

**THE EFFECTIVENESS OF SCHOOL BASED HIV EDUCATION IN
REDUCING RISKY SEXUAL PRACTICES OF SECONDARY SCHOOL
YOUTH IN LINDI MUNICIPALITY**

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

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CERTIFICATION

The undersigned certifies that she has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation entitled: “**The Effectiveness of School Based HIV Education in Reducing Risky Sexual Practices of Secondary School Youth in Lindi Municipality**” in partial fulfillment of the requirements for the degree of Master of Arts in Social Work (MASW) of the Open University of Tanzania.

.....
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.....
Date

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DECLARATION

I, **Leo Haule**, do hereby declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

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.....

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DEDICATION

This work is dedicated to all Social workers in Tanzania who work day and night to support people subjected to social constraints beyond their coping capacity especially those who are subject to mental health problem, disabilities, extreme poverty, disasters, and unstable families.

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ABSTRACT

This study sought to assess the effectiveness of school based HIV prevention education in sexual behaviors among secondary school youths. One of the limitations of this study was students concern over disclosing their real life sexual practices following its sensitivity. The study was a mixed evaluative case study based on CIPP evaluation model which involved 384 students who were selected through systematic sampling and 8 students were selected through purposive sampling. Closed ended questionnaire, face to face interview and document review were used for data collection. The study findings revealed that HIV education in secondary schools is provided by being integrated mainly into Biology syllabus and slightly in Civics. However, majority of students 173 (71.1%) perceive that the education provided is not adequate due to incompetent teachers, lack of supportive training materials and shortage of time committed for teaching. HIV prevention education had raised knowledge and awareness on HIV prevention strategies, however this knowledge and awareness didn't helped to change students behaviours as significant number of the respondents were sexually active during the time of the study, and nearly half of those who are sexually active never use condom and some have multiple partners. It was concluded that HIV education has been addressed in secondary school curriculum and integrated into two subjects and has been taught in class but the strategies used to teach this education only helps to improve knowledge of students regarding HIV and AIDS but do not go beyond creating self-awareness toward sexual behavior change of the students, thus the study recommended that schools need to make sure that HIV education is taught in more recommended participatory and interactive approaches rather than didactics for positive results.

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LIST OF ABBREVIATIONS

| | |
|------------|--|
| AIDS | Acquired Immunodeficiency Syndrome |
| CIPP Model | Context, Input, Process and Product Approach Model |
| ESS-HA | Educational Sector Strategic Plan for HIV/AIDS |
| HIV | Human Immunodeficiency Virus |
| MOEC | Ministry of Education and Culture |
| MOEVT | Ministry of Education and Vocational Training |
| NACP | National Aids Control Program |
| NIMR | National Institute of Medical Research |
| NMSSF | National Multi-Sectoral Strategic Framework |
| TACAIDS | Tanzania Commission of AIDS |
| THMIS | Tanzania HIV and Malaria Indicator Survey |
| UNAIDS | United Nations Programme on HIV/AIDS |
| UNESCO | United Nations Educational, Scientific and Cultural Organisation |
| UNGASS | United Nations General Assembly |
| UNICEF | United Nations Children's Fund |
| WHO | World Health Organization |

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) are among the most complex health problems of the 21st century. HIV/AIDS has become a public health threat to our nation. The cases of AIDS in our country were reported in Kagera region in 1983. Since that time the disease has spread quickly throughout the country affecting thousands of people and many others lost their lives.

According to Tanzania HIV and Malaria Indicator Survey (THMIS, 2007), it was estimated that by the end of 2010 more than two million Tanzanians will be infected with HIV. The rapid growing of the epidemic and lack of neither cure nor vaccine to control it suggested that effective preventive measures were to be taken since the beginning at all levels from individual to national level.

Among the efforts taken was the declaration of HIV/AIDS as national disaster done in December 1999, by His Excellency retired President Benjamin William Mkapa who impressed on the entire nation including the government actors and non-governmental actors like politicians, religious and community leaders, Non-governmental organizations, on the importance of taking new measures to curb HIV/AIDS epidemic (NMSSF, 2003). The HIV prevalence in Tanzania is still high despite many HIV preventions methods being introduced through government and non-governmental initiatives so as to have a HIV free society. According to the Third

Tanzania HIV and Malaria Indicator survey (THMIS, 2011), the HIV prevalence in Tanzania is 5.1%. Recent global trends on new HIV infections shows that the rate of new HIV infections is higher among young people whereby in 2011 approximately 40% of all new HIV infections globally was of those aged 15 – 24 years (UNAIDS, 2012) and significant number of them at that age are in secondary schools many secondary school students around the world are involved in sexual behavior risks such as becoming sexually active at very younger ages, having unprotected sex, engaged in relations with sexual partners who considered as HIV high risk partners like those who inject drugs and those who exchange sex with money as well as those who practice unprotected anal sex.

In other words, many young people in schools are sexually active as evidenced by a number of studies conducted among adolescents in the age group of 10 to 19 years in different countries. For example, the studies done in America and Italy revealed that the prevalence of sexual activity was 48.7% in America (Eaton et al, 2007), and 38% in Italy (Giannotta et al, 2009).

According to the data from 2010 TDHS, the age at the first sex among young women and men aged 15 – 24 years reported being fairly constant for five years from 2004-05 to 2009-10 with slightly higher rate among women where by 13% reported being sexually active at the age of 15 years compared with 7% of young men. Those rates are significantly higher because early sexual activeness is related with several other issues including sex before marriage, premarital unwanted pregnancies and abortion as well as increasing HIV prevalence and STI among youth (Mensch et al., 2003). It is important to over emphasize the major role of unsafe sex in the current higher

rates of unwanted pregnancies among youth which is also associated with negative outcome like dropping out of school and eventually achieving lower level of academic achievement.

Furthermore, a report from TACAIDS (2012) has revealed that only 60% of people seem to have correct knowledge on HIV/AIDS in Tanzania and hence affecting the progress of behavior change. Despite this high efforts made in fighting the disease through health education/promotion and care and treatment, the prevalence of HIV in Tanzania is still high, thus encouraging youth's sexual education is very important. Education has been referred to as a 'social vaccine' against HIV/AIDS because of its role in providing information and knowledge that lead to behavior change in the continued efforts to reduce the spread of the virus that causes AIDS (KOMUNDA et al., 2007) and knowing the role of education in behavior change, Tanzanian Government under the Ministry of Education and Vocational Training (MoEVT) developed the Education Sector Strategic Plan for HIV and AIDS (2003 – 2007) whereby primary and secondary schools are supposed to provide school based life skills and HIV education for the purpose of educating young people on the transmission and prevention of HIV/AIDS with ultimate goal of reducing HIV prevalence.

1.2 Statement of the Problem

HIV/AIDS is a major global health problem and has been declared as a national crisis among Sub Saharan African countries. Youths represent a vulnerable group to HIV pandemic. According to UNAIDS, it is estimated that 2500 young people aged 15-24 years get infected with HIV every day (UNAIDS, 2012) which accounts for

45% of new infections globally. While the major mode of HIV transmission in sub-Saharan Africa is unprotected sex (NACP 2012), in Tanzania about 50% of young women and 43% of young men aged 18 to 24 years reported to have already engaged in sexual relationship before the age of 18 years (THMIS, 2011).

Most of them are secondary school students and usually engaged into risky sexual practices including unsafe sex, engaged in relations with sexual partners who considered as HIV high risk partners like those who inject drugs and those who exchange sex with money as well as those who practice unprotected anal sex. Beside HIV infections many relationships may end up with unwanted pregnancies which have been among major factors of school dropouts for female students in Tanzania. All this has resulted into a complicated problem facing youths in secondary schools in their present and future lives, and hence the need of having deeper understanding on the role of HIV prevention education provided in schools to behaviors of students is of greater importance.

Knowing the role of education in behavior change, the government of Tanzania, via its Ministry of Education and Vocational training (MoEVT) (now Ministry, Science and Technology) developed the Education Sector Strategic Plan for HIV and AIDS (ESSP – HA 2003-2007 and ESS – HA II 2008-2012) with the strategy to ensure maximum integration and provision (teaching) of skills based SRH/HIV/AIDS/STIs education to learners through the core curriculum approach, facilitate skills based SRH/HIV/AIDS/STIs education to learners and education service providers through extra-curricular approach (peer approach) and where by 2012, 90% carrier subject teachers/tutors at all levels were trained.

However, despite this initiative the pandemic persists and, according to current pattern of the pandemic with assumption that the median incubation period of disease after infection is 10 years, it suggests that significant number of individual got HIV infections in adolescence, and thence the further problem of how the initiative has been translated into practice and its effectiveness toward positive behaviour change of the student is the matter of concern. Nonetheless, no evaluative study has been carried out to assess if the initiatives by the government have resulted in behavioural change by the youths.

A study needs to be done to assess the role of such education on positive behaviour changes of students toward HIV prevention. Thus, this study was done to assess the extent to which school based HIV prevention education has been effective in bringing about the youths' sexual behavior change, and their changed attitude towards HIV prevention.

1.3 Objectives

1.3.1 Main Objective

To assess the effectiveness of school based HIV prevention education in sexual behaviors among secondary school youths.

1.3.2 Specific Objectives

- (i) To find out the extent to which HIV prevention education has been incorporated into secondary schools teaching curriculum.
- (ii) To determine the students' perception of HIV prevention education taught in school.

- (iii) To assess the extent to which HIV prevention education has changed students' self-awareness and sexual practice.

1.4 Research Questions

- (i) To what extent is HIV prevention education has been incorporated into Secondary School teaching curriculum?
- (ii) How do secondary school students perceive the HIV prevention lessons taught in their schools?
- (iii) To what extent are secondary school students aware of HIV prevention practices?

1.5 Significance of the Study

The government of Tanzania came up with the strategy to ensure maximum integration and provision (teaching) of skills based SRH/HIV/AIDS/STIs education to learners through the core curriculum approach due to realization that education is key tool toward social changes. However, having good plan and initiatives may not make any positive impact if they are not translated into action. Thus this study explored if what has been articulated in ESSP-HA has been translated into practice in secondary schools and at what extent. Thus the findings of this study help to raise awareness on the quality of the education provided and its ability to impart knowledge, influence attitude and change behaviors of those young people and suggest any possible ways of improvement to respective authorities.

1.6 Scope of the Study

The study involved secondary school student's boys and girls in the 2nd, 3rd and 4th year of their studies. While HIV/AIDS issues are very broad, this study focused

much on reviewing the documents related with teaching of HIV prevention education in secondary schools as well as exploring sexual practices of secondary school youths which make them vulnerable to HIV infection and hence hampers the effort for prevention which addressed through class sessions.

While teachers were not directly involved in this study, they played greater role through supporting observation and document review of HIV education teaching related materials including curriculum, syllabus and text books. Also direct observation of HIV prevention education teaching in class was not part of this study.

1.7 Limitations of the Study

Due to sensitivity of the HIV and reproductive health issues, some student hesitated to participate and others were not willing to share all the information during the interview. This was minimized by ensuring confidentiality where by participants were told that participation in voluntary and they will not need to mention their names, may decide not to participate at all, withdrawal on the process or may decide not to answer any question they think not able to do so. Also using mixed methods in data collection has helped to triangulate information from interviews and questionnaires.

1.8 Chapter summary

This chapter has provided the background of the study and statement of the problem. Also it has presented objectives to be achieved and respective research questions. Finally, it has stated the research scope and limitations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter is divided into three main parts, including literature review and theoretical framework of which the study based on and knowledge gap based on literature synthesis. In the literature review, a review is made of various arguments and findings from various authors by identifying gaps and adding knowledge as well as familiarizing the readers with relevant theoretical perspectives and information in relation to the role of school based education on sexual behaviour including HIV prevention among youth will be highlighted.

The chapter is organised in following sub heading; prevalence of HIV/AIDS pandemic, the role of formal education, youth vulnerability, the teaching curriculum, the role of teachers, school environment and the role of social cultural issues

2.2 Literature Review

2.2.1 The Role of Education in Social Matters

The role of education in different social matters has been researched throughout the world. Young people worldwide including in Tanzania are passing through the second decade within their life and experience significant transition between childhood and adulthood and experiencing in changes in behaviours and taking decision which would impact their whole life as individual, their families and communities where they will be living (UNICEF, 2011). In a study done to assess adolescent sexual behaviors by Walcott, Meyers and Landau (2007), it was found

that large number of adolescents are susceptible to negative consequences resulting from risky sexual behaviors especially those who become sexually active at younger ages, those who have sexual relationship with multiple partners and those who practice unsafe sex as those behaviour expose them into reproductive health problems like unplanned pregnancies and sexually transmitted infections (STIs), including HIV.

In Tanzania, school girls' dropout because of pregnancy as a result of unprotected sex is among major issues. In 2010 about 1760 primary school girls and 63000 secondary school girls forced to leave schooling due to pregnancy (Songa, 2012). Moreover, while more than 90% of HIV transmissions take place through unprotected sexual intercourse; large proportion of young people both in school and those out of school in Tanzania have sexually active at very early ages. According to THMIS (2012), 9% of young women and 10% of young men aged 15-24 reported having sexual intercourse for the first time before the age of 15, and among those aged 18-24, 50% of young women and 43% of young men reported having sex by age 18, this put them at higher risk of acquiring HIV/AIDS.

Encouraging youths' sexual education is very important. Schools have a greater role in building awareness, positive attitude as well as shaping students' behavior. AVERT (2007). This is supported by UNAIDS (2010) which reveals that education is key to an effective response to HIV/AIDS. Thus educated youngsters are expected to accelerate behavior change in fighting further spread of HIV infection because they are more likely to know how to prevent HIV infection by taking protective measures during sexual intercourse or they may delay or abstain from sexual

relations until when they get married. Experiences show that in many countries, including the developing countries, educated and skilled young people are more likely to protect themselves from HIV infections because they are less likely to engage in risky sexual behaviors. Education is very important in imparting appropriate knowledge about HIV to students, building negotiation skills for them and hence developing skills to think critically and make informed decisions after analyzing the situation at hand (Komunda, 2007). Based on this critical role of education in influencing behavior change, MoEVT put in place the Education Sector Strategic Plan for HIV and AIDS (2003 – 2007) whereby primary and secondary schools are supposed to integrate HIV prevention education in life schools sessions for the purpose of educating young people on the transmission and prevention of HIV/AIDS with ultimate goal of reducing HIV prevalence and thus this study will serve the purpose of exploring the role of the education taught on youths' knowledge, attitude and behavior toward HIV prevention.

Knowing the role of education in behavior change, MoEVT adopted the intervention put in place through multisectoral framework approach since 1991. The approach focus on collective responsibilities of individuals and communities toward prevention of HIV spread. It also focuses in organizational and institutional capacity building at sectoral level in collaboration with partners toward enhancing and sustaining AIDS Education Programmes at education workplaces.

With the above context the government through MoEVT developed the Education Sector Strategic Plan for HIV and AIDS. The first Education Sector Strategic Plan for HIV and AIDS was implemented from 2003 to 2007 and the second plan from

2008 to 2012, (ESSP – HA 2003-2007 and ESS – HA II 2008-2012, respectively) which was implemented in accordance to National Multisectoral Strategic Framework on HIV/AIDS which implemented within the same time period.

According to ESSP – HA II (2012), HIV/AIDS is mostly affecting people at 25 – 34 years of age with peak incidence of 25 – 34 and 30 – 39 in female and males respectively. With reference to the fact that the average incubation period of HIV is ten years, the age pattern mention above may infer that significant number of individual get HIV infections during adolescence and hence the need to focus most of preventive intervention at younger age groups with particular attention to those in schools. Thus ESS – HA II come up with the strategy to ensure maximum integration and provision (teaching) of skills based SRH/HIV/AIDS/STIs education to learners through the core curriculum approach, facilitate skills based SRH/HIV/AIDS/STIs education to learners and education service providers through extra-curricular approach (peer approach) and improve utilization of multimedia educational materials for behaviour change to learners and education service providers.

Among the targeted indicators by ESS – HA II (2008) include having, by 2008, curricula of carrier subjects are reviewed, revised, printed and distributed to all learning institutions, by 2009 primary and secondary schools, non-formal education centres and Teacher Colleges have revised curricula and teaching and learning materials, by 2009 a variety of cultural appropriate teaching and learning material addressing HIV/AIDS/STIs are produced and distributed and by June, 2012, 90% carrier subject teachers/tutors at all levels trained. Thus by the end of 2012 it was

supposed that most if not all primary and secondary schools are supposed to be providing school based HIV prevention education toward reducing HIV prevalence.

2.2.2 The Role of Formal Education in HIV prevention

The role of formal education toward prevention of HIV transmission has been mentioned in all levels. Schools have a greater role in building awareness, positive attitude as well as shaping students' behavior. AVERT (2007). This is supported by UNAIDS (2010) which revealed that education is key to an effective response to HIV/AIDS. Thus educated youngsters are expected to accelerate behavior change in fighting further spread of HIV infection because they are more likely to know how to prevent HIV infection by taking protective measures during sexual intercourse or they may delay or abstain from sexual relations until when they get married. HIV/AIDS educational strategies that focus on young people have important part in overall efforts to ensure the world free of AIDS epidemic.

While global report in 2012 shows decline in the number of new HIV infections at global level among young people in contrary the number of death has been increasing with HIV related death being the second leading cause among young people (WHO, 2014). According to the study conducted among middle schools in Wuhan, China (Xiaohui et al., 2012) with the objective of assessing effectiveness of school based education on HIV/AIDS, knowledge, attitude and behavior among secondary school student it was found that HIV/AIDS education programs were well accepted by students and has contributed positively to HIV/AIDS knowledge and attitude.

Moreover, a study in Yaoundé, Cameroon by Yvonne (2009) of which government bilingual high schools was involved, revealed the importance of education in HIV prevention. The study was conducted with the purpose of describing student's attitude, knowledge and practices in school with HIV/AIDS educational program and those without such programs. The study found that there were some differences in terms of knowledge but less significant differences in attitude between the schools with interventions and those without interventions.

2.2.3 Youths' Vulnerability

The role of formal education becomes more crucial to young people in school due to the fact that they are much more vulnerable as they are in the period of biological and emotional changes due to pubertal developments. While more than 90% of HIV transmission takes place through unprotected sexual intercourse (NACP, 2012), most of young people start engaging in sexual activities at a very young age when they cannot negotiate for safer sex. For example, several studies done all over the World have revealed that many young people in schools are sexually active. For example, in a study done in four cities of Tanzania by Laddunuri (2013) found that 40.2% of secondary school students had experienced sexual intercourse at the time of the study.

This is similar to a number of earlier studies conducted among adolescents in the age group of 10 to 19 years in different countries revealing that the prevalence of sexual activity was 48.7% in America (Eaton et al, 2007), and 38% in Italy (Giannotta et al, 2009). Gary Engleberg et al. (2003) reported that large number of young people starts sexual activity between 10 to 15 years while lacking important skills and

enough information as well as access to proper services to make them safe from. A similar study done by NIMR/TACAIDS/UNAIDS (2010) which reported that significant number of respondents (85.5%) had first sexual exposure between 10 – 19 years.

Also, according to THMIS 2011-2012, 9% of young women and 10% of young men aged 15-24 reported having had sexual intercourse for the first time before the age of 15, and among those aged 18-24, 50% of young women and 43% of young men reported having had sex by the age of 18. This put a lot of young people, including the secondary school youths, at risk of acquiring HIV/AIDS. Lema et al. (2008) suggested that HIV transmission is multifactorial ranging from socio-cultural to biomedical in nature and hence making the condition more complicated.

2.2.4 The Teaching Curriculum

The content and process of delivering any type of education has a greater role in achieving intended goals. After more than two decades of experience in HIV/AIDS, studies have shown that properly designed and implemented school based HIV and STD education programs are more likely to produce positive outcomes for young people (Abraham, 2002). The positive outcome include but not limited to avoiding being sexually active at younger ages, avoiding to have many sexual partners, avoiding unprotected sex and good use of contraceptive services (Kirby et al., 2006).

Not only that but also properly designed programs proven to have good impact on critical sexual behaviour determinants like awareness of risks and negative outcomes related with unwanted pregnancy and STD, traditional norms and cultural issues

related with engaging in unprotected sex or not using contraceptive methods in the ability to make right decision of doing it or not (UNESCO, 2007, 2009). While less comprehensive programs that focus in some few components of HIV prevention do not have significant results (Kirby and Laris, 2009).

In an evaluation study conducted by WHO and UNESCO to assess school based comprehensive education program was found that students were ready to learn but they didn't learn enough from the program, the reason being improper teaching approach as well as teachers reported having limited time to provide classroom sessions on top of overloaded teaching curriculum (WHO/UNESCO, 1994). As a suggestion in this study, students commented that having education program in the curriculum alone is not enough as it requires motivated teachers and students as well dedicated time for it to be taught (Kinsman et al., 2001).

In another study done in Bangladesh to identify factors that affect teachers in provision of HIV prevention, Haribondhu and Elizabeth (2013) found that half of teachers (50%) commented that HIV/AIDS session has been allocated with limited teaching time. Also lack of supplemental teaching materials was another reason as teachers with adequate teaching materials were in better position of teaching their schools.

Moreover, in a study which was conducted in South Africa with the aim of evaluating life skills training program in secondary schools, Visser (2005) found that the program only succeeded to gain knowledge to students on HIV/AIDS but didn't manage to change high risk behavior patterns among schools group youth. The

finding was partially linked with failure to implement the program as planned following poor school organization, teachers not committed, poor relationship among teachers and students, conflicting priorities as well as insufficient resources allocated to support the education system.

In 2000 the then Ministry of Education and Culture in Tanzania (now Ministry of Education, Science, Technology and Vocational Training) issued a circular number three which gave directives on teaching and learning of HIV/AIDS (MOEC, 2014) which has been adopted by all secondary schools (Tatu, 2007). Despite those directives it was found that incorporation of HIV/AIDS into school curriculum was yet to be done by 2008 despite ministry claims of having trained teachers and supplied to support the training. (AVERT 2014). Several issues reported to hinder proper integration of HIV education in the curriculum including misconduct relationships between teachers and students, limited materials and financial resources and socio-cultural barriers (UNESCO, 2008). According to UNGASS/TACAIDS (2010) Tanzania accepted the fact that there is ineffectiveness and poor coordination in government efforts toward implementation of youth focused HIV prevention initiative with much dependence on support from non-government actors.

2.2.5 The Role of Teachers

Teachers play a key role in translating and imparting knowledge to students. Also in a social context, teachers are expected to be role models to their students. Failure to prepare teachers through training is among leading reasons for failure of integrating HIV/AIDS education into the school curriculum. For example, in Zimbabwe it was reported that by 2005 less than a quarter of all teachers trained on

HIV teaching, Zimbabwean Ministry of Education, Sport and Culture (2005). Both teachers and students in Africa have limited knowledge about HIV.

According to James-Traore et al. (2004) teachers are important connections in reproductive health and HIV prevention information flow to young people in schools and hence they need to have enough knowledge and skills to teach appropriate messages that put into consideration socio-cultural of the respective community. However many teachers themselves have limited knowledge on basics of HIV/AIDS which make them less confidence and feel not comfortable to teach those sessions to students (Finger et al., 2004). Eventually they select only few issues to share with their students based on their understanding rather than on what is appropriate.

In addition to that teachers do not realize the differences of HIV/AIDS related sessions with other regular sessions in subjects like mathematics or sciences. This difference has been overemphasized by Ragon (1995) who insisted on participatory approach with multiple media in the provision of HIV/AIDS education rather than the routine deducting classroom trainings as for other regular subjects.

Moreover, studies have highlighted how teachers have been affected with cultural issues in relation with HIV. According to Haignere (1996) the fact that many communities are not willing to discuss about sex issues including HIV/AIDS have negative impacts in prevention programs. That is because even teachers who are members of those communities perceive to be insecure to address such issues and believe that it should be a primary responsibility of parents. Kinsman et al. (2001) added that teachers may risk themselves by embarking on teaching issues which are

considered inappropriate by the respective community. Hence it is important for the government to ensure what is incorporated into curriculum is culturally appropriate as emphasized by Schenker (2001).

2.2.6 School Environment

School infrastructures as well as supporting teaching materials are very important in provision of quality standard education. Schools plays important role in reducing stigma toward HIV positive people as mentioned by international agencies (UNESCO, 2009).

Addressing stigma may help young people in schools to access important services without fear of being discriminated (UNICEF, 2012). Usually schools are considered the first source of appropriate information regarding sexuality (Mckay and Holowaty, 1997). When school based sexual education program is properly planned and taught at appropriate quality make young people aware of their own sexual health issues and hence make informed decision before embarking into negative consequences. (Baldwin et al, 1990; Mackie & Oickle, 1996; Munro et al., 1994; Martiniuk et al, 2003; Jahan et al., 2009).

While the above readings clearly reflect the role of formal education in combating the spread of HIV/AIDS to young people in and out of school, there are several factors associated with the outcome of the education provided toward youth behavior change on HIV prevention. Among those factors are the school environments, contents of teaching materials and teachers ability on providing such education.

According to Kinsman et al. (2001) teachers are as important as adults in the respective family members of young people and thus they are expected to be good leaders in providing youth friendly health learning environment. However some teachers are misbehaving and hence their parenting role is questionable to in front of their students (James-Traore et al., 2004). Thus until when the school environment become youth friendly and teachers are supportive and well trained the efforts to use educational prevention programs in school may not yield enough results in the fight against HIV.

According to the study done in Mkuranga district by Tatu (2007), HIV/AIDS education programs in schools have a lot of issues which are beyond several instructions or guidelines provided from the national level. That is because of unclear issues between polity and curricular content as well infrastructure and materials to support the whole process of delivering such education.

2.2.7 The Role of Socio-cultural Issues

Culture has always been a vital component in lives of many African communities Tanzania included. African culture has made up of both good and bad practices which also have the same effects in people daily lives as some members of the society may end up to be victims of those practices like women being at risk of exposure to HIV than their counter part. Culture and traditions do not only affect normal life but also influence delivery of information of what is regarded as sensitive issue to young people. For example, in a study in Uganda by Kinsman et al., (2001) it was noted that during implementation of HIV/AIDS education to students, teachers

were reluctant to discuss details of some issues like condom use for fear of antagonizing parents, the wider community or head teachers.

2.3 Literature Synthesis and Knowledge-gap

The literature review above has clearly shown the importance of school based education in social changes including sexual practices of young people. In addition to that, it has shown by the literature that the government of Tanzania by knowing the of school based education in HIV prevention strategies, they came up with Educational Sector Strategies for HIV/AIDS prevention by incorporating the HIV prevention education into teaching curriculum. However, despite these strategies, which are seen in documents, there are still no studies made to evaluate if at all the suggested strategies has been incorporated into the teaching curriculum, the extent to which it has been implemented in schools as well as if it has any roll in sexual behavior of the secondary school youth. This gap formed the basis of this study.

2.4 Theoretical Framework

There are several education evaluation models which can be used in looking how the program is performing and its role in meeting intended outcome. Among the widely used evaluation model is the Daniel Stufflebeam's (2000) CIPP model. The CIPP Evaluation Model is a comprehensive framework which guides evaluation of wide range of programs and projects particularly those which focus on long term developments.

CIPP stands for context, input, process, and product evaluation. The model uses a checklist to look at what actually needs to be done, in what ways, rate and status of

implementation and the level of success in reaching intended deliverable. The evaluation of intended product can be done at impact level, checking of effectiveness of the intervention and sustainability of the intervention. The checklist also helps for timely reporting which supports proper planning, appropriate implementation, institutionalization for sustainability and dissemination to targeted stakeholders as well as sharing best practices and lesson learnt.

The CIPP checklist has 10 components including contractual agreements to guide the evaluation, context, input, process, impact, effectiveness, sustainability, transportability evaluation components, metaevaluation and the final synthesis report. Basing on this theory, the evaluation of school based HIV prevention education was evaluated in terms of its incorporation into the teaching curriculum in secondary and schools and also its role in sexual behaviours of secondary school youth. This was contextual, inputs, process and products within CIPP model. In this study the context factors that were studied are students' perceptions on importance of HIV prevention education provided and adequacy of HIV prevention education provided.

The inputs are HIV related training materials like books, photos, reports, journals, audios and videos. The processes are participatory teaching approach of HIV prevention education, having HIV clubs, having visiting teachers or visits to nearby health facility. The products studied are knowledge and awareness of HIV prevention among secondary schools students and sexual practices which reduces risk of students toward HIV prevention like abstinence, safe sex and being faithful in sexual relationship.

2.5 Chapter Summary

This chapter has provided literature review based on study done by other scholars though their arguments and findings the role of school based education in HIV prevention, the role of teachers and teaching curriculum as well as the vulnerabilities of secondary school students, and later on came up with a research gap to be studied. In addition to that the chapter has also come up with CIPP evaluation model as a conceptual framework to support this study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter covers research methodology and the following issues were presented and described: Study design, study area, sample size, data collection methods, data analysis methods, ethical consideration, study limitations, study duration and budget estimation and justification.

3.2 Study Design

This is an evaluative case study in which in depth examination and understanding of how school based HIV prevention education has been incorporated into secondary school syllabus as well as how the students perceive its effectiveness in terms of creating self-awareness and influencing their sexual practices toward HIV prevention.

The case study approach usually focuses in describing and enlightening the program and sometimes may not show how it developed or what are its advantages and disadvantages. Typical questions posed in case study program evaluation are those which aims to understand the concept of the program and its practice, program changes over time, its operation in producing intended outcome, its product, the positive and negative consequences of that particular, how stakeholders involved and their acceptance, how the program addressed need of beneficiaries, challenges or best practice toward failure or success? (Stufflebeam, 2000). Thus, the use of case study in program evaluation need to employ both qualitative and quantitative

approaches with wide range of data sources and data collection tools. Case study report may include diverse information including key areas of case description as determine by audiences as well as general presentation and assessment (Stufflebeam, 2000).

3.3 Study Area

Lindi Municipal Council is among the six councils of Lindi Region. It borders Lindi District council in the north and the Indian Ocean in the south west and east. Lindi municipal has 18 Wards and 20 Villages. According to population and housing census (2012), the municipal has a total population of 75,000. Coastal climate prevails in Lindi region and it is generally hot and humid in Lindi Municipal. Lindi municipal council has been chosen for this study due several reasons.

First of all, it is clear that one among key factors which accelerates HIV transmission in a given area is increased socio-economic activities. Recent discovery of natural gases in the area as well as improved transport infrastructure, with anticipated increase in industrial and commercial activities in the southern zone of the country will ultimately increase the risk of many young people, including youth to be exposed to HIV transmission and hence reinforcing proper HIV prevention education, is of paramount importance.

In addition to that, according to UNESCO (2011), Lindi region of which Municipal council is the head quarter, has the lowest percent of having one book for every three students. Not only that but also Lindi is among the regions with school enrollment

below national targets as well as is among regions with high drops out. All those factors have necessitated the selection of Lindi MC as the study area.

3.4 Study Population

The study population included all secondary school youths in Lindi Municipal council from both private and government secondary schools.

3.5 Sample size and Sampling Technique

A total of 384 secondary school students from three schools were involved in the study. A sample was obtained by systemic sampling in which schools and students were identified to be involved. The actual sample for this study was determined using the following three factors (i) the estimated proportion of secondary schools with proper HIV prevention education, assumed to be 50% i.e. 0.5. The assumption was that there are no previous studies done to establish this proportion; (ii) the desired level of confidence (95%) with standard normal deviation of 1.96 and (iii) the acceptable margin of error (5%).

The sample was obtained from the following formula;

- a. $n = Z^2 \pi (1-\pi) / D^2$
- b. n – sample size
- c. Z – standard normal deviation at 95% is 1.96
- d. π - The proportion of secondary school with well-established HIV prevention education in place, taken to be 50% (0.5)
- e. D – margin of error at 95% confident interval, taken to be 5% (0.05)

Thus sample size for this study was

$$= 1.96^2 \times 0.5(1-0.5)/0.052$$

$$= 384$$

Thus, the sample size for this study was 384 students. Also 8 students were purposively selected for face to face interview based on the following criteria;

Inclusion Criteria:

- (i) Minimum of 8 students were interviewed. The small sample is preferred in order to gain detailed accounts of the responses and allowing for large amounts of information to be analyzed.
- (ii) The responded should be identified from quantitative information collected using questionnaire with potential of providing information regarding the study objectives.
- (iii) Secondary school students in the either 3rd or 4th year of studies who are mostly likely have an opportunity to be taught HIV prevention lessons.

Exclusion criteria

- (iv) Secondary school students in their 1st and 2nd year of study
- (v) Teachers

3.6 Data Collection Tools

The data gathering involved three tools, as detailed hereunder.

3.6.1 Questionnaires

Quantitative data were collected using closed ended questionnaire. The Swahili translated questionnaire was used to collect information regarding inclusion and

implementation of HIV prevention education, student perception on the role of HIV prevention education provided and the extent to which HIV prevention that was taught had influenced self-awareness on their sexual practices. Initial data review was done simultaneously to identify participants who are potential for being involved in further discussion through in depth interview.

3.6.2 Interview

Another instrument is face-to-face in-depth interview that was also used to collect information from the students to response on specific objective two and three. The information that was collected included the perceptions of the students on the role of HIV prevention education taught and the extent to which the education provided has influences self-awareness on their sexual practices.

The face-to-face interview lasted for about 2 hours per participant. There was flexibility in the flow of questions and the time used for each question depended on participant responses and level of discussion took place. All discussions were recoded using with prior approval of the interviewees. Willingness for interview participation as well as confidentiality was insisted to all participants before starting interview sessions. Any participant was free to leave the session any time he or she feels to do so. In order to maintain confidentiality all interview session a separate room usually an office was used for the discussion.

3.6.3 Documentary Review

A survey and review were made to the teaching materials in relation to HIV prevention education like text books, teaching plans and teaching syllabus, detailed

review was done to that document in order gather information on what is really the content of the materials and their adequacy in providing enough knowledge, skills and awareness to students. This information helped to response for fist specific objective on the implementation of HIV prevention education.

3.7 Data Analysis Procedures

Quantitative data were analyzed using SPSS computer software under respective specific objectives. Qualitative data analysis was ongoing parallel to data collection. The interview reports were transcribed verbatim followed by analysis of the transcripts. Transcribed data were reduced through coding and categorization. Coded categories were then grouped into themes, patterns and relationships by looking on similarities and differences on responses from the participants. Finally, triangulation of qualitative and quantitative data was done, followed by thematic analysis with the help of NVIVO computer software.

3.8 Ethical Considerations

Permission to conduct the study was sought from the research and publications unit of the Open University of Tanzania and other relevant authorities that are to be involved in passing this proposal. A notification letter was then written to the Lindi municipal educational officer and Heads of schools to which study would be conducted. To participants who would participate in the study the following ethical issues were considered;

- (i) Ethical confidentiality was maintained throughout the study. No names of respondents were recorded so as to help freedom of expression.

- (ii) Before conducting interviews, willingness of respondents was required and written informed consent to respondents were used. Both the purpose and importance of the study will be explained.

3.9 Chapter Summary

This chapter has explained in details the design of this research, the area where the study was conducted, the sample size and sampling technique used. Also it elaborated how data were collected and tools used, ethical issues considered during data collection as well as how data was analyzed. Furthermore the chapter also explained the limitations of the study, duration of the study as well as budget and its justification.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF THE FINDINGS

4.1 Introduction

This chapter presents the findings which are broadly categorized into the following thematic areas; demographic characteristics of the participants, the curricular contents that address HIV/AIDS related matters, Secondary school students perception on HIV prevention lessons taught in their schools, awareness of secondary students on HIV prevention practices and HIV related risk sexual behaviour practices by students after being provided with HIV prevention education.

4.2 Demographic Characteristics of the Respondents

A total of 384 respondents participated in the study; their attributes are summarized in Table 4.1.

Table 4. 1: Distribution of respondent by Age and Sex

| Respondent Age | Respondent Sex | | Total |
|----------------|----------------|---------|---------|
| | Male | Female | |
| <16yrs | 19 | 35 | 54 |
| | 35.20% | 64.80% | 100.00% |
| | 10.70% | 16.90% | 14.10% |
| 16-18yrs | 142 | 166 | 308 |
| | 46.10% | 53.90% | 100.00% |
| | 80.20% | 80.20% | 80.20% |
| >18yrs | 16 | 6 | 22 |
| | 72.70% | 27.30% | 100.00% |
| | 9.00% | 2.90% | 5.70% |
| Total | 177 | 207 | 384 |
| | 46.10% | 53.90% | 100.00% |
| | 100.00% | 100.00% | 100.00% |

Source: Lindi Municipal Survey, (2015)

As it can be seen in Table 4.1, more than half of the respondents (207, which is 53.9%) were female and remaining were males. The majority (308, which is 80.2%) were of the age ranging between 16 and 18 years, followed by those aged less than 16 years who were 54 (14.1%) and lastly those above 18 years, who were 22 (5.7%). Regarding their education class levels, 176 (45.8%) were in form four, 123 (32.0%) in form two and 84 (21.9%) in form three. Regarding the form of study, about 176 (45.8%) respondents were studying in form four, followed with 123 (32.0%) form two and 84 (21.9%) form three students.

4.3 Content and Implementation of HIV/AIDS Prevention Education in Secondary School teaching Curriculum

The first specific objective of this study sought to find out the curricular content and implantation of HIV prevention education in Secondary Schools. In order to achieve this objective a review was done review of secondary school teaching textbooks and face-to-face interview with students were conducted on their experiences regarding HIV prevention education provided in their schools. During document review it was found that HIV/AIDS issues are well addressed in Biology Syllabus in form one and form four and also having few contents in Civics for the same class.

As it can be seen in figure one below, regarding HIV/AIDS issues in the biology syllabus, in form one there about nine specific objectives namely which include helping students being able to do the following;- explain the meaning of HIV/AIDS, STIs and STDs; Explain causes, symptoms, mode of transmission and effects of HIV/AIDS, STIs and STDs; Outline the preventive and control measures of HIV/AIDS, STIs and STDs; Explain ways of avoiding risk situations, risky

behaviors and practices; Demonstrate necessary skills for avoiding risky behaviours, practices and situations; Outline the importance of curative health care for STIs and opportunistic infections; The importance of providing care and support to People Living with HIV and AIDS (PLWHA) in the family, community and at schools; Outline necessary care and support services to be provided to PLWHA in family, community and schools as well as Explain the effects of discrimination and stigma to people living with HIV/AIDS to individual, family and society.

| TOPIC | SUB-TOPIC | SPECIFIC OBJECTIVES | TEACHING/LEARNING STRATEGIES | TEACHING/LEARNING RESOURCES | ASSESSMENT | NO. OF PERIODS |
|-------|---|---|---|--|---|----------------|
| | 3.4 Human Immunodeficiency Virus (HIV) Acquired Immune Deficiency Syndrome (AIDS), Sexually Transmitted Infections (STIs) and Sexually Transmitted Diseases (STDs). | <p>The student should be able to:</p> <ol style="list-style-type: none"> 1. explain the meaning of HIV/AIDS, STIs and STDs. 2. explain causes, symptoms, mode of transmission and effects of HIV/AIDS, STIs and STDs. | <ol style="list-style-type: none"> i) The teacher to guide students in groups to discuss the meaning of HIV/AIDS, STIs, and STDs. ii) The teacher to guide students to present group tasks for plenary discussion and guide them in making necessary corrections. iii) Students to brainstorm on causes, symptoms, ways of transmission and effects of HIV/AIDS, STDs and STIs. iv) The teacher to invite a guest speaker to talk on causes, symptoms, mode of transmission, effects, preventive and control measures of STIs and HIV/AIDS. v) The teacher to guide students to summarize the major points from the guest speaker's speech/presentation. | <ul style="list-style-type: none"> • Pamphlets • Brochures • Charts/texts on HIV/AIDS/STIs. • Pictures • Charts • Brochures and films. | <p>Is the student able to give the proper meaning of "HIV/AIDS", "STIs" and "STDs"?</p> <p>Can the student correctly explain the causes, symptoms, mode of transmission and effects of STIs and HIV/AIDS?</p> | 6 |

| TOPIC | SUB-TOPIC | SPECIFIC OBJECTIVES | TEACHING/LEARNING STRATEGIES | TEACHING/LEARNING RESOURCES | ASSESSMENT | NO. OF PERIODS |
|-------|--------------------------------------|---|--|--|--|----------------|
| | | 3. outline the preventive and control measures of HIV/AIDS, STIs and STDs | <ol style="list-style-type: none"> i) By using questions and answers, the teacher to guide students to outline the preventive and control measures of HIV/AIDS, STIs and STDs. ii) Students to summarise major points and the teacher to guide them to make clarification and conclusion. | <ul style="list-style-type: none"> • Charts • Magazines • Journal/articles on STIs and HIV/AIDS. • Radio/Video tapes. • Films. | Can the student correctly outline preventive and control measures of STIs and HIV/AIDS? | |
| | 3.4 Management of STIs and HIV/AIDS. | <p>The student should be able to:</p> <ol style="list-style-type: none"> 1. explain ways of avoiding risky situations, risky behaviours and practices. 2. demonstrate necessary skills for avoiding risky behaviours, practices and situations. | <ol style="list-style-type: none"> i) The teacher to guide students to discuss in groups ways of avoiding risky situations, behaviours and practices. ii) Students to present group deliberations in plenary and the teacher to guide them in making necessary corrections. iii) Students using guidelines to role-play on how to use various life skills to avoid risky situation, behaviours and practices. iv) The teacher to guide students to discuss the major effects and consequences shown in the role-play and make conclusions. | <ul style="list-style-type: none"> • Magazines • Brochures/fliers on ways of avoiding risk behaviours and practices. • Pamphlets • Charts/pictures showing risky behaviours, practices and situations. | <p>Is the student able to explain ways of avoiding risky situations, risky behaviours and practices?</p> <p>How accurate can the student demonstrate necessary skills for avoiding risky behaviours, practices and situations?</p> | 6 |

| TOPIC | SUB-TOPIC | SPECIFIC OBJECTIVES | TEACHING/LEARNING STRATEGIES | TEACHING/LEARNING RESOURCES | ASSESSMENT | NO. OF PERIODS |
|-------|---|--|---|--|--|----------------|
| | | 3. outline the importance of curative health care for STIs and opportunistic diseases. | i) The teacher to lead students to brainstorm on the importance of curative health care for STIs and opportunistic diseases e.g. early health care seeking habit, the importance of early medical testing and treatment. ii) The teacher to invite a health officer to talk on necessary curative health cares and services for STIs and opportunistic diseases. iii) The teacher to guide students to summarize the major ideas from the above presentation. | • Pamphlets • Brochures • Radio/Video tapes • Pictures showing health care for STIs and opportunistic diseases. | Is the student able to explain the importance of curative health care for STIs such as early health care seeking habit? | |
| | 3.5 Care and Support of People Living with HIV/AIDS (PLWHA) | The student should be able to: 1. explain the importance of providing care and support to PLWHA in the family, community and at school. | i) The teacher to lead students through questions and answers to explain the importance of providing care and support to PLWHA in the family, community and school. ii) The teacher to guide students to summarize the major ideas and points on the importance of providing care and support to PLWHA. | • Publications on home based care for PLWHA. • Any other relevant materials. • Pictures showing how to take care of PLWHA. | Is the student able to explain the importance of providing care and support to people living with HIV/AIDS (PLWHA) in the family, community and at school? | 6 |

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| TOPIC | SUB-TOPIC | SPECIFIC OBJECTIVES | TEACHING/LEARNING STRATEGIES | TEACHING/LEARNING RESOURCES | ASSESSMENT | NO. OF PERIODS |
|-------|-----------|---|---|--|--|----------------|
| | | 2. outline necessary care and support services to be provided to PLWHA in the family, community and at school. | i) The teacher to guide students to discuss in groups the necessary care and support services to be provided to PLWHA in the family and at school. ii) Students to present their responses for plenary and the teacher to guide them in making any necessary corrections and clarification. <ul style="list-style-type: none"> • Manuals on care and support for PLWHA. | • Manuals on care and support for PLWHA. • Film/Video tapes on care and support services to PLWHA. | How accurately can the student outline necessary care and support services to be given to PLWHA? | |
| | | 3. explain the effects of discrimination and stigma to people living with HIV/AIDS to the individual, family and society. | i) The teacher to provide case studies on the various incidences of stigma and discrimination and their effects to an individual, family and the society. ii) Students in groups to discuss the case studies, make correct interpretations and present their responses for plenary discussion and the teacher to sum up. | • Pamphlets/ Brochures on stigmatization and discrimination of PLWHA. • Pictures/photographs on incidences of discrimination and stigma to PLWHA. | Can the student explain the effects of discrimination and stigma and their effects to PLWHA? | |

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Figure 4.1: Scanned Copy of Form one Biology Syllabus

Source: Lindi Municipal Survey, (2015)

Also as it can be seen in figure 2 below, for form four there are also another nine specific objectives which include helping the students to do the following;

Distinguish between HIV, AIDS and STIs; Explain the relationship between HIV and STIs; Investigate the impact of HIV/AIDS and STIs in the community; Outline ways of managing and controlling HIV/AIDS and STIs; Mention the life skills needed for home based care for PLWHA; Mention procedures to be taken when handling PLWHA and STIs; Explain the concept of Counselling and Voluntary testing (CVT); Outline the significance of CVT in the control and prevention of HIV/AIDS and STIs as well as Explain the procedures and technique of CVT for HIV/AIDS.

| TOPIC | SUB-TOPIC | SPECIFIC OBJECTIVES | TEACHING/LEARNING STRATEGIES | TEACHING/LEARNING RESOURCES | ASSESSMENT | NO. OF PERIODS |
|---|---|---|---|---|---|----------------|
| 5.0 HUMAN IMMUNO DEFICIENCY VIRUS (HIV) ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS) AND SEXUALLY TRANSMITTED INFECTIONS (STIs) | 5.1 Relationship between HIV, AIDS and STIs | The student should be able to: 1. distinguish between HIV/AIDS and STIs. | i) The teacher to guide students to brainstorm on the differences between HIV, AIDS and STIs ii) Students to record the correct responses and tabulate the differences between HIV, AIDS and STIs. | • Reports from UNAIDS, NACP and TACAIDS • Charts on AIDS in Africa | Is the student able to distinguish between HIV/AIDS and STIs? | 6 |
| | | 2. explain the relationship between HIV and STIs. | i) The teacher to lead a class discussion on relationship between HIV and STIs focusing on similarities, differences, mode of transmission and effects. ii) Students to record and summarize major ideas on the relationship between HIV and STIs. | • Reports on HIV/AIDS and STIs • Charts on AIDS in Africa/World/Tanzania | Is the student able to explain the relationship between HIV and STIs? | |
| | | 3. investigate the impact of HIV/AIDS and STI in the community. | i) The teacher prepare guidelines for students to investigate the impact of HIV/AIDS and STIs in the community. | • Real objects • Samples of study reports on impacts of HIV/AIDS/STIs | Can the student investigate the impact of HIV/AIDS and STIs in the community? | |

| TOPIC | SUB-TOPIC | SPECIFIC OBJECTIVES | TEACHING/LEARNING STRATEGIES | TEACHING/LEARNING RESOURCES | ASSESSMENT | NO. OF PERIODS |
|-------|---|---|---|---|---|----------------|
| | | | ii) Students to carry out an investigation on the impact of HIV/AIDS and STIs in the community. iii) Students to analyze their finding and present study reports in a plenary session and clarify where necessary. | | | |
| | 5.2 Management and Control of HIV/AIDS and STIs | The student should be able to: 1. outline ways of managing and controlling HIV, AIDS and STIs. 2. mention the life skills needed for home based care for PLWHA. | i) The teacher to lead students to discuss ways of management and control of HIV, AIDS and STIs. ii) Students to present their task in a plenary discussion and the teacher to make necessary clarifications. i) The teacher to prepare extracts from or magazines on the management of HIV/AIDS/STIs. ii) Students in groups to discuss life skills needed for management and control of HIV/AIDS and STIs. | • Mammal on management HIV/AIDS and STIs • Reports on HIV/AIDS and STIs • Extracts/texts on HIV/AIDS and STIs • Life skill manual • Extracts/texts on Life skills for Management of HIV/AIDS and STIs • FLE Biology Teachers Guide Form III & IV | Is the student able to outline ways of managing and controlling HIV/AIDS and STIs? Can the student mention the appropriate life skills needed for home based care for PLWHA. | |

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| TOPIC | SUB-TOPIC | SPECIFIC OBJECTIVES | TEACHING/LEARNING STRATEGIES | TEACHING/LEARNING RESOURCES | ASSESSMENT | NO. OF PERIODS |
|-------|-----------|--|---|--|---|----------------|
| | | | iii) Students in groups to role play how to use different life skills in the management and control of HIV/AIDS and STIs. iv) The teacher to lead students to reflect on role-plays and summarize major ideas in the management and control of HIV/AIDS/STIs. | | Is the student able to outline ways of managing and controlling HIV/AIDS and STIs? | 6 |
| | | 3. mention precautions to be taken when handling people living with HIV/AIDS (PLWHA) and STIs. | i) Students in groups to discuss on the necessary precautions when handling HIV infected people and those with STIs/STDs. ii) Students to share their group work in a plenary session. iii) The teacher to guide students to prioritize the mentioned precautions for handling people with STIs and those living with HIV/AIDS. | • Brochures and fliers on methods of handling people living with HIV/AIDS • Charts on HIV/AIDS/STIs in Africa/World/Tanzania • FLE Biology Teacher Guide for form III & IV | Can the student mention the appropriate life skill needed for management and control of HIV/AIDS and STIs | |

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| TOPIC | SUB-TOPIC | SPECIFIC OBJECTIVES | TEACHING/LEARNING STRATEGIES | TEACHING/LEARNING RESOURCES | ASSESSMENT | NO. OF PERIODS |
|-------|---|--|--|--|--|----------------|
| | 5.3 Counselling and voluntary Testing (CVT) | The student should be able to 1. explain the concept of counseling and voluntary testing. | i) Students in group to discuss the meaning and importance of counseling voluntary and testing. ii) Students to present their group tasks in a plenary discussion and the teacher to give clarifications where necessary. | • CVT manual • Reports on HIV/AIDS/STIs | Is the student able to explain the concept counselling and voluntary testing (CVT)? | |
| | | 2. outline the significance of CVT in the control and prevention of HIV/AIDS and STIs. | i) The teacher to lead students through questions and answers to outline the significance of CVT in the control of HIV/AIDS/STIs. ii) Students in groups to discuss the significance of CVT in the control and prevention of HIV and STIs. iii) Students to present their tasks in a plenary session and the teacher to give clarifications. | • Manuals on CVT • Reports on CVT | Can the student outline the significance of CVT in control and prevention of HIV and STIs? | |

| TOPIC | SUB-TOPIC | SPECIFIC OBJECTIVES | TEACHING/LEARNING STRATEGIES | TEACHING/LEARNING RESOURCES | ASSESSMENT | NO. OF PERIODS |
|-------|-----------|--|---|---|--|----------------|
| | | 3. explain the procedures and techniques of CVT for HIV/AIDS | i) The teacher to provide guidelines on the procedures and techniques of counseling voluntary and testing. ii) Students in groups to discuss the procedures and techniques for CVT and record the main ideas. iii) Students to share their findings and observations in plenary discussion. | • Manuals on counseling voluntary and Testing for HIV/AIDS/STIs • Extracts/texts on procedures and techniques of CVT | Is the student able to explain the procedures and techniques for counseling voluntary and testing? | |

Figure 4.2: Scanned Copy of Form Four Biology Syllabus

Source: Lindi Municipal Survey, (2015)

In order to ensure effectiveness and positive outcome of the lessons to students, the syllabus also indicated some teaching/learning strategies as well as some key resources to be used during teaching and learning process. The strategies suggested included having study visits to the health care facility, invitation of guest speaker from health facility, review of national and international journals and report concerning HIV/AIDS, role plays, video shows and group discussion. Resources like

journals, reports, pictures, charts, audio and video tapes were indicated as very important. However, none of the above required resources mentioned were seen during the classroom visits, this may suggest that teachers use traditional teaching approaches without the strategies suggested.

As for Civics syllabus, in Form one HIV/AIDS issues addressed within a topic termed as responsibilities to special group including HIV/AIDS victims while in Form four the issues covered are positive and negative aspects of cultural practices in relation to spread of HIV/AIDS in the society.

When asked to comment on HIV/AIDS prevention education provided through face to face interview, respondents commented that HIV education is provided in their schools, however some few were not sure. The following are comments provided by two different respondents regarding HIV/AIDS prevention education provided; - The first said:

“HIV/AIDS education in general is taught in our school but not as a separate subject but has been included as a sub topic in subjects like Civics, and usually has very few sessions”

The second said

” HIV/AIDS prevention is taught but occasionally within Biology subject. To be honest the education provided is very important as it helps us students to identify and avoid risky sexual behaviors”

4.4 Students' Perception on Adequacy of HIV Prevention Education

The second specific objective sought to determine the students' perception of importance of HIV prevention education. While responding in the questionnaire regarding adequacy of HIV prevention education provided in their respective schools, their responses are as summarized in Table 4.2.

Table 4.2: Respondents' Perceived Adequacy of HIV/AIDS Prevention Education

| Responses | Frequency | Percent | Cumulative Percent |
|------------------|------------------|----------------|---------------------------|
| Yes | 59 | 15.4 | 15.4 |
| No | 273 | 71.1 | 86.5 |
| Don't know | 52 | 13.5 | 100.0 |
| Total | 384 | 100.0 | |

Source: Lindi Municipal Survey, 2015

As it can be seen in Table 4.2, less than a quarter of respondents (59, which is 15.4%) were of opinion that the education provided was adequate while the majority of respondents (173, which is 71.1%) said that that the education that was provided was not adequate. The rest were not sure whether the HIV education provided was adequate or not.

When asked through a questionnaire to give their reasons for their position about the inadequacy of the syllabus, about a quarter of respondents (98, which is equal to 25.5%) said that the HIV prevention education provided in their school was not adequate due to incompetent teachers in that particular subject matter, followed by

86 (22.4%) who said the training materials were not available and those who said teaching time allocated for HIV prevention education was not enough were 83 (21.3%). When further asked about how the HIV prevention education provided in their schools can be improved, their responses are as summarized in Table 4.3.

Table 4.3: The Respondents' Suggestion on Improving Adequacy of HIV Education

| Responses | Frequency | Percent | Cumulative Percent |
|---------------------------------|------------------|----------------|---------------------------|
| Train teachers | 87 | 22.7 | 22.9 |
| Commit more time | 191 | 49.7 | 72.7 |
| Provision of training materials | 88 | 22.9 | 95.6 |
| Others | 17 | 4.4 | 100.0 |
| Total | 384 | 100.0 | |

Source: Lindi Municipal Survey, (2015)

The findings in Table 4.3 show that nearly half of the respondents (191, which is similar to 49.7%) said that committing more time for teaching HIV prevention education would improve the situation, followed with 88 (22.9%) who said providing training materials and 87 (22.7%) suggested training more teachers for teaching the HIV prevention education in secondary schools while the rest did not suggest any solution to improve the quality of HIV education provided to make it adequate.

The findings from questionnaire respondents are similar to those found through face to face interview as despite the fact many interviewed students admitted that HIV/AIDS education has been provided in their schools, most of them were of

opinion that the education provided is inadequate and needs improvement starting from number of sessions taught as well as the methodology to be used in teaching that particular subject. For example one interviewee said:

“ the teaching sessions are very few, books are not enough and not participatory techniques like discussion....., it would be better if HIV/AIDS issues is taught as a separate subject, if it is within other subjects then it has to get enough time and be more practical”

Another respondent said

“HIV/AIDS education taught is not adequate, as it usually taught for the purpose of examination, as always in for form II we expect one essay question from HIV/AIDS section, moreover I think to improve it teachers may come up with more friendly methods to teach it like use of discussion groups and establishing social clubs for HIV/AIDS activists within our school and if possible to invite expertise outside the school to teach the lesson”

The statements above shows that both time allocated as well as materials provided to teach HIV/AIDS prevention are not adequate as stated in the respective syllabus. Not only that but also, it seems that teachers either lack necessary skills or do not have enough time to properly plan for participatory teaching approaches and hence uses more didactic approaches which just prepare students for sitting for examination rather than behaviour changes.

4.5 The Extent to which HIV/AIDS Prevention Education has Changed the Students' Self-awareness on the Sexual Practice

The third specific objective of this study aims at assessing the extent to which HIV prevention education had changed students' self-awareness and the sexual practices. Nearly all respondents 376 (97.9%) were found to be knowledgeable and aware about different methods for HIV prevention as each one was able to mention at least one of the methods, including abstinence, safe sex using condom and being faithful with single partner.

However, when asked about being engaged in HIV risk behaviours, about a quarter of the respondents 97 (25.3%) reported having history of sexual relationship of which there was significant difference between males and females having high proportion of males 63 (35.6%) compared to female 34 (16.4%) - (Chi- square of 20.216 and P-value of <0.000). Also about 62 (16.1%) respondents reported still being in sexual relationships during the time of the study, including lesser proportion of males 23 (13.1%) than 39 (18.8%) females.

When asked about number of partners they had in their history of sexual relationships, about two third of respondents (66, which is 68.0%) reported having only one sexual partner while 13 (13.4%) reported to have had relationship of more than one partner and the rest were not willing to disclose the number of relations they had up to the time of the study.

Also when asked about condom use during sexual contact, about 44 (45.4%) of those sexually active reported that they had never used a condom, followed by 41 (42.3%)

who said they used condoms frequently and 12 (12.4%) reported to have used condoms occasionally.

Those findings are similar to those obtained through face to face interview as when asked about their engagement in risky sexual behaviors like early sexual relationships, unsafe sex, having multiple partners and the influence of the education provided on HIV/AIDS prevention in their practices. Many respondents were reluctant to admit their engagement in those risky sexual behaviors while there were very open in explaining how majority of their fellow students are engaging in those risky sexual behaviors. Not only that but also while some were hesitant on the role of HIV/AIDS prevention education to influence sexual practices many admitted that such education is too helpful and influential to the sexual practices of many students in their school. The following are responses to some students regarding this question; One of the female respondents said:

“Personally I have never been in sexual relationship though I know many of my fellow students are in sexual relationships.... and especially for those in higher classes like form four they feel proud to have several girlfriends one in each class.... Usually they don’t use condom because there is this notion that condom decreases sexual pleasure. I am doing as others not just because of the HIV/AIDS education provided here but due to my upbringing at home”

Another male respondent also said:

“ I was in relationship about one year ago, later on I have decided to quit from it because I realized that the same girl had an relationship with other person in the upper class..... I think HIV/AIDS education has played some

significant role in helping students avoiding risky sexual practices as may the situation would be worse without it that the situation now”.

According to above statements, it shows that despite the fact that HIV/AIDS prevention education has been provided in schools, it has less influence in risk behaviour changes among students as still they are engaging in unprotected sex with many partners. Also responses show how young people exclude themselves from the risk of being infected with HIV/AIDS and believing others' are at more risk.

4.6 Discussion on the Findings

The study found that HIV/AIDS education has been incorporated into the secondary school teaching curriculum and has been taught through Biology and Civics. This shows that the Ministry of Education, Science and Vocational Training implemented the recommendation made through NMSSF (2003) and HSS – HA (2003 – 2007) which emphasized the role of formal education on HIV prevention and hence recommended the need of incorporating HIV/AIDS prevention education in secondary schools.

Also the findings revealed that majority of students felt that HIV/AIDS prevention education provided in not due less time devoted to teach HIV/AIDS in class, incompetent teachers, lack of supportive materials as well as focusing in didactic training technique that participatory approach as recommended by the teaching syllabus. This is congruent to another study which conducted in schools to evaluate HIV/AIDS and STD prevention education programs done by WHO and UNESCO. (WHO/UNESCO, 1994) it was found that students were ready to learn but they

didn't learn enough from the program, the reason being improper teaching approach as well as teachers reported having limited time to provide classroom sessions on top of overloaded teaching curriculum. Not only that but also in another cross-section study conducted in Bangladesh among teachers to identify the factors that support or hinder their role in HIV/AIDS education in Bangladesh (Haribondhu and Elizabeth, 2013) found about 50% of teachers felt that the time allocation for each of the HIV/AIDS classes was insufficient.

Also lack of supplementary teaching materials was another reason as teachers with adequate teaching materials were in better position of teaching their schools. Also, in a study in Mkuranga district by Tatu (2007) seeking to determine challenges teachers face in delivering HIV/AIDS education in secondary school, it was found that despite the directives, circular and guidelines on how to teach HIV/AIDS in education, provision of education is met with many challenges such as policy, HIV/AIDS delivery content economic challenges especially in terms of schools in fractures and teaching materials.

Finally, the findings shows that, despite HIV/AIDS being taught in secondary those schools, only knowledge has been improved while there is no changes in attitude and practices toward risky sexual behaviours. That is because, almost all students were aware of HIV/AIDS prevention knowledge, still some of them admitted to be practicing sex at younger age, having more than one partner as well as not using safe sex. This correlates to the study done in Cameroon Yvonne (2009) which found that, while there were some differences in level of HIV/AIDS knowledge among students in schools with formal HIV/AIDS intervention program and those without program,

there were no differences in attitude among students from those two different schools.

Moreover, in a study which was conducted in South Africa with the aim of evaluation of large scale implementation program of life skills training as HIV/AIDS prevention strategy in Secondary Schools, Visser (2005) found that the program only succeeded to gain knowledge to students on HIV/AIDS but didn't manage to change high risk behavior patterns among schools group youth. The finding was partially linked with failure to implement the program as planned due to several reasons including poor school organization and management, teachers are not committed, poor relationship among teachers and their students and limited resources in the education system.

This shows that not only is the content adequate but also the process of delivering any type of education has a greater role in achieving intended goals as studies have shown that properly designed and implemented school based HIV and STD education programs are more likely to produce positive outcomes for young people (Abraham, 2002). The positive outcome include but not limited to avoiding being sexually active at younger ages, avoiding to have many sexual partners, avoiding unprotected sex and good use of contraceptive services (Kirby et al., 2006).

Not only that but also properly designed programs proven to have good impact on critical sexual behaviour determinants like awareness of risks and negative outcomes related with unwanted pregnancy and STD, traditional norms and cultural issues

related with engaging in unprotected sex or not using contraceptive methods in the ability to make right decision of doing it or not, (UNESCO, 2007, 2009).

4.7 Chapter Summary

This chapter has first presented and analyzed the findings of the study in five key areas; demographic characteristics of the participants, the curricular contents that address HIV/AIDS related matters, participant's perception on HIV prevention lessons taught in their schools, participants awareness on HIV prevention practices and HIV related risk sexual behaviour practices by students after being provided with HIV prevention education. After the presentation and analysis the chapter has also discussed about the study findings.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

5.1.1 General Summary

This was a mixed evaluative case study based on CIPP evaluation model with broad objective of assessing the effectiveness of school based HIV prevention education in sexual behaviors among secondary school youths. The study aimed at answering the following research questions; What are the curricular contents that address HIV/AIDS related matters?, How do secondary school students perceive the adequacy of HIV prevention lessons taught in their schools? To what extent are secondary school students aware of HIV prevention practices? And what are sexual behaviours practices by secondary school students after they have been taught HIV prevention strategies?

Due to the fact that HIV and sexual behavior are sensitive issues, one of the limitations of this study was students concern over disclosing their real life sexual practices, ensuring confidentiality throughout the process of study helped to reduce this concern. Also the methodological limitations of qualitative and quantitative approaches were addressed by triangulation of information from both approaches. The study involved 384 students who were selected through systematic sampling and 8 students were selected through purposive sampling. Closed ended questionnaire, face-to-face interview and document review were used for data collection while SPSS and NVIVO computer software were used for data analysis.

5.1.2 Summary of the Findings

The study findings revealed that HIV education has been incorporated into secondary schools curriculum as it has been provided through Biology and Civics syllabus. However, majority of students perceived the education provided to be inadequate. The main reasons provided for the HIV education not being adequate include; incompetent teachers, lack of supportive training materials and shortage of time committed for teaching and thus its improvement rely on the same focus areas.

Not only that but also the use of didactic approach more than participatory approaches has associated with inadequacy of the HIV prevention education to deliver what is expected by students. Moreover, the study found that despite the fact that HIV prevention increased knowledge and hence awareness about HIV prevention it has not been able to change risk sexual practices of students as many still become sexually active at early ages, they practice unprotected sex and have multiple sexual partner which put them vulnerable for HIV infections.

5.2 Conclusions

In the light of the above summarized findings, the following inferences are drawn:

First, HIV education in secondary schools is provided through and has been integrated into Biology and Civics syllabus.

Secondly, the HIV prevention education provided has contribution in improving HIV/AIDS knowledge to secondary school youth. However, the HIV prevention education provided is not adequate both in terms of time allocated as well as teaching approaches/strategies used to teach the subject.

Third, even though HIV prevention education provided in schools helped to improve the knowledge about HIV, its effects on good sexual practices and behavior toward prevention is seems to be beyond the classroom lessons which can be contributed several factors as identified in this study as follows;

- (i) the teaching of HIV/AIDS education in secondary schools is more of didactic style focusing on preparing students for passing examinations rather than developing awareness and life skills to help student to deal with risky sexual behavior in schools in in their communities which may predispose them with HIV infections through interactive and participatory approaches as recommended by the teaching syllabus and
- (ii) the education provided has not changed sexual practices of some of the learners.

5.3 Recommendations

5.3.1 Recommendations for Action

The study raised a lot of key issues to be addressed in order to improve effectiveness of HIV prevention education in secondary schools not only for improving knowledge and awareness of students about HIV/AIDS but also to influence their sexual behavior and practices toward prevention of HIV transmission.

The first and fore most, secondary schools should make sure that HIV education is taught through recommended strategies and approach especially interactive and participatory approach like role plays, using group discussions, having practical study visits to health care facilities, use of pictures, use of invited professionals and making use of social clubs.

Secondly, the use of recommended teaching strategies has also to go hand in hand with increased committed teaching time for the HIV lessons.

Thirdly, the government or schools should ensure that supportive training materials like HIV journals, reports, video and pictures are available and used during classroom teachings, group discussions and social clubs events.

5.3.2 Recommendations for Further Studies

The study recommend further studies to be done to explore teachers capacity, ability as well as their perception and attitude toward teaching HIV education in secondary schools. Not only that but also, a further study needs to be carried out on the role of out of school education including media and community sensitization campaigns in influencing students perception and attitude toward HIV prevention. Also, another study could be done involving a direct observation on how teachers teach HIV prevention education in classrooms so as to expand knowledge in this area.

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APPENDICES

Appendix 1: Questionnaire

A questionnaire For Secondary School Students concerning the effectiveness of school based HIV education in reducing risky sexual practices of secondary school youth in Lindi MC

Dear respondent,

I am a Leo Haule doing a research on effectiveness of school based HIV education in reducing risky sexual practices of secondary school youth for the purpose of assessing the implementation of HIV/AIDS prevention strategy through secondary school teaching.

Thank you for agreeing to be part of this study and to participate in filling the questionnaire. As mentioned earlier, I ask you to answer the questionnaire about a sensitive topic on Sexual the role of school based HIV education in sexual practices of secondary school youth. The aim is for me to understand the extent to which secondary school implementing HIV education its role on actual sexual behavior to students. I acknowledge that everyone is different and I am not interested in judging

anyone positively or negatively but I am trying to understand the situation which can help to advice your schools and policy makers for further improvement

1. What is your Sex?
 - a. Male
 - b. Female
2. How old are you?
 - a. Below 15
 - b. 16 – 18
 - c. Above 18
3. What level are you studying in?
 - a. Form 2
 - b. Form 3
 - c. Form 4
4. Who owns your school?
 - a. Government
 - b. Private
5. Is your school teaching HIV education?
 - a. Yes
 - b. No
 - c. Don't know
6. Do you think HIV education taught in your school is adequate enough to provide knowledge and skills to you to for preventing HIV infections?
 - a. Yes
 - b. No

- c. Don't know
7. If your response to No.8 above is 'No', why do you think it is not adequate?
- a. Teachers' capacity is not adequate
 - b. Teaching time is not enough
 - c. Teaching materials are not available
 - d. Others
8. What do you think can be done to improve HIV education to be more effective?
- a. Train teachers
 - b. Commit more time
 - c. Provision of training materials
 - d. Others
9. Have you ever had sexual relationship?
- a. Yes
 - b. No
 - c. I would rather not say
10. How old were you when you had sex for the first time?
- a. Less than 14 years
 - b. 15 – 16 years
 - c. 17 – 18 years
 - d. Above 18 years
 - e. I would rather not say
11. Are you currently in a relationship?

- a. Yes
 - b. No
 - c. I would rather not say
12. With how many sexual partners did you have sex in your life?
- a. One
 - b. More than one
 - c. I would rather not say
13. How frequent are you using condom during sexual intercourse?
- a. Frequently
 - b. Occasionally
 - c. Never used
14. What can you do to protect yourself from getting AIDS? (mention any 2 you know)

Appendix 2: In-Depth Interview

In-depth interview topic guide

1. Can you please tell me about yourself:
 - (a) Probe age, sex, religion, year of study, whether lives with parents or guardian.
2. What can you comment on HIV lessons taught in your school?
 - (b) Probe inclusion of HIV issues in their classroom lessons.
3. What is your opinion on adequacy of information taught as part of HIV education in your school?
 - (c) Probe his/her perception on usefulness of taught lessons to their daily life pertaining sexuality.
4. Can you share in brief your sexual experiences?
 - (d) Probe age of first sex contact, number of partners and safe sex practice.
5. Do you think the HIV education taught in your school has any influence in either way (positively or negatively) on your current understanding and sexual practices.

Appendix 3: Review of Documents

After prior introduction from school head or academic master, I will request the information on where to get sources of data for materials used to teach students on HIV education. Then I will observe and review the following respective documents and comments accordingly on content of HIV education lessons;

- Text book
- Teaching Plan
- Teaching curriculum/syllabus.

