THE ABSTINENCE, BEING FAITHFUL AND CONDOM USE (ABC) STRATEGY IN UGANDA: THE ROLE OF PRE- AND IN-SERVICE TEACHER TRAINING INSTITUTIONS

by

Eugene Angelo Arigye

Bachelor of Philosophy, Makerere University, 1995

Master of Public Management, Carnegie Mellon University, 2007
Master of Arts, Peace and Conflict Studies, Makerere University, 2008

Submitted to the Graduate Faculty of the

School of Education in partial fulfillment

of the requirements for the degree of
Doctor of Philosophy

University of Pittsburgh

2017

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

This dissertation was presented

by

Eugene Angelo Arigye

It was defended on

26 July 2017

and approved by

Dr. Maureen W. McClure, Associate Professor, School of Education

Dr. John C. Weidman, Professor Emeritus, School of Education

Dr. Yusuf K. Nsubuga, Ministry of Education and Sports, Uganda

Dissertation Advisor: Dr. W. James Jacob, Associate Professor, School of Education

THE ABSTINENCE, BEING FAITHFUL AND CONDOM USE (ABC) STRATEGY IN UGANDA: THE ROLE OF PRE- AND IN-SERVICE TEACHER TRAINING INSTITUTIONS

Eugene Angelo Arigye, M.P.M., M.A., PhD

University of Pittsburgh, 2017

HIV is one of the world's leading epidemics in the 21st century, and Sub-Saharan Africa has the highest reported cases, accounting for close to 70% of the global infection. Today, it is asserted that over 25 million people are living with HIV, and over 1.2 million have died from HIV and its related illnesses. It is estimated that the region has over 15 million children orphaned (one or both parents lost), and to make matters worse, the prevalence rates in Uganda is 7.3% which is among the highest globally. This not only points to devastation caused by the pandemic so far, but also its continued spread that seems to be beyond the policy makers.

In this situation, it is undisputable that highly valued cultural traditions and practices like polygamy, forced and arranged marriages, widow/widower inheritance remain high risk factors. The role of these factors in the spread of HIV is further complicated by the respect and value that the African society accords these cultural practices. As a preventive paradigm, the ABC strategy cannot ignore the role of pre-and in-service teacher training institutions (TTIs). This is because education is at the core of any preventive method that aims at scaling down the spread of HIV. Unfortunately, policy makers in Uganda seem not to put emphasis on training the educators by empowering them with knowledge bases and skills needed to handle this scourge. This study exclusively deals with what is missing in the line of training teachers and emphasizes the role of TTIs in this approach. The policy frameworks and budgetary supports that fund TTIs need to

critically provide the infrastructure and pedagogical preparedness that empowers teachers to communicate effectively with their pupils or students on matters relating to HIV.

The importance of communication in the fight against HIV lies in the fact that it sensitizes young people and thereby empowers them to make their own sexual and marriage decisions. Communications also exposes the dangers of the above highlighted risk factors, encourages the victims to seek professional treatment and services like screening of partners before marriage and offers opportunities of positive living through voluntary HIV counseling and testing. Basing on the case study of TTIs and the mixed method research design, the study went into details about what is taught in preparation of teachers and how teachers in training feel about handling this subject which their culture would otherwise not permit as a topic to be discussed in public.

ACKNOWLEDGEMENTS

First, I thank the Almighty God for the many blessings I have enjoyed throughout my life. Your blessings have been without boundaries. I thank Thee for the gift of having the capacity to read books and understand them, for enabling me not only to go to class but also to pass the necessary examinations. It is by Thy will and providence that I have reached this highest stage of my academic journey. It has been a journey of challenges that without Thy power and grace, I could not have reached the end. For this reason, I re-sound the words of the Apostle John, that I must diminish and Christ increase, (John 3:30).

I am greatly indebted to my beloved wife, the love of my life, for being there for me. If Michelle Obama could testify that bringing up two girls is not an easy task with all resources at her disposal as a mother in the White House, I can imagine how you fared my dear. Whatever the case might be, I know that your deep faith and unfading love carried you through. Thank you so much. I have no words to express my gratitude.

To my kids—Angella, thank you so much for understanding that despite my absence, I believe in you and for cherishing the values that make me proud as a parent. Girl, I am proud of you. And Chacha, you are an amazing lady. I always felt strong after every call by your blessing and dedicating me to the blood of Jesus. Indeed, *eshangama ya Yesu* (the blood of Jesus) kept me; it kept us strong. Aidan and Ashley, thank you for appreciating that Daddy needed to read and pass. Your words inspired me to continue moving.

In a very special way, I wish to extend my most sincere gratitude to my doctoral committee for your guidance and nurturing me to become the scholar, practitioner, and researcher that I am

today. Professor Maureen W. McClure, you equipped me with the necessary analytical skills that will always shape my work and world outlook. Professor John C. Weidman, your insight into understanding and appreciation of concepts in shaping and mapping reality have greatly influenced my approach to reality. It is interesting how these tools make it simpler to see issues in both objective and subject perspectives without compromising the phenomena they stand for. Professor W. James Jacob, for accepting to be my academic advisor and for the unwavering guidance and advice that you rendered to me since I joined the program. Dr. Yusuf K. Nsubuga, you are my role model when it comes to hard work and research especially in the field of HIV and its impact on education. Your professionalism and scholarly approach to HIV and AIDS in Ugandan society is a challenge to any researcher and articulates issues that need attention in order to use the ABC strategy to fight HIV in schools.

To all my teachers and professors, I am not only indebted to you but also proud to be among the many scholars you have mentored and sent in the world as practitioners, policy analysts, educators, and researchers. I cannot forget my friends who have made my life what it is and framed my world outlook. Engineer Richard Kapiriri who shaped my understanding of the world and helped me to navigate what was almost impossible. His exemplary life and words of wisdom not only made me survive Karamoja but have always inspired me whenever I find myself in situations that are frightening and threatening. His constant concern with what is going on around me puts him in a special position of a brother, elder, and inspirer. Deogratias Katekere and the Rubongoya family, who helped me to see love beyond tribes. I wish to thank them for their support and guidance that has framed my deeper understanding of human relations. I wish to thank Akiiki and Atwooki for their love and care. I will always cherish the values and the principles that they emphasized especially the guiding principle of *barangira kiki*? I am indebted to Atwooki, whose

critical analysis of issues and scholarly work influenced my appreciation of cultural realities that make us who we are. I also wish to thank the Rukandema family for all they did for me. May the Almighty, reward them abundantly.

Indeed, I am greatly indebted to Msqr. Peter Kumaraki, under whose wings I learned the importance of prayer and hard work, *Ora et Labora*. I am grateful for him accepting and grooming me into an individual who draws courage from prayer and belief in common goals for humanity. His spiritual guidance, simplicity and prayer life continue to inspire me every day to live abundantly. May he ever be blessed.

In addition, Iam grateful to my mother who has always been there for us as a family.Maama ,thank you for ensuring that we had all that we needed as a family. Through your maternal love, strength in difficulty times of Tooro, Nyabitutsi and Dura we came out victorious as a family. Your motherly love, desire to succeed and guidance made me who I am today. Thank you Maama. am greatly indebted to my extended family in my brothers and sisters. We have come from far, let this achievement be cornerstone in furthering what unites together and an inspiration for our children. Thank you for being there for me and I will continue working hard so that the glory of God will continue shining in our family.

For the Njenjekas—especially Uncle Medard and Dr. Justus—thank you for loving us and keeping our family moving especially in those hard times of Dura and eventual settling in Ntugama. May God, bless you abundantly. For the Mpambaras, thank you for standing in for me. With your love and support, life became easy for the Arigyes, thank you so much.

Lastly, let me extend my sincere gratitude to my employer, the President's Office, without their assistance especially for granting me a study leave that enabled me to concentrate on my studies. Thank you so much for believing in me.

DEDICATION

I dedicate this dissertation to my dad, who continuously told me that the greatest weapon I have in my hands is education. Indeed, his inspiration drove me this far. It is my prayer that he rests in peace and I will always cherish the discussions we had, especially in literature and grammar. In the same tone, I dedicate this work to my late younger brother, Emmanuel Rugyendo, who left so early but whose courage and dreams still push me to move on. I will always cherish those times that we shared together. Young man, Rest in Peace.

TABLE OF CONTENTS

LIST OF TABLES

1.0 INTRODUCTION

A review of the available literature indicates that the fight against HIV and AIDS has been given great consideration by both the Ugandan government and other stakeholders (UNESCO, 1998). The same review notes that the situation of rising numbers of infections that continue to elude these efforts is causing confusion among the stakeholders as the disease continues spreading at an alarming speed. This situation is more alarming when it comes to the question of the youth who seem to be lost between modernity and their cultural/traditional heritage. It is very important to recognize that this dilemma creates a problem when children become sexually active and there is nobody to counsel them. The results are many, though the most traumatizing ones are the unwanted pregnancies and the acquisition of HIV, among other sexually transmitted diseases (STDs).

The study explored the role of pre-service and in-service teacher training institutions (TTIs) in the current strategy of abstinence, be faithful, and condom use (ABC). The assumption here is that society is safer when children and parents are educated on how to make decisions regarding sex and on the dangers of cultural practices and values that are HIV risk factors. Therefore, the study recognized the importance of TTIs, especially by appreciating the role that teachers play in the transmission of knowledge to young people. The study also critically analyzed the challenges teachers face in this fight and what can be done to empower them as frontline soldiers in this noble cause. At the policy making level, the study calls for a framework that creates avenues and

channels of empowering teachers in their training as custodians of HIV knowledge and the life skills that pupils or students need to safeguard themselves against the HIV. The study argues that the current strategy of fighting HIV is a failure because it undermined the importance of teachers in creating a mindset that devalues and condemns cultural practices that are HIV risk factors.

These values include, among others, polygamy, forced and arranged married, female genital mutilation on top of compulsory widow/widower inheritance. In addition, abstinence cannot always protect a girl or boy whose marriage is to be arranged by their parents over a beer pot and being faithful does not offer complete protection to a woman who is in a polygamous marriage and whose husband can get a woman as and when he feels so. On the other hand, teachers who can fundamentally educate the masses about the dangers of HIV risk factors can easily stop HIV that is transmitted through such means. These risk factors include: polygamy, forcing young people into marriages, the inherent dangers involved in circumcision regiments using a same knife and the need to respect women as equal partners in development rather than as part of a man's property.

1.1 STATEMENT OF THE PROBLEM

HIV is one of the greatest concerns for the current political administration of Uganda (Uganda AIDS Commission, 2012). When HIV was discovered in 1982 in Rakai district, the government immediately designed an open and public strategy of fighting it by using local and traditional means of announcing danger/trouble among the communities (Avert, 2005). This strategy worked well because by 1996 Uganda's strategy of fighting AIDS was applauded globally (UNICEF,

2002). While this strategy had achieved results, it was superseded by a global strategy that shifted focus to abstinence among the youth, faithfulness/fidelity among the married and use of condoms in case of failure to abstain or remain faithful. This strategy came to be known as abstinence, being faithful, and condom use (ABC).

At the beginning, this strategy was more appealing and pragmatic because it attracted a lot of funding from big donors such as the United States President's Emergency Plan for AIDS Relief (PEPFAR), international bodies such as the United Nations Children's Fund (UNICEF), Joint United Nations Programme on HIV and AIDS (UNAIDS), and Irish AID in addition to various international and local non-governmental organizations (NGOs). While many studies have applauded this strategy for fighting the disease in Africa (Avert, 2011), some scholars argue that it did not study/understand the role played by cultural realities in the transmission of HIV among the Africans (Mugisha et al., 2010).

Indeed, this has created a big shift among stakeholders who are now blaming each other in public instead of ironing out their differences and working together towards scaling down the national prevalence rate. In fact, the literature on this aspect of harmonizing the strategy with the HIV transmission realities that are deep rooted in culture is scanty and not straight forward (Uganda Bureau of Statistics, 2011). This study endeavored to highlight what went wrong and how the situation can be brought under control by integrating the component of training teachers as vanguards of this strategy. By so doing, the study spells out areas that need to be strengthened at the policy making level, especially in the training of teachers.

1.2 OBJECTIVES OF STUDY

1.2.1 General Objective

The major objective of this study is to highlight the role of the teacher training institutions in the ABC strategy that is being used by the Ugandan government in the fight against HIV. Having teachers who are trained and competent in handling HIV education, especially during their training in their formation institutes, is one of the best ways ensuring that the ABC strategy is well grounded in our societies.

1.2.2 Specific Objectives

In addition to the main objective, the following three objectives are addressed in this study:

1. To emphasis the urgency of integrating HIV training in the training of teachers;
2. To appraise the existing evidence and propose modifications in the current ABC strategy and its implementation; and
3. To propose new roles of TTIs in the implementation of this strategy, basing on the current knowledge bases available in the Ugandan system of education.

1.3 RATIONALE AND SIGNIFICANCE OF THE STUDY

The current situation of surging numbers of new infection cases of HIV in Sub-Saharan Africa calls for a review and critical analysis of the current model of fighting the pandemic among the

population. After a thorough analysis, it is clear that the ABC strategy did not invest much in understanding the role of educators and their formation institutions.

It can also be argued that because of the absence of an education strategy targeting cultural values and practices such as polygamy and female circumcision, among others, such archaic practices have continued to see the light of our days. This study exposes the skills that are required for teachers to handle their students in a manner that prepares them to face the challenges of HIV. Based on the above, this study is important for policy makers, educators and all stakeholders involved in the HIV crusade. This is because it explores in details the fundamental reasons and philosophies that account for the challenges of the ABC strategy as envisaged by the local people who think that the strategy is a foreign concept that does not put into consideration their culture. It also outlines the imperatives that the policy makers need to adhere to in order to scale down the spread of HIV.

In this study, the researcher argues and shows that it is culture and the search for meaning of life realities of the local people that should shape and guide the narrative in the fight against HIV because the African culture bides her people together as well as influences their social, economic and political relations. In this regard, the ABC strategy needs to be aligned to the education strategy. Above all, the education system should create a mindset that makes it easy for the ABC strategy to have meaning in the people's lives by creating a pool of individuals who are capable of influencing at least the minds of the young people in relation to HIV risk factors.

In the struggle against AIDS, the government of Uganda has put much emphasis on providing information about HIV transmission to the populace. However, not much has been invested in creating professionals in the HIV communication sector. Communication in this sector is not the "usual communication," because the subject matter is what hitherto was a taboo to talk

about in the open and, therefore, a preserve of certain members of society that were pre-ordained to do so. The importance of this study lies in the fact that it is a wake-up call to the policy makers to realize the importance of training a force that is capable of transmitting information about HIV with confidence.

The study is also important in identifying areas that need to be emphasized during the training of teachers in order to make them effective disciples of the ABC strategy. This will go a long way in forming attitudes and knowledge bases that are critical in the ABC strategy. By using mixed methods, the study adds evidence to demonstrate the importance of having teachers as central players in the fight against AIDS. The government needs to effectively fund and facilitate programs and activities that are critical in this approach rather than looking at the teaching fraternity as passive actors in this strategy. Lastly, the study reviews the current form of ABC and proposes adjustments that would strengthen the implementation of this strategy and the best practices that would create democratic classrooms where students and teachers would be able to exchange ideas and information about HIV.

In order to achieve the stated objectives, the study had to take a determined focus. In this case, the focus was to either be on policy issues or program improvement within TTIs. After a thorough analysis of factors on the ground, the study focused on program improvement in TTIs. This was basically important because study was more interested in understanding what TTIs can do in the current circumstances rather than policy advocacy.

Focusing on program improvement, the study tried to understand the competencies that need to be created in TTIs. For TTIs to play their role in ABC strategy, they need to put emphasis on those areas that make a teacher competent but not covered in the traditional teaching and

training of teachers. For a teacher to be effective, she/he needs both personal and professional competencies that are necessary to make him or her a channel of HIV knowledge.

In addition, the study took an interest in the curriculum that is studied in schools. It was quite surprising to find out that HIV as a topic is nowhere in the curriculum. It only comes out as a sub topic in the biological studies or religious education. Consequently, the study points out that this is a bigger challenge that TTIs can offer a hand in finding ways to bridge this gap or open up opportunities that can easily guarantee HIV a conspicuous space in the school curriculum.

Lastly, the study investigated the partnership needed to accomplish the role of TTIs in the fight against AIDS. In this investigation, it was clear that lack of a policy in relation to other stakeholders who are involved in the fight against the scourge hampers the operation of TTIs. TTIs have no policy framework that guides their operations with the outside world. This limitation has to be removed especially when one looks at opportunities that NGOs offer in terms of research and knowledge sharing.

1.4 CURRENT HIV SITUATION ANALYSIS AND TRENDS IN UGANDA

1.4.1 Situational Analysis

HIV remains one of the killer diseases in Uganda. It has affected negatively all ages, tribes and sectors of economic development. When it comes to the education sector, it becomes a challenge that nobody wants to talk about. According to Yusuf K. Nsubuga, the coordinator of HIV protocol in the Ministry of Education and Sports (MOES), HIV is a real challenge because the majority of

Ugandans do not feel comfortable to discuss the issue with children at home or with students at school. This point is well documented in several publications that detail how it is in many ways a cultural taboo for Ugandans to talk about sex and sexuality with their children (Morisky, et al., 2006; Jacob, et al., 2012). This is one reason it why is essential for teachers to help in the sexuality education process.

In a survey carried out by the MOES in 2012, it was found out that over 400,000 students, support staff and teachers were HIV positive making almost 25% of the school populations (MOES 2013). In this survey, it was astonishing to find out that these people who are part of the school's population are underground because of stigma and continue infecting others unknowingly.

Currently, the epidemiological situation of HIV in the country is worrying in the sense that HIV continues to spread at an alarming rate since the early 2000s as shown in the table below. The available data (Table 2) from Uganda AIDS Commission show that the national HIV prevalence rate has steadily remained high despite the gains in the early 1990s.

Table 1.1: *Showing National HIV Prevalence Rate in the selected Years*

Year	Annual Prevalence Rate
1998	8.3
2009	6.5
2010	6.7
2011	7.3
2012	7.2
2013	7.2
2014	7.1
2015	7.1

Source: Annual Reports of the Uganda AIDS Commission for 2000, 2010, 2012 and 2015.

According to the study conducted by the Uganda Network of AIDS Service Organisations (UNASO, 2016) from 2011 to 2015, this current situation is due to lack of effective means of communication among the policy makers and the grassroots communities where new infections are high. Similarly, indicates that while the government and its partners have increased their efforts in scaling up HIV and AIDS care and treatment in the recent past, young people are increasingly becoming complacent and returning to increased risky behaviors.

In relation to the above, Uganda AIDS Commission has identified lack of a social support framework as another factor that might be playing a role in this situation. Accordingly, the Uganda AIDS Commission, has established mechanism to offer such a support as outlined hereunder.

> The country has continued to mitigate the effects of the epidemic through psychosocial support, protection and empowerment particularly for the youth, PLHIV and OVC. Innovations included The SALT (Support on AIDS and Life through the Telephone) programme that provides counselling services through the telephone and the HIV Psychosocial support to People Living with HIV. The Y+ Beauty Pageant 2014 was developed to address beauty with Zero Discrimination among the HIV positive youth and to reduce stigma in Uganda. 11,735 para-social workers from communities such as Village Health Teams, People Having AIDs, Community Based Organisations and Functional Adult Literacy groups were skilled in child protection. (Uganda AIDS Commission, 2015, p. v)

The situation is more desperate when one looks at the rate of infections among the institutions of higher learning. In a study by Silberschmidt (2001), he notes that the number of students getting infected with the virus is ever increasing. This arises from the phenomenon of sugar daddies and mummies where the students are driven into cross-generational sex due to economic reasons. This is more worrying when it is known that young people of ages between 15 and 24 account for approximately 39% of new HIV infections (MOES, 2013).

It is also important to note that even though the prevalence rate is going up from 6.4% in 2004 to 7.3% in 2016, Ugandans are optimistic that the situation is still manageable (UNAIDS, 2015; Uganda AIDS Commission, 2016).

As the darkness of HIV hovers over Africa, the world offers hope in terms of financial, technical and research opportunities to fight the disease. Actually, much of what is known about HIV and the strategies that are being used to fight the disease are derived from foreign origins rather than indigenous knowledge. In other words, Ugandans have benefited from the world community in terms of resources and scientific knowledge that the country is using in the fight against the scourge (UNAIDS, 2016). In relation to this global dimension of the AIDS epidemic, the study provides a deeper understanding of what TTIs are doing or can do in relation to the fight against HIV and AIDS.

1.5 RESEARCH CONCEPT AND THEORETICAL FRAMEWORK

1.5.1 Research Concept

The role of teachers in the fight against AIDS is undeniable. This study is aimed at identifying HIV and AIDS knowledge gaps among pre- and in-service teachers and the attitudes they have towards the epidemic in general and those affected or can be affected by the disease. In this regard, the study intends to identify the role TTIs can play in the fight against AIDS and move towards empowering their students with skills needed to handle such challenges. Consequently, the study approaches the topic using a mixed research methodology. The reasoning behind this approach is

that whereas the qualitative method guides study in discovering what meanings or understanding that stakeholders attach to TTIs and to HIV, the quantitative methodology assists us in establishing the relationship between TTIs and the subject matter of HIV grounded in the sociological approaches.

Another concept that concerns this study is that teachers can play a great role in creating awareness that some African cultural practices that are high-risk HIV transmission behaviors need to be disregarded or modernized. For instance, the *imbalu* rite of passage (circumcision ceremony)[1] among the Bamasaba of Eastern Uganda, which has been identified as a catalyst in the transmission of HIV especially when the traditional surgeon uses a single knife for many participants, need to change. TTIs should empower teachers to inform society that these male youth can be circumcised under safe medical practices. Conceptually, the driving force here is to find out the first causes and the cultural/social trends of such a behavior and reasoning behind it.

In addition, the TTIs need to find appropriate pedagogical methods that are not confrontational but effective in passing this information to pupils/students and the entire society. This is important because it will push policy makers especially in the education sector to conceptualize the fight against AIDS as creating awareness through appropriate pedagogy and knowledge that is readily accepted by society. This conceptualization can also be reinforced by teaching children skills that will enable them to manage their sexual lives (UNESCO, 2002).

[1] Imbalu is an initiation ceremony among the Bamasaba of eastern Uganda and western Kenya that culminates into a circumcision ritual where a local surgeon uses traditional cherished methods and means. The practice exposes young boys to HIV. This is because the surgeon uses a single knife on a number of them without necessarily caring out universal health precautionary measures.

1.5.2 Theoretical Framework

The study uses a constructivist theoretical perspective that draws from the post-structuralism and sociological theory of knowledge advanced by Berger and Luckmann (1967). In unison, these theorists argue that what people take as reality is what they socially build consensus on and believe in as true (Berger & Luckmann, 1966; Foucault, 1995). Under this perspective, what makes sense to people is what they understand from their own lived experiences of reality. Reality cannot be foreign to people because when it appears so, it becomes meaningless and has no bearing to their day to day living. In other words, reality is socially constructed through a collective process that bides people together (Berger & Luckmann, 1966).

The theories in this study point to the fact that the Ugandan society in particular has its own understanding about HIV that is entrenched in people's customs and traditions. It is therefore imperative that the struggle against AIDS is grounded in the local understanding and concepts that give life meaning. In other words, the fight against AIDS must be based and enshrined into people's culture and discourse (Foucault, 1995). Working from this perspective, this pandemic cannot be fought and won by using exclusive approaches or strategies, which inevitably leave out some members of society. Instead, the most effective strategies involve the entire society. All stakeholders should be involved in laying and designing a strategy to fight the epidemic.

In 2000, Peter Piot who was the executive director of UNAIDS, described HIV as a political problem (UNAIDS, 2000). For Sub-Saharan Africa, HIV is the most serious clear obstacle to the social-economic development efforts that needs a clear political agenda from both local and global leaders to fight it. The local people need to be helped to construct a socio-economic reality around HIV. This can be done by using cultural education that re-evaluates cultural practices and

values in the local communities. This calls for a social reform or cultural transformation that can only be achieved by creating a pool of teachers who can move beyond both cultural and current pedagogical challenges in order to handle the topics of HIV education effectively.

In this study, the researcher attempted to show how grassroots mobilization, especially if undertaken by teachers, could be an effective means of fighting AIDS in the Sub-Saharan Africa. This is because teachers are respected members of society and they have a large catchment that brings together people of all walks. In agreement with the social constructivists, the researcher explored sociological realities and knowledge bases in the African cultures and how they relate to the situation of HIV. In addition, special attention was paid to how the social phenomenon and objects of consciousness interact in the social context of understanding HIV.

By using this approach, the researcher studied the relationship between the spread of HIV and the African understanding of the social selves as expressed in their social customs and religions. This is well-summarized in the African philosophy of Ubuntuism, "I am because we are and since we are, therefore, I am" (Mbiti, 1999). This understanding is based on the knowledge, current development realities and social phenomenon of the African people. Such an outlook is instrumental in the fight against AIDS. Ideally, the narrative in the fight against AIDS should be drawn from the reality that emphasizes life experiences of any people as derived from and maintained by their social interactions (Berger & Luckmann, 1967). This idea is well illustrated by Berger and Luckmann (1967) when they argue that:

> all knowledge, including the most basic, taken from granted common sense knowledge of everyday reality, is derived from and maintained by social interaction. When people interact, they do so with the understanding that their respective perceptions of reality are related and as they act upon this understanding of their common knowledge which reinforces their understanding of reality. (p. 197)

In relation to the above idea, it becomes clear that the fight against AIDS cannot be won without constructing an objective reality that evolves from people's own understanding of the epidemic as a social problem that requires a negotiated trajectory. It should be a strategy that the education system in the country in general and TTIs in particular are willing to identify with. According to Foucault (1995) this is a normalization process whereby society identifies what is abnormal and normal by framing and organizing knowledge and truth into a web of power property relations, views and communal responsibilities (Facault, 1995; Bogdan & Bikien, 2004; Blumer, 1999; Smith, 2000).

This theoretical framework echoes the idea that it is important to understand the perspective of the subject community and how they view their world by seeking to understand the meaning they attach to their communal events and human interactions (Smith, 2000; Blummer, 1999). In this struggle against HIV, efforts should be directed at capturing people's fullness of experience and richness of living by imparting the right knowledge bases by the right person which is incidentally one of the major reasons why the TTIs exist.

More so, this framework highlights the role of cultural education in the fight against HIV. Cultural education can easily become a function of all social transformation or development theories (revolutionary, modernization, grassroots mobilization and critical development) needed to suppress the spread of HIV. The researcher strongly believes that none of these theories can in isolation lead to a harmonized position of fighting or a better understanding of HIV situation in Uganda. A deliberate approach, incorporating the views of all stakeholders in this situation leads to a more pragmatic and accommodative approach.

1.6 RESEARCH QUESTIONS

In an attempt to understand the role of TTIs in the ABC strategy and what the education sector is doing to incorporate HIV education in the teacher training programs, the study is guided by the following research questions:

1. Is there any need of embedding HIV education as part of pre- and in-service teacher training?
2. What evidence is there to warrant modifications in the existing ABC strategy?
3. What competencies (knowledge bases) and attitudes are supposed to be developed during the HIV education training processes?

1.7 DISSERTATION ORGANIZATION

This study was carried out in Central Uganda among six TTIs that are situated in Kampala, the capital city, and its suburbs. It addresses issues that are impacting teachers and their capacity to effectively spearhead the ABC strategy in the fight against the HIV pandemic. Using a mixed-method research design, the study sought to develop a deeper understanding of the role of teachers in this fight and the areas that need special attention to fill the gaps that seem to be affecting the outcomes of the ABC strategy. In this regard, the research proceedings and findings are captured under five chapters.

The first chapter talks about the research problem, objectives of the study, situates the study in terms of scope, justifies the methodological choice and thereafter states the research questions. This is followed by Chapter 2, which delves into literature about the topic, discusses the role of

teachers in the fight against AIDS and offers insights into realities that teachers and TTIs face in the implementation of the ABC strategy.

The third chapter highlights the research methodology used in the data collection and analysis processes. It also justifies the choice of the methodology and offers the positioning of the researcher in the research process. The same chapter discusses the selection of the sample and factors that were considered in this selection.

The fourth chapter discusses the findings of the study and interprets the data in relation to the research questions. This leads to chapters five that offers recommendations, insights into future research and general conclusion.

2.0 REVIEW OF THE LITERATURE

2.1 INTRODUCTION

This literature review is organized basing on the prevailing circumstance in the country and the need to strengthen TTIs to play a leading role in the fight against AIDS especially in schools as they try to implement HIV education. The major problem of HIV Education like any other topic relating to sex education in higher institutions of learning requires a structural adjustment that would be permissible in a strong cultural and conservative society that Uganda is. Consequently, the disturbing question is what dosage of sex education would be permissible in institutions of higher learning to allow a fundamental understanding of role of sex in the transmission of HIV? This makes the teaching of HIV Education, which a segment of sex education a no go area for groups of people like teachers. Therefore, for TTIs to play their role in the implementation of the ABC strategy effectively there are areas that need to be reviewed substantially and these areas were covered by this study in its literature review under thematic areas.

Under these thematic areas, TTIs should be able to articulate the available knowledge about HIV and evolving struggle mechanisms against AIDS. This can only be possible when TTIs develop a well-planned pedagogical framework that begins with the people's understanding and meaning of HIV in their individual lives and the social dynamics involved in fighting this pandemic. Consequently, the literature review highlighted areas that form a backbone of any effective HIV education program or curriculum that has the potential to empower TTIs to play a leading role in the ABC strategy. These thematic areas are discussed under the following sections:

(1) the origins of the ABC strategy in the fight against AIDS, (2) better understanding of ABC history in Uganda, (3) major modes of HIV transmission, (4) factors favoring the spread of HIV, (5) the role of education in the fight against AIDS, (6) the challenges faced by pre- and in-service teacher training, (7) the education sector responses to HIV, (8) HIV information and TTIs curriculum, (9) other stakeholders in the fight against AIDS, and (10) the role of pre- and in-service teacher training in the context of HIV.

2.2 THE EVOLVING STRUGGLE AGAINST HIV AND AIDS

According to the Centers for Disease Control and Prevention (CDC), HIV was recognized as a new disease in 1981 after several young men mostly from the homosexuality circles started dying in big numbers from opportunistic infections and other kinds of rare cancers (CDC, 1981). However, HIV became a major concern in Uganda during the early 1990s when the pandemic started killing people in big numbers around the shores of Lake Victoria. In response to this, the government of Uganda adopted a multi-sectoral approach of fighting the scourge. In this regard, the Uganda AIDS Information Center was formed with the task of providing testing and counselling services to the population. This was later followed by the creation of the Uganda AIDS Commission with the mandate of developing a national HIV policy (Avert.org). Similarly, Dyk (2001) gives a chronological account of how HIV invades a human body and the changes that comes thereafter until a person dies. In the same book, Dyk underscores the importance of education in the fight against AIDS. He argues that the educators have the forum and obligations of making sure that our children are given skills that are necessary to survive this scourge (p. 165).

In 2000, Peter Piot who was the executive director of UNAIDS by then, described HIV as a political problem (UNAIDS, 2000). For Sub Saharan Africa, HIV is the most serious clear obstacle to the social-economic development efforts that needs a clear political agenda from both local and global leaders to fight it. The local people need to be helped to construct a socio-economic reality around HIV. This can be done by using cultural education that re-evaluates cultural practices and values in the local communities. And this calls for a social reform or cultural transformation.

This call for cultural and social transformation is reinforced by the narrative drawn from sociologists like Berger and Luckman (1967). They argue that any effort towards social transformation must be drawn from the reality that emphasizes life experiences of any people as derived from and maintained by their social interactions (p. 196). This idea is well illustrated in their book, The Social Construction of Reality when they argue that:

> all knowledge, including the most basic, taken from granted common sense knowledge of everyday reality, is derived from and maintained by social interaction. When people interact, they do so with the understanding that their respective perceptions of reality are related and as they act upon this understanding of their common knowledge which reinforces their understanding of reality. (p. 197)

The point that is clear in this argument is that the understanding and later on the fight against AIDS must evolve from people's understanding of their environment and life situation. This is very critical today because any attempt to fight AIDS outside people's understanding and social realities has failed completely. The success of any strategy against HIV especially the current approach that is grounded in the ABC philosophy must take note of this reality and understanding.

In the quest of playing a constructive role in the fight against AIDS, teacher training becomes a big component because it is a starting point for empowering people who have a platform

that positively influences the social attitudes and thinking of young people who are mostly affected by this disease.

2.3 THE ORIGINS OF THE ABC STRATEGY IN UGANDA

At the onset of HIV in Uganda, the government formed the National AIDS Control Programme as an established arm of government to fight AIDS in the country. This was actually the first national response to the scourge (Natulya, 2002). Under this response, the government developed a multifaceted approach to combating the epidemic. This approach involved many key stakeholder representatives, including religious leaders, political leaders, and members of the civil society, NGOs that are faith based and those formed by people living with HIV (Epstein, 2004; Green, 2003; Kaleeba et al., 2000). The political leadership, headed by the President himself championed this cause. According to Green et al. (2006),

> In face-to-face interactions with Ugandans at all levels, he [President Museveni] emphasized that fighting AIDS was a "patriotic duty" requiring openness, communication and strong leadership from the village level to the State House. His charismatic directness in addressing the threat placed HIV/AIDS on the development agenda and encouraged constant and candid national media coverage of all aspects of the epidemic, including/emphasizing behavior change. (p. 338)

Similarly, many religious leaders trained their followers on the best approaches and language to use in confronting the scourge. Pulpits and any other opportunity of preaching the word of God (e.g., weddings, funeral and prayer meetings) became an opportunity to educate people about HIV, especially on how the virus is transmitted and the best means and way of avoiding it (Ruteikara et al., 1995). By 1990, the religious leaders and other NGOs were actively helping to lead the fight against AIDS in the country especially in HIV education and

pragmatic/tangible prevention activities (Kaleeba et al., 2000; Kirby, 2003; Sabatier, 1988). Faith-based hospitals were the first to design programs and outreach activities to address the plight of windows and orphans (Kitovu Hospital, Mbuya-based Catholic HIV initiative) while the Islamic Medical Association of Uganda (IMAU) directed its efforts on AIDS education project in rural Muslim communities targeting local religious and community leaders (Kagimu et al., 1998; UNAIDS, 1999).

In summary, the initial HIV kit rotated around two major pillars. These were abstinence and being faithful to one's partner(s) as primary prevention measures. And in cases where individuals were HIV positive, the message was that such individuals should be treated with respect and compassion based on religious and traditional values that compelled society to look after the sick. Briefly, this initial package included love and care of affected people, importance of fidelity among the married, abstinence and chastity, voluntary HIV counselling and testing, support and care for orphans and safe of blood transfusion services (Tumushabe, 2006).

In fact, this message was against the promotion of condom use as the first strategy, except as a final resort in the prevention of HIV and other STDs (Morisky, Jacob, Nsubuga, & Hite, 2006). Generally speaking, the promotion of condom use among the youth and young adults was perceived by the public as a way of encouraging them to engage in pre-marital sex and extra marital sex. The inclusion of the condom use in this strategy has remained a controversial issue among some religious sects and it has also shaped the outlook on the fight against AIDS by calling upon government to help, especially when it comes to issues related to fighting poverty and the emancipation of women (Murphy et al., 2006; UNICEF, 1988).

In response, President Museveni has continually argued that condoms should be promoted in order to protect and save lives of sex workers, but only after all efforts have been made towards

abstinence and being faithful. He gave a speech on May 15, 2004, at a public rally in Rakai, where he declared:

> I am going to review this issue. I will open war on condom sellers. Instead of saving life they are promoting promiscuity among young people. When I proposed the use and distribution of condoms, I wanted them to remain in town for the prostitutes to save their lives. (*The New Vision*, 2004, p. 2)

As a speaker at the International AIDS Summit in Bangkok in July 2004, Museveni argued that the promotion of condom use among the unmarried is one of the ways of encouraging promiscuity and termed condoms as an "improvisation and not a solution." He emphasized the need to establish "optimal relationships based on love and trust instead of institutionalized mistrust, which the condom is all about" (IRIN, 2005).

The challenge for TTIs is finding the right packaging for this information. Their role should be in finding acceptable approaches to material content and pedagogy that promotes the strategy. The TTIs should make it categorically clear that the three components of the strategy are complementary, synergistic, and inseparable components in the country's HIV national prevention and control programs. This should be reinforced by an explanation that does not demonize the use of condoms especially among discordant couple who found themselves in a permanent relation. It must also be the role of TTIs to explain to the students that condoms can only offer protection when they are properly and constantly used (CDC, 2006; Uganda AIDS Commission, 2014).

2.3.1 A better understanding of the ABC history

The study defines ABC as an aggregate approach to the fight against AIDS using a combination of means and methods that emphasis Abstinence, Being faithful and Condom use when the two fail. Unlike other African political leaders, HIV and AIDS were defined by the Ugandan political

leaders as a threat to the national development and security. Consequently, President Museveni took steps and actions that were deliberately aimed at scaling down the spread of HIV and protecting young people from becoming infected. In this approach, the government launched a well-coordinated campaign against HIV and AIDS through the media, posters, radio messages, and public rallies addressed by the President himself (Okware, 2005**)**.

This lead to the government training teachers to approach issues related to HIV and AIDS more proactively. Within a short time period, the government developed a multisectoral approach towards the fight against AIDS that involved cultural leaders, churches, and private citizens who had first-hand experiences about the disease (Nsubuga & Jacob, 2006a). In a nutshell, this strategy rotated around open and candid discussions of HIV and AIDS, reducing AIDS stigma (Nsubuga & Jacob, 2006b), improving testing facilities, and the provision of better care for those infected (Okware, 2005).

In the Ugandan case, the ABC strategy received support and funding from PEPFAR and aimed at either reducing the spread of HIV or evolving models that could eliminate the disease in the long run (Edenburgh, 2007). Briefly put, under the ABC strategy, the government and its agencies seeks to fight AIDS and stop the spread of HIV by encouraging married couples to remain faithful to each other, young people to refrain from sexual activities, and empower people to understand that condoms, when consistently and properly used, can protect individuals who cannot abstain or remain faithful to their sexual partners (Olupot-Olupot, 2006).

In this regard, TTIs throughout the country are expected to produce teachers who are capable of making this message clear to their students. They should be able to train teachers who can talk publicly about HIV and AIDS without appearing confrontational to traditional customs and norms about sex. More important, TTIs should be able to make the point that none of the three

pillars can work in isolation to either reduce the speed at which HIV is spreading or eliminate AIDS. In this era of HIV and AIDS, TTIs are also important in creating an atmosphere that opens a debate on exploring other areas that can easily entrench this strategy in a variety of cultural and social settings. This is well articulated by Murphy and colleagues (2006) who argues that;

> We must listen to women and men in order to address their needs; this in itself constitutes a worthwhile AIDS prevention research agenda. It makes no sense either to dismiss or to promote "the ABCs" as if this were a strategy or program rather than behavioral responses to social mobilization, leadership, and empowerment. We must work to create an environment that makes these behavioral responses logical and possible for both women and men. The evidence suggests that these efforts will reap rewards in declining HIV rates. (p. 1445)

In other words, TTIs play a crucial role in providing avenues of research and creating competent and confident teachers who are willing and capable of confronting social challenges and cultural barriers that teachers meet in teaching about HIV education. In this case,there remains the challenge of developing a pedagogy that is age-related and allows an educative discussion and dialogue between teachers and their students.

2.3.2 The Ugandan case analysis

The ABC strategy has been nationally and internationally recognized as one of the reasons that has helped Uganda fight the pandemic that once threatened its development agenda. In Uganda, the basic emphasis has been on abstinence before marriage and fidelity afterwards (A and B), as compared to a focus on using condoms (C). Many leaders at all levels openly discouraged the use of condoms among the youth in general and by students in higher education institutions (including in TTIs). President Museveni was also against the promotion of condoms use as the first line of prevention. In an aggressive manner, Museveni went throughout the country advocating for

abstinence among school-going youth and faithfulness among married couples. He captured this idea as follows: “I am not in favor of distributing condoms in primary and even secondary schools. Leave them in shops so that the ones who are badly off can buy them. Let condoms be a last resort” (New Vision, 2004).

To make this strategy more dynamic and responsive to the prevailing situations, the government and its agencies have developed in collaboration with members from the donor and the modalities of civil communities’ that allow for the advocacy of condoms in an appropriate manner (UNASO, 2015). For instance, in 2001, the government developed a program called the *National Condom Policy and Strategy* through the STD/AIDS Control Programme of the Ministry of Health (MOH). Under this program, the MOH was tasked to quietly promote the use of condoms with appropriate education. This nationwide program has since evolved and taken in other stakeholders from all sectors(government, health care workers, religious leaders, NGOs, academics, business community, and the private sector) who are looking at condoms as a viable tool of fighting HIV especially among discordant couples (Uganda AIDS Commission, 2016).

From the above, it is evident that whereas abstinence and being faithful are strong prevention pillars especially when it comes to open discussions about the fight against AIDS, Condom advocacy has also started gaining momentum. This is imminent especially when it comes to dealing with issues of discordant couples, where unfaithfulness threatens the existence of the family and the protection of sex workers who are part of society in many Ugandan towns (Okware et al., 2005). Therefore, TTIs are in a better position of driving this outlook where abstinence, being faithful, and condom use are looked at as complementary and synergistic in the national HIV and AIDS control program regardless of current prohibitive arguments on condom use that seem

to be based strictly on moral issues. This is very important because the ABC strategy is about the elimination of HIV rather than just questioning the moral integrity of those affected by HIV.

2.3.3 Historical role of local organizations, funding and government agencies

When it comes to the ABC strategy, various local organizations and faith-based sects have played different and important roles in the advocacy and implementation of this strategy. Local organizations like The AIDS Support Organisation (TASO) and the UNASO have been on the frontline advocating and spearheading the activities and programs of ABC especially through dialogue and sharing of strategic information (UNASO, 2015). From a religious perspective, faith-based organizations through their teachings advocate for abstinence among the young people and call for fidelity and faithfulness among married couples. In fact, the common denominator among these local organizations has been a call to return to cultural values that emphasized virginity and chastity among the young people.

This understanding has framed a government's response especially towards the media and other education outlets that are engaged in the fighting against AIDS. In relation to this, the Ugandan government has written stringent laws concerning pornography and against the promotion of norms and activities that seem to be in direct confrontation with norms and beliefs that encourage and propagate the ideals of abstinence among youth and fidelity among married couples. It is on this basis that laws and regulations against pornography and indecent dressing have been promulgated (Uganda Parliament, 2013). It is also against this background, that the education sector has been mandated to filter what is taught in schools and the literature that is exposed to the young people.

From a cultural standpoint, most Ugandans are sensitive when it comes to open sex talk and whoever ventures to do so risks being misunderstood or to lose his reputation and social status. This was the primary rationale for the establishment of organisations like *Straight Talk*, which have been instrumental in communicating HIV related information to the young adults in both primary and secondary schools (Jacob et al., 2006). Therefore, TTIs can play a great role in the ABC strategy and the fight against AIDS by supporting research about cultural accepted ways of communicating the HIV information without being culturally or religiously offensive and confrontational. By so doing, TTIs will be central institutions in providing local organisations, funding agencies and government with information about accepted approaches to fighting HIV and AIDS especially in communities that have cultural norms and practices which are HIV risk factors.

In relation to funding the activities and operations for fighting HIV and AIDS in Uganda, the following agencies or organisations have played a great role in terms of providing financial resources, technical expertise, and training opportunities. Their areas of concentration and activities are outlined below. This information was compiled from (UNASO, 2015).

The Joint United Nations Programme on HIV/AIDS (UNAIDS) co-ordinates the United Nations bodies (e.g., UNHCR, UNICEF, WFP, UNDP, UNFPA, UNODC, UN Women, ILO, UNESCO, WHO and the World Bank) in the fight against AIDS and the spread of HIV. A major objective of UNAIDS (2016) is to achieve "zero new HIV infections, zero discrimination and zero AIDS-related deaths." In Uganda, the focus is on HIV and AIDS research, education on HIV prevention, care and treatment of HIV opportunistic diseases like malaria and TB.

In Uganda, the Australian Agency for International Development (AusAID) works hand in hand with the Global Fund and UNAIDS to add values to the existing HIV and AIDS programs especially in the areas of HIV prevention and reduction of drug users.

The Japan International Cooperation Agency (JICA) extends the Japanese Government's commitments to the elimination of HIV and improving of the conditions of people living with AIDS. Currently, JICA works with the Global Fund in the fight against AIDS and its opportunistic diseases like Tuberculosis and Malaria. In this area their major contribution is in support of quality testing, compilation, and analyzing health information.

Irish Aid's major focus is in the support of the programs that are related to people living with HIV. Their focus is on breaking the vicious cycle of poverty as a means of empowering vulnerable people in the fight against the spread of the virus. Irish Aid supports the Uganda government with over €100 million every year to fight against communicable diseases that are related to HIV.

The Global Fund focuses mainly on providing funding to fight against HIV/AIDS, Malaria and Tuberculosis. Apart from this, the Global Fund is currently funding Uganda's efforts of strengthening human and technical capacity of health workers.

The United States Agency for International Development (USAID) is primary engaged in strengthening the national efforts of expanding the availability and accessibility of antiretroviral therapy to many Ugandans who are not receiving this treatment. This is mainly carried out by funding small-scale projects and ongoing activities of local partners like The AIDS Support Organisation (TASO).

2.4 MODES OF HIV TRANSMISSION

In this section, the study explores the methods and means that are responsible for the transmission of HIV from one person to another. In Uganda, the primary mode of transmission of HIV is through heterosexual intercourse (UNAIDS, 2012; UNICEF, 2012; Uganda AIDS Commission, 2013). The major challenge that comes up immediately from such a mode of transmission is that the effects of HIV fall immediately on families (Niwagaba, 2010; Kagarura, 2012). This is because it affects married men who are the primary bread winners or young adults who are economically productive thus reducing the social capital for development. According to Wabwire (2010), heterosexual transmission accounts for over 84% of all HIV infections in the country.

Another major channel of transmission of HIV in Uganda is from a mother-to-child during childbirth. In this mode of transmission, children are infected either in the process of birth or afterwards, especially through breast-feeding (UNAIDS, 2012). According to UNICEF's annual report of 2012, mother-to-child infections occur after birth especially when their mothers do not go for ante-natal checks and breast feed their infants. This is a major challenge in a country where the biggest numbers of the mothers are peasants and do not have the means to purchase or have access to formula for their children.

In spite of the availability of medicine that can protect children from getting infected, it is estimated that in the last ten years, a quarter million children under the age of 15 in Sub-Saharan Africa have died from HIV infection got from their mothers (UNAIDS, 2012). It is also important to realize that even those who have heard about it cannot afford the cost. This forces many mother to breast feed their children. Despite the potential risks associated with breastfeeding, including

the risk of HIV transmission from mothers to their breastfeeding children, scholars have concluded that the advantages of breastfeeding children far outweigh the risks (World Bank, 2010).

Apart from the above-mentioned modes of transmission, there are other sources of literature that show that HIV has been transmitted through other means like using unsterilized gadgets during the process of initiation ceremonies especially circumcision of both young boys and girls (*The New Vision*, 2013). These are common practices in the Eastern parts of the country where female genital mutilation and male circumcision are part of such ceremonies. Despite the incredible evidence that some people have acquired the virus in such circumstances, people seem to be stuck in their old and traditional way of doing things. This is the time to empower teachers in this area to have the capacity and the knowledge to influence the attitudes of the people they live with. This can only be achieved only when teacher-training institutions have the audacity to incorporate HIV education in their program (Ediau et al., 2015).

The unfortunate reality is that such transmissions are the result of using archaic and unprofessional methods of surgery that do not consider universal guidelines of keeping surgical instruments safe. For instance, a local surgeon can use one surgical knife over a number of candidates without sterilizing it. In such situation, it becomes easy to transmit a virus from one person to another.

From the early 1990s, efforts have been put in place to ensure that HIV transmission through blood transfusion is highly controlled (Avert, 2014). Incidentally, blood transfusion pauses an epistemological question in developing countries because World Health Organization (WHO) claims that 5-10% of all HIV infections worldwide have been acquired through transfusions of infected blood and blood products (WHO, 2013). This mode of transmission points

to the fact that knowledge bases and the corresponding skills plus adequate technology remains a subject that is wanting in the face of the fight against AIDS in developing countries.

In Africa and Uganda in particular, political leadership in collaboration with WHO have tried to make sure that safe blood transfusion is guaranteed. In spite of this achievement, the WHO report that was released on the World Blood Donor Day in 2014 indicates that individuals who receive blood transfusions that are contaminated with HIV have a 90% chance of becoming infected. The same data estimates that each year, up to 13 million units out of more than 75 million units of the global blood supply are not screened for HIV or other transfusion-transmissible infections like hepatitis B and syphilis (WHO, 2014).

Worse still, research still indicates that transmission of HIV through blood transfusion is still possible due to the following three epistemological reasons:

1. Donations may be collected during the window period of infection; (This is a period when the donor is infected but has not yet developed positive HIV laboratory tests.)
2. Infection with variant strains of HIV that may escape detection by current screening apparatus.
3. Since blood transfusion is done by human beings, a mistake at any level of blood screening can lead to this disaster.

In this situation, it is important to recognize the fact that people who live in developing countries, especially Sub-Saharan Africa, have a high chance of receiving blood that is contaminated with infectious diseases like HIV, hepatitis, malaria and syphilis compared to people living in the developed world. This is because developing countries lack technical skills and technology to minimize and reduce chance of transfusing HIV contaminated blood and its products (UNASO, 2014). In the absence of this technology, teachers can take it as an extra duty to inform

their societies about the dangers inherent in blood transfusion. This can only be achieved when they get such training in their formation periods.

In addition, this ugly picture is further collaborated with the WHO assessment report of 2013 that made the following observation;

> In Sub-Saharan Africa, 22% of countries report that they do not have an adequate system to store blood. They lack the necessary facilities, as well as consistent electricity to refrigerate blood and blood products. (Refrigeration is necessary to prevent bacteria growth in the blood products.) In addition, about 51% of countries in the area report that they experienced interruptions in general blood supplies. This is especially common in areas that are faced with political instability and armed conflict. In addition, poor countries lack funding to employ and train healthcare workers to handle blood and blood products safely. (WHO, pp. 7-9)

It is therefore important to realize that the economic situation in the developing world and the infrastructure development affect adversely the fight against AIDS especially in handling of blood and its product as a cross- cutting reality in the treatment of diseases and other medical complications that might need blood transfusion. The case in point is the treatment of malaria and over bleeding during child birth by rural folks. In all these cases, blood transfusion remains central to the treatment of such cases and can therefore play a big role in the transmission of HIV.

2.5 FACTORS FAVORING THE SPREAD OF HIV

Scholars like Wagner (2011) have attributed several factors to the continued sky rocketing numbers of people who are getting infected by the disease. These factors have not be taken seriously in terms of pointing them out and condemning them or finding a way of aligning them to the current realities imposed on society by HIV. Fortunately, several studies continue to show that developing an understanding about the role played by these factors in the spread of HIV is as

important as finding the cure to the scourge (Wagner et al., 2011). These four factors are described below.

2.5.1 Multiple partners

The available literature indicates that many young men between the ages of 15 and 29 who are fundamentally in school, find themselves entangled in societal perceptions and practices of engaging in multiple sexual partners (International AIDS Society, 2006; UNFPA, 2003; UNICEF, 2006). Multiple sex partners (MSP) increases chances of acquiring HIV in particular and other STDs in general when such individuals have unprotected sex.

In a study that was carried out in Uganda by Anil Joshi (2010), many young men are encouraged to engage in MSP relationships in order to gain experience and control of the opposite sex as future men and husbands. Throughout their upbringing, anything that challenges or stands in their way to gain experience and control of the opposite sex is a threat to their masculinity development. Consequently, TTIs have an important role to play in training teachers at all levels with the knowledge and skills that are needed to inform young men and women about the dangers that are inherent in having MSP in relation to HIV and AIDS (Gregson, et al., 2001; Brown, 2001).

In a related study by the MOH and ARC Macro (2005), it was noted that many young men in Uganda fall victims of their cultural upbringing that motivates them to engage in risky sexual behaviors, including of having unprotected sex. These expectations and norms that are handed down from generation to generation often shape youth attitudes and perceptions of pre-marital sex as an expression of maturity. Such a liberal approach to sex education is problematic to any effort against the spread of HIV including ABC. Unfortunately, it becomes a factor in the spread of HIV

especially under circumstances where the use of condoms is not given an equal emphasis. This places a professional and moral obligation on TTI administrators and teachers to disseminate HIV prevention strategies that can help combat societal norms that expose young men and women to risky MSP behaviors (Brown, 2001).

According to Brown (2001), the issue of MSP is further complicated by what he calls socially-determined gender norms of young men that aimed at making males controllers, providers, and primary decision makers. Having MSP seems to put many young men in a position of power over their girlfriends, provide for their needs and above all, tests their capacity to make decisions when the time comes for them to settle down in marriage relationships. This is a situation that TTIs can help address by encouraging their students to overcome and avoid such traditional perceptions and attitudes.

2.5.2 Corruption and embezzlement

Uganda as a country has been highly ranked as one of the most corrupt countries in the world (*The Red Pepper*, 2014). Corruption and embezzlement of resources mobilized for the fight against HIV is one of the factors that have fueled the spread of the scourge. During the Ogoola Commission that was established by the government in 2011 to study this phenomenon, it was discovered that activities and programs intended to stop or scale down the spread of HIV were never implemented. Instead, the resources and funds for this noble cause were misused and diverted. In the history of HIV in Uganda, a number of senior government officials have been accused of stealing and diverting resources meant for this cause to their personal ends (Wang, 2013; Kaufmann et al., 2011). The case in view is the US$45 million from the Global Fund to Fight Aids, Tuberculosis

and Malaria in 2010 plus the diversion of US$12 million from the Global Alliance for Vaccines and Immunizations in 2006.

These cases and other related mismanagement of resource aimed at fighting HIV culminated into the suspension of donors funds towards the struggle against HIV in 2012. This imposed a great challenge to anybody involved in this struggle. In the words of one leading HIV advocate, corruption and embezzlement of funds meant to fight HIV is more dangerous and devastating than the virus itself. Such acts contradict the sense of humanity that is at the backbone of all struggles against the scourge (Kagarura, 2012).

2.5.3 Poverty

Some HIV activists believe that the fight against AIDS is misguided and instead the guns should be pointed towards the fight against poverty. During his reign as a the president of South Africa (1999-2007), Thambo Mbeki took a center stage and argued that what kills people is not HIV but poverty and therefore, the world should concern itself with minimizing and lowering of poverty levels than fighting the symptoms of poverty like AIDS (Doyal, 2013; Namara, 2013).

In relation to poverty, Nongovernmental organizations like Oxfam and Red Cross, continue to rise the concerns about the role of poverty in the spreading of HIV. Poverty plays a big role in forcing young people into marriages where the HIV status of the husbands is not known on top of making it hard to get treatment for the poor who get infected. To this point, the relationship between poverty and HIV and AIDS is very strong. For instance, HIV and AIDS increase the level of poverty in the impoverished families and poverty in turn fuels the process of turning HIV

pandemic into full-developed AIDS cases. HIV drains household and community resources thus entrenching poverty (Namara, 2013).

In the words of Mbeki, AIDS is a breakdown of immune system due to malnutrition and general ill health. In this regard, the only way to reverse the effects of HIV in Africa is to work towards the alleviation of poverty (Fassin, 2007). This argument makes a logical sense but is not pragmatic at least in a near future. What Ugandans in particular and Africans in general need is insulation against this scourge before they are empowered to fight the biting levels of poverty. In this study, efforts focused on making a thorough analysis of the effects of HIV in relation to fighting the low levels of backwardness, ignorance and underdevelopment. Therefore, this study underscores the need to study the correlation between poverty and HIV.

Actually, the available literature indicates that an individual's capacity of to live a productive life and coping up with HIV and AIDS depends on their economical muscles and the assets they have. The poorest of the poor succumb easily to HIV as they cannot manage to continue paying their bills, seek medical treatment leave alone meeting their basic needs (Doyal, 2013). In other words, poverty exacerbates misery, hopelessness and stigmatization among the poor people who are affected by HIV (Oxfam Annual Report, 2016).

2.5.4 Culture

Uganda as a home of over 35 million people has over 50 major cultures with each culture having a different understanding towards HIV as a social reality and how it can be fought using the same culture. It is important to note that all stakeholders should take a deep and focused cultural study

that harmonizes similar or cross cutting cultural realities that can provide a platform for a national policy against HIV and AIDS (Maleche & Day, 2011).

The challenges that the ABC strategy faces emanate from the fact that it ignores the fact that culture is at the root of all causes of HIV in the population and must play a big role in finding the solution to the same problem. Importantly, this challenge cannot be addressed without a unifying national cultural policy. This well captured by the UNAIDS and Economic Commission for Africa when it asserts that; "Where cultural norms have not been taken into account in HIV and AIDS prevention strategies, prevalence rates continue to rise" (UNAIDS, 2013).

Consequently, this study tries to emphasize the fact that the studies that link the spread of HIV to cultural factors and patterns of social behavior have been missing in the struggle against AIDS and this is a big challenge in itself. Integrating a cultural approach in the fight against HIV especially questioning the current dilemma of holding unto cultural practices and values that are HIV risk factors, a deliberate attempt to situate HIV in our cultural norms plus a strategy that uses cultural resources and institutions to fight the scourge is the way to go.

The fight against HIV is more complicated and tricky when it comes to dealing with the youth. In a national survey carried out in 2012, it showed that 2% of juveniles and 5% of the youth were infected with the virus (The Monitor December,2013). In this survey, it was found out that the major cause of this phenomenon is use of drugs like marijuana and unemployment which lead to casual or unprotected sexual relations and engagements as a means of passing time.

According to medical and HIV practitioners, this shows a big raise in HIV prevalence rates. Taking 2005 as a base year, this shows an HIV infection rate increase among the youth from 6% in 2005 to 9% in 2012. This is scaring because it portrays the capacity of HIV to wipe out an entire generation. However, the situation of the youth is far complicated when one analyses the factors

that lead them into such behaviors and their solution. It is hard to see a solution in the near future especially when one looks at the current unemployment rate that stands at 83 % (Uganda Bureau of Statistics, 2012).

When one factors in the current strategy of fighting HIV, it becomes apparent that the war is far from being won. This can be understood by asking the following questions; is it possible economically for these young people to access condoms, which are relatively expensive? Amidst the alcohol and drug abuse, is it practically possible for one to use a condom regularly? In the context of casual sex, how can one talk of abstinence as means of protecting such youth? In this situation, TTIs have a big role to play. They have to prepare teachers who can guide and influence society by answering the above questions.

2.6 THE ROLE OF EDUCATION IN THE FIGHT AGAINST AIDS

The major guiding document in the fight against AIDS that spells out the role of education is the Dakar Framework for Action that came out in 2000 after the meeting of African educationist and other world leading agencies in the field of education. This document provides a framework for African governments to work together towards a solution in the struggle against AIDS. Under this framework, leaders are called to adopt policies that discourages discrimination and stigmatization of HIV victims, provide a safe and secure school environment, students with skills-based health education which in turn promotes good healthy and positive behaviors (UNESCO, 2014).

This document further outlines areas that schools and systems of education should emphasis in their curriculum designs. These areas include modes of transmission, ways of

prevention and protections plus imparting skills that are critical in the HIV care and treatment (Dakar Framework for Action, 2000).

The intentions of Dakar Framework for Action are further captured and articulated by Aggleton and Crewe (2011) in their book *Education and HIV/AIDS: 30 Years on AIDS Education and Prevention*. They argue that the fight against HIV and AIDS in Uganda and other African countries need to be grounded in their education system so that children grow up knowing very well the dangers that are involved in engaging in premarital sexual activities. In order to achieve this, they advocate for three types of education. For instance, education for HIV prevention, education about treatment, and education to prevent or mitigate the negative effects of the epidemic. This is all aimed at having zero transmission of HIV, creating a community of people who care about those affected by HIV and making sure that people have full knowledge about the realities of HIV (Aggleton & Crewe, 2011).

In support of the above, David Clarke, (2008) in his book, *Heroes and villains: Teachers in the education response to HIV*; suggests that teachers need to be empowered to do their role in the fight against HIV in terms of training and doing research. He argues thus:

> There is very little published research on teacher education or teacher training for school-based HIV education. As a result, very little is known about the strategies ministries of education are adopting, the capacity that is being built in Teacher Training Colleges, the types of course that are being provided and, lastly, how effective these courses are in training teachers for the classroom delivery of the curriculum. (p. 66)

By this reasoning, educators and their governments need to sharpen their skills and knowledge bases in order to win the war against HIV. This is a direct call to TTIs to engage in areas of research and pedagogy that have a direct impact especially on issues of building confidence to talk about HIV among teacher trainees and those who are already in the teaching profession

2.7 PRE- AND IN-SERVICE TEACHERS CHALLENGES

The challenge of implementing this strategy in schools stems from the cultural background of each and every teacher in Uganda. In a study by Katahoire et al. (2002) it was found out that many teachers feel shy about talking openly when it comes to sex education which is the basis of the ABC strategy. In this study, it was revealed that whereas teachers acknowledge that they are a source of information, they do not have competencies to carry out this mandate (Katahoire et al., 2002; Clarke, 2008). In order to overcome this challenge, UNESCO in its working document of 2006 proposes putting in place a system of monitoring teachers and their training institutions to make sure that they discharge this duty in a clear and precise manner (UNESCO, 2008).

According to Clarke (2008), there is a need for a deliberate strategy of having special programs for teachers in the field of sexual and HIV education. This strategy is important in creating cadres who are able to go beyond the religious and cultural barriers that tend to stop people from talking about HIV in the open (Clarke, 2008).

2.7.1 HIV information and the TTIs curriculum

According to Mirembe (2002), education is one of the strongest weapons against AIDS, especially when the learners are given the opportunity to contribute towards the curriculum content and pedagogy. Unfortunately, such a democratic process is not a way of doing this in Uganda. She argues that,

> Education is critical in curbing the spread of HIV/AIDS because the curriculum is characterized by denial of knowledge, marginalization of youth (especially girls), and lack of ability to change or improve content. Democratic education is needed. Three approaches are proposed to improve AIDS education: student participation in curriculum formulation,

> students setting the agenda for delivery of AIDS education, and individual student choice of what to learn and how. (p. 78)

Largely, her argument is a call upon TTIs to engage student in finding out what is critical in the HIV phenomenon and the right methodology to impart knowledge to the learners. Such type of democratic pedagogy establishes grounds of demystifying HIV talk that is culturally held as a taboo and as a subject not to be discussed in public. The challenge here for TTIs is to find a way of empowering teachers with the pedagogy and the material content that does not conflict with the culture and high held values in the society

A study by World Bank done in 2002 and entitled *Education and HIV/AIDS: A Window of Hope*, outlines the importance of imparting life skills in the fight against AIDS. The World Bank states that

> Children 5 to 14 years old represent one window of opportunity because they are the least likely to be infected with HIV. Education before they reach the peak vulnerable years will protect them, and early training that promotes healthy life styles and avoidance of risky behaviors will reinforce this protection. Youth 15 to 24 years old represent a second window. This high-risk group, which accounts for some 60% of all new HIV infections in many countries, is also the one where ignorance remains dangerously high and where education efforts can yield maximum results. (World Bank, 2013)

In this situation, TTIs can play a great role in empowering children to stand firm against HIV risk factors especially in present circumstances where HIV information is scarce. TTIs can also invest in producing teachers who are capable of training young people to be assertive, creative and critical in making life decisions as they maneuver their ways into adulthood (Boler & Aggleton, 2005, p.7).

It is also important to note that while most schools do not include HIV as part of the formal national curriculum, HIV information is disseminated through other subjects. In most schools, especially those that have a strong religious background the information is integrated in the

religious classes (Buonocore, 2003). The unfortunate part of this strategy is that the use of condom is negated and emphasis is put on abstinence and being faithful to one another. In such a case, the education curriculum does not care for those who cannot abstain or be faithful to their partners. In sum, TTIs as institutions of higher learning can keep the condom aspect in discussion as an alternative to abstinence and faithful especially among students.

2.7.2 Stakeholders involved in HIV information

The fight against AIDS in the education sector goes beyond the structures of the TTIs. This is because the current Education Sector Policy on HIV in Uganda categorizes HIV and AIDS as a serious problem that requires a comprehensive strategy stretching from policy makers, planners, researchers and NGOs (Mugabirwe, 2005; MOES, 2011). In order for TTIs to do their role effectively and produce quality HIV educators, they need support from every sector of the economy (UNESCO, 2004).

Unfortunately, there is often little co-ordination among MOES stakeholders largely due to lack of sufficient funds. For example, findings from a study conducted in one district in Uganda in 2005 reveals that there is no official HIV education policy from the MOES that provides monitoring guidelines and funding for implementation of HIV activities in schools (Mugabirwe, 2005). In addition, some studies further indicate that whereas the strategic plans exist within the MOES, they are not fully implemented because they are developed in isolation from other policy implementers and stakeholders (Boler & Aggleton, 2005). What schools receive are circulars and directives from the MOES instructing them to start AIDS clubs in their schools.

Currently, the HIV and AIDS Unit at the MOES headquarters is supported by volunteers who are well versed with HIV and AIDS trends in the entire country and how it is affecting education. It is also interesting to note that this unit is well stocked with literature on HIV and AIDS. In other words, it is easy to access information on HIV and AIDS from the MOES headquarters for the teachers and the public. However, the problem is the accessibility for teachers from rural areas who cannot access this information physically or by internet.

On the other hand, the good news is that there are structural measures such as legal, environmental and regulatory framework aimed at TTIs in this cause. This framework backed by political commitment and openness can be harnessed by TTIs to develop their HIV programs that can easily be accepted by all stakeholders (Okware et al., 2005; Bounocore, 2006; Allen & Heald, 2004,; Green et at., 2006; Cohen, 2003). For instance, the National Strategic Framework for HIV/AIDS Activities in Uganda (NSF) and the Uganda HIV/AIDS Partnership (UHAP) are the key structural frameworks that can easily be exploited by TTIs in developing their course content and pedagogy.

The challenge among the stakeholders is that they have not been brought together to develop a common national strategy of fighting AIDS. Each organization stands alone and this makes it hard to have a policy in place that would offer this partnership between NGOs and TTIs.

In all studies undertaken in other regions of Africa, including Zimbabwe, Kenya and South Africa, TTIs like any other teaching institution feel reluctant to teach about HIV because they know that the content is not examinable and that they will not be penalized for not doing so. (Naidoo & Chikte, 2001; Kinsman et al., 1999). This shows the necessity of getting every stakeholder involved in order to have the desired results. In the present setting TTIs are not monitored to ensure that they are doing what they are supposed to do.

In the current situation and running of TTIs, HIV education is relegated to a second place. In this process, TTIs must ensure that competent and well-informed teachers convey right messages clearly to the learners. This is well articulated by the Social Learning Theory[2] that helps us to realize that through reciprocal determinism, everybody learns from one another. However, the question that remains is how to ensure that the information passed on is authoritative enough to promote prevention efforts.

2.7.3 The role of pre- and in-service teacher training in the context of HIV

Teacher training (both pre-service and in-service) provides a strategic entry-point for developing the knowledge, skills and values which teachers need to respond to HIV and AIDS in their own lives, in the classroom and in the community (UNESCO, 2011).

The available literature indicates that TTIs have integrated HIV and AIDS into their curricula, despite the fact that there is no adequate information about the subject matter taught and the pedagogy (UNESCO, 2006). In order to have an effective pre- and in-service training the following guidelines were given by UNESCO in 2006:

1. The integration of HIV/AIDS and sexuality in teacher education curricula, preferably offered as a mandatory and examinable course, attuned to school curricula, paying special attention to distance education for inset programs.
2. Institutionalizing continuous and accredited professional development and focus on motivated and youth-trusted teachers.

[2] Social Learning Theory asserts that people learn by observing other people and considering consequences. This is followed by rehearsing what might happen in the subsequent behaviors before people get their lessons.

3. Enhancing pedagogical competencies (child-centered, participatory, creative, cultural sensitive, peer-led) based on a process of reflection on their own attitudes and values about the topic and their behaviors regarding HIV risks.
4. A systematic supply of education material and easy access to the World Wide Web.
5. Providing student teachers with HIV/AIDS treatment and care literacy, counseling and psychosocial guidance skills.
6. Strengthening of universities' capacity in research and pedagogical guidance related to behavioral change models, teacher preparation and actual teaching.

As indicated above, the training of any teacher should include proficiency in the field of HIV. The TTIs should emphasize topics that cover in great details the HIV subject matter and the competencies of disseminating it. This objective can only be achieved when teacher trainers get specialized skills in coaching, mentoring and peer support which skills are currently lacking in the TTIs (UNESCO, 2011).

Pre-and In-service trainings are crucial in this fight because they package what the teachers will give to their classes. This resonates well with current developments in the epistemological stances in the fight against AIDS. Pre-service and in-service trainings have the capacity to negotiate the space and time for HIV prevention education in the formal training curriculum and co-curricular activities necessary to produce teachers who are HIV aware, HIV competent and HIV safe (Coombe, 2004; Farah et al., 2009)

2.7.4 The role of education leadership in implementing the ABC strategy

TTIs can only be effective in the fight against AIDS when there is an effective leadership at the top that is capable of monitoring and evaluating their HIV programs. This type of leadership must be in control and capable of ensuring that the programs have an impact on learning, schooling and

the school environment. In the process of training teachers, TTIs need leaders who are capable of steering the crusade against AIDS using their personal leadership and strong commitment (Tumushabe, 2006).

In relation to the above, the major issue is that the teaching of sex education and HIV seems to be requiring the principals of these TTIs to be at the forefront of this struggle. They must be able to integrate their activities in the current national HIV Strategic Plan (2011-2015) that is aiming and working around a shared universal vision of a future of zero HIV-related deaths, zero new infections, zero stigma and discrimination of the infected and affected. This point is well illustrated by UNAIDS as referenced by Avert (2016, p. 1).

> Initially, HIV prevention methods focused primarily on preventing the sexual transmission of HIV through behavior change. For a number of years, the ABC approach – "abstinence, be faithful, use a condom" – was used in response to the growing epidemic in sub-Saharan Africa. However, by the mid-2000s, it became evident that effective HIV prevention requires more than simply ABC and that interventions need to take into account underlying socio-cultural, economic, political, legal and other contextual factors.

In fact, when it comes to interventions that are crucial in the implementation of national strategies, TTIs cannot manage to lead from behind. They need to be engaged in research and debates that are directed not only towards the effective implementation of the strategy but also about opportunities that ground the strategy in the people's culture and philosophy. Leadership of TTIs should be able to come up with a combination of prevention measures that advocates for a holistic approach whereby HIV prevention is not a single intervention (such as only focusing on abstinence, being faithful, or condom distribution) but the simultaneous use of complementary behavioral, biomedical and structural prevention strategies (UNAIDS, 2010).

In this line, UNAIDS agrees with some other grassroots organizations that the best combination of prevention includes rights-based, evidence-informed, and community-owned

programs that use a mix of biomedical, behavioral, and structural interventions, prioritized to meet the current HIV prevention needs of particular individuals and communities, so as to have the greatest sustained impact on reducing new infections (Avert, 2016)

This puts a big challenge before the entire leadership and the administration of the MOES. There is a lot to do in terms of facilitating and monitoring of HIV programs in the TTIs. The principals should be put to task and encouraged to start a homegrown HIV prevention program based on pragmatic intervention (UNAIDS, 2006). The principals of TTIs can easily bring on board key structural intervention and combination of preventive measures. For instance, these structural interventions can only work when they are formulated in line with deep-rooted socio-economic issues like poverty, gender inequality, and social marginalization.

The importance of education leadership and administration is also key in developing synergies with other departments of governments especially through lobbying and planning for HIV prevention activities and programs within the national comprehensive response to HIV and AIDS (UNAIDS, 2011).This approach was looked at as a fundamental basis of reversing global HIV prevalence rates and creating a mechanism of offering support, care and treatment to those affected by HIV and AIDS. In reference to guidelines laid down by UNAIDS (2007), this can be done through the following means:

- Providing overall leadership and advocacy for HIV prevention,
- Creating platforms for policy debate on HIV prevention,
- Supporting resource mobilization and capacity building in the entire ministry from donors and other line government departments, and
- Analyzing human resource and social protection needs and identify measures to build them especially in terms of providing adequate remuneration and better terms and conditions of work.

In conclusion, TTI leadership is very important in the implementation and co-ordination of HIV activities. It is also crucial in the realization of effective participation of both staff and students.

2.8 THE PIASCY INITIATIVE

After attending United Nations General Assembly in 2001 on HIV and AIDS, President Museveni embarked on a mission of designing a simple format of helping teachers and their head teachers to communicate sex education to their pupils and students with the hope of promoting increased education about HIV prevention especially in primary and secondary schools. According to Museveni (2007),

> There are 7 million primary school pupils and one million students in secondary and tertiary institutions (were in school by then). All these young people are at the great risk yet accessible for people who want to inform them. I called for teachers to talk regularly and directly to them. This strategy is now called Presidential Initiative on Aids Strategy for Communication to Youth. (Cohen, 2006)

His ideas and plans were put together in a booklet/manual that was well articulated and direct. It goes into details and gives teachers the rationale of saying what they are saying to pupils and students. In other words, PIASCY is a resource and means of promoting ABC strategy and life skills education among the primary and secondary school going children (Ndawula & Nakawuki, 2010, p. 20). PIASCY as a resource, has a component of creating and distributing manuals on the HIV prevention for primary school teachers, the drafting of secondary school materials, and organizing HIV-oriented youth rallies countrywide.

Incidentally, this packaging of sexuality and HIV education was not generally received well in these religious circles that are known to have started most of the TTIs in the country. Accordingly, by 2003, the MOES was encouraged to revise the first publication and eliminate any information that may have been interpreted as putting condoms as a first-priority in the ABC strategy (Cohen, 2006). As Barnowe (2012, p. 24) notes,

> Shortly after their release, however, several evangelical groups expressed passionate opposition to the manuals' content, protesting the inclusion of any information or images appearing to contradict messages promoting abstinence until marriage. In late 2003, faced with mounting opposition, the government pulled the first set of PIASCY teacher manuals from circulation.

The notion here is that the ABC strategy should primarily focus on the first two letters—*A* for abstinence, and *B* for being faithful—and only focus on the third letter—*C* for condoms—as final resort if the others are no longer possible.

This situation has persisted up today. In the entire education system, what to teach about sexuality is at the center of the fight against AIDS and surely TTIs cannot be spared of this confusion. In many studies after the launch, TTIs still face the old society philosophy and approach towards open exchange about sex and HIV. This has led and forced some teachers to editing and auditing of the PIASCY message in order to fit in their teaching environment as observed by Mudige and Undie (2009, p. 2):

> Some teachers also reported censoring curricular messages inconsistent with their personal beliefs, focusing on topics such as personal hygiene "rather than placing emphasis on life skills education, such as saying 'no' to sex."

The point that is cardinal here is to have a consensus on what can be taught in situation where religious leaders and traditional beliefs determine the content to be taught in the TTIs. This whole story highlights the role of TTIs in the fight against HIV using the ABC strategy. When you do not solve this confusion in the training institutions, then you will have teachers who are not competent enough or empowered to meet the challenges of teaching the basics needed by pupils and student to survive the scourge of HIV.

After 15 years of its launch, PIASCY needs revision in its content and implementation. PIASCY is an education resource that has failed to achieve its intended goals because it lacks essential facilities and resources needed to reach the beneficiaries. For it to succeed, these

educational materials are very important at both the teacher training level and the baseline, which are the schools where these teachers will find themselves as implementers.

3.0 RESEARCH DESIGN AND METHODOLOGY

This chapter focuses on the discussion of the research design and methodological approaches that were applied both in the collection and analysis of the data. The chapter begins with the justification of using the mixed methods research design and the research process that was followed in the process of writing this dissertation. Thereafter, the researcher presents the design, which provides the study population, sample strategy, description of the research site, data collection instruments, data entry, data analysis, methodological norms and ethical matters.

The study adopted a mixed-method research design to evaluate the role of TTIs in the implementation of the ABC strategy in the fight against AIDS in Uganda despite the fact that the strategy has substantially met challenges right from the conceptualization level to its current implementation stage. In order to gain a deeper understanding of what TTIs teach in relation to HIV education, the researcher administered two types of surveys, each aimed at capturing the HIV education perspective and its challenges from different stakeholders in the TTIs. These stakeholders included students, administrators, pre-service teacher trainees and in- service trainees.

The choice of mixed methods was made basing on a belief that narrow views of the world held by the positivists and their world outlook are sometimes misleading and non-conclusive. In this case, the researcher felt that a phenomenon like HIV and AIDS which is multi-faced and dynamic needs a method that is all encompassing and holistic in nature. (Alveson & Skoldberg, 2009).

Under this choice, post-positivists assert that using more than one method in undertaking research in social sciences is advantageous in terms of strength when dealing with the subject

matter. They also argue that by this multi-faced method one can develop a clear picture of the research subject matter than relying on one method (Golafshani, 2003). It is also argued that when a researcher combines methods, it is easier to overcome the inherent biases and weaknesses that are likely to arise in the research process (Dick, 2005). The use of mixed methods in this study was also justified for triangulation purposes. This is because mixed methods offer an opportunity for the research to deal with issues that measure the level of understanding the phenomenon of research in the targeted population (this aspect is taken care of by the qualitative method) whereas the relationships or the influence of factors on each other is taken care of by the quantitative method.

This argument is reinforced by Jick (1979, p. 609) when he argues that "organizational researchers can improve the accuracy of their judgments by collecting different kinds of data bearing on the same phenomenon thereby increasing the rigour, relevance and reliability of their results."

Much as challenges exist in the use of mixed methods research design, there are many opportunities to be gained by the mixed methods researcher. According to Teddlie and Tashakkori (2003), there are a number of areas in which mixed methods are superior to a single approach designs as outlined hereunder;

1. Mixed methods research can answer research questions that the other methodologies cannot.
2. Mixed methods research provides a better (stronger) inferences and the opportunity for presenting a greater diversity of views.
3. They make it easier for the researcher to tie together different types of data analyses from the two methods that are juxtaposed and generate complementary insights that in sum create a bigger picture.
4. In mixed methods, the two methods become complementary thus providing completeness in the intended inquiry. By using both quantitative and qualitative methods, the researcher gets a more comprehensive account on ABC strategy in

schools in terms of how they construct meaning and how different factors influence the implementation of the strategy.

5. Lastly, the mixed methods choice was a better option for this study because of the need for a validity and reliability measure that could easily accommodate the marriage of data from different sources.

3.1 MY REFLEXIVITY AND POSITIONING IN THE STUDY

Scholars are required to show rigor in their research design and execution so that the product's characteristics of credibility and reliability are maintained. Under this aspect, the researcher is tasked to be aware of the role of the individual self in the entire research process. This is very important because it insulates the entire research process against personal biases, cultural disposition and other unwarranted stereotypes. This awareness and attitudinal preparedness is what is called reflexivity in research (England 2007). This idea is well explained by Creswell (2007, p. 37) as follows:

> qualitative research begins with assumptions, a world view, the possible use of theoretical lens and the study of the research problems inquiring into the meaning individuals or groups ascribe to a social or a human problem. Consequently, the credibility of one's research begins with their own understanding of values and how their views shape the interpretation of their findings thereof.

Another element of reflexivity in this theoretical perspective especially when it comes to data analysis, interpretation of the findings and making recommendations, is the issue of personal perspective. Peshkin (1988) argues that it is crucial to be aware of the subjective self and role it plays in research since being aware is better than assuming we can get rid of one's subjectivity. The realization of individual subjectivity makes a researcher aware of the qualities, knowledge and experiences that can be brought into areas of inquiry. This element of the role of subjectivity is well summed by Eisner (1998, p. 27) as follows:

> Each person's history, and hence world is unlike anyone else's. This means that the way in which we see and respond to a situation, and how we interpret what we see and respond to a situation, and how we interpret what we see, will bear our own signature. This unique signature is not a liability but a way of providing individual insight into a situation.

My personal history as an implementer, peer educator and overseer of the government policy of fighting HIV and AIDS stretches over a period over 15 years. In this period, I have come face to face with challenges that form a basis for analyzing the ABC strategy. In this study, grappling with technicalities and dilemmas that are associated with this strategy is inevitable. However, this offers an opportunity to critically examine the dynamics of this strategy. At another personal level, my dearly held beliefs and views as an ex-seminarian in particular and a Roman Catholic in general facilitate a strong bearing on this study. Importantly, this aspect does not bias the outcomes and the general recommendations of this study; instead it enhances my awareness, knowledge and sensitivity to issues that the study tries to address, especially when working with key participants and informers who hold different views basing on their educational and religious background. Incidentally, this does not negate the fact that every step was taken to guarantee objectivity, despite the fact that the researcher's personal experiences might have shaped the ways he viewed and understood the data collected and the interpretation thereafter.

Important to note is that with training in qualitative research and acquisition of skills in the general areas of ethnography, interviewing, transcription and observation, the researcher recognizes the need to open up and listen attentively to the thoughts and opinions of others and their world outlook. My guiding principle was the subjecting of the data to triangulation so that I could gain insights into the experience of others rather than letting my background and world outlook influence the outcomes of this inquiry.

3.2 SAMPLE SELECTION STRATEGY

3.2.1 Sample TTIs

This study was part of the wider and ongoing study by Institute for International Studies in Education (IISE) of the University of Pittsburgh that began in 2012 under the direction of W. James Jacob. The entire study aimed at examining the existing nature and effectiveness of HIV instructions in the pre-service and in-service teachers and teacher trainers in the East African region, soughtto evaluate what is taught, and ought to be taught by these TTIs. As a broad project, the study was aimed at establishing the best practices of HIV education in addition to integration of HIV and AIDS into primary and secondary education curricula.

As a student in the same school and participant in some discourses that focused on comparative and international education, I developed an interest in examining the role of TTIs in the implementation of the ABC strategy by first looking at TTIs as formation houses for future fighters of the ABC strategy. In this regard, Makerere University and Kampala International University were selected as representative samples for the degree awarding TTIs, Mubende and Kaliro National Techers' Colleges for the diploma awarding institutions while Kibuli and Ggaba were a chosen for certificate awarding TTIs. All six participating TTIs are located in the Central Region of Uganda.

In all of these TTIs, the intention was to look at the material content that TTIs use and the challenges they face in integrating HIV education in their training. This gave me the flexibility to design additional research questions and themes aligned with this overall project.

3.2.2 Participants

The sample for this study consisted of two groups of individuals: 160 pre-service teachers and 80 in-service teachers. Of the two groups, 116 pre-service and 77 in-service teachers responded, realizing a 72.5% and 96.3% response rate respectively (see Table 3.1)

Table 3.1 *Descriptive Statistics on Sample Participants*

	Pre-Service Teachers				In-Service Teachers			
	SN	S%	N	%	SN	S%	N	%
Kibuli Muslim Core PTC								
Female	10	50.0	144	64.9	7	41.2	117	54.4
Male	10	50.0	78	35.1	10	58.8	98	45.6
Kampala International University								
Female	6	30.0	59	35.5	10	100.0	412	65.2
Male	14	70.0	107	64.5	0	0.0	220	34.8
St. John the Baptist Ggaba PTC								
Female	10	50.0	84	67.2	–	–	–	–
Male	10	50.0	41	32.8	–	–	–	–
Makerere University								
Female	8	22.6	60	31.4	10	58.8	671	46.7
Male	12	77.4	131	68.6	7	41.2	766	53.3
Kaliro NTC								
Female	10	50.0	305	32.2	5	33.3	47	42.0
Male	10	50.0	643	67.8	10	66.7	65	58.0
Mubende NTC								
Female	17	45.9	107	35.8	8	44.4	206	33.3
Male	18	54.1	192	64.2	10	55.6	412	66.7
Total Participants	116	100.0	1,951	100.0	77	100.0	3,014	100.0
Female	50	43.1	759	38.9	40	55.8	1,453	48.2
Male	66	56.9	1,192	61.1	37	44.2	1,561	51.8

Participants were selected by a random purposive procedure from one class at each institution. In general terms, this sample represented a 14.3% of the total pre-service trainees and 25.4% of the in-service trainees from the sample TTIs. There was no attempt to stratify the sample by gender, rather all class participants were given equal opportunity to volunteer for this study. This led to an

unequal distribution of gender in some schools, where more females were sampled at Kaliro NTC and more males at Mubende NTC. The administration of these questionnaires was done at the beginning for in-service teachers and at the end of the semester for pre-service teachers. This timing was preferred because students would have time to respond to the questionnaire compared to when they would be busy in with classes and other exercises at other times of the semester.

3.2.3 Data collection strategy

According to Amin (2005), sample strategy consists of techniques used to select respondents. Therefore, a data collection strategy must help a researcher to select participants in a study from the population. In this study, the MOES was at the center because of its mandate over all TTIs in the country. In short, the researcher needed the MOES' blessing to get the participation of the TTIs.

Strategically, the researcher started with a familiarization tour of the participating TTIs to get the general setting and running of both academic and administrative affairs. This presupposed a coherent research approach that included getting permission from the MOES as well as holding meetings with administrators and responsible class instructors who would in turn organize class representatives randomly to form the desired samples. These initial meetings were important not only because they prepared ground for me beforehand but also because they gave the researcher the general perception of what institutions feel should be done and by who.

These initial meetings were followed by the administration of the surveys in a classroom. Before the survey, the contact persons nominated by the TTIs administrators who would first read through the survey copy and express their consent and willingness to help the researcher in the

administration of the same. After the administration of surveys, the researcher conducted focus group discussions (FGDs) and focus group interviews (FGIs) that aimed at fine-tuning the answers given in the surveys. In these discussions and interviews, the participants discussed freely and expressed their views in an open manner. The selection of FGDs was entirely based on basic principles of adherence to numbers and homogeneity of participants and moderation (Foich-Lyon & Trost, 1981), FGIs were based on leadership positions as outlined in the administrative structures of each institution (for example, principals, heads of departments or chaplains). In order to enhance the researcher's understanding of the TTIs and their capacity to integrate HIV education in their curricula, the study added on aspect of key informant interviews (KIIs) who were identified as respected educators either still in active service or in retirement. A total of 15 interviews were carried out and the researcher primarily sought their expert opinion and experience (Nicholas, 1991, p. 14). Their selection was based on the Gilchrist and Wiliams (1999) definition. According to this definition, a key informant is an individual who possesses special knowledge, status or communication skills and is willing to share their knowledge with the researcher (Gilchrist & Williams, 1999).

In these interviews, emphasis was put on their views as they understand the Ugandan cultural setting and its impacts on the ability of TTIs to teach such cultural sensitive topics as sex education. These in-depth interviews probed the issue of HIV education and the meaning that educators attach to it. As a procedure, during these interviews, a recorder was openly used after getting the permission of the interviewees and notes would be taken to capture salient issues that would require follow- up or clarification in subsequent interviews. On the other hand, the study involved an extensive and intensive secondary data search that was deemed relevant to the Ugandan situation. I must admit that this was not an easy task because there are not many studies

that are devoted to this area in the country. To be precise, most of the research on HIV and AIDS in Uganda has not taken seriously the issue or component of teacher training as an integral part of fighting HIV in the country.

3.2.4 Data collection instruments

The study used the instruments that were already developed by the Institute for International Studies in Education (IISE) of the University of Pittsburgh in previous studies on the same subject of HIV in schools. In addition, the instrument was used in accordance with the guidelines that were stipulated in the IRB that corresponds to the study. The data collected for this study and the instruments used to collect them are described in the following sub-sections.

3.2.4.1 Quantitative data collection

Quantitative data were the main form of collected data because these data were needed to evaluate not only the role of teacher training institutions on preparing of pre-service and in-service teachers but also in relation to the integration of ABC strategy in the teaching curriculum. In addition, quantitative data collection endeavored to capture realities of the strategy implementation and how information on HIV in particular and sexuality in general is shared in a school setting.

In this regard, quantitative data are collected using positivistic research methods, which, according to Saunders et al. (2003), include surveys and observations. The method employed in this study was the survey method, notwithstanding its being costly as Amin (2005) observed and as was actually the case. The specifically adopted method was the cross-section survey because the required quantitative data were to be collected from different stakeholders of the schools, who

included pre-and in-service students. This method was adopted also because it facilitates administration of questionnaires and therefore, collection of largely consistent and first hand data from a relatively large sample (Blumberg et al., 2005).

The quantitative data collected in this study were in form of first hand perceptions of the selected pre-and in service students about the role of disseminating HIV education to reduce the spread of the disease. The quantification involved designing an item and asking a respondent to indicate their perception by ticking a response that best matched their perception. The ticked response was considered the perception that a respondent held about the item. The response was assigned a code that transformed it to a quantitative form. For instance, for a response scale running from strongly disagree through disagree to not sure, agree and strongly agree, the first response was assigned code "1," the second was assigned code "2," and the third was given code "3." The codes were then used to quantitatively determine the perceptions that respondents held about each item.

All the administered items were designed in a form of two semi-structured self-administered questionnaires according to the research questions of the study. One of the questionnaires was designed for pre-service and in-service students. These types of questionnaires were used to collect data because of the following reasons:

- They accommodate both close-ended and open-ended questions, implying that they were used to collect all data required to accomplish a study by giving respondents an opportunity to answer some of the questions intended to collect un-predetermined data in an unlimited manner (Amin, 2005).
- They also facilitate data collection from large samples made up of literate respondents (Trochim, 2006). The data were, therefore, appropriate since the targeted students and teachers were relatively many. Moreover, by virtue of being students and teachers, these respondents were literate enough to read, understand and respond to the questions in writing.

- These types of questionnaire were completed by respondents themselves. This made data collection relatively easy. In addition, the fact that the items included in the questionnaires were mostly close-ended items made data analysis relatively easy.

A copy of the questionnaire designed for pre-service teachers appears in Appendix A and that of the questionnaire designed for in-service teachers is shown in Appendix B. As shown in these appendices, the questionnaires had five sections. Section A in each questionnaire consisted of items designed to collect biographical information of respondents in each category. Section B contained items that were intended to collect data on knowledge of respondents about HIV while Section C contained questions concerning attitudes towards and opinions about HIV and AIDS. Section D had questions concerning curriculum training while Section E was concerned with the general questions about implementation of ABC strategy in schools

Most of the items in both questionnaires were designed in such a way that they measured the variables of the study using Likert scales of responses as described by Trochim (2006). Likert scales were suitable for measuring the relevant characteristics of respondents and each variable. As such, respondents used the given response options to answer all closed questions. Likert scales were used to enable the transformation of the perceptions of respondents from a qualitative to a quantitative form.

3.2.4.2 Qualitative data collection

Qualitative data refer to texts that cannot be quantified (Creswell & Clark, 2007). These data are usually collected in form of first hand perceptions, views and opinions given by respondents in form of narrative responses either orally or through writing (Macmillan & Schumacher, 2010). Qualitative data are collected using interpretive methods, which include written or oral interviews

that may be conducted by face-to-face encounters, writing, telephone, post office or electronic mailing (Cohen & Manion, 2007; Creswell et al., 2010).

For this inquiry, the researcher used both Focus Group and Key Informants interviews to collect qualitative data. The data were collected in form of first hand views and perceptions that were told by school administrators about the role of teacher training institutions in the implementation of ABC strategy to students in schools. These data were collected using an interview schedule, which was designed according to the research questions of the study. The participant responses to the interview questions were either written or digitally recorded. School administrators were at liberty to write or answer orally by virtue of their jobs.

In case a selected school administrator preferred to answer orally, the researcher using the very copy of the interview schedule that the respondent would have filled if he or she had opted to writing recorded the responses.

Two interview schedules were used to accommodate both open and close-ended questions, enabling school administrators and school departmental leaders to answer some of the questions freely. They also enabled the researcher to conduct written or face-to-face interviews with the respondents depending on their preference (Thompson, 2008). The first interview schedule had five sections. Section A consisted of items intended to collect biographical information of the selected school administrators. Section B contained items that were intended for data regarding the ways in which ABC strategy was to be implemented in schools.

3.2.5 Review and analysis of documents

The review and analysis of documents (secondary data) formed a major component of this inquiry. Secondary data refer to facts or information prepared in a published or unpublished form for other uses but relevant for the study being carried out (Creswell, 2003, p. 98). Secondary data may be qualitative or quantitative and they are collected using a method referred to as document analysis or review (Newhouse, 2002a, 2002b). This method facilitates collection of data by reviewing or analyzing already existing reports or documents containing information originally meant for other purposes and extracting data from reports or documents considered relevant to a study (Cohen & Manion, 2007). The reports or documents that informed this study were basically ministerial policy statements and guidelines plus general guidelines at the national level.

In this study, documentary analysis was undertaken through examination of data that were collected from documents such as:

- The Uganda National HIV and AIDS Policy (2011)
- Behavior Change: Communication Strategy for HIV Prevention among Teachers 2012-2016 (June 2012),
- A Teacher's Handbook on HIV/AIDS Prevention in Schools (2002) By Dr. Elioda Tumwesigye,
- The Fountain Youth Survival Kit for Schools (2002) by Dr. Elioda Tumwesigye,
- Recipe for Disaster (2000) by Lilian Tinyebwa,
- In Depth Evaluation of Life skills and Sexuality Education in Upper Primary Schools 2014 by the MOES Sector HIV Prevention Strategic Plan 2011-2015 May, 2011.

Additional information was also collected from published textbooks, journal articles, and online manuscripts. These resources were useful in developing a clear understanding of national efforts about creating programs and policies aimed at curbing the scourge among the teaching fraternity and the students. They also shed light on challenges being encountered in the implementation of the ABC strategy in schools

3.2.6 Data analysis

The study employed mixed methods, which were predominantly quantitative and qualitative in nature. The data collected were analyzed using different techniques of analysis, which included quantitative and qualitative techniques as well as thematic content analysis. After collecting questionnaires from the respondents, they were compiled, sorted, edited and coded to have the required quality, accuracy and completeness. The collected data was coded on a Coding Sheet and then entered in the computer using the Epi-Data Programme before being analyzed using Statistical Package for Social Scientists (SPSS version 16.0).

On the other hand, the analysis of qualitative data was interactive whereby the researcher sought to understand the meaning and existential experience that students have or have formed around this scourge of HIV. This understanding was then subjected to a reflexive process that aimed at probing what the TTIs can do to positively influence society in general and the students in particular about the importance of ABC strategy in the fight against AIDS. In this process, the study remained open to any idea and continually sought feedback especially through focused group discussions.

3.2.7 Ethical considerations

Ethics is generally concerned with beliefs about what is morally right or wrong. Opolot-Okurut (2004, p. 103) observed that, “In every research process, ethical issues and considerations must be addressed and adhered to.” In research, ethics focus on what is morally proper or improper when engaging with participants or accessing secondary data (McMillan & Schumacher, 2010).

According to Strydom (2001), ethics refer to a "set of widely accepted moral principles that offer rules for, and behavioral expectations of the most correct conduct towards respondents, researchers and assistants." Ethical standards are emphasized in any study that involves interaction with people or sensitive documents as a means of protecting the human subjects from degradation and exploitation (Opolot-Okurut, 2004).

In this study, the considered ethical issues included access to the source of information, informed consent, attention to anonymity, confidentiality and debriefing of respondents. Considering ethical issues is not only a requirement by the university but also an integral part of the research process. Consequently, the study was approved by the University of Pittsburgh Institutional Review Board in 2012. In addition, consent was obtained from individual participating TTIs administrators and each participant. Informed-consent was sought from respondents prior to involving them in the study by administering an appropriate research instrument to them. Informed consent is defined by Bulger (2004) as a process in which participants give their consent to participate in a research project after being informed of its intentions, risks and benefits.

McMillan and Schumacher (2010) added that researchers should generally be open and honest with participants about all aspects of the study. This usually involves the full disclosure of the purpose of the research. In the consent form, it was guaranteed that the participants were aware that their participation was voluntary and that they could withdraw at any time. The consent letter was also intended to ensure that respondents were well-acquainted with the purpose and objectives of the research before accepting to participate. Respondents were also assured that they were free to make independent decisions about whether they wanted to continue participating or to withdraw at any point in the study without the fear of negative consequences.

As a matter of procedure, the use of gadgets, especially the recorder, was also explained in order to avoid suspicion and encourage free deliberation of the topics at hand. The researcher emphasized to the participants the issues of confidentiality as an obligation on his part and the steps that would be taken to guarantee confidentiality as a guiding principle of any research at this level. According to McMillan and Schumacher (2010), confidentiality means that no one has access to individual data or the names of the participants except the researcher. Confidentiality was observed in this study by safely keeping the information that was obtained from the respondents away from people who were not part of the study until the information was used to write a research report.

Lastly, the respondents were also informed that participation was voluntary and that they were free to withdraw from the study at any time if they so wished. The respondents were assured that the collected data were to be used for purely academic purposes and that no unauthorized persons would be allowed to have access to the data. They were also assured that the researcher did not have any intention to have the data known or revealed to any person who was not a part of the study. This was intended to conform to the confidentiality principle of the information management.

Debriefing was done at the end of the qualitative data collection and the rest of the research process. The respondents were informed that they would have access to the final report if they so wished, that the access to this study would be maximized by disseminating the findings of the research through seminars, workshops and publications in the relevant peer reviewed journals.

3.3 STUDY LIMITATIONS

The study was basically carried among the TTIs and aimed at establishing the role of TTIs in the ABC strategy of fighting AIDS. Therefore, the finding of this study might not necessarily be applied to the entire spectrum and core ideology of the ABC strategy. It should also be noted that the researcher did not go into other ideological and current challenges of the ABC strategy. The current challenges to this strategy include among others the integration of emerging debate on homosexuality into the strategy.

Another limitation to the study was the geographical factor. The study was carried out in the metropolitan Kampala and its suburbs. Consequently, the findings might not necessary be applicable to all TTIs because their catchment areas of recruitment might be different and thus having a different understanding altogether. This is an important factor because TTIs that are based in rural areas tend to recruit from neighboring settings whose understanding and meaning of HIV and AIDS might be different from those in urban areas due to exposure factors.

Lastly, the study did not engage much into the policy implementation of this strategy, especially from schools and the MOES. It limited itself to the TTIs and the challenges they meet regarding HIV using the ABC strategy. In this regard, the role of MOES and other government agencies and bodies might not be well articulated. However, the findings of this study might be applied by the same MOES and government agencies in reinforcing the message that the challenges HIV and AIDS impose on society can easily be addressed by increasing students/pupils knowledge and empowering teachers as the frontline soldiers in the fight against this scourge.

4.0 FINDINGS

The major purpose of this research design was to help the researcher gain a deeper understanding of what the pre- and in-service teachers in the Central Region of Uganda know about HIV and AIDS. Equally important, the researcher wanted to better understand the attitudes that these students have towards people who are infected with HIV or who are living with AIDS. The quantitative method utilized a quality scorecard instrument to collect relevant data for statistical analysis. In addition, the qualitative method dealt with issues that measure the level of understanding the phenomenon of research in the targeted population, whereas the relationships or the influence of factors on each other was taken care of by the quantitative method.

This chapter is divided into three major sections, which discuss the knowledge levels of the participants, their attitudes towards HIV and AIDS, and the need for certification of teachers in handling HIV and AIDS matters especially in terms of subject content and as a means of breaking barriers that bar people from discussing the relationship between sex and HIV in public.

4.1 HIV KNOWLEDGE INDEX

In general terms, the knowledge index was measured by answering 58 questions that examined the participants' knowledge about HIV and AIDS in their communities and schools. Consequently, the knowledge index was captured under the following categories: general HIV/AIDS knowledge, basic prevention measures, modes of transmission and individual's capacity of self-control (self-

efficacy). In addition, these questions went further to probe the participants' knowledge about HIV and AIDS in regard to dealing with persons living with HIV, protecting themselves from acquiring the disease. Lastly, under the knowledge index, the study also wanted to know whether participants knew how to use and store condoms correctly and effectively. The findings regarding general HIV knowledge and modes of transmission are discussed below.

Table 4.1 *HIV Knowledge Index*

		Pre-Service Teachers			In-Service Teachers		
		N	High	X^2	**N**	High	X^2
Aggregate Scores		116	65.5		77	62.3	
Gender							
	Female	43	58.1	7.425	40	65.0	2.963
	Male	73	69.9		37	62.3	
Age							
	18-24	53	67.9	19.553	22	54.5	39.509*
	25-34	51	64.7		26	76.9	
	35-44	10	60.0		19	57.9	
	45 or older	2	50.0		10	50.0	

*$p < .10$.

4.1.1 HIV and AIDS Knowledge

This was examined through a number of questions that ranged from the modes of transmission to the gender understanding of sexual intercourse. For instance, 93.1% of the pre-service students knew that AIDS has no cure, compared to 89.6% of the participating in-service teachers. Similarly, 80.2% of pre-service participants compared with 88.3% of in-service teachers recognized the

dangers inherent in having many sexual partners. At the same time, it was generally demonstrated by pre-service participants that being compassionate and able to live with people infected with the virus has nothing to do with one getting HIV. It is also important to note that the participants were aware of the fact that despite a person looking healthy, one can be infected and be able to pass the virus on to other people.

Three-fourths of the pre-service teacher respondents believed that abstinence among the unmarried young adults is the best means of self-preservation in this era of HIV and AIDS. It was also clear from the responses that the majority of the participants knew that the proper use of condoms (consistently and regularly) is one of the means for preventing spreading HIV in their communities. When it came to issues of storage of condoms, only 32.8% of the pre-service participants and 48.1% of the in-service participants knew that condoms should not be stored in warm and moist places before use. This demonstrates widespread lack of knowledge about condoms among the majority of the participants and if condoms are to be used to stop the spreading of HIV, TTIs have to play a big role in teaching their students about proper places and conditions of storing/keeping condoms before use. On the lubrication of condoms, 72.4% of the pre-service participants and 79.2% of the in-service participants demonstrated that they know that Vaseline—which available in most Ugandan homes—is not a good lubricating agent for condoms. When it comes to the relationship between STDs and HIV, 72.4% the participants in the pre-service group were aware that individuals with STDs puts them at a higher risk of contracting HIV as compared to 68.8% of the in-service participants.

It is also important to note that the participating students knew that students or teachers who are affected or infected with HIV/AIDS need compassion and understanding rather than discrimination and isolation. For instance, 85.3% of the pre-service and 83.1% of the in-service

participants asserted that it is false to think that being compassionate with someone who has HIV can lead one to infection. In addition, it was disturbing to find out that only 51.7% and 49.4% of pre-service and in-service participants respectively were knowledgeable in relation to the fact that one can take between 6 months from the time of infection to 10 years before developing AIDS.

The study also showed that the participating students were generally aware of the fact that self-control through abstinence was the best measure to guard against acquiring HIV/AIDS. This is clearly shown by the high percentage responses to questions that were related to abstinence and condoms use where participants scored 80.0% on average.

In relation to the responses given above, one can confidently say that the participating students of all categories have basic knowledge about HIV and AIDS. At the same time, these findings demonstrate a need for TTIs to formulate a deliberate policy that entrenches the teaching of HIV education in the training of teachers in these TTIs.

4.1.2 Modes of transmission

To understand the extent to which the knowledge about the modes of HIV transmission is crucial in the fight against AIDS, participants responded to the following three points: (1) HIV is transmitted through semen and virginal fluids and blood; (2) it is possible for HIV to be passed from a mother to her unborn child; and (3) whether individuals may acquire HIV from sharing unsterilized needles for drugs, tattooing, and ear or nose piercing.

The majority of both pre-service (86.2%) and in-service participants (89.6%) showed that they know that the HIV virus can be transmitted through, seminal, vaginal fluids, and blood. The respondents were also knowledgeable on the role of sharing unsterilized needles for drugs,

tattooing and ear or nose piercing in the phenomenon of HIV transmission. Roughly four-fifths of both groups knew that one can easily get HIV from having multiple sexual partners. Furthermore, the study was able to show that only 71.6% of the pre-service participants believed or knew that an HIV positive mother can transmit the virus to the unborn child as compared to 81.8% of the students selected in the in-service.

This analysis is further validated by the same data especially when one examines it from the point of participants knowing ways or means that HIV cannot be transmitted. For example the study was able to establish that most of the participants from both groups (85.3% of pre-service teachers and 87.0% of in-service teachers) knew that a person cannot get HIV from eating the food prepared by an individual with HIV or by drinking from the same glass with a person with AIDS (80.2% of pre-service teachers compared to 90.9% in-service teachers).

The fact that roughly 20% of all participants on average did not have the knowledge on the above-mentioned modes of transmission calls for an immediate action plan for teacher trainers and policy makers, such that the acquisition and dissemination of this much-needed HIV and AIDS information becomes an integral part of instruction in all TTIs. At the policy and curriculum development levels, it would help if HIV-related information formed a mandatory part of the pre-service and in-service learning experience.

4.1.3 Gender differences between males and females participants

Through focused group discussions and expert interviews the study found out that gender differences impacted on what one knows and eventually determined how such knowledge can be used in the ABC strategy. It was revealed that women in general and girls in particular are helpless

in making their partners stick to condom use. One participant observed that girls in the TTIs who have older men (*sugar daddies*) as sexual partners find it hard to tell them to use condoms especially when these girls cannot afford to buy condoms which might not even be available in the school canteen. In this case, women participants see gender inequality as a major obstacle in the fight against the spread of HIV using condoms.

In this discussion, it was further revealed that TTIs can play a big role in the implementation of the ABC strategy by creating programs that foster debate among students on issues that are gender based yet risk factors in the spread of HIV AIDS. For instance, being faithful to one's partner should be emphasized and appreciated by all sexes. A male students in the TTIs should be empowered to know the dangers inherent in the culturally accepted values and practices like having many wives at will and not being answerable to any of them. The trainees should be made to understand that sexual irresponsibility is the fertile ground for the transmission of HIV.

Furthermore, the TTIs have the obligation to explain to their students that such a behavior is a clear manifestation of gender inequality can easily exposea couple to HIV. This situation makes women vulnerable despite having knowledge about HIV and AIDS. Consequently, the general consensus was well captured as follows;

> We all know that condoms can protect us from the virus. The problem is that as women we are not in charge of negotiating this with a man who is not bothered about using condoms. Again condoms are not like groceries that I will comfortably buy in the trading center when I go shopping with my friends. By the way, I do not think there are many students that have a budget for condoms.[3]

In a nutshell, it is clear that the socio-cultural issues that are grounded in gender are still a challenge to the ABC strategy. TTIs are therefore, in a position to make a contribution to the success of this

[3] Female participant at Mubende National Teachers College.

strategy by empowering both males and females students to take charge of their sex related decision especially in this era of HIV and AIDS.

Briefly put, the participants clearly demonstrated that there is a big difference between men and women in terms of knowing what ABC strategy stands for and having the capacity to put this knowledge into practice. While men can decide to use condoms consistently, women do not have that capacity, it all depends of the willingness of their partners. This demonstrates the role TTIs can play in the implementation of ABC strategy by offering survival skills to their students especially those that are disadvantaged by the cultural perception of their gender.

4.2 ATTITUDES SCALE

This section examined the attitudes of participants towards abstinence, condom use, and pornography, which were derived from 38 questions from the main survey instrument. These questions aimed at establishing how the participants feel and think about abstinence, condom use and pornography in relation to HIV transmission and self-efficacy.

4.2.1 Abstinence

Abstinence is one of the pillars of the ABC strategy. In simple terms, it advocates for students in higher institutions of learning to abstain from sexual activities until they are married. In fact, it is the major strategy that both the government leaders in particular and the other leaders (religious or cultural) in general agree on as the weapon against HIV among the young people. This is

reflected in the Presidential Initiative on AIDS Strategy for Communication to Youth (PIASCY). PIASCY as a youth program gives abstinence-until-marriage messages through a series of assembly addresses, classroom activities and youth rallies

In order to find out the role of TTIs in the implementation of the ABC strategy, the following five statements were analyzed to develop a clear understanding of how students perceive abstinence in their daily lives:

1. It is alright for teenagers to have sex.
2. If your spouse of boy/girlfriend wants you to have sex, it is better to agree rather than to lose him/her.
3. It is a good idea for teenagers to delay having sex until they are older or married
4. A person does not have to feel bad about delaying or refusing sex

When the participating students were asked whether it was alright for teenagers to have sex, 70.7% of pre-service teachers disagreed as compared to 81.8% of in-service teacher respondents. This comparison is critical because it shows that roughly 30% of the young adults in the pre-service group (who are roughly between the ages of 19 and 24) tend to have a relaxed attitude towards sex. Incidentally, this was not the case with the in-service teacher participants who were generally older.

TTIs are supposed to be places where strong and positive attitudes are formed and framed. In this case, it the role of TTIs to produce graduates who have attitudes that keep themselves and society safe. From this perspective, attitudes towards abstinence, roughly 25% of all participants agreed that it is alright for students to engage in sex. All stakeholders in the TTIs framework must be concerned by this attitude and need to work together especially in this era of HIV to make sure that students have the right attitude toward their sexuality as enshrined in their cultural and

religious values. This can be done through open discussions in classes where HIV education is taken as an integral part of their training.

When participants were asked whether it is better to agree to sex when your spouse or boy/girlfriend wants it rather than to losing him/her, 62.2% of pre-service respondents disagreed as compared to 76.6% of their counter parts in the in-service group. This suggests that some students cannot make decisions about having sex on their own. Their decision making in this case depends upon their spouse or boy/girlfriend, which is wrong because the implications of having unplanned sex can affect parties involved in the long run and can easily bring disastrous consequences like unwanted pregnancies and HIV acquisition.

Interestingly, the majority of respondents (88.8% of pre-service teachers and 88.3% of in-service teachers) agreed that it is a good idea for teenagers to delay having sex until they are older or married. The study also found out that the majority of both groups agreed that a person does not have to feel bad about delaying or refusing sex (85.3% and 83.1% for pre-service and in-service teachers respectively). This is an attitudinal question that needs to be addressed by TTIs. It can be achieved through a deliberate policy that enhances drawing and formulation of corresponding programs that empower students to stand up and measure to such challenges. Such programs can be tailored along classes or seminars that empower students with critical and survival skills.

Related to this was the fact that the majority of participants reported that if one wanted to, he/she could easily abstain from having sexual intercourse (81.1% for pre-service respondents and 87.0% for in-service respondents). Moreover, when the respondents were asked whether they would be able to show affection (love, feelings, etc.) without having sexual intercourse, three-fourths of pre-service respondents agreed, compared to 88.3% of in-service teachers.

Lastly, when respondents were asked whether education on abstinence should be the only HIV prevention method taught in schools, the majority disagreed. Only 20.7% of pre-service and 31.2% of the in-service respondents indicated that there is a need to have comprehensive HIV education that covers other methods of prevention. This is an indicator that a great number of the respondents did not understand that abstinence cannot be the only HIV-preventive education. When schools uphold abstinence as the only prevention method to acquiring HIV, what happens to those who cannot abstain? Students in TTIs must therefore, be trained on the benefits of multiple HIV prevention methods so that they appreciate the different circumstances where these prevention methods may be applicable.

4.2.2 Condoms

One of the reasons why condoms succeed or fail in HIV prevention is the attitudes that people have towards them. This section aimed at finding out what participants think about condoms. When respondents were asked whether it is alright to have sex without a condom, because the chance of getting infected with HIV is very low, 87.9% of the participants from the pre-service category disagreed, none (0.0%) agreed and 10.4% only were not sure. When compared to the in-service teachers, 92.2% disagreed and 7.8% were not sure. This is an indicator that most participants were aware of the importance of condom use in the fight against HIV. However, twelve of the 116 pre-service participants were not aware of this fact as compared to six of the 77 in-service participants. These might be participants who do not believe in the use of condoms for various reasons. What is worth noting here is that the majority of respondents agreed that it is not

safe to have sex without a condom. In other words, they believe that condoms can play a great role in stopping the spread of HIV.

In response to the statement, “It is alright for young people to have sex without a condom if they know each other,” the majority disagreed (71.5% of pre-service participants and 80.5% of in-service participants). This implies that the majority think it is not alright for young people to have sex without condoms even if they knew each other. This is also another indicator that students have a positive and stronger attitude towards condom use among their communities. However, this in some ways contradicts the thinking of founding bodies of TTIs that emphasize abstinence first when it comes to fighting HIV and AIDS. This further points to the question of the availability and accessibility of condoms in and around halls of residence especially in circumstances where the administration is actively involved in what is sold in the most shops around these campuses.

It is also important to note that more than 18% of all respondents are in danger of acquiring HIV because they do not have a strong or positive attitude towards their own capacity to protect themselves by carrying a condom. Still, more than three fourths of all respondents agreed that they should carry a condom with them if they think they might have sex with a partner.

In reference to the statement, “I would be too embarrassed to use a condom,” more than 70% of all respondents disagreed, 22 respondents agreed and 28 of them were not sure. This is a clear indication that TTIs can create an atmosphere that fosters discussions on HIV and condom use so that a positive attitude towards condom use as a means of fighting HIV is developed and harmonized with societal values and the individual survival instincts.

In relation to a statement, “teaching teenagers about condom use as a means of HIV prevention will encourage them to have sex,” 28.5% of pre-service participants and 36.4% of in-service participants disagreed while 18.1% and 16.9% respectively were not sure. This finding

may indicate that many respondents are uncomfortable discussing issues of HIV prevention, and especially condom use with teenagers.The argument here is that such exposure might influence children to start having sex at an early age especially in situation where corresponding interventions are lacking.. This is a challenge that TTIs face. As institutions that are responsible for training teachers, they need to come out with specific subject content that is age friendly and acceptable to the community.

In one of the expert interviews, it was stated that the danger here is the dilemma that such knowledge creates. One principal compared it to one cultural aspect where a girl or boy is given officially a knife/spear respectively as an act of empowering them to start behaving as a man or woman. He wondered whether such a teaching would not be pointing to such a direction. In other words, teaching condom use among teenagers is another way of encouraging them to start engaging in sex, or sex-related activities. The benefits of this thinking should be an area of further research.

The study found out that when it comes to issues of condom use, participants are generally knowledgeable especially in all theoretical aspects. They know the names of the brands available in their local communities and what condoms can do especially when used efficiently and consistently. However, focus group participants mentioned how it is often embarrassing for both females and males to approach a counter in a bar or shop and ask for a condom. One participant observed,

> In this community we are known as old and married students who have come to upgrade our knowledge. How can they [traders who sell condoms] see us again shopping around for condoms? We cannot do it. This is a cause for embarrassment to ourselves.[4]

[4] Interview at Kaliro National Teachers College.

In this case, the TTIs do not have sufficient outlets for condoms and this undermines the spirit of the ABC strategy which urges such participants to remain faithful but in case they fail, they should be able to have access to and use condoms.

In another development, condom availability is problematic. In an expert interview with one official in the MOH, it was revealed that condoms are not on the government list of essential drugs and supplies. This is the reason why condoms are often out of stock. In addition, the study was informed that apart from condom availability, Ugandan men have complained about the size of the condoms. He pointed out that there has not been research done in the country to establish what would be the ideal size for the Ugandan market. He gave an example of when in 2014 the Parliament had to intervene and call upon the MOH. According to this source, there was a national outcry about condom sizes especially those made in Korea, China, and the government's own brand that was called *Engabo*[5] (also see, King, et al., 2013; *France 24*, 2014).

In this regard, it is very important that TTIs make it central to their students that condoms can only work not only when they are used consistently and properly but also when they are of the right size. This argument was further brought forward by one of the chaplains who argued that if malaria is killing people yet its medication is far cheaper than condoms, how can an institution of learning be on the frontline teaching students to use condoms which they cannot sustainably maintain as their line of defence? In her own understanding, TTIs should entirely discourage students from using condoms, and instead encourage to abstain by creating avenues that help them to do so and help them to marry as soon as they leave school.

[5] Interview at the MOH with an official in the National Condom Coordination Office.

4.2.3 Pornography

In response to a statement, "Viewing pornography increases one's chance of acquiring HIV," 115 respondents of both groups agreed (60.3% of pre-service respondents and 58.3% of in-service respondents), 53 disagreed and 25 were not sure. This statement points to the fact that participants felt that students who engage in pornographic viewing are more likely to engage in HIV risk behaviour. This is because viewing pornographic materials influences one's moral values, sexual attitudes, and behaviours (Braithwaite, et al., 2015; Harkness, et al., 2015).

In addition, pornography may act as a motivating factor to experiment on what one has seen. In so doing, a student can find himself a victim of having multiple sex partners, disregarding condom use; making it more difficult to abstain from sex. In this situation, TTIs are challenged to be innovative and to design programmes that can communicate to students the dangers involved in such activities. More so, TTIs have an obligation of finding alternative avenues and activities that can meaningfully occupy students in their free or leisure time.

4.2.4 Differences between urban and rural settings for teachers

The location of teachers in general, and TTIs in particular, determine the challenges that are faced in the implementation of the ABC strategy. In urban areas where most of the sampled TTIs are located, the students and their teachers are open to discussing the ABC strategy. Teachers feel free to start discussions at schools that most students can continue at home without any fear or attack from parents. This can be attributed to having access to open sources of information (e.g., TV, newspapers, radio talk shows, and the internet) that expose young people and their parents to the

ABC message. On the contrary, teachers in most rural settings are disadvantaged in the sense that they often find themselves as the only source of information. What they know is what their students will know because rural settings do not offer as much access to information as is found in most urban hubs and peri-urban areas.

Through focused group discussions, most in-service trainees in Kaliro NTC revealed that in areas where they come from (especially the Teso and Lango regions) the implementation of the ABC strategy is complicated by socio-cultural issues like parents marrying off their girls at a tender age to older men. In these tradition-steeped situations, women are often viewed as part of a man's property. These deep-rooted socio-cultural issues in rural areas are challenges to teachers in these settings.

At a critical analysis level, talking about the ABC strategy in rural settings is not always an easy task for teachers and the majority of them prefer not to talk about it altogether. For TTIs located in these rural areas, the ABC strategy is a challenging subject of study because it is very sensitive to talk to students who are coming from this background where customs, traditions, and cultural practices (that sometimes include high-risk HIV practices) are highly valued and cherished. Worse still, these rural settings are generally not covered by other means of exposure that would make any discussion about the ABC strategy easy. One student wondered how a person can talk about condoms as a means of protection when he/she is aware that condoms are not readily available for the masses in such areas. He cited an example in Karamoja and some deep rural areas where villages have a central market once a month. In this case, condoms are not readily accessible and available when needed on a daily/nightly basis throughout the rest of the month.

In sum, socio-cultural beliefs and the inaccessibility of resources needed to teach people about the ABC strategy in rural settings makes it hard for teachers to talk about the strategy. On the other hand, the discussion about the ABCs in most urban setting s is not all that complicated because teachers can easily access the resources they need to teach about the ABC strategy and the urban setting itself generally discourages values and practices that would stand in the way of implementing the ABC strategy. For instance, women are generally respected in urban areas, condoms are easily available and accessible at counter in bars and shops which is not generally the case in most rural and remote Ugandan villages.

At another level, the challenges faced by rural teachers differ from those faced by urban teachers when it comes to gender inequality and its effects on the ABC strategy. A rural woman's subordinate status affects her ability to negotiate condom use even when condoms are available because rural men tend to be more possessive and often expect total submission of their wives when it comes to sexual decisions. In such situations, condoms can only be used when a man wants. Briefly put, teachers in rural areas have to empower women and girls in the first place before they start any serious work on the implementation of the ABC strategy. In this case, TTIs need to do research so that they can provide comprehensive training in general areas that affect the implementation of the ABC strategy.

4.3 APPROPRIATE SETTINGS AND CERTIFICATION FOR TEACHING

Under this section, the study examined what students thought about different settings for students to learn about Sexually Transmitted Infections and the best ways for teachers to learn about HIV

prevention, treatment, care and support. Finally, the study examined about the most appropriate means for certification for teaching about HIV.

4.3.1 Most appropriate settings to learn about STIs

Participants were asked to rank three settings in the order that they thought would be the most appropriate for learning about STIs. These settings were homes, schools, and places of worship (especially churches and mosques). The data shows that when participants were asked where is the most appropriate place/setting/context for students to learn about STIs including HIV, 59.5% of pre-service participants and 46.8% of in-service participants felt churches/mosques were the most appropriate setting for this purpose.

This demonstrates the dilemma between many policy makers and TTIs when it comes to under which subject or area of specialization to place the HIV education. The reasons given ranged from the fact that the spreading of these infections is a manifestation of people not following their religious teachings to a lack of commitment to talking about morals from teachers who are not living exemplary lives. Both categories reasoned that religious leaders can use their buildings of worship, lessons, and programs to empower young people with skills and knowledge necessary to avoid STIs.

Homes and schools were placed second by the pre-service participants while the in-service participants placed schools before homes. This is grounded in the African traditional thinking that the places for teachings about sex and related matters must be where maternal aunts for the girls and maternal uncles for the boys are located. However, the reality is that living patterns of modern families have changed and these two focal persons (paternal aunts and maternal uncles) are no

longer always available to Ugandan youth. In this case, religious leaders have evolved as the best suited alternative. Consequently, with participants coming from this background, it becomes logical that the most appropriate setting for students to learn about STIs would be in churches and mosques.

4.3.2 Best ways to learn about HIV prevention, treatment, care and support

In order to find out what the participants thought about avenues and opportunities that could empower teachers in terms of acquiring knowledge and skills of about HIV prevention, treatment, care and support, the study asked participants about the best ways to achieve this. The following were the responses as shown in Table 4.2

Table 4.2 *Optimal ways teachers learn about HIV prevention, treatment, care and support*

	Pre-Service Teachers (N=116)		In-Service Teachers (N=77)	
	N	%	N	%
Attending HIV workshops/seminars	45	38.6	34	44.9
Involving themselves in HIV associated organizations	10	9.0	09	11.5
Interacting and learning from people living with HIV	04	3.4	03	3.8
Through guidance and counselling meetings	02	1.4	04	5.1
By including HIV in the school curriculum	07	6.2	06	7.7
Through Straight Talk Clubs	03	2.8	01	1.3
By accessing educative videos	03	2.1	01	1.3
By reading newspapers and magazines	08	6.9	04	5.1
Through teacher training colleges	01	0.7	01	1.3
Through music, dance, and drama	14	12.4	06	7.7
Use of electronic media	19	16.6	08	10.3

Table 4.2 shows that when the respondents were asked about the best ways for teachers to learn about HIV prevention, treatment, care, and support, the majority of both participating groups indicated attending HIV workshops/seminars was the best way. This was followed by the use of electronic media (16.6% of pre-service teachers) and 11.5% of in-service teachers getting involved

in HIV-associated organizations. Surprisingly, both categories of participants were less enthusiastic about including the subject in the formal training of teachers (only 6.2% of pre-service and 7.7% of in-service teacher participants looked at including HIV in the school curriculum as the best way for teachers to learn about HIV prevention, treatment, and care). The use of music, dance and drama was placed third among pre-service respondents, while the use of electronic media was also ranked third among in-service teachers.

In this case, it is apparent that students expect their teachers to be informed about HIV and the government strategy of fighting it. What remains central is the fact that respondents generally feel that the best way to provide HIV training is not from traditional settings of learning. Rather, they expect the MOES to arrange seminars and workshops where experts in the field come and talk about HIV. In this case, roughly 40% of all respondents expressed interest in attending such training seminars and workshops.

This reasoning and general support for workshops as the best avenues for teachers to learn about HIV prevention and support is grounded in the general socio-cultural setting that prohibits talking about sex openly. It is believed that workshops and seminars are the best conduits for training teachers on HIV prevention, treatment, care and support, because social, cultural and religious values are often well harmonized by the organizers of these training events. Consequently, they are assumed to be strategically arranged in order to equip teachers with skills and knowledge on HIV and AIDS.

At a policy level, this calls for innovations in TTIs structures so that they can be able to mobilize resources and pedagogical tools that enhance learning from such events. It is therefore important that policy makers, especially at the MOES, organize workshops that are tailored to HIV prevention, treatment, care and support. It takes ministerial planning and focus to achieve this.

Second to workshops, the data shows that electronic media (television and radio) are other channels through which teachers learn about HIV. The participants believe that through focused television and radio programming, the population in general—and teachers in particular—can be taught about various and appropriate ways of handling issues related to STIs, including HIV. In the early days of the campaigns against HIV, electronic media played a great role in creating awareness among the population and empowering people to live positively, especially those who were directly affected or infected with the virus. Using electronic media with an HIV prevention and support perspective is very effective in Uganda because of its nationwide coverage. Another reason why electronic media is preferred is that it generally airs messages and content that are nationally and culturally acceptable. In this scenario, teachers access information and knowledge that is acceptable and often avoid more controversial issues.

Sadly, due to the poor culture of reading newspapers, many participants did not look at it as a best practice for learning about HIV even though newspapers carry a lot of information on the subject. For instance, 7.0% of pre-service participants and 5.1% of in-service participants believed that newspapers and other forms of print media could help teachers with opportunities to learn about HIV prevention, care and treatment. This also points to the fact that newspapers are a luxury to many school settings, especially those that are situated in rural areas.

4.4 Teacher HIV certification

As already indicated, teachers form a frontline in the fight against AIDS. In order to carry out this mandate effectively, teachers need to be prepared and equipped with knowledge bases, skills and

appropriate pedagogical tools. In other words, they need to be competent and confident in this area that is controversial.

Through focused group discussions and expert interviews (TTIs principals and Chaplains),the study find out that most teachers have taught, talked about and answered questions about HIV and AIDS without any preparedness. For purposes of being professional and effective in handling HIV and AIDS matters, there is an urgent need to have teachers certified in handling HIV and AIDS-related subject material. This in part harmonizes the knowledge and information given to the students and also creates a cadre of teachers who are able to measure up to task.

Therefore, certification in HIV means equipping teachers with skills and knowledge bases that increase their confidence and competency in handling matters of HIV education especially in the aspects of counselling and general guidance. As providers of information, teacher training and the corresponding certification are big components of fighting HIV in schools. To do this successfully, TTIs need to appreciate that the only way to ensure quality and uniformity in terms of information given out, a certification process that covers HIV and AIDS subject content, teaching techniques, and resource utilization is the way to go.

In order to achieve the above, the following areas need to be covered: (1) pedagogical tools and knowledge bases that ground them in HIV prevention, (2) counselling techniques and procedures that are student friendly, and (3) critical and analytical skills that help students in particular and the teachers in general to feel confident while discussing sensitive and controversial topics that help teachers to examine their own attitudes towards sexuality and behaviours that are responsive to HIV prevention, care and support.

In this study, the focus was put on finding out whether students took certification of teachers in HIV prevention and counselling as an important factor in the implementation of the ABC strategy. Consequently, the following questions guided this inquiry:

1. Should teachers be certified in HIV prevention and counselling?

2. Why should teachers be certified in HIV prevention and counselling?

3. What should the certification training include?

The majority of pre-service participants (60.1%) felt teachers should be certified in HIV education, compared to only 39.9% of in-service participant responses. This implies that pre-service participants are generally of the view that there is a need to get certified in HIV prevention and counselling so that they can help their students to develop individual skills and communal strategies of avoiding acquiring HIV. Incidentally, the majority of in-service participants do not see it as a need or of great importance.

The deeper analysis reveals that certification of teachers is very important because it helps policy makers and government planners to transform conservative/traditional stances and outlooks (especially among the more senior teachers) to a more proactive approach that confronts the HIV pandemic in a realistic manner. Certification of teachers needs to be looked at as a means of creating avenues of fostering an open discussion on HIV prevention and how teachers can play their role effectively. This can be done by TTIs helping teachers to create a capacity of innovating values, behaviours and attitudes that can help young people to navigate their way in this era of HIV and AIDS.

After establishing that participants (especially pre-service respondents) generally looked forward to having teachers certified in terms of HIV prevention and counselling, the study investigated the reasons that compelled participants to think that there was need to have this

certification by asking the following question; why should teachers be certified in HIV prevention and counselling?

Table 4.3 shows that when the respondents were asked for the reasons for certification of teachers in HIV prevention and counseling, the highest number of respondents (24.4% for pre-service and 22.5 for the in-service participants) indicated that making teacher professional counselors should be the leading factor in this process of certification. To help the students understand HIV better and broaden their knowledge came second. The other reasons that were outlined rotated around helping teachers to: (1) deal with students on issues of HIV more effectively, (2) gain more confidence when discussing HIV-related issues, and (3) be exemplary in the community especially when it comes to positive living and support of those affected by HIV and AIDS.

Table 4.3 *Why should teachers be certified in HIV prevention and counselling*?

	Pre-Service Teachers (N=116)		In-Service Teachers (N=77)	
	N	%	N	%
To make teachers professional counselors	28	24.4	17	22.5
Help students understand HIV better	29	24.8	12	15.7
To broaden their knowledge on HIV	24	20.9	16	20.6
To deal with students on issues of HIV more effectively	20	17.1	20	25.5
To gain more confidence when discussing HIV-related issues	08	7.3	08	10.8
To be examples in the community	07	5.6	04	4.9

A final look at the certification, includes responses from participants about what the certification training should include (see Table 4.4).

Table 4.4 *What should the HIV education certification training include?*

	Pre-Service Teachers (N=116)		In-Service Teachers (N=77)	
	N	%	N	%
The effects of HIV	16	14.0	11	14.0
Abstinence from sex and its benefits	13	11.9	14	17.7
Use of condoms and its benefits	15	12.5	12	15.9
How HIV is spread or transmitted	16	13.7	08	11.0
The causes, symptoms, and prevention of HIV	15	12.8	08	10.4
Communication skills and counseling	13	11.6	09	11.6
Being faithful in marriage and its benefits	15	12.5	06	7.9
How to take care for HIV and AIDS patients	08	6.9	07	8.5
Treatment of HIV and AIDS	05	3.9	02	3.0

Table 4.4 shows that when the respondents were asked about what should be covered in the HIV and AIDS certification training, both groups ranked effects of HIV top on the list and other topics that were suggested include: abstinence from sex and its benefits, condoms use, how HIV is spread or transmitted and the causes, symptoms and prevention of HIV. Other areas cited include communication skills and counseling, being faithful in marriage, and how to take care for AIDS patients and treatment of HIV and AIDS. In general terms, participants pointed out that any HIV certification program should cover the modes of HIV transmission from one person to another, the ABC strategy, communication skills, including emphasizing survival, critical and analytical skills that are necessary in averting peer pressure. It was also found out that the participants in general were aware of the fact that HIV and AIDS have ravaged families and communities, proposed that the certification program should include topics on the treatment and caring for people living with HIV.

4.5 HIV AND AIDS NATIONAL COMMUNICATION STRATEGY

Throughout the study, it was emphasized by all TTIs principals that the fight against the spread of HIV should not repeat the same mistakes that the policy makers made in the initial stages of the Presidential Initiative on AIDS Strategy for Communication to Youth (PIASCY). PIASCY as deliberate strategy to curtail and contain the spread of HIV has remained a paper policy because its communication strategy was weak and institutions of learning found themselves at the center of knowing what to do but lacking the means to transfer such knowledge. One of the expert interviewees had this to say:

> We know what to say, but we do not know how to say it to different levels of students. You cannot address all students on sexual matters on an equal basis. The fleshers might have different experiences basing on the spirituality and social interactions existing at their former high schools. Again, who leads this crusade? As a principal, I do not have that time on my plate. Should we include it in the training program? If yes under what specific subject or we have to make it an independent area of study. May be, we leave it to the chaplain.

This scenario demonstrates the confusion in terms of communicating the already existing policy in TTIs that is a directive not only from government's highest political office (The President) but also a generally accepted strategy from the MOE&S. Consequently, the study found out that the similar situation is facing the ABC strategy. The data collected showed that the major factors in the HIV preventive effort lack a communication strategy that brings them together. For instance, there is no connecting string between government policy, socio economic status of many students who come from poor families, harmonization of cultural expectations and HIV cultural risk factors, gender relations and spirituality. The interconnectedness of these factors is crucial in a forming a robust communication strategy that enhances individual sexual behaviors and attitudes towards the ABC strategy. This is very important because TTIs cannot implement the ABC strategy without

communicating its major pillars in terms of the government policy, students' cultures and economic status in addition to each individual students' spirituality.

In this regard, the study observed that TTIs have a big role to play in terms of developing a communication strategy that synthesizes students sexual and growth needs as it takes into account the many aspects of HIV prevention, AIDS care, treatment and support. Therefore, the study finds it hard for TTIs to play their role when there is no proper communication on the subject matter of the ABC strategy between the students, administrators and the spiritual leaders (chaplains) of these institutions. Briefly put, the gathered evidence points to the earlier talked about cultural belief that nobody can talk about sex, more so in the open, as the underlying factor that is affecting the growth and development of HIV and AIDS communication strategy especially in these TTIs.

4.6 RELIGIOUS- AND GOVERNMENT-FOUNDED TTI DIFFERENCES

Apart from Kampala International University which is purely a private institution of higher learning, all these TTIs are public institutions of learning and government sponsored despite the fact that some of them (Kibuli and Ggaba) were founded to advance a religious cause. In terms of students' sponsorship, the majority of students in the pre-service are government sponsored while some students are admitted on a private sponsored scheme. On the other hand, in-service teacher training is purely a private scheme unless an individual teacher gets sponsorship from his/her current school or from an organization that has an interest in such a training.

However, it is also important to note that government allows founding bodies in these institutions to run them basing on the founding faith and their religious accepted traditions. For instance, in Kibuli PTC, any student who applies is expected to be admitted but girl/women are expected to be under veil no matter which faith you subscribe to. If you are in Ggaba, the Catholic faith provides a framework of running the institution. Above, you must be a Moslem to head Kibuli PTC and a Catholic to head Ggaba PTC.

In relation to the above, when it comes to the implementation of ABC strategy, Ggaba and Kibuli will in principle will encourage their students to abstain and those who are married to remain faithful. Actually, Kibuli and Ggaba PTC, have arrangements that can allow married students to live off-campus. In otherwords, the existing rules at these institutions do not allow students to show any tendencies presumed to be sexual in nature or engage in pre-marital sex. The school environment endeavors to substitute the Condom use (C) in ABC strategy with Chastity. In these faith-founded institutions chastity is both a value and virtue that is highly recommended and students are called through prayers, acts of faith and belief to be so.

Only the contrary, government sponsored institutions have a liberal perspective. They take their students as mature people who should be left on their own to make their decision in relation to the ABC Strategy. For instance, the study was able to establish that condoms are sold in bar and shops around halls of residence in Makerere University and Mubende National Teachers College. Girls can freely go to hall of residence that belong to boys and vice versa which is unheard of in these religious founded institutions.

4.7 INADEQUATE INSTITUTIONAL CAPACITY BUILDING MECHANISMS

The improvement in care management and the realities of positive living with HIV have brought challenges to the TTIs in particular and the education sector in general. Negatively, the study found out that many TTIs have either lost teachers to AIDS and those who are HIV positive might not be able to perform to their full capacity and that there is no direct way to talk about it. This has an adverse effect to the remaining teaching staff who have to carry on the extra load especially in times of sickness or when a teacher passes on and there is no immediate replacement. One principal expressed his situation as follows:

> It takes two to three years to submit a staff request and get a response from the headquarters. With the current staff ceiling from the Ministry of Public Service the situation is too bad. When a staff dies, his or her load is taken up by another staff or shared among the staff. This is frustrating and tiresome especially in science subjects. In extreme cases, I have taken teaching roles on top of administration. On other hand, it even becomes hard to submit a request when a staff member is sick and unable to teach at all because the public service standing order are that you cannot even ask for another staff when the one you intending to replace is still alive. By all standards, it is even inhumane. In such cases, when a staff member is affected by HIV and AIDS, the effects overflow to the students, staff and the administration.

In this case, TTIs find themselves operating below the staff ceilings which affect their general output. At the same time, this situation is made worse, because the old instructors who are mentors to the young instructors are the ones in most cases affected by the pandemic. They leave these institutions without mentors whose experience and guidance especially in school practice or internship cannot be found in books.

At a wider perspective, HIV and AIDS have cut down on individual institutions capacity building in regard to curricular structuring and manpower development. The major revelation was that schools in general and TTIs in particular are facing a new challenge of students who are HIV

positive and are on anti-retroviral drugs (ARVs).The teaching staff and administration have identified this as a major problem because they are not trained to handle such situation and there is no personnel at the moment to handle such situations. The phenomenon has given rise to many questions ranging from human rights of such students and instructors to questions of privacy and the protection of other students who are not affected by the virus. For one administrator had this to say:

> The problem we have is that the curriculum is inelastic and does not accommodate new challenges in HIV and AIDS management. There are situations when the guardians/parent come and tell you that I have brought my daughter or son because I know you will care. She/ he is on ARVS. Are you going to announce it to everybody? How do you protect others during the games when you know that bleeding or bruising is inevitable? In general how do you serve and provide a learning environment to all without discrimination against and risking any student or teacher. It is a challenge.

The deeper analysis of this information points to the fact that TTIs lack the institutional mechanism to address such challenges. There is no professional framework to handle such emerging challenges despite the fact that the administration in these TTIs recognize the need to equip their staff with the necessary knowledge bases and skills to handle HIV and AIDS related challenges. Briefly put, the study found out that TTIs need to be innovative and restructure their curriculum so that trainees are well grounded in HIV prevention and AIDS psyche-social care and treatment.

4.8 SUMMARY

This study was able to show that at least students are aware of the existence of HIV and AIDS in their communities even though there were variations in the depth of their knowledge. On the other hand, it was also clear that TTIsfind themselves constrained and challenged by the ideological

stances of their founders when it comes to talking about the ABC strategy which highlights condom use among the methods of fighting the spread of HIV.

It is important to note the significance attached to the certification of teachers in HIV and AIDS in the fight against the scourge. All administrators and policy makers agreed that TTIs will be more effective when they produce teachers who are able to stand up against their cultural and religious ideas in a professional manner. This can be achieved when they are fully grounded in both pedagogical and critical skills that can empower them to analyze their cultural setting and come up with ways that inform their students without conflicting with their cultural and religious leaders who are major stakeholders in whatever they do.

In summary, the role of TTIs in the implementation of the ABC strategy heavily relies on their capacity to train and empower teachers who can harmonize cultural/traditional values that may be in conflict with the one or more aspects of the ABC strategy. Consequently, TTIs need to engage in research that centers on HIV education, especially in trying to find out the best approaches and pedagogies that are suitable and acceptable to all stakeholders.

5.0 RECOMMENDATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

In the middle of the fight against HIV and AIDS is a communal effort and it must be made clear that each and every individual's contribution plays a great role. The role of TTIs must be seen and appreciated within the wider scope of the society that they find themselves situated in. In the context of the African cultural setting, it is clear that TTIs can only be effective in this war against AIDS only when they align themselves within the social customs and the religious beliefs that are cherished within their atmosphere of operation.

From a social construction perspective, TTIs in general and teachers in particular need to develop a working relationship with the communities that they serve and abide by the principles of founders despite the fact that they are public institutions. For instance, there is no way TTIs founded on religious principles can promote condoms. In this regard, they have to deal with the issue in a manner that they remain playing a leading role in terms of knowledge production without conflicting with the founding fathers.

In this study, it is apparently clear that there is a need for the dissemination of HIV information is still complicated and there is need to study the dynamic of communication that can effectively deliver such information to the intended audiences.

Second, TTIs, and their sponsoring organizations, play a great role in terms of what is taught to students. In this case, the stakeholders need to develop a synergy that allows trainers to be effective when handling HIV education as a component part of the wider subject matter of sexuality education.

Third, stigmatization has to be addressed in a comprehensive manner so that students and/or teachers who are HIV positive can live their normal lives respectively. This is a complicated issue. Take the example where the parents confide in teachers and tell them that their children are on ARVs and need special attention. How does the teacher who is not trained in HIV counseling handle this delicate situation? The answer is that TTIs need to prepare these teachers before they leave the gates at graduation. Do they have resources to do so? The answer is absolutely no.

In this situation, the role of TTIs must be clear. Are they going to be researchers, advocates or sleeping giants that are willing to follow what society says without their input as the disease continues devastating society? Briefly put, the role of TTIs in the fight against AIDS remains unclear especially when society is not willing to invest in new approaches to fighting the disease in the higher institutions of learning where students find themselves as victims of the situation.

All in all, this chapter wraps up the entire study and discusses major areas that need attention from the TTIs management, founders and policy makers especially from the MOE&S. These areas are (1) communicating an HIV education strategy, (2) cultural realities, (3) pedagogical materials, (4) institutional capacity building, and (5) HIV curriculum implementation.

5.1 RECOMMENDATIONS FOR POLICY AND PRACTICE

5.1.1 Communicating an HIV education strategy

The HIV education policy stresses the importance of all learners, employees and employers to having access to information on HIV that is accurate, current, complete, appropriate and

scientifically factual in a manner that does not alienate any group. In response to the challenges brought about by this scourge, the MOES (in working with the Uganda AIDS Commission) developed the *Education Sector HIV and AIDS Workplace Policy* with an aim of promoting behavior change practices, increasing access to quality HIV and AIDS prevention, care, support and treatment services, empowering schools and other education workplaces to sustainably play their role in ensuring a healthy and efficient workforce (MOES & Uganda AIDS Commission, 2006).

The fight against AIDS rotates around people engaging in a dialogue that describes the pandemic as a social catastrophe that can easily wipe the entire society. However, the problem is that the transmission of this information from one group to another is difficult because of cultural reasons. It is against this background that TTIs find a problem in including HIV education in their curriculum. For example, in Central Uganda, it is only the paternal aunts and maternal uncles that are expected to talk to girls and boys about sexual matters respectively. Outside these two categories of people, it is a taboo to talk about sex. In this situation, TTIs find themselves in a dilemma of whether to break the barrier or just be complacent to the situation and maintain the status quo.

On other hand, TTIs can only play a major role in the implementation of ABC strategy when they become agents of change. This calls for a deliberate strategy that invests in research and other knowledge ventures that can allow such a free exchange of knowledge and ideas. Through research and community engagements, TTIs can lead a deliberate dialogue or discourse where basic knowledge about HIV, risk sexual behaviors and culture are discussed.

TTIs can develop a friendly communication strategy that is age friendly and comprehensive enough to cover HIV knowledge bases, attitudes and life skills. This strategy need to be developed

with the cultural and religious expectations in order to be accepted. Any attempt to communicate outside the socio-cultural background will backfire since society is not yet ready for an open discussion about sex.

TTIs have a moral obligation of developing a communication strategy for the future teachers. This is because the shaping of morals and behaviors of students is dependent on schools where the teachers are the major stakeholders. Through proper means and methods of communicating about HIV, students in particular and society in general will be able to discuss and have a dialogue about HIV risk factors, coping mechanism especially against stigma and better ways of supporting the victims of HIV in society. This strategy is important in creating better avenues of engaging society and empowering the young people with life skills necessary to avoid HIV.

This role of developing a communication strategy cannot be underestimated especially in this era where society needs teachers on the frontline of fighting AIDS. TTIs have to take a leap of faith into the unknown of sex education so that sexuality and HIV become a topic that parents can discuss with their children and help them to face the challenges that they face in the wider society especially when they are living on their own.

5.1.2 Cultural realities

Culture is still a big issue in the fight against AIDS. Ugandan communities are known for their strong ties to their cultural heritages and cultural practices that are HIV risk factors like widow/widower inheritances, regimental circumcision where local surgeons use unsterilized equipment to perform the procedure on different persons, domestic violence, marrying off young

girls and forced marriages. In this situation, TTIs can lead a social transformation by exposing inherit dangers in these practices. Take the example of the education of the girl child. This step alone has a great multiplier effect. An educated young girl will marry when she is ready, she will marry a person of her choice and above all it will be easy for her to stand up for her right to demand for an HIV test before marriage. In this regard, the teacher must be competent enough to perform this function and this starts from the TTIs.

Through comprehensive research, TTIs are fundamentally important in constructing a teaching approach that is based on life skills. The basic assumption here is that young people lack life skills such as assertiveness or the capacity to say "NO" especially in situations where peer pressure is at play. On the other hand, in communities where forced marriages reign high, individuals at school should be empowered to say no using the available social, religious and legal frameworks.

This approach helps individuals to develop skills like critical and creative thinking, positive decision making and self-esteem (World Bank 2002). In situation where talking about sex openly is a taboo, it is important to recognize that this approach does not discuss sex explicitly but offers opportunities of insulating young people against risk behaviors that could expose them to HIV.

In this study, it was found out that the cultural definition of a family is still a big issue in the transmission of HIV. This is because men take women as part and parcel of their properly. Women have no say in their sexual relationships with their husbands, they are actually sexual objects that a man can use as and when he wants. Women have no power to negotiate their sexual relations in a marriage. Take the example of polygamy; women are never consulted when a man wants to marry a second wife. In absence of pre- marriage HIV testing, when the second woman

is infected, the resulting situation is catastrophic to the entire family. In this perspective, TTIs need to empower teachers to be able to guide society in transforming some of these cultural ideas.

5.1.3 Pedagogical materials

In the fight against AIDS, most of the teaching materials whether formal or informal have been provided by NGOs like Straight Talk Magazines and developing partners' projects like the Uganda Program for Human and Holistic development (UPHOLD), which was designed among other objectives to support the government social sector policies. These entities have played a big role in producing materials that help the young people visualize the impact and the devastation HIV has caused in families and society at large. Apparently, these pedagogical materials lack the professional touch from an education point of view and at worst they have caused confusion among the learners and the education community (UNAIDS/IATT, 2006).

In the study by Mugabirwe (2005), it was found out that whereas teachers take HIV education seriously, there is no practical guidance on the materials to use in its teaching. In this situation, TTIs can fill this vacuum by spearheading studies and researches that can champion the production of appropriate pedagogical material that are age and education level responsive in the teaching of HIV lessons.

5.1.4 Institutional capacity building

One of the dilemmas that faces the pre-and in-service training is the how to address the complex issue of having teachers who can ably guide their students along the modalities and realities that

can keep them free from HIV. This is a complex task because neither the administrators nor the trainers have been fully engaged in the developing of skills, knowledge bases and curriculum content needed to embrace such a challenge. In order to grasp this reality, one needs to critically understand the teaching methods in these TTIs and the curricular structure that is majorly constructed around teaching methods and curricular structuring

5.1.4.1 Teaching method(Pedagogy)

In Uganda like any other African country, the teacher knows it all. The teacher looks at students as containers to be filled with knowledge. In this situation, the teacher-student relationship cannot allow interpersonal exchange of ideas or fears that individual students might be having on HIV. This type of banking education (Friere, 1993) does not allow a clear understanding of the HIV situation that requires student to be interactive, creative and involved in a total transformation of behaviors and attitudes.

The teaching of HIV education must be interactive, thoughtful and soul searching. The student must be presented with the situation that they are able to grasp and internalize so that they construct their own realities and create a meaning of HIV in their lives and communities. It is important to emphasize the fact that in teaching HIV education, the teacher's knowledge should authenticate the students' knowledge. It should be dialogical whereby the teachers create an atmosphere that brings out what the students know about HIV and lead them to the world of discovery in terms of the magnitude and devastation the disease can cause when not given the attention it needs. Through dialogic interaction, the teacher should be able to guide the students in discovering that ABC is the answer.

At this level, TTIs should be at the center of this praxis. They should be able to marry the policy requirements, implications of the ABC strategy and articulate them in their situations. This should be an inquiry that is aimed at finding out what works for who and where so that they complement the efforts of donors, policy makers, and government planners. Moreso, it is only through the dialogical interaction that the Ugandan society sees ABC as a strategy that is similar to their cultural understanding of virginity before marriage that was cherished and highly regarded throughout the ages.

All in all, the teaching of HIV subject matter should be done in a manner that empowers individuals to make their own life decisions. It should be understood and appreciated that there is a high degree of positive response when young people are involved in the formulation, delivery and evaluation of the subject matter that affects their lives (Mirembe, 2002). In this case, the teaching of HIV in TTIs should adopt a participatory approach that gives individual students an opportunity to ask questions and get involved in finding answers to the puzzles of their daily lives and the challenges that come their way.

5.1.4.2 Curricular structuring

There MOES lacks a general curriculum on HIV education in Uganda that can be adapted and adopted in Ugandan schools. This makes it an optional area of study in TTIs especially when the management team is not interested in HIV education. The teaching of HIV education, which is not examinable remains an option at most TTIs. This has a very negative implication on the teachers that are produces. They either have less understanding of HIV phenomenon or have no competencies to approach the scourge especially in front of their students.

The TTIs with the help of policy makers at the MOES need to consciously design a curriculum on HIV that can be monitored, supervised, and examined. This curriculum should frame HIV as a social and scientific question that society must investigate with seriousness it deserves since it touches on most human sensitive issues in terms of individual privacy and public concerns. For example, how can you guarantee the liberty of HIV positive child to play football without risking his playmate (remember in the African context where bruising and bleeding are expected occurrences in the game).

In the nutshell, the curricular should be able to articulate African folklore alongside modern and scientific knowledge bases about HIV. This should be done within the framework that is was given by the Centers for Disease Control and Prevention in July 2016 (CDC, 2016). In this framework any HIV curriculum must cover the following thematic areas: defining HIV provide a history of AIDS, including its origins; defining the stages of HIV; describing how one knows if they have HIV; provide basic pre-cautionary measures in the prevention against HIV; and an explanation on how HIV turns into AIDS.

This structure leads us to the next question. How do we cater for HIV education in an already crowded curriculum? This idea was born from an argument advanced by many TTIs administrators who argued that HIV education is a necessary topic that does not have room in the current teaching and curriculum structure. This structure cannot be expanded to accommodate the subject so long as the policy makers are not willing to frame HIV as an area of study in TTIs. However, the interesting revelation was that all TTI administrators interviewed agreed that the teaching of HIV education must be embraced and catered for as quickly as possible. At the end of the day, it was agreed that there must be a deliberate policy guideline to determine how HIV

education can be integrated in the existing curriculum as outlined in the manual for *Integrating HIV/AIDS Education in School Curricula* (UNESCO, 2006).

5.1.5 HIV curriculum implementation

The major premise here is that HIV is a preventable disease and that education is the only weapon the nation has in the process of protecting the young people from acquiring and spreading HIV. It also plays a major role in the care and treatment of those affected by the disease. In this case, TTIs can take a leading role in finding out the best pedagogical tools and methods of teaching the young people about the dangers of HIV and how best they can protect themselves against the scourge.

In this regard, it is important to recognize the importance of monitoring and evaluation of this effort in TTIs. Consequently, TTIs have the obligation of producing competent and qualified teachers in schools. After a critical analysis of the situation and the collected data, the study found out that

1. Teachers lack knowledge and skills on HIV education, a fact that was attributed to lack of training in the TTIs; and
2. Leadership commitment to effective teaching of the subject is very low. Schools generally did not have enough resources for quality teaching and learning of the subject. This point was further complicated by the fact that HIV education is not examinable. As a result, no TTIs tend to allocate an appropriate amount of needed subject time to provide students with sufficient content information.

Based on these two factors, the major recommendation throughout this study is to establish a monitoring and evaluation mechanism that will oversee the teaching and learning of HIV in TTIs. This is very important because without evidence-based quality assurance, the teaching and learning of HIV and AIDS in TTIs will remain a wanting field of study. In this situation, the monitoring and evaluation of HIV education programs in TTIs will provide the lenses to improve the teaching

and learning of HIV and AIDS in schools and in the long run increase the competencies needed by the teachers in the field.

5.2 IMPLICATIONS FOR FUTURE RESEARCH

Education in general and TTIs in particular are best social insulation society has against AIDS in Africa. In Uganda today, the hope against HIV is making people aware about the devastating effects of HIV on a family, society and the entire nation. This can be done through cultural education where the interface between culture and education is investigated at the scholarly level using all the tested and relevant perspectives.

In order to have this outlook work, research needs to be done on how the education sector and TTIs in particular can be used to fight the scourge. In this regard, this research can be expanded to cover cultural horizons that seem to undermine the ABC strategy and how they contribute to the spreading of HIV.

It is also important to realize that teachers form a well co-ordinate and spontaneous network that can be used to reach all corners of the nation. Therefore, focused research is needed to find out how TTIs can be used in this co-ordination especially in the dissemination of scientific information in the management and care of HIV on top of creating awareness in the communities. This research is essential in establishing and securing resources and knowledge bases needed in the fight against AIDS.

The role of TTIs in the fight against AIDS in general and ABC strategy in particular is very crucial in the efforts of minimizing the effects of HIV on the education sector. This is because TTIs have a direct impact on

- HIV prevention programs,
- the pedagogy in relation to the different levels of education,
- the curriculum content, and
- the development of skills that are HIV and AIDS related.

In relation to these factors, it is important that government and development partners deliberately focus on TTIs as means of making the ABC strategy popular and acceptable to the local population. It is very important that government and development partners provide avenues for exchanging ideas and experiences where learning of new approaches and strategies can be developed.

It is also cardinal to note that the role of TTIs' founding bodies and their strong held beliefs/ideologies have a major role in what these institutions can do. This calls for a working relationship that articulates the common grounds and areas in the ABC strategy that TTIs can emphasize in their training as they navigate ways of accommodating the differences or contentious areas that are identified in this study especially condom use.

APPENDIX A: INTERVIEW SCHEDULE FOR TTI ADMINISTRATORS

1. Does the school have a copy of the MOES HIV and AIDS guidelines and the education sector HIV and AIDS workplace policy?

2. Have you trained your teachers in the field of HIV education and pedagogy?

3. Is HIV education required of students before they can advance to another class?

4. Do you think HIV education helps the students to avoid high risk behaviors?

5 What would you think should be included in the HIV education curriculum?

6. What challenges are you facing in the mainstreaming of HIV education?

7. What do you think is the role of TTIs in the implementation of ABC Strategy?

8. Do you have any recommendations especially for policy makers in the education sector?

Thank you for your cooperation.

APPENDIX B: POLICY MAKERS' INTERVIEW SCHEDULE

1. Who comprises the HIV and AIDS Unit (HAU)? (i.e. how many members? What is their capacity? What is their training? What is their profession?

2. What are the core functions of the HAU? Examples?

3. Does the HAU have a strategic plan for its activities? If YES, illustrate activity and state time frame (when started? Process? When ending?) If NO, why?

4. How does HAU relate to the field (from HQ to the school)?

5. Does HAU have an independent budget to carry out HIV education activities?

6. Is implementation of HIV education a factor in school curriculum? Why?

7. Have teachers in Primary/Secondary/Tertiary Institutions been trained to deliver HIV education?

8. What challenges are being met in the implementation of ABC strategy?

Thanks for your time.

APPENDIX C: SCHEDULE FOR FOCUSED GROUP DISCUSSIONS

1. What should be taught to students about HIV in the formal school curriculum?

2. What is currently being taught about HIV in the formal curriculum?

3. How do students learn about HIV outside of the formal curriculum?

4. What challenges do you faced as students or teachers

   I. In the process of discussing ABC strategy with your peers?
   II. In the communities when discussing ABC strategy?

5. Who normally talks about ABC strategy in your communities?

6. Which is the hardest pillar to talk about in the ABC strategy and why?

7. Are there cultural practices that are in direct conflict with the ABC strategy?

8. Do you think religious or cultural leaders have a big role to play in the ABC strategy?

9. What can we do to improve on the outcomes of the ABC strategy especially in our schools and communities?

Thank you so much for your participation.

BIBLIOGRAPHY

Adeogun, A. A. (2001). The principal and the financial management of public secondary schools In Osun State. *Journal of Educational System and Development. 5(1),* 1 - 10.

Aggleton, P., Yankah, E., Crewe, M. (2011). *Education and HIV/AIDS – 30 years on. AIDS Education and Prevention, 23,* 495-507.

Alatrista, J. & Arrowsmith, J. (2004). Managing employee commitment in the not-for-profit sector, *Personnel Review, 33,* 536-48.

Aseka, E. (1998). *HIV/AIDS in Africa: A Socio-Cultural Perspective.* Retrieved from www.k4health.org./toolkits/hiv

Avert. (2011). Sex workers, prostitution and AIDS. Retrieved January, 2014, from: http://www.avert.org/prostitution-aids.htm

Avert. (2016). HIV prevention programmes overview. Retrived June 20, 2016 from http:// www.avert.org/professionals/hiv-prevention-programming

Bandura, A. (1977). *Social learning theory.* Prentice Hall Inc. Englewood Cliffs, New Jersey.

Barnowe-Meyer, B. (2012). HIV/AIDS Prevention in Sub-Saharan Africa: 'Abstinence until Marriage' Education and Girls' Health in Wakiso District, Uganda. *Human Welfare, 1,* 18-41.

Barrett, A. M. (2007). Beyond the polarization of pedagogy: Models of classroom practice in Tanzanian primary schools. *Comparative Education, 43(2),* 273- 294.

Belawati, T. & Zuhairi, A. (2007). *The practice of quality assurance system in open and distance learning: A case study at Universitas Terbuka Indonesia (The Indonesia Open University).* International Review of Research in Open and Distance Learning, 8, 1492-3831.

Berger, P. & Luckman, T. (1967). *The social construction of reality.* New York, NY: The Free Press.

Bogdan, R. & Biklen, S.K. (2004). *Qualitative Research for Education: An Introduction to Theories and Methods.* Boston, MA: Pearson.

Boler, T. & Aggleton, P. (2005). *Life skills education for HIV prevention: A critical analysis.* London, Save the Children and ActionAid International.

Bowring – Carr, C & West-Burnham, J. (1997). *Effective learning in schools. How to integrate learning and leadership for a successful school.* London, UK: Pearson Education.

Braithwaite, S. R., Coulson, G., Keddington, K., & Fincham, F. D. (2015). The influence of pornography on sexual scripts and hooking up among emerging adults in college. *Archives of Sexual Behavior*, 44 (1), 111-123.

Brown, H. C. (2001). *Gender-based violence, relationship power and risk of HIV infection in Uganda.* Kampala: Fountain Publishers Ltd.

Bush. T. & Oduro, J. (2006). New principals in Africa: Preparation, induction and practice. *Journal of Educational Administration,* 44, 359-375.

Braun, V. & Clarke, V. (2006). Using thematic analysis in qualitative research in psychology. *Qualitative Research in Psychology,* 3 (2), 77-101.

Caillods, C., Kelly, M. J. & Tournier, B. (2008). *IIEP brief for planner, HIV and AIDS: Challenges and approaches with the education sector*. Paris: UNESCO Institute for Educational Planning.

CDC. (2006). Sexually Transmitted Diseases Treatment Guidelines, 2006. *Morbidity and Mortality Weekly Report*, 55(RR-11).

Campbell, C. (2003). '*Why HIV prevention programmers fail.'* Editorial in Student BMJ 11 (December), 439-441.

Carl-Hill, R, Peart, E. (2003). *Understanding the Impact of HIV/AIDS on Education Systems in Selected Eastern and Southern African Countries.* DFID, UK.

Carl-Hill, R, Kamugisha, J. K, Katahoire A. R., & Oulai D. (2002). *The impact of HIV/AIDS on Education and Institutionalizing Preventive Education.* UNESCO/IIEP, Paris.

Catherine, K. R. (1993). *Analysis of personal narratives*. Newbury Park, CA: SAGE Publications Inc.

Clarke, D. J. (2008). *Heroes and villains: Teachers in the education response to HIV.* Retrieved from www.iiep.unesco.org.

Coombe, C. (2004a). Awareness – Safety – Competence, HIV and teacher education. A consultation on HIV and teacher education in East and Southern Africa. Retrieved from http://www.hivAIDSclearinghouse.unesco.org/search/resources.

Cook, N. (2009). AIDS in Africa. Congressional Research Service. Retrieved from www.loc.gov/crsinfo.

Creswell, J. W. & Miller, D. (2000). *Determining validity in qualitative inquiry. Theory into Practice.* Los Angeles, CA: Sage.

Harkness, E. L., Mullan, B., & Blaszczynski, A. 2015. Association between pornography use and sexual risk behaviors in adult consumers: A systematic review. *Cyberpsychology, Behavior, and Social Networking*, 18(2), 59-71. https://doi.org/10.1089/cyber.2014.0343.

Human Rights Watch. (2006). *HIV and human rights in Uganda.* New York, NY: De Cook D'Agostino, J. V. (2000). Instructional and school effects on students' longitudinal reading and mathematics achievements. *The Journal of School Effectiveness and School Improvement, 11, 197-235.*

Digumarti, B. R. (2000). *HIV, ethics and human rights.* Delhi-India: Discovery Publishing.

Dinham, S. (2007). How schools get moving and keep improving: leadership for teacher Learning, student success and school renewal. *Australian Journal of Education, 51,* 263-275.

Doyol, L., & Doyal, L. (2013). *Living with HIV and Dying with AIDS: Diversity, Inequality and Human Rights in the Global Pandemic*. London: Ashgate Publishing, Ltd.

Dyk, V. A. (2001). *HIV Care and Counselling. A Multidisciplinary Approach.* Cape Town: Longman.

Ediau,M., Matovu,J.Byaruhanga,J.,Tumwesigye,J& and Wanyenze,K.(2015).Risk factors for HIV infection among circumcised men in Uganda: a case-control study. *The Journal of International AIDS Society*, 18(1): 19312

Ehrhart, M. G. (2004). Leadership and procedural justice climate as antecedents of unit-level organizational citizenship behavior. *Journal of Personnel Psychology*, 57, 61-94.

Eisner Eliot, (1998). *Think with me about creativity.* New York. Dansville.

Farah, I., Kavuma, C., Mwingi, M. & Onyango, O. (2009). Where are the Gaps? HIV and Gender. Pre-Service Teacher Training Curriculum and Practices in East Africa. Commonwealth Secretariat.

Fassin, D. (2007). *When Bodies Remember: Experiences and Politics of AIDS in South Africa*CA: University of California Press.
FONDAD. (2002). HIV Control in Kabarole District, Uganda. The Hague, Netherlands.
France 24. (2014). Ugandan men say condoms too small. *France 24*, September 22, 2014. Available online at: http://www.france24.com/en/20140922-uganda-condoms-too-small-aids-hiv; accessed on 6 October 2017.
Fullan, M. (2001). *The New Meaning of Educational Change*, (3rd ed.). New York, NY: Teachers College Press.
Glaser. B. & Strauss, A. (1967). *The discovery of the grounded theory: Strategy for qualitative research.* Hawthorne, NY: Aldine.
Green, E. C. (2003). *Rethinking AIDS prevention*: *Learning from successes in developing countries*. Westport, CT: Praeger Publishers.
Gregson. S., Heather, W., & Chandiwana S. (2001). School education and HIV control in Sub-Saharan Africa: From discord to harmony? *Journal of International Development*, 13, 467-485.
Greenleaf, R. K. (1977). *Servant leadership.* New York, NY: Paulist Press.
Hallinger, P. & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *Journal of School Effectiveness and School Improvement*, 9, 157-191.
Herald, S. (2015). Community home based care for people living with HIV: An overview of client needs actors and services provided in Ethiopia. *Journal of AIDS Research, 7*(8), 97-108.
International AIDS Society. (2006). *Report of the Evaluation of the XVI International AIDS Conference*. 13-18 August 2006. Geneva, Switzerland: International AIDS Society.
Jacob, W. J., Morisky, D. E., Nsubuga, Y. K., & Hite, S. J. (2006). Evaluation of HIV/AIDS Education Programs in Uganda. In D. E. Morisky, W. J. Jacob, Y. K. Nsubuga, & S. J. Hite (eds.), *Overcoming AIDS: Lessons Learned from Uganda*. Greenwich, CT: Information Age Publishing.
Jacob, W. J., Morisky, D.E., & Nsubuga, Y. K. (2012). HIV Education in Ugandan Secondary Schools: Attitudes of Students, Teachers, and Administrators. In A. W. Wiseman & R. N. Glover (eds.), *The Impact of HIV/AIDS on Education Worldwide* (pp. 57-77). Bingley, UK: Emerald.
Jacob, W. J., Mosman, S. S., Hite, S. J., Morisky, D. E., & Nsubuga, Y. K. (2007). Evaluating HIV/AIDS education programs in Ugandan secondary schools. *Development in Practice, 17(1),* 114-123. Retrieved from http://www.jstor.org/stable/25548183
Jick, T. (1979). "Mixing Qualitative and Quantitative Methods: Triangulation in Action" *Administrative Science Quarterly, 24*(4), 602-611.
Joshi, A. (2010). Multiple sexual partners: Perceptions of young men in Uganda. *Journal of Health Organisation and Management, 24*(5), 520-527.
Kagarura, W. (2011). Hits and misses in the fight against HIV/AIDS in Uganda. *The African Portal, 3, 3-8.*
Kaufmann, D, Kraay, A., & Mastruzzi, M. 2010. "The worldwide governance Indicators: Methodology and analytical issues," Policy Research Working Paper Series 5430, The World Bank.
King, R., Barker, J., Nakayiwa, S., Katuntu, D., Lubwama, G., Bagenda, D., et al. (2013). Men at Risk; a Qualitative Study on HIV Risk, Gender Identity and Violence among Men Who

Have Sex with Men Who Report High Risk Behavior in Kampala, Uganda. *PLoS ONE* 8(12): e82937. https://doi.org/10.1371/journal.pone.0082937

Leclerc – Madlala, S. (2002). On the virgin cleansing myth*:* Gendered bodies, AIDS and ethno medicine. *African Journal of AIDS Research,* 1, 87-95.

Leithwood, K & Jantzi, D. (1999). The effects of transformational leadership on organizational conditions and students engagement with school. *The Journal of Educational Administration. Retrieved from files.eric.ed.gov/full text/ED432035.08/2015*

Kramer, L. (2000), *Under the Microscope: The Biology of HIV/AIDS.* Retrieved from www.arenastage.org/show.

Maleche, A., & Day, E. (2011). *Traditional Cultural Practices and HIV: Reconciling Culture and Human Rights.* Working Paper for the Third Meeting of the Technical Advisory Group of the Global Commission on HIV and the Law, 7-9 July 2011.

Marum, E., & Madraa, E. (1999). A decade of an effective national response to AIDS. A national Review of the Ugandan experience. Kampala

Marshall, C., & Rossman, B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage.

Mbiti, J. (1999). *African religious and philosophy.* German: Heinemann Publisher.

Merriam, S. B. (1998). *Qualitative research and case study applications in education.* San Francisco, CA: Jossey-Bass.

Michaelowa, K. (2001). *Primary education quality in francophone sub-Saharan Africa: Determinants of learning achievement and efficiency considerations.* World Development, 29(10), 1699-1716.

Ministry of Education and Sports (MOES). (2004). *Ministry of Education and Sports Draft Policy on HIV/*AIDS. Kampala: MOES.

MOES. (2013). *Education Statistical Abstract 2013*. Kampala: MOES. Retrieved April 25, 2017 from: http://www.education.go.ug/files/downloads/Abstracts_2013.

MOES & Uganda AIDS Commission. (2006). *The education sector HIV and AIDS workplace policy.* Retrieved April 20, 2017, from: http://www.education.go.ug/.

Ministry of Health (MOH). (2001a). *HIV/AIDS Surveillance Report*, STD/AIDS Control Programme, Ministry of Health. Entebbe, Uganda: MOH.

MOH. (2001b). *Ministry of Health national health policy.* Kampala: MOH. Retrieved June 24, 2014, from: http://www.health.go.ug/docs/NationalHealthPolicy.

MOH and ORC Macro. (2005). *Uganda HIV/AIDS Sero-Behavioural Survey, 2004-2005*. Calverton, MD: MOH and ORC Macro.

Mirembe, R. (2002). AIDS and democratic education in Uganda. *Journal of Comparative Education* 38 (3), 291-302.

Miller, J. P., & Wayne. S. (1990). *Curriculum perspectives and practice*. Toronto, Canada: Copp Clark Pitman Ltd, Longman Company.

Morisky, D.K., Jacob, W.J., Hite, S.J., & Nsubuga, Y.K. (2006). *Overcoming AIDS: Lessons Learned from Uganda*. Greenwich, CT: Information Age Publishing.

Morrow. S. L., & Smith, M. L. (2000). Qualitative research methods in counselling psychology. In S. D. Brown & R. W. Lent (eds.), *Handbook of Counselling Psychology (*3rd ed.), New York, NY:

Morse, S (1996). *Youth, AIDS and Sexuality Transmitted Diseases.* London: Routledge.

Mudege, N. N., & Undie, C. (2009). Formative Evaluation: Presidential Initiative on AIDS Strategy for Communication to Youth. Final Report. New York, NY: Population Council.

Muijs, D., Harris, A. and Crawford, M. (2004). *The role of assistant heads: a review of research.* Paper presented at the International Congress for School Effectiveness and School Improvement, Rotterdam, January 5.

Mulford, B. & Silins, H. (2011). Revised models and conceptualisation of successful school principalship for improved student outcomes. *International Journal of Educational Management, 25,* 61-82

Mupa, P. & Chabaya, R. A. (2011). *Effect of class size on students' opportunity to learn: Experiences in primary schools in Masvingo province in Zimbabwe*. Saarbrucken, Germany: Lambert Academic Publishers.

Murphy, E. M., Greene, M. E., Mihailovic, A., & Olupot-Olupot, P. (2006). Was the "ABC" Approach (Abstinence, Being Faithful, Using Condoms) Responsible for Uganda's Decline in HIV? Retrieved May 15, 2017 from: http://www.ncbi.nlm.nih.gov.

Namara, R. (2009). *NGOs poverty reduction and social exclusion in Uganda.* Maastricht, Netherlands: Shaker Publishing.

Nantulya, V. M. (2002). HIV/AIDS prevention: Policy and program context of Uganda's success story. Presentation to USAID, Washington, D.C.

Ndawula, S., & Nakawuki, R. C. (2010). Educational resources for HIV/AIDS prevention in Uganda: The role of PIASCY program in primary schools. *Journal of Educational Research, 13,* 20-31.

Oxfam. 1998). Gender, poverty and intergenerational vulnerability to HIV/AIDS. Retrieved Sept, 2015 from http://www.oxfam.org.nz.

Opolot Okurut, (2004). Classroom learning environment and motivation towards mathematics among secondary school students in Uganda. *International Journal of Learning Environments Research,* Issue 3, 267–277.

Pankhurst, J. (2002). *The Uganda Success Story? Evidence and Claims of HIV Prevention. Bombay:* Lancet Publication.

Parolini, J., Patterson, K. & Winston, B. (2009). Distinguishing between transformational leadership and servant leadership. Leadership & Organization Development Journal, 30, 274-91.

Patton, N. (1990). *Qualitative evolution and research methods.* (2nd Ed). London: Sage.

Pascoe, S. et al. (2015). Poverty, Food Insufficiency and HIV Infection and Sexual Behaviour among Young Rural Zimbabwean Women. *PLOS Strategic Management Journal* 6 (2), 126-138.

PEPFAR. Fact Sheet.(2015*). Latest Results*; December 2015.Retrieved Sept, 2016 from: kff.org>Global Health Policy.

Riddell, C. R. (2008). *Does foreign aid really work*? New York, NY: Oxford University Press.

Sejjoba, E. (2003, December 20). Forty Percent of Rakai Men Have Sex Outside Marriage. *New Vision,* Kampala. Retrieved from http://www.newvision.co.ug.

Teddlie, C. & Reynolds, D. (eds.). (2000). *The International Handbook of School Effectiveness Research* London: Falmer Press.

Thompson, Bruce. (2008). *Foundation of Behavioural Statistics: An Insight-Based Approach*. New York: Guilford Press.

Thungu, J., Wandera, K., Gachie, L., & Alumande, G. (2008). *Mastering PTE Education.* New York, Oxford University Press.
Uganda AIDS Commission (UAC). (2004). *MTR of the National Strategic Framework for HIV/AIDS Activities in Uganda: 2000/01–2005/06*. Kampala: UAC.
UAC. (2000). *The National Strategic Framework for HIV AIDS Activities in Uganda: FY 2000/01–2005/06*. Kampala: UAC.
UAC. (1997). *HIV/AIDS Status Report*. Kampala: UAC.
UAC. (2015). *HIV/AIDS Annual Report*. Kampala: UAC.
UAC. (2016). *HIV/AIDS Annual Report*. Kampala: UAC.
Uganda Bureau of Statistics. (2011). *Uganda Demographic and Health Survey Report*. Kampala, Uganda Bureau of Statistics.
Uganda Network of AIDS Service Organisations (UNASO). (2014). Year 2013 Annual Report. Retrieved from: http://www.unaso.org.ug.
UNASO. (2010). *Annual Report: 2010 Community Awareness and Response on AIDS*. Retrieved April 26,2017 from: http://www.carauganda.org.
UNASO. (2015). National Prevention Strategy, 2011-2015. Facts about HIV&AIDS in Uganda. Retrieved July 25, 2017 from: http://www.unaso.blogspot.com.
Uganda Parliament. (2014). Uganda HIV Prevention and Control Act of 2014. Kampala: Government of Uganda.
UNAIDS. (2007). *AIDS epidemic updates*. Retrieved April 25, 2017 from: http://www.unaids.org.
UNAIDS. (2011). *Joint United Nations Programme on HIV/AIDS.* Geneva, Switzerland: UNAIDS. Retrieved April 25, 2017 from: http://www.unaids.org.
UNAIDS. (2015). *The HIV and AIDS Uganda Country Progress Report 2014*. Geneva, Switzerland: UNAIDS. Retrieved June 15, 2017 from: http://www.unaids.org.
UNAIDS. (2016). *Global* AIDS *updates*. Retrieved, April 26, 2017 from http//:www.unaids.org/.
UNESCO. (2000). Dakar Framework for Action. Education for All Movement: Meeting our collective commitment. Karine Brune (ed.).
UNESCO. (2006). *Challenges of implementing free primary education in Kenya: An assessment report*, Retrieved June 15, 2015, from http://www.unesdoc.unesco.org.
UNESCO. (2008). *Training teachers in HIV Context: Experiences from Ethiopia, Kenya, Uganda and Zambia.* Retrieved April 26,2017, from: http://www.unesdoc.unesco.org.
UNESCO. (2011). Booklet 6: Pre-service teacher training. Good Policy and Practice in HIV/AIDS. Paris: UNESCO.
UNICEF. (2006). Gender and HIV/AIDS: Prevention among young people. Retrieved April 2, 2017 from: http:// www.unicef.org.
UNDP. (2002). *Uganda Human Development Report*. Kampala, Uganda.
UNDP. (2012). *Uganda Human Development Report 2012. Linking the Environment to Human Development:* Retrieved from: http://www.undp.org/countries/countries_facts_sheets.
UNFPA. (2003). Influencing the health agenda: UNFPA's experience leading the Health Development Partners' Group. New York: UNFPA.
UNFPA. (2014). Contraceptives and condoms for family planning and STI/HIV prevention. External procurement support report 2013. New York: UNFPA.
UNRISD. (2006). The politics of HIV/AIDSin Uganda. Geneva, Switzerland.
Tumushabe, J. Vandemoortele, J., & Enrique, D. (2000). The "Education Vaccine" against HIV. *Current Issues in Comparative Education, 3 (1),* 6-13.

Wabwire-Mangen, F., Odiit, M., Kirungi, W. Kaweesa, D. K. & Okara. W. (2009). Uganda HIV modes of transmission and prevention response analysis. Kampala, Uganda.

WHO. (2010). *Health Topics*. Retrieved January10, 2010, from http:// www.who.int/topics/hiv

Wisner, P. S. Stringfellow, A. Youngdahal, W. E., and Parker, L. (2005). The service volunteer-loyalty chain: An exploratory study of charitable not-for-profit service organizations. *Journal of Operations Management*, 23, 143-61.

World Bank. (2002). Education and HIVAIDS: *A Window of Hope*. Washington, DC: The World Bank.

World Bank. (2010). *Africa Regional Capacity Building Workshop on Operational Planning in HIV and AIDS: Eastern and Southern Africa*. Workshop Final Report. Johannesburg: The World Bank.