 2000).

Therefore, this study was conducted to assess the effectiveness of VCT towards reducing transmission of HIV among adolescent to secondary school's students using Kibaha District Council as a case study. Currently there are no studies conducted in Tanzania to assess the effectiveness of VCT on secondary school's students. Therefore, this study is of importance to both public as well as private sector as it is going to examine the effectiveness of the VCT towards HIV reduction in Tanzania. The main objective of this study was to assess the effectiveness of Voluntary Counseling and Testing (VCT) in reducing transmission of HIV among adolescent secondary school students in Kibaha Township.

1.6 General Objective

1.6.1 Specific Objectives

Following the afore-mentioned main objective, the following specific objectives were set to guide the research study:

(i) To assess and determine attitude of adolescent secondary school students towards VCT in Kibaha.

(ii) To assess barriers towards VCT among adolescent secondary school students in Kibaha.

(iii) To examine the success of VCT in reducing HIV/AIDS transmission among adolescent secondary school students in Kibaha.

1.7 Research Questions

(i) What is the attitude of adolescent secondary school studentsVCT?

(ii) What are the barriers towards VCT among adolescent secondary school students?

(iii) How far has VCT succeeded in reducing HIV/AIDS transmission among adolescent secondary school students?

1.8 Significance of the Study

The information which was obtained from this study might be a useful means to find ways to encouraged young people to test for HIV as this is the most important option that may provide useful information for HIV prevention and also encouraging behavioral changes among youth especially those in secondary schools. Again, the findings of the study will be useful towards understanding the importance of VCT and its effectiveness in reducing transmission of HIV among adolescent.

The study concludes that Voluntary Counseling and Testing programmers form the cornerstone HIV prevention strategies. They increase awareness of HIV issues and potentially reduce both primary and secondary HIV transmission. However, barriers such long distances travelled to access the health center, possibility of meeting parents in VCT centres, lack of health care provider's and confidentiality are among the obstacles for youth to seek HCT.

Similarly, through this study the government through TACAIDS, non-governmental and international organizations may realize the effectiveness of VCT in reducing HIV transmission and in a country like Tanzania and therefore assist in establishing more VCT centres. This will be in line with provision of education on the importance of VCT among the youths.

1.9 Limitations of the Study

Financial difficulties and Time limitation were the main challenge for this study. Researchers' effort to raise funds for this research were unfruitful and the six-month period allocated by the university to conduct this research was not suitable for a very sensitive ethnographic study that needs time to gain confidence and trust of the respondents. Yet to improve the vigour and rigorous of the research, both qualitative and quantitative which complement each other methods were used.

1.10 Delimitation of the Study

For the purpose of this study, the researcher focused on Kibaha District Council as her case study so as to get relevant information and data pertaining to the effectiveness of VCT towards HIV reduction among the adolescent students of the secondary school. Although the results of the study to large extent might reflect the situation at Kibaha, yet the fact that students in secondary school investigated come from different parts of Tanzania, make this finding generalizable to Tanzania and probably other African countries with similar socioeconomic settings.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter is to provide a contextual situation through the review of existing literatures. The section also defines key terms used in this dissertation and provides theoretical framework and conceptual framework that guides the study.

2.2 Definition of Key terms

2.2.1 Adolescent

According to UNESCO (2013), adolescence is the time when puberty takes place, when many young people initiate their first romantic and sexual relationships, when risk-taking is heightened and 'fitting in' with peers becomes very important. It can also be a challenging time for young people, who are becoming aware of their sexual and reproductive rights and needs, and who rely on their families, peers, schools and health service providers for affirmation, advice, information and the skills to navigate the sometimes-difficult transition to adulthood. This transition may catalyze a range of challenges including HIV infection, other sexually transmitted infections (STIs), unintended pregnancy, and low education attainment or dropping out of education and training.

According to WHO (1997), adolescence is a critical period in lifetime for physical and emotional development, self-discovery and the establishment of life-long patterns of adult behavior and relationships. For most young people – married or unmarried – sexual relations begin during adolescence.

2.2.2 Youth

According to the Kenya Youth Friendly Service Guideline (2005) the terms "Adolescents" "Youth" and "Young People" are interchangeably used to refer to this

group in different circumstances. Adolescence is a journey from the world of the child to the world of the adult. The second decade of life (10-19 years) is a time of rapid physical and emotional change as the body matures and the mind becomes increasingly independent.

2.2.3 HIV Testing and Counseling

HIV Testing and Counseling (HTC) is the primary strategy to control the generalized epidemic. It serves as the entry point for HIV prevention, treatment and care. Knowledge of one's status is crucial for individuals to receive HIV related health care (Li and Backer 2009). In general, HTC is conducted in three steps: pre-counseling, testing and post-counseling. In pre-counseling sessions, the testing process, implications of testing, risk assessment and prevention, and coping strategies are delivered to clients (Li and Backer 2009). Then clients make decisions on whether to take the test or not. If they opt to receive the test, the testing results are to be delivered in the post-counseling sessions, together with information on risk-reduction plans and discussion on possible disclosure of their HIV status (Li and Backer 2009).

Moreover, for sero-positive individuals, referral for treatment, care and support will be provided. During this process, knowledge and information provided will be beneficial to help HIV-free individuals stay negative (Li and Backer 2009). For those infected, knowing their status is the route to access care and treatment, and to learn means to prevent transmission to others.HTC includes mainly two complementary components: client-initiated testing and provider-initiated testing. The former component refers to the well-known voluntary counseling and testing (VCT), while the latter further includes testing in prevention of mother-to-child.

2.2.4 Knowledge on HIV/AIDS

Knowledge on HIV and AIDS in the population seems to be high, but proper understanding of HIV/AIDS by the community is still low (Alemu 2004). Studies show that knowledge especially on HIV transmission and prevention is strikingly poor with a lot of misconceptions (Alemu 2004).Alemu (2004) show that in Ethiopia, there are people who still believe they can contract the disease by sharing a meal, cutlery and utensils, toilets, or taking food prepared by PLHIV. Others fear casual contacts with PLHIV like hugging, shaking hands or sharing beddings. This misconception and poor knowledge is associated with low uptake of HTC (Alemu 2004).

At the same time, young people continue to engage in sexual behaviors that place them at risk of contracting the disease. They are, for instance, involved in risky sexual behavior like having multiple sexual partners, with history of STIs and sex under the influence of alcohol and early sex debut (Mgosha 2009).This takes place in the setting of low condom use (Cherutich 2008, Nzioka 2002).This misinformation leads to an incorrect risk perception for HIV infection (Manirankunda 2009, Olugbenga 2008). The low perception of risk to HIV among young people has been associated with reduced testing uptake (Mgosha 2009, Olugbenga 2008). Evidence from available studies show that people who perceive themselves to have high risk behavior for HIV have higher testing uptake (Wringe2008).

2.2.5 Attitude to HTC

Several studies have shown positive attitudes to testing and counseling among young people, including willingness to take up testing in the future (Mgosha 2009, Olugbenga

2008, NASCOP 2009). This positive attitude has however not translated to uptake of testing. Research shows that there are factors that influence attitude to testing. There is preference to take up HIV testing during sickness (Alemu 2004). This is more so among men who take onset of a sickness as a better or enough reason to attend testing than merely turning up in a health facility for just a test. They seek a more pressing issue rather than HTC only, to travel to hospital (Mutale 2006).

A study in Zimbabwe found that clients described having an opportunistic infection and weight loss as reason for seeking testing (Morin 2006). This study found that clients take up testing to confirm a suspicion of symptoms of possible HIV -related disease. Conditions arousing suspicion include TB, STI or unexplained weight loss or illness or death of a spouse or child. Among women pregnancy is associated with high uptake of testing and counseling to prevent mother to child HIV transmission. Positive testing attitudes are also linked to risky sexual practices like having had unsafe sex and those who perceive themselves to be at risk from the behaviour of their spouses.

According to the study by Morin (2006) women suspicious that their husband or male partners had other sexual partners or move with commercial sex workers seek testing and press their partners to take up testing. Though more girls seek HCT than boys (Juma 2002), youths in general express reservations to testing in VCT clinics both in health facilities and standalone centers (Meiberg 2008). They prefer youth only sites (McCauley 2004) rather than health facilities where they may meet adults who know them (Juma 2002).

2.2.6 HIV and AIDS Stigma

HIV and AIDS stigma has been identified as an important hindrance to HTC (Meiberg 2008). AIDS related stigma and discrimination is widely reported in the community (Ngozi 2009). Stigma has resulted in fear to undertake a HIV test even among people with past risky behavior, they are afraid of a positive result and the related personal and social consequences (Manirankunda2009). Stigma associated with HIV emanates from the perceived seriousness and contagiousness of the disease (Meiberg 2008).

The disease is still associated with emaciation and opportunistic infections. The absence of a cure has resulted in the disease being associated with death and dying by the community. Even those infected, though not developed AIDS, are still pitied as dying (Meiberg 2008). The infected are blamed for getting the disease as a result of having immoral behaviour and promiscuity (Meiberg 2008) which are practices the society disapproves. People are not comfortable about being in contact with them or even those merely suspected of being infected (Meiberg 2008).

2.2.7 Confidentiality

Concerns have been raised by clients about breach of confidentiality by health care workers. In a study in Thailand 34% of clients reported breach of confidentiality by health care workers (UNAIDS 2008). Clients do not trust some counselors as they spread information on positive test results, more so for counselors who know them or are from their community. They prefer counselors who do not know them (Angotti 2009). In most health facilities VCT clinics and other HIV testing rooms are usually situated in openly labeled areas and make the purpose of the visit to be exposed to others

attending the facility (Chirawu 2010). Young people express displeasure at having tests in these centres where they are likely to meet adults who know them; preferring youth only sites (McCauley 2004).

2.2.8 Access to HTC

Distance is an obstacle to HTC (Angotti 2009). Travel to testing centres and health facility involves cost in fares and opportunity costs (Nuwaha 2002). Transport costs are a barrier among members of poor households, mostly affecting married women who have to seek approval from their husbands before being given or incurring those costs (Prost 2007). A study in rural Zambia reported high uptake of testing by males in home based HCT where services are offered at home in both rural and urban setups (Helleringer 2008).This community-based approach attempts to circumvent barriers to testing and counseling associated with logistics such as distance, fares for transport and time(Angotti 2009). PITC strategy attempts to improve on HTC uptake in health care settings (WHO 2007).

However, in some health facilities testing may not always be offered to patients and clients as standard form of care (Manirankunda 2009) and some of those offered decline. Some avoid a visit to the doctor altogether for fear of being subjected to a test by coercion (Weiser 2006). One Mexican study (Moyer 2008) dealing with intravenous drug users found missed opportunities for counseling and testing in two thirds of the participants. Missed opportunities are high in areas with shortages of health workers (WHO 2007), especially those able to conduct testing without evoking fears of misinterpretation of results (Prost 2007). Further, there is evidence of shortages of adequately trained health care workers equipped with proper communication skills to

handle clients and especially young people. Some counselors are rude and unfriendly (Angotti 2009), scaring especially young people, who prefer counselors who will be non-judgmental and who will not reprimand them for being sexually active (Juma 2004)

2.3 Theoretical Framework

2.3.1 The Theory of Planned Behavior

The Theory of Planned Behaviour (Ajzen, 1991), built upon the earlier Theory of Reasoned Action (Ajzen & Fishbein, 1970), focuses on the theoretical constructs that are concerned with individual motivational factors as determinants of the likelihood of performing a specific behavior. The central factor of the theory is the individual's intention to perform a given behavior. 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 a 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 a behaviour is a function of three salient beliefs: the person's attitude, subjective norms and perceived behavioral control. The three predictors influence subsequent behaviour indirectly through behavior a intention (Appendix B). 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 behavior in previous literature (Ajzen, 1991).

Attitudes have been the most widely researched aspect of the TPB and continue to receive attention from social and cognitive psychologists (Ajzen, 2001; Bentler & Speckart, 1981). Attitudes toward performing behavior reflect favorable or unfavorable evaluation of the particular behavior. 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 behavior. They are governed by perceptions of whether significant others think that one should perform the behavior (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 behaviors (Ajzen, 2001). In other words, some adolescents may give importance to their attitude about the behavior when deciding to engage in a behavior, while other adolescents may give more importance to what they think others think they should do.

Perceived behavioral control reflects the perceived ease or difficulty associated with behavior performance and with behavioral intention, and unlike attitudes or subjective norms, is posited to directly predict behavioral achievement. This construct of the theory is intended to account for situations where an individual has less than complete

control over the behavior and includes two components. The first component is "facilitating conditions" (Triandis, 1979) which reflect the availability of resources needed to engage in a behavior. This might include access to the time, money and other resources required to engage in a behavior. The second component is self-efficacy and refers to the individual's self-confidence in his/her ability to perform behaviour (Bandura, 1982).

Ajzen argues that a person will expend more effort to perform a behavior when his or her perception of behavioral control is high. Beliefs about the presence of factors that might hinder the behavioral achievement (control beliefs; perceived likelihood of occurrence of each facilitating/constraining condition) and perceived ability to control factors that might hinder the behavioral achievement (power of control; perceived effect of each condition in making VCT uptake difficult/easy) provide the basis for perceived behavioral control. According to the theory, an individual's intention to perform a specific behavior is a direct determinant of whether he or she will act. To accurately assess the behavior, one must take into account the target, time, context and behavior on which the intent is being judged (Ajzen & Fishbein, 2000; Ajzen & Fishbein, 1970). The theory's' validity is therefore achieved through empirical support for the relationships among attitudes, subjective norms, perceived behavioral control and their relative path weights that lead to intention.

The Theory of Planned Behavior has often been applied to predict the likelihood of health behavior (Hardeman, et al, 2002), including condom use (Albarracin, et al, 2001), dieting (Bagozzi, Moore, & Leone, 2004), product choice, supportive behaviors, and voting (Cooke & Sheeran, 2004). The theory has also been applied to a broad array of

cultures or continents, including Africa (Fekadu& Kraft, 2001; Molla, Astrom, & Berhane, 2007; Lugoe& Rise, 1999) and empirical evidence suggests that the cognitions supplied by the TPB are useful in predicting sexual behavior in adolescents attending school in non-Western contexts (Bandawe & Foster, 1996; Bosompra, 2001; Klepp, Ndeki, Thuen, Leshabari & Seha, 1997).

Although the core components of the TPB model have been successful in predicting behavioral intention and subsequent behaviors, other variables are often included to increase the predictive utility of the model (Fishbein&Ajzen, 2005). Include the variable of perceived risk from the health-belief model because the high prevalence of HIV in Kenya might increase risk perception, which in turn might affect the uptake of VCT services, as it has other HIV-related decisions (Fylkesnes & Siziya, 2004; Holtzman, Rubinson, Bland & McQueen, 1998). With a significant contribution to the variance in intended use of VCT services among Tanzanian teachers, perceived risk may be a valuable addition to the TPB model in this study.

2.3 Empirical Studies

Chin et al, (2012) did research in America with the title "The Effectiveness of Group-Based Comprehensive Risk-Reduction and Abstinence Education Interventions to Prevent or Reduce the Risk of Adolescent Pregnancy, Human Immunodeficiency Virus, and Sexually Transmitted Infections. Two Systematic Reviews for the Guide to Community Preventive Services, Community Preventive Services Task Force". Using documentary review, they found that there are favorable effects for all of the outcomes reviewed. For abstinence education, the meta-analysis showed a small number of studies, with inconsistent findings across studies that varied by study design and follow-

up time, leading to considerable uncertainty around effect estimates and group education effective strategy to reduce adolescent pregnancy, HIV, and STIs.

Rebecca et al (2015) in their research titled “Evaluating youth-friendly health services: young people’s perspectives from a simulated client study in urban South Africa” used questionnaire method of data collection and found out Health facilities providing the YFS programme did not deliver a more positive experience to young people than those not providing the programme. They were also no more likely to be recommended by simulated clients to their peers. More positive experiences were characterized by young people as those where healthcare workers were friendly, respectful, knew how to talk to young people, and appeared to value them seeking health information. Less positive experiences were characterized by having to show soiled sanitary products to obtain contraceptives, healthcare workers expressing negative opinions about young people seeking information, lack of privacy, and inadequate information. The researchers conclude that the provision and impact of the YFS programme are limited.

Rita *et al*. (2012) conducted research in Mtwara, titled” Barriers to sexual reproductive health services and rights among young people in Mtwara district, Tanzania: a qualitative study.”

Using nine focus group discussions the study revealed that a good number of health facilities do not have skilled service providers (SPs) on sexual reproductive health rights. Services sought included; education, family planning and voluntary counseling and testing. However, the services were inaccessible due to lack of privacy, confidentiality; equipment’s and negative attitudes from SPs. Initiation ceremonies,

early marriages and gender disparities were mentioned as social-cultural barriers to SRH rights.

Ndegwa et al, (2012) did research in Kenya with a title “Factors Influencing Behaviour Change for the Prevention of the Spread of HIV/Aids among Students in Githunguri Division, Githunguri District, Kiambu County, Kenya”. By using questionnaire method of data collection, the findings show, behavior change had occurred among 56% of the respondents who had abstained from sex as compared to 36% of the respondents who had not abstained.

Out of the 36% of the respondents who had engaged in sex, 50.8% of them had used condoms as compared to 49.2% of the respondents who had not used condoms. Females reported an average of 1.48 sexual partners, while the male respondents reported an average of 2.03 sexual partners. Behavior change was influenced by religion, knowledge of HIV/AIDS, influence from HIV/AIDS prevention methods and gender. HIV prevention efforts had a significant influence on behavior change for the spread of HIV/AIDS among students. The study recommended the need to have prevention efforts that focus more on adolescents so as to enhance their behavior change.

2.5 Conceptual Framework

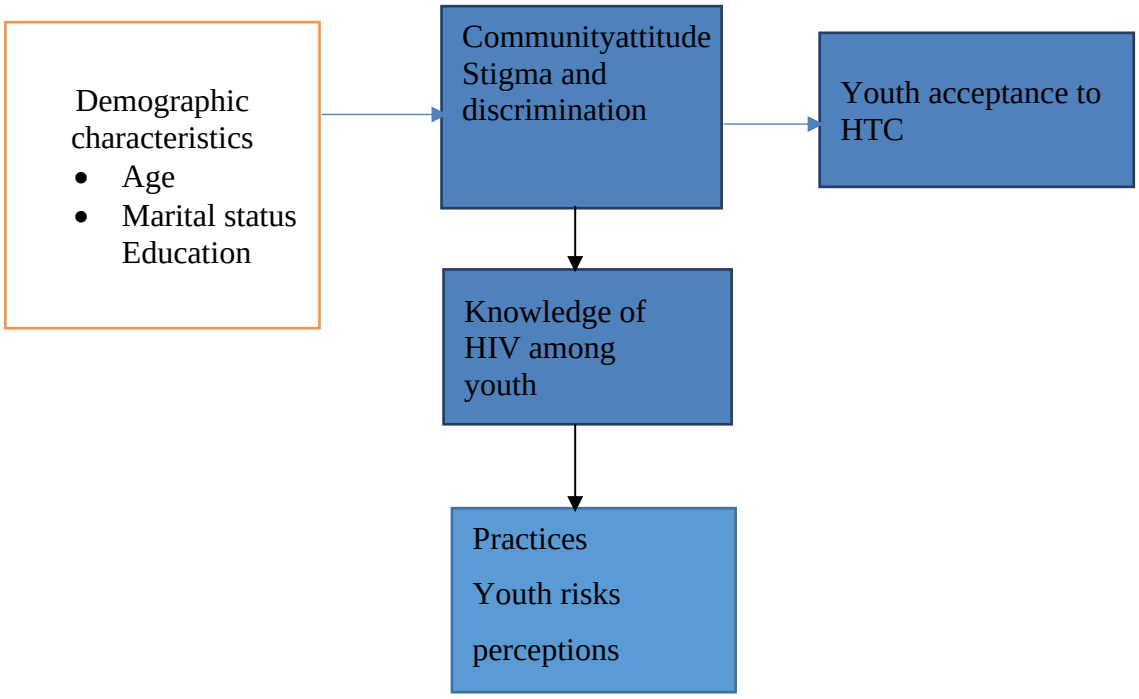

Figure 2.1: Conceptual Framework

2.6 Research Gap

Researchers have discussed on different matters related to HIV, Youth Friendly services and factors hindering young people access to HIV counseling and testing. Factors influencing behavior change but none of the researchers learned on the effectiveness of the HIV counselling and Testing on the reduction of HIV transmission.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents research methods by showing the research approach and design, and area of the study. It also includes information sample size and sampling procedures, data collection methods, instruments, and data analysis techniques and software.

3.2 The Research Approach

Research approach is defined as the arrangement of appropriate conditions for collecting and analyzing data in a manner that reflects the research purpose and that; the research approach may be qualitative or quantitative depending on the nature of the study. This study employed largely qualitative research approach, but some elements of quantitative approach were also included.

3.3 Study Design

The research design is stated by Santarocks (1993) as the plan that guides the investigators in the process of collecting, analysing and interpreting the collected data. This study employed the descriptive survey design, and this was selected because of its strength in interpreting conditions, practices, beliefs, views, perception and effects that exist in the real world.

3.4 Area of the Study

The study was conducted in Kibaha district in the Coast Region. The area was chosen as a case study because the researchers' past experiences in the area which has cost implication, but most importantly its HIV prevalence, which sits higher than the

regional average. The district comprises seven (7) wards namely: Mkuza, MailiMoja, Pangani, Visiga, Mbwawa, Tumbi and Kibaha. There are about five selected secondary schools from the district namely: Kibaha boys, Kibaha girls, Tumbi, Nyumbu and Bundikani.

3.5 Research Population

Research population refers to group of individuals who have one or more characteristics in common to that area of interest to the researcher (Best & Khan 2005). The study population comprises of health workers, community development practitioners, local community, parents and religious leaders.

3.6 Sample Size

Charles (1995) defines a sample as a small group of respondents drawn from the population where a study has to be conducted. Sampling is the process of selecting a group or selection to represent the whole study area. The sample size of this study comprises of a total of 53 respondents. There were different factors that were considered when deciding the sample size for this study since sample size is very important in any research for the purpose of obtaining accurate information. So, in order to make important research design accurate information, the formula stipulated by Kothali, (2004) were used to obtain sample size.

$$n = zpq/d$$

n = minimum Sample Size,

z = Percentage point of the normal distribution corresponding to the level of significance for 5% level of significance Z = 1.96.

p = preparation of affected members in the preparation taken to be 20%; (sampling frame)

q =1- p; d = maximum likely error

Table 31: Showing Sample Size of the Respondents

S/N	SAMPLE UNIT	Target population	SAMPLE SIZE	Sampling Technique
01	Kibaha secondary school	800	25	Purposive
02	Kibaha Girls	282	15	Simple random
03	Nyumbu	1237	30	Purposive
04	Tumbi	630	15	Systematic sampling
05	Bundikani	582	15	Systematic sampling
Total Target Sample		**3531**	**100**	

3.7 Sampling Procedures

3.7.1 Purposive Sampling Technique

According to Mauya (2006), purposive sampling technique is a deliberate selection of particular units of the universe for constructing sample, which represent the universe and it is usually used to select respondents who are rich in information. Respondents who will be chosen through this technique in the study include: VCT centre workers and the patrons and matrons.

3.7.2 Systematic Sampling

Through this method the study randomly picks the first item subject from the population. This method of sampling will be preferred as it is very easily as it can be done manually. Therefore, for the purpose of this study only three methods of sampling

were preferred as follows: purposive sampling, systematic sampling as well as simple random sampling.

3.8 Data Collection Methods and Instruments

This study used interviews using questionnaires, and review of secondary through documentation as the methods of data collection. The combination of the three methods enabled the researcher to collect and triangulate information for consistency and vigourity. Semi structured (interview guides) and structured questionnaires were used during interviews.

3.8.1 Interview

An interview is described as a guided conversation in which a researcher poses oral questions to the respondents who reply on the same (Kombo, 2006). The author further contends that the method has a considerable ability of probing information as it is flexible and allows new facts to be included. In this study semi-structured interview were used for the assumption that it gives a framework of information assisted by other information sources such as probing questions and reading facial expression of respondents. The method that were used to gather information from the religious leaders and parents. The sample size below was obtained from the formula stipulated by Kothali, (2004)

$$n = \frac{Zpq}{d}$$

n = minimum sample size

Z = percentage point of the normal distribution corresponding to the level of significance for 5% level of significance Z = 1.96.

p = preparation of affected members in the preparation taken to be 20%; (sampling frame)

q = 1-p; d = maximum likely error (0.05)

Table 3.2: Distribution of Respondents

S/No	Respondents' Category	Sex			Data Collection Method
		Female	Male	Total	
1.	VCT centre workers	3	3	6	Interview
2.	Parents	6	6	12	Interview
3.	Patrons and matrons	3	2	5	Interview
4.	Students	50	50	100	Questionnaire
Total		**62**	**61**	**123**	

3.8.2 Questionnaires

Questionnaire is defined as a set of questions in a printed or typed form, from which a respondent answers them in writings (Kothari, 2004). Questionnaires can be posted, mailed or transferred using any desirable ways to the respondents where they independently or under minimal guidance answer the questions. During the study questionnaires were used to obtain information from the community development and clinical officers.

3.8.3 Documentation

This includes reading of journals, published materials, archives and hospital/ dispensary records relevance to the study being conducted.

3.9 Data Analysis

The major part of the analysis in this study were based on descriptive (qualitative data analysis) that involve factual and logical interpretation comparison and explanation of

study findings. The data were coded and arranged in smaller and manageable categories depending on content, similarity, method used in collection and category of respondent. Quantitative data were analyzed using SPSS. This involved cross tabulation and percentages together with the frequencies. Qualitative data was used to supplement quantitative information.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This study assesses the findings based on both qualitative and quantitative methods. The general objectives of conducting this study were to assess effectiveness of VCT in reducing transmission of HIV among adolescent secondary school students. The study specifically works on the following objectives, first to determine adolescent secondary school students' attitude towards VCT, secondly to analyze the barriers towards Voluntary Counseling and Testing among adolescent secondary school students, and thirdly to examine the success of Voluntary Counseling and Testing in reducing HIV/AIDS transmission among adolescent secondary school students.

4.2 Age of Respondents

The study categorized the age of respondents as follows: 20% of all the respondents were aged between 9 – 14, 30% aged between 15– 19 years, 40% aged between 20 – 24 years, and 10% were above 25 years of age (Table 4.1).

Table 4.1: Showing Age of Respondents

Age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9 – 14	20	20.0	20.0	20.0
	15 – 19	30	30.0	30.0	50.0
	20 – 24	40	40.0	40.0	90.0
	25 and above	10	10.0	10.0	100.0
	Total	**100**	**100.0**	**100.0**	

Primary Data, 2017

4.3 Gender

The study findings revealed that 65% were male, while the remaining 35% were female. The summary of the findings is presented in the Table number 4.3.Male

respondents took the large part of the sample because it is known that male is more likely to refuse VCT services than females. Thus, by including more males in the sample the study was able to collect information on gender-based barriers to access VCT.

Table 4.2: Showing Gender of the respondents

Gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	35	35.0	35.0	35.0
	Female	65	65.0	65.0	100.0
	Total	**100**	**100.0**	**100.0**	

Source: Primary Data, 2017

4.4 Rate of Counseling Session

The assessment of how respondents rate counseling session provided by hospital or VCT centers reveals that 20% of the respondents reported the counseling session were very good, 40% said they were fair, 6% argued that the counseling session were poor, while the remaining 4% argued that the counseling session were very poor (Figure 4.1).

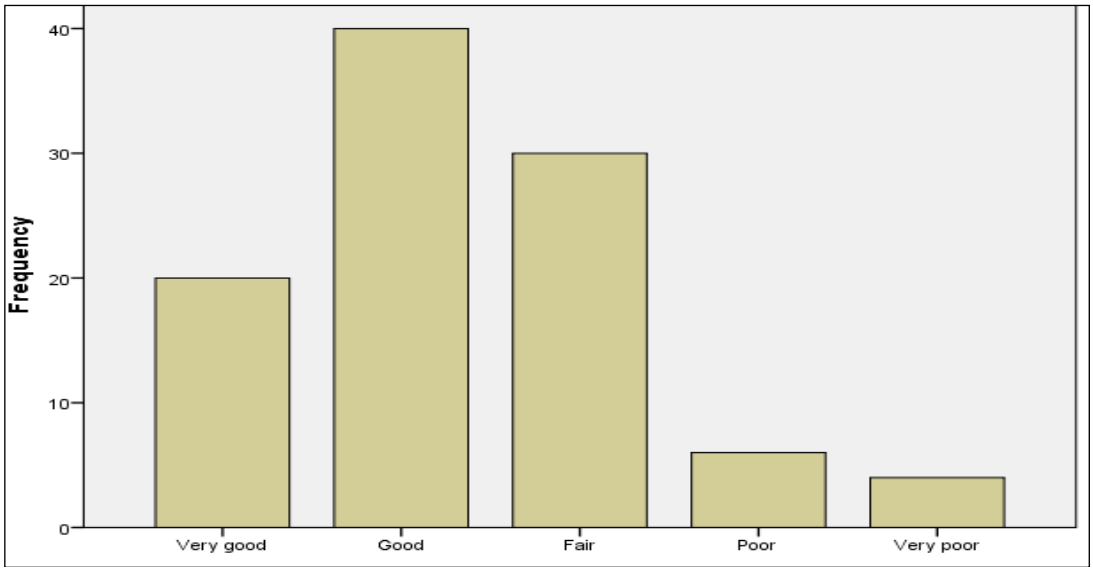

Figure 4.1: Showing the Rate of Counseling Session

Source: Primary Data, 2017

4.4.1 HIV Prevalence Rate at Kibaha

The findings from the study reveal that HIV prevalence rate within Pwani region is 5.9% wheres at Kibaha Town is 9.21% and at Kibaha District is 8.27% this is according to HIV data taken from 2015 to 2016 as summarized in the Table 4.3.

Table 4.3: HIV Prevalence Rate at Kibaha from 2015-2016

Region	District	HIV Prevalence
PWANI		5.9% Pwani region
	Mkuranga DC	6.18%
	Bagamoyo DC	4.31%
	Kibaha TC	9.21%
	Rufiji DC	4.45%
	Kisarawe DC	6.14%
	Kibaha DC	7.27%
	Mafia DC	4.59%

Source: PEPFAR Tanzania COP15

Therefore from the above data it shows that HIV prevalence within Kibaha is so high compared to other region that is why this study was conducted in order to come up with important conclusions about HIV prevalence within Kibaha district.

4.5 Friendliness of Centers

The study also assessed how VCT centers are friendly to users and the following findings were revealed: 60% of all respondents' state that the VCT are very friendly, 30% states that the VCT are friendly, and the remaining 10% states that the VCT are unfriendly. The summary of the findings is presented in the Figure 4.2.

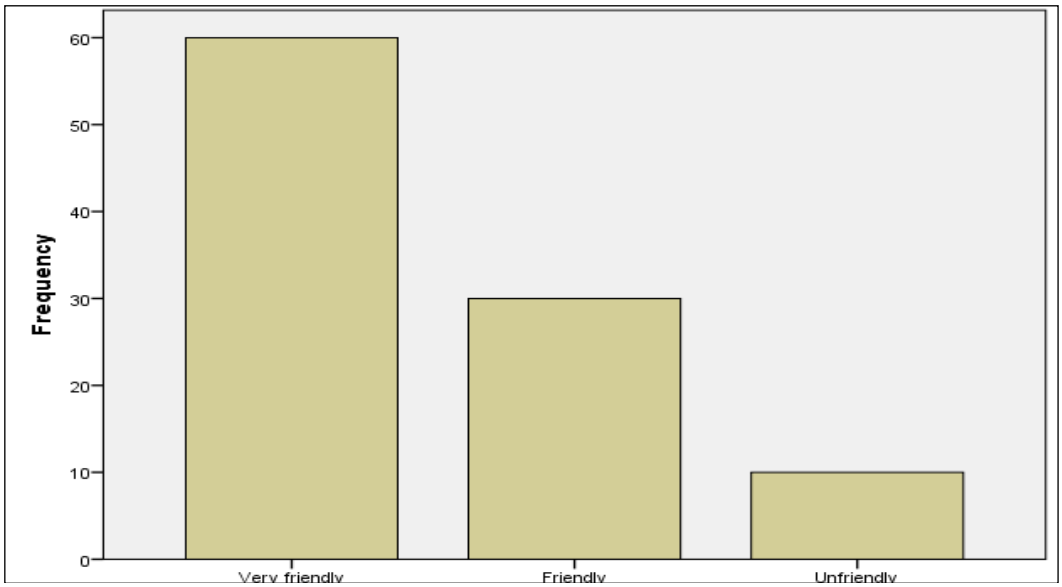

Figure 4.2: Showing how Friendly VCT Centers are

Source: Primary Data, 2017

4.6 Time Set for Youth to Attend VCT

The assessment on whether there is time set for any person to attend VTC, the findings revealed that 70% of the respondents said that there is a time set, while the remaining 30% states that there is no specific time set. The summary of the findings is summarized in the Figure 4.3.

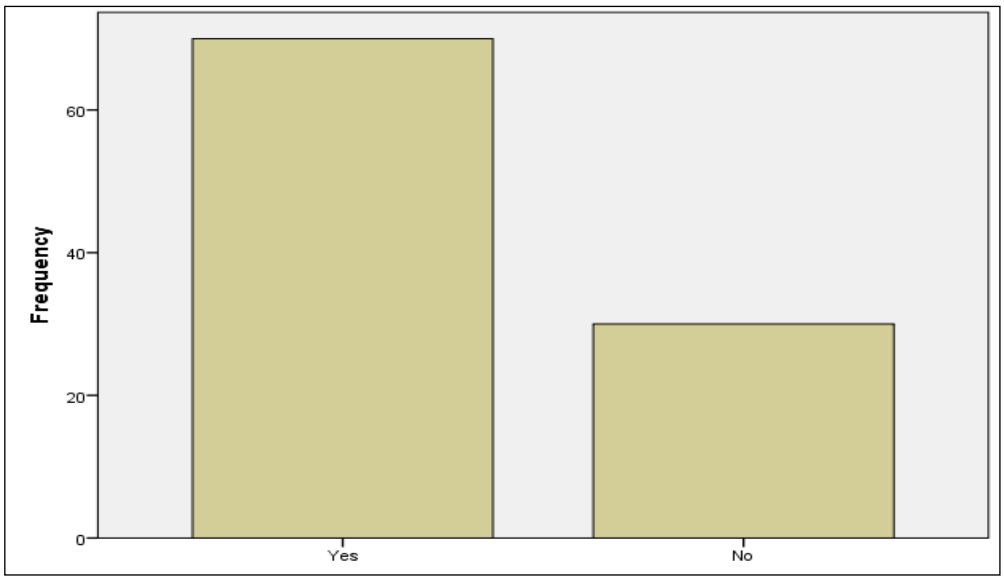

Figure 4.3: Showing Time set for Youth Attending HCT

Source: Primary Data, 2017

4.7 Rate of Facility Room for Counseling

Asking respondents to rate the facility used,70% of the respondents said that the facility room were very confidential, 20% said they were confidential, and 10% said they were fairly confidential (Figure 4.7). This means, generally, there facility settings provided some kind of confidentiality to clients.

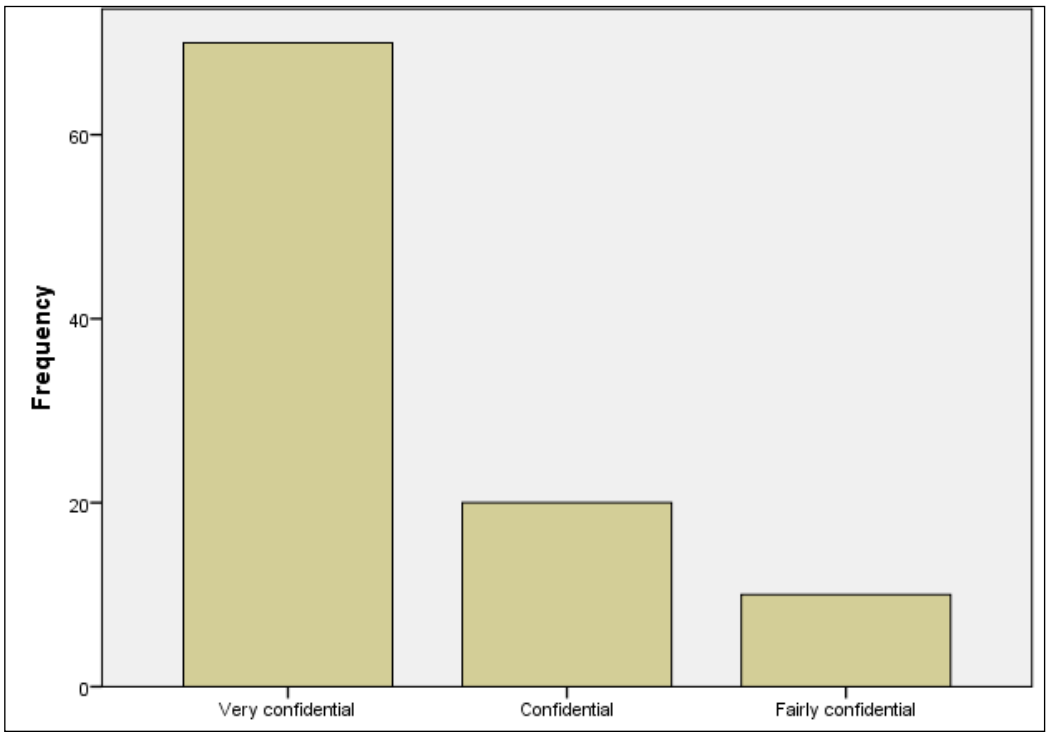

Figure 4.4: Rate of Facility Room for Counseling

Source: Primary Data, 2017

4.8 Recommendation of Friend to VCT

The study findings also asked the respondents as to whether they may recommend their friends to attend for VCT. The findings revealed that 90% states that they may recommends their friends to attend for VCT, while 10% argued that they may not recommends their friends to attend for VCT (Table 4.8).

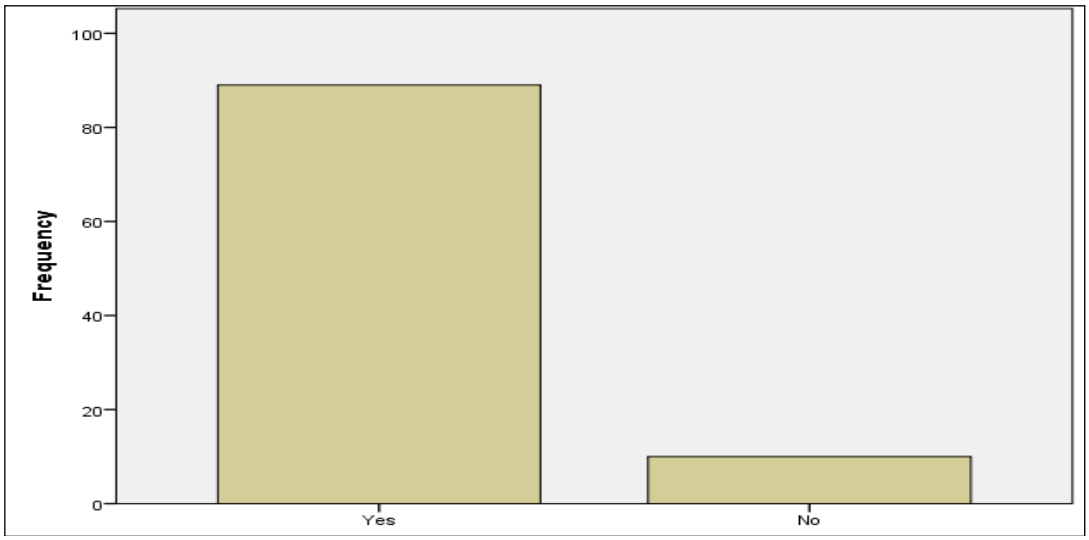

Figure 4.5: Showing Recommendation of Friends for VCT

Source: Primary Data, 2017

4.9 Barriers of Voluntary Counseling and Testing Among Adolescent Secondary Students

The second objectives of conducting this study were to analyze the barriers of VCT among adolescent secondary schools. The following table shows the summary of the findings of the barriers of VCT:

Table 4.4: Showing the Barriers of VCT among Secondary School's Students

Statements	**SD**	**F**	**D**	**F**	**N**	**F**	**A**	**F**	**SA**	**F**
The distance to the health center can hinder youth to attend to the VCT	-	-	-	-	-	-	70	70 %	30	30%
The fear for stigma around the community is among the barriers for attending HCT	-	-	-	-	-	-	85	85 %	15	15%
Lack of special time for youth to access HCT is also a barrier for youth	-	-	-	-	-	-	90	90 %	10	10%
Fear to meet **their parents** at the health facility is also a barrier for youth to attend to the HCT.	-	-	-	-	20	20%	50	50 %	30	30%
Lack of health care providers confidentiality is among the obstacles for youth to seek HCT	20	20%	30	30%	-	-	34	34 %	26	26%

SD = Strong disagree, D = Disagree, N = Neutral, A = Agree, SA =Strong Agree, F= Fair

Source: Primary Data, 2017

The distance to the health center can hinder youth to attend to the VCT, the findings from the study revealed that 70% agree with the statements, 30% strongly agree with the statements. Most of the respondents claimed that there is high distance from their homes to VCT centers, thus preventing them from attending VCT. Therefore, it is the opinion of the researcher that there is a need for the government as well as other stakeholders to place the VCT nearby the streets.

The fear for stigma around the community is among the barriers for attending HCT, most of the respondents claimed that fear of discrimination from the community hinders them from attending VCT centers. The findings from the study revealed that 85% of all respondents agree with the statement that fear of stigma hinders them to attend VCT, while the remaining 15% strongly agree with the statements. It is therefore clear that to promote VCT attendance the government and other stakeholders must work to first address issues related to HIV/AIDS stigma.

Lack of special time for youth to access HCT is also a barrier for youth, the findings from the study revealed that 90% of respondents agree with the statements while the remaining 10% of respondents strongly agree with the statements. Therefore, from the above analyses it shows that lack of time limit set for youth to attend for VCT become the barriers for youth to attend from the VCT centers. Fear to meet their parents at the health facility is also a barrier for youth to attend to the HCT. The findings from the study revealed that fear to meet their parents at the centre become a challenge that hinders them not to attend to centre. The findings revealed that 20% of respondents were neutral with the statements, 50% of respondents agree with the statements while

the remaining 30% of respondents strongly agree with the statements. Thus, setting a clear time only for youth could promote their attendance to VCT.

Lack of health care providers confidentiality is among the obstacles for youth to seek HCT, the findings from the study revealed that 20% of respondents strongly disagree with the statements, 30% of the respondents disagree with the statements, 34% respondents agree with the statements while the reaming 26% of respondents strongly agree with the statements. Another reported reason why students do not go for VCT is the shortage of human and infrastructural resources namely: the shortage of counselors/nurses and the shortage of counseling rooms.

The participants mentioned that they were willing to go for VCT but one factor that discouraged them was that the VCT centre had only one nurse and she was not always available. The shortage of counselors/ nurses to offer VCT services made long queues outside the VCT facility as students waited patiently to be tested. Another hindering factor to VCT uptake by students in this study was the negative perceptions that the participants had towards VCT. Other participants perceived VCT as painful and this hindered them from seeking VCT. These were the negative perceptions that they held despite them not having gone to the VCT in order to verify the facts.

4.10 The Success of Voluntarily Counseling and Testing In Reducing HIV/AIDS Transmissions Among Young Graduates

The third objective of conducting this study was to examine the success of voluntarily counseling and testing in reducing HIV/AIDS transmissions among young graduates.

The following table shows the summary of the findings of the success of VCT on reducing HIV/AIDS transmissions among young graduates.

Table 4.5: Showing the Success of Voluntarily Counseling and Testing in Reducing HIV/AIDS Transmissions among Young Graduates

And F = Fair. **Statements**	**SD**	**F**	**D**	**F**	**N**	**F**	**A**	**F**	**SA**	**F**
Counseling and testing enabled youth to understand their health status.	-	-	-	-	-	-	76	76%	24	24%
Counseling and testing linked youth to the HIV care and treatment centers	-	-	-	-	10	10%	80	80%	10	10%
Counseling and testing rose hope for youth living with HIV on living possibilities	-	-	-	-	5	5%	77	77%	23	23%
Counseling linked youth living with HIV to nutritional support and post-test clubs	-	-	-	-	-	-	90	90%	10	10%
Counseling and testing increased confidents for youth living with HIV to expose their HIV status	-	-	-	-	-	-	95	95%	5	5%

Where SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree

Source: Primary Data, 2017

Counseling and testing enabled youth to understand their health status, results show that VCT is of importance as it helps youth to understand health status of the respondents. The analysis reveals that 76% of respondents agree with the statements, 24% respondents strongly agree with the statements. Therefore it is the evidence from the study that the counseling and testing has enabled the youth to understand health status of the respondents.

Counseling and testing links youth to the HIV care and treatment centers: the results from this study reveal that VCT makes between youth and HIV treatments. About 10% 80% of the respondents respectively strongly agrees and agrees that there is a link between HIV care and treatment and VCT, whereas 10% were neutral with the statements.

Counseling and testing rose hope for youth living with HIV on living possibilities: the findings from this study reveals that 5% of respondents were neutral with the statements, 77% of respondents agree with the statements, 23% of the respondents strongly agree with the statements. Therefore, from the above analysis it shows that the VCT has facilitated to raise hope for living among people living with HIV.

Counseling linked youth living with HIV to nutritional support and post- test clubs: the findings from the study revealed that 90% of the respondents agree with the statements, while the remaining 10% strongly agree with the statements. It is clear

therefore that VCT facilitates to link people living with HIV with nutritional support from different clubs.

Counseling and testing increased confidents for youth living with HIV to expose their HIV status: the findings from the study revealed that VCT has given confidence to the youth living with HIV. The findings reveal that 95% of the respondents agree with the statements, 5% strongly agree with the statements. Therefore, from the above analyses VCT has led into increasing confidence for youth living with HIV.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSION, RECCOMENDATIONS AND AREAS FOR FURTHER STUDIES

5.1 Introduction

This chapter provides the summary of the findings, conclusion, recommendations and areas for further studies.

5.2 Summary of the Findings

This study employed both qualitative and quantitative methods of data collection to assess the effectiveness of VCT in reducing transmission of HIV among adolescent secondary school students. The study specific objectives were to i) determine attitude of adolescent secondary school students towards VCT, ii) analyze the barriers towards VCT among adolescent secondary school students, and iii) examine the success of VCT in reducing HIV/AIDS transmission among adolescent secondary school students.

The first objective of conducting this study to determine the perception/attitude of students towards VCT, the findings revealed that

The study assessed also how respondents rate counseling session provided by hospital or VCT centers and the findings revealed that 20% states that the counseling session were very good, 40% states that the counseling session were good, 30% of respondents rate canceling session as fair, 6% states that the counseling session were poor, while the remaining 4% argued that the counseling session were very poor.

The second objectives of conducting this study were to analyze the barriers of VCT among adolescent secondary schools.

The distance to the health center can hinder youth to attend to the VCT, the findings from the study revealed that 70% agree with the statements, 30% strongly agree with the statements. Most of the respondents claimed that there is high distance from their homes to VCT centers, thus prevent them from attending VCT.

Lack of special time for youth to access VCT is also a barrier for youth, the findings from the study revealed that 90% of respondents agree with the statements while the remaining 10% of respondents strongly agree with the statements. Fear to meet their parents at the health facility is also a barrier for youth to attend to the VCT.The findings revealed that 20% of respondents were neutral with the statements, 50% of respondents agree with the statements while the remaining 30% of respondents strongly agree with the statements.

Lack of health care providers confidentiality is among the obstacles for youth to seek HCT, the findings from the study revealed that 20% of respondents strongly disagree with the statements, 30% of the respondents disagree with the statements, 34% respondents agree with the statements while the reaming 26% of respondents strongly agree with the statements.

The third objectives of conducting this study were to examine the success of voluntarily counseling and testing in reducing HIV/AIDS transmissions among young graduates.

Counseling and testing enabled youth to understand their health status, the findings from the study reveal that VCT is of importance as it helps youth to understand health status of the respondents. The findings revealed that 76% of respondents agree with the statements, 24% respondents strongly agree with the statements. Therefore, it is the evidence from the study that the counseling and testing has enabled the youth to understand health status of the respondents.

Counseling and testing linked youth to the HIV care and treatment centers: the findings from the study revealed that VCT has made link between youth and HIV treatments, therefore from the above analyses the findings revealed that 10% of all respondents were neutral with the statements, 80% of respondents agree with the statements, 10% strongly agree with the statements.

Counseling and testing rose hope for youth living with HIV on living possibilities: the findings from the study revealed that 5% of respondents were neutral with the statements, 77% of respondents agree with the statements, 23% of the respondents strongly agree with the statements. Therefore from the above analysis it shows that the VCT has facilitated to rise hope for living among people living with HIV.

Counseling linked youth living with HIV to nutritional support and post- test clubs: the findings from the study revealed that 90% of the respondents agree with the statements, while the remaining 10% strongly agree with the statements. Counseling and testing increased confidents for youth living with HIV to expose their HIV status: the findings from the study revealed that VCT has given confidence to the youth living with HIV. The findings revealed that 95% of the respondents agree with the statements, 5% strongly agree with the statements.

5.3 Conclusion of the Study

The study concludes that, Voluntary Counseling and Testing programmes form the cornerstone of HIV prevention strategies. They increase awareness of HIV issues and potentially reduce both primary and secondary HIV transmission. However barriers such long distances travelled to access the health center, possibility of meeting parents in VCT centres and lack of health care provider's confidentiality is among the obstacles for youth to seek HCT.

The study also concludes that fear to meet their parents at the health facility is also a barrier for youth to attend to the HCT. The findings revealed that 20% of respondents were neutral with the statements, 50% of respondents agree with the statements while the remaining 30% of respondents strongly agree with the statements.

5.4 Recommendations

Regarding suggestions to improve the uptake of VCT services, participants gave their views in relation to the strategies that should be implemented to boost the uptake of VCT services to the young students. Their recommended measures included: increased resources allocation, increased awareness campaigns, improved counseling and making VCT services more accessible.

These findings are congruent with the results obtained from other studies. Research has shown that VCT uptake is high in places with well-resourced VCT services (Sambisa et al 2010:174). There is a need for government as well as other stakeholders to allocate enough budget or finance so as to enable VCT centers to be established in

close proximity to potential users/clients. Reasonable fund allocation will avert other challenges that impede implementation of planned VCT activities. Fund availability will help VCT centres to recruit qualified staff such as nurses, doctors, as well as councilors. This will in turn increase efficiency and effectiveness of VCT centres in service provision, and hence builds clients confidence to seek VCT services.

The provision of VCT services in locations and in conditions that are convenient to clients such as at workplaces, health facilities, schools, higher education institutions have been shown to increase utilisation (Obermeyer & Osborn 2007). Such approaches to increase VCT utilisation include: the use mobile VCT, home-based VCT and provider-initiated VCT (Matovu & Makumbi 2007).The use of peer counselors to offer VCT services could also improve uptake. Young people are likely to respond to programmes conducted by their peers.

For example, a study among university students revealed that respondents had undergone VCT because of the influence of peers (Njagi & Maharaj 2006).Increased awareness campaigns about VCT through a wide range of engaging student led prevention activities including drama groups, residence workshops, media and marketing projects, marches, games, poetry slams and community outreach boosted VCT uptake by university students (HEAIDS 2010).

5.5 Area for Further Studies

Although the findings of this study have important implications generally for HIV/AIDS-related research, more research is needed to understand methods to circumvent barriers and improve motivators for testing among this population, with a

view to evaluating the effectiveness of VCT for couples. The findings of this study have important implications generally for HIV/AIDS-related research Further research is needed to unwind why HIV/AIDS-related stigma and discrimination is still high among university youth and specially students.

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APPENDICES

Appendix I: Questionnaire to Students

i) Age of the respondent

a) 9-14 ( )

b) 15-19 ( )

c) 20- 24 ( )

d) 25 and above

ii) sex of the respondents

a) Male ( )

b) Female ( )

a) *To determine adolescent secondary school students' attitude towards Voluntary Counseling and Testing*

1. How do you rate the counseling sessions provided at the hospital that you attended

Statements	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
Very good					
Good					
Fair					
Poor					
Very poor					

Others please explain

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2. How friendly is the reception to youth?

Statements	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
Very friendly					
Friendly					
Unfriendly					
Very unfriendly					

Others please explains:

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3. Is there any time set specific for youth to attend for HTC?

A) Yes

b) No

4. How can you rate the facility room for counseling?

Statements	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
Very confidential					

Confidential					
Fairly confidential					
Non confidential					

Others please explain

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5. Can you recommend your friend to attend the clinic?

a) Yes

b) No

b) To analyze the barriers towards Voluntary Counseling and Testing among adolescent secondary school students. Please put (√) where appropriate for question number

6. Which among the following is the challenge towards VCT among the adolescent students?

Statements	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
The distance to the health center can hinder youth to attend to the VCT					
The fear for stigma around the community is among the barriers for attending HCT					
Lack of special time for youth to access HCT is also a barrier for youth					
Fear to meet their parents at the health facility is also a barrier for youth to attend to the HCT.					
Lack of health care providers confidentiality is among the obstacles for youth to seek HCT					

Others challenges please explain

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c) To examine the success of Voluntary Counselling and Testing in reducing HIV/AIDS transmission among adolescent secondary school students

Which among of the following are the strength of VCT towards reduction of HIV transmission among young gradates?

Statements	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
Counselling and testing enabled youth to understand their health status.					
Counselling and testing linked youth to the HIV care and treatment centers					
Counselling and testing rose hope for youth					

living with HIV on living possibilities					
Counselling linked youth living with HIV to nutritional support and post- test clubs					
Counselling and testing increased confidents for youth living with HIV to expose their HIV status					

Others please explain

Appendix II: Interview Guide Questions

1. What is the effectiveness of the VCT towards reduction of HIV transmission among the youth?
2. What are the challenges hindering effective implementation of VCT towards HIV reduction in Tanzania?
3. What are the youth attitudes towards VCT towards Voluntary Counseling and Testing (VCT)?
4. How is the VCT being promoted or publicized? Are peoples aware of the services?
5. Does the VCT helps to reduce spreads of HIV among the people in the community? Please explains
6. Does VCT provide education to the adolescent students in secondary schools to enable them to be aware of the spreads of HIV?
7. To what extent do the Voluntary Counselling and Testing (VCT) among adolescent secondary school students succeeded in reducing HIV/AIDS transmission?
8. What should be done in order to improve the effectiveness of VCT towards HIV reduction among the youth?