

**FACTORS AFFECTING THE UPTAKE OF VOLUNTARY COUNSELLING AND
TESTING AMONG YOUTH IN RURAL NIGERIA**

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DEDICATION

To the eternal God, of whose breath I live. To my beautiful wife and gorgeous daughter, when I see those electrifying smiles daily, it cements my desire to keep living. I love you both!

ABSTRACT

The number of AIDS-related deaths in Nigeria is a public health concern. Voluntary counselling and testing (VCT) has been shown to be a critical gateway in reducing the disease mortality. However, the benefits of VCT is yet to be effectively optimized, especially in the Global South. The purpose of this study was to explore the factors affecting the uptake of VCT among youth in rural Nigeria. Naturalistic inquiry was used to gather qualitative data from ten rural youth in southwestern Nigeria. An overarching theme was developed: (Dis)Approving Voices. Major themes included: External Voices, Internal Voices, and Voices of Acceptance. The results revealed there are barriers, such as stigma and low levels of awareness, to testing among youth in rural communities. Furthermore, the participants shared the need for more acceptance of VCT users and HIV patients. The implications of the research findings for future policy development are discussed.

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TABLE OF CONTENTS

DEDICATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENTS	v
LIST OF TABLES	viii
CHAPTER ONE: STATEMENT OF THE PROBLEM	1
Rationale for Study	1
Background	2
Literature Review	5
Methodology Overview	5
Problem Statement	6
Purpose	7
Research Question	8
Research Significance	8
CHAPTER TWO: REVIEW OF THE LITERATURE	9
The Burden of HIV/AIDS	9
The Past and the Current State of VCT	10
The Youth and Rural Community	12
Importance of VCT in Disease Control	14
Treatment challenges	14
VCT intervention	16
Obstacles Affecting VCT Uptake	18
The Youth Perspective on Factors Affecting Voluntary Counselling and Testing Uptake	26
Summary	26
CHAPTER THREE: METHODOLOGY	29
Research Design	29
My Philosophy of Inquiry	27
Underlying propositions	30
My philosophical assumptions	30
Naturalistic Inquiry	31
Research Setting	32
Participants and Participant Recruitment	32
Data Collection	34
Data Management	34
Data Analysis	35
Rigor and Trustworthiness	37
Credibility	37
Transferability	37
Dependability	38
Confirmability	38
Ethics	38
Respect	39
Concern for welfare	39
Justice	40
Summary	40

CHAPTER FOUR: FINDINGS	41
The Research Participants	42
(Dis)Approving Voices	43
External Voices	44
Knowledge and understanding	44
Community influence	47
Religious beliefs	48
Internal Voices	49
Perception of risks and benefits.	50
Perceived barriers	51
Pervasive denial	53
Voices of Acceptance	54
Improving access	55
Increasing inclusivity	57
Normalizing HIV and VCT uptake	58
Conclusion	59
CHAPTER FIVE: DISCUSSION	61
The Significance of External Influences and Internal Fears	63
Limitations of Study	77
Summary	79
REFERENCES	80
APPENDIX A: LETTER OF INFORMATION AND CONSENT	92
APPENDIX B: INTERVIEW GUIDE	94

LIST OF TABLES

Table 1: Themes and Sub-Themes.....	42
Table 2: Names, Age, Gender, and Prior VCT Experience of Participants	43

CHAPTER ONE: STATEMENT OF THE PROBLEM

Rationale for the Study

My experience with two different clients at a Human Immunodeficiency Virus (HIV) treatment centre in Nigeria influenced my research interest and the chosen methodology. The first client was HIV positive and came to the clinic for her antiretroviral therapy (ART). I asked about her family, only to watch her to burst into tears. Then she made a profound statement: “I lost my husband and three kids to what you call AIDS, and the doctor told me we showed pretty late.” Further probing revealed that they, as a family, were never offered the opportunity to undertake HIV counselling and testing (VCT) during their visits to the clinic. Interestingly, it was during a visit to the hospital for a viral infection that her physician recommended VCT. It turned out that she was HIV positive and was told to bring her family for her next hospital visit.

Sadly, family members tested positive as well and were advised to start ART immediately, because their virus levels revealed that they had been clinically eligible for treatment well before knowing their HIV serostatus. Furthermore, she stated that the comprehensive health centre available in their community never advised them of VCT and its benefits and, in fact, did not have such a service. She buttressed her point by saying that it took her approximately three hours to get to the HIV treatment centre every two weeks, which was located in a different state. The client’s response prompted me to think that making VCT services accessible to clients might motivate more of them to access care. This experience was crucial in further strengthening my research question and the topic of interest.

On the other hand, I had a conversation with another client on the phone; he told me he had been diagnosed with Hepatitis B. Following my assessment, I counselled him to consider HIV testing, but he refused, citing the “fear of stigma and discrimination” associated with being HIV positive. He said, “If I could get a place to get tested far away from my community, then I would listen to you.” He further explained that he knew where he could access VCT in his town, but that he had confidentiality concerns. His concerns were in contrast to the first client’s story shared earlier, and both experiences revealed the range of factors affecting people’s attitude towards VCT uptake in Nigeria and the need to conduct an in-depth analysis of these differing reasons by getting “close enough” to the individuals involved.

These experiences formed the basis for my philosophy of inquiry: interpretivism and subjectivism. I strongly support the school of thought that reality is subjective and is a function of the respective individual’s interpretation of events; having a “rich” and “accurate” account of this view of the social world will require listening to the person concerned (Van de Ven, 2007, p. 36). All this put together helped shape my research inquiry: “What are the factors affecting the uptake of voluntary counselling and testing among youth in rural Nigeria?”

Background

The problem of HIV illness, incidence, and mortality has become a global and public health concern. The recent report released by Joint United Nations Programme on HIV (UNAIDS, 2014) showed some encouraging statistics, but more still needs to be done in Africa. The report revealed a global prevalence of 35 million infections at the end of 2013. This relatively high prevalence has been attributed to more people enrolling for

treatment and therefore living longer (UNAIDS, 2014). However, AIDS-related deaths within this time totalled 1.5 million globally (p. 9). More disturbing is the fact that sub-Saharan Africa contributed about 1.5 million new infections to the global incidence of HIV in 2013, and has been greatly affected by the mortality of the disease (UNAIDS, 2014). These figures have prompted global health institutions and governments of both high- and low-income countries to direct efforts towards battling HIV illness.

HIV is now perceived as a huge national and global challenge and is still being viewed as a defining public health crisis of our time (Simon, Ho, & Karim, 2006; Yahaya, Jimoh, & Balogun, 2014). In the early 1990s, the World Health Organization (WHO) projected that by the year 2000, about 26 million individuals would be infected worldwide, with about 90% coming from low-income countries (Quinn, 1996). This projection sadly became an undeniable truth, as my search into the literature showed a rapid increase in HIV prevalence in low-income countries. This further confirmed the WHO projection (Quinn, 1996), with Nigeria conspicuously occupying the second position in the list of countries with the greatest disease prevalence and number of AIDS-related deaths (National Agency for the Control of AIDS [NACA], 2014, p. 18; see also Yahaya et al., 2014).

Approximately 2.0 million people were infected with HIV globally in 2014, the lowest incidence since the year 1990 (WHO, 2015). Africa as a continent and Nigeria as a country have made giant strides in slowing the spread of the disease and in the reduction of disease mortality (WHO, 2015). Current estimates reveal a 41% reduction in the number of new infections in Africa between the years 2000 and 2014 (WHO, 2015). However, there is a need to further reduce the spread of HIV (NACA, 2014, p. 13;

Yahaya et al., 2014). While it can be said that substantial gains have been made in the high-income countries to slow down the mortality of this dreaded disease, the same cannot be said of low-and middle-income countries (LMIC) like Nigeria (NACA, 2014, p. 13). Moreover, as the pace of globalization and immigration continues to increase, the burden of HIV illness will require further attention.

One of the strategies employed by some LMIC, such as Zambia and Zimbabwe, to help combat HIV was to encourage people, especially those living in rural areas, to be counselled and tested (Corbett et al., 2006; Matovu & Makumbi, 2007; Miller et al., 2014; Osborn & Obermeyer, 2016; Wringe et al., 2008; Yahaya et al., 2014). The uptake of HIV testing and counselling is crucial for any progress to be made in the prevention and management of the disease (Corbett et al., 2006; Matovu & Makumbi, 2007; Wringe et al., 2008; Yahaya et al., 2014). When infected patients are diagnosed early, they are more likely to use the management program and subsequently reduce the likelihood of spreading the disease in their communities. In other words, the earlier individuals undergo testing and counselling, the better their chances of experiencing a better quality and length of life (Matovu & Makumbi, 2007; Zolopa et al., 2009).

The prevalence pattern of HIV across Nigeria shows that the sexually active group contributes a significant burden of the disease (Salako et al., 2013), and youth form a large percentage of this population group in Nigeria. Interestingly, very few studies have been done to examine youth's perspective on how to further curb the spread of HIV across the nation. Even though various authors have shown that increasing VCT services is one of the most critical pathways to reducing HIV prevalence, little is known about the

situation (Corbett et al., 2006; Matovu & Makumbi, 2007; Wringe et al., 2008; Yahaya et al., 2014).

Katibi and Adegoke (2013) studied university students in north central Nigeria and revealed a rising number of infections among this group. Even though there was a high level of disease awareness among the youth, very few actively sought VCT services. Some of the reasons for the low uptake included accessibility, knowledge and the awareness level of VCT, fear, and stigma. The authors therefore suggested that addressing these factors can help increase the number of people engaging in VCT services, possibly modifying their engagement in high-risk behaviour (Katibi & Adegoke).

Literature Review

My search of the literature revealed that very few studies have been conducted in Nigeria examining the factors affecting youth's attitude towards VCT uptake. None of the existing research was conducted using a qualitative design. Qualitative methodology, I believe, allows the participants to freely share their experiences on the research topic; hence, I decided to use this approach to address my topic of interest. While some authors showed that fear, stigma, and discrimination play a crucial role in affecting people's attitude towards VCT uptake (Kalichman & Simbayi, 2003; Skinner & Mfecane, 2004; Yahaya et al., 2014), others saw accessibility and religious beliefs as more significant factors (Corbett et al., 2006; Matovu & Makumbi, 2007). Existing literature about factors affecting VCT uptake are discussed extensively in Chapter Two.

Methodology Overview

The question guiding this research was: “What are the factors affecting the uptake of voluntary counselling and testing among youth in rural Nigeria?” My research question played a significant role in helping me arrive at my method of inquiry.

My search into the literature revealed that no study has examined the factors affecting rural youth’s attitudes towards VCT utilization in Nigeria using qualitative methodology. This notion, along with my philosophy of inquiry, informed my choice of naturalistic inquiry as a methodology. For a researcher to adequately capture the perspectives of the participants, there is usually the need to observe the participants in their natural setting, which was an opportunity afforded to me by using this approach (Blummer, 1969; Lincoln & Guba, 1985; Patton, 2002). Additionally, naturalistic inquiry entails gathering rich and detailed data from the participants, using in-depth interviews and participant observation during the data collection phase of the study (Blummer, 1969; Lincoln & Guba, 1985; Patton, 2002). Furthermore, naturalistic inquiry data collection techniques allowed my participants to share their experiences on the research topic (Athens, 2010).

Problem Statement

The number of AIDS-related deaths (210,031 persons) in 2013 shows that the virus is a threat to the Nigerian population (NACA, 2014, p. 13). The estimates reveal that of the 3 million people currently living with HIV in Nigeria (UNAIDS, 2012, p. 9), approximately 87% are 15 years and above (NACA, 2014, p. 13). While reports are positive about the reduced prevalence and increased number of patients currently enrolled in ART (UNAIDS, 2014, p. 14), aggressive action still needs to be taken to further reduce

the number of new infections and also to increase awareness of the disease, especially in the rural areas (Yahaya et al., 2014). Some authors have shown that a superficial knowledge of HIV, reduced socioeconomic status, and poor access to health care services are among the factors that play a role in the spread of the disease in Nigeria (Iliyasu, Abubakar, Kabir & Aliyu, 2006; Yahaya et al., 2010). It is worthy of note that these factors are prominent in rural Nigeria (Yahaya et al., 2014).

Investigators have shown that VCT is central to achieving the objective of reducing the incidence of transmission by increasing the number of patients on ART. VCT can help achieve this because it has been shown prevent delayed entry into HIV treatment, which eventually results in the desired reduction of AIDS-related deaths (Corbett et al., 2006; Matovu & Makumbi, 2007; Tewabe, Destaw, Admassu, & Abera, 2012). While this approach has been used successfully in some African countries, it is yet to be efficiently maximized in Nigeria (Yahaya et al., 2014). Additionally, the number of testing and counselling facilities in 2011 in Nigeria was 1,357 (WHO, 2014, p. 1). Putting this in perspective, there is one VCT centre per 100,000 adults in the country (p. 1). This number of VCT facilities validates the claim that more must be done in terms of access, to maximize VCT use in Nigeria as a nation and to help further reduce HIV morbidity and mortality.

Purpose

The goal of this study was to examine the factors that affect utilization of VCT among youth in rural Nigeria. The findings will serve as a useful tool in developing interventions to reduce the morbidity and mortality of HIV and AIDS in Nigeria. Experience has shown that the earlier patients become aware of their HIV status, the more

likely they are to present for treatment (Gupta et al., 2011). Early presentation for treatment can be linked to an improved chance of survival (Denison, O'Reilly, Schmid, Kennedy, & Sweat, 2008) and reduced transmission of the virus (Gupta et al., 2011). For this reason, enhancing access to VCT will help minimize the spread of the disease and will also improve the quality of life of patients who test positive for the virus.

Research Question

The current status of Nigeria in the fight against HIV and AIDS, coupled with little or no significant attention to youth in hard-to-reach places, has led me to ask this research question:

“What are the factors affecting the uptake of voluntary counselling and testing among youth in rural Nigeria?”

Sub-questions that I addressed include:

1. What does VCT mean to youth in rural Nigeria?
2. How do youth perceive the burden of HIV in Nigeria and how does it affect them?

Research Significance

The findings from this study will contribute to our knowledge and may help address the development of policies to address the barriers highlighted by youth as related to the factors affecting their frequent uptake of VCT. Most importantly, this research served as a platform for youth to air their views and perspectives on the factors affecting their attitude towards VCT.

CHAPTER TWO: REVIEW OF THE LITERATURE

In this chapter, I briefly describe the burden of HIV illness and the role of the youth and the rural community in the dynamics of this disease in Nigeria. The role of VCT in the past, present, and future is also discussed, with specific attention paid to the factors hindering its uptake among youth. Furthermore, the role of VCT in achieving further reduction in the spread of HIV illness across Nigeria is addressed. Lastly, the role of this study in tackling the current challenges facing VCT utilization and how it will contribute to existing knowledge is discussed.

The Burden of HIV and AIDS

The HIV is a retrovirus that infects cells of the immune system, destroying or impairing their function (Reeves & Doms, 2002). Consequently, the infected person becomes more susceptible to potentially fatal opportunistic infections, such as respiratory tract infections, cancers, genital herpes, and oral thrush. The most advanced stage of HIV infection is AIDS (Reeves & Doms, 2002). The outcome can be fatal, especially if infected individuals do not present early for treatment. The major treatment option for HIV and AIDS is the use of ART, which can eliminate most or all symptoms of the illness (UNAIDS, 2014).

While current figures show a global decline in HIV estimates, the illness continues to be a major public health concern, especially in LMIC (Pham, Wilson, Law, Kelleher, & Zhang, 2014). In 2013, AIDS claimed over 1.5 million lives worldwide, with sub-Saharan Africa being the worst hit by this deadly condition (WHO, 2014). Africa accounts for approximately 70% of the global burden of HIV even though it has only 13% of the world's population (WHO, 2014, para. 1). Nigeria, the most populous African

country, accounts for around 13% of the disease burden in this region (NACA, 2014, p. 18; Yahaya et al., 2014). Even though current trend analysis reveals a reversal of the epidemic from the year 2005 to date, one must interpret this apparent progress with caution because it masks the dynamics of the disease among different population groups in Nigeria (NACA, 2014, p. 13). Despite a drop in the national prevalence in 2012 to 3.2% from 3.6% in 2007, Nigeria's estimated population of 177 million makes this situation a grave concern (NACA, 2014, p. 8; UNAIDS, 2014). Increased disease awareness, improved uptake of VCT, and the prompt initiation of ART in eligible patients have been given as the main reasons for the decline in the HIV pandemic (NACA, 2014, p. 13; see also Pham et al., 2014). However, there is need to employ strategies to further reduce the number of those infected.

The Past and the Current State of VCT

The term "voluntary counselling and testing" is sometimes referred to as "client-initiated testing and counselling" (Kennedy et al., 2013, p. 2). Client-initiated testing and counselling involves individuals in need of the service actively visiting facilities that offer the service (Creek et al., 2007; Fylkesnes & Siziya, 2004; van Dyk, 2013; WHO, 2007a, 2007b). However, this client-based VCT comes with several limitations that contribute significantly to the challenges in sub-Saharan Africa, including Nigeria (Asefa & Mitike, 2014; Matovu & Makumbi, 2007; Mutale, Michelo, Jurgensen, & Fylkesne, 2010; Nieburg, Cannell, & Morrison, 2005; Osborn & Obermeyer, 2016). Initially, the primary objective of VCT was to help people become aware of their status in a timely manner (Denison et al., 2008). Authors have shown that HIV-positive patients who became aware of their status disengaged from high-risk behaviours (Kennedy et al., 2013; Mutale et al.,

2010). Additionally, this disengagement reinforced a positive lifestyle in individuals who tested negative for the virus (Wringe et al., 2008).

Examination of the literature revealed that the WHO had as much concern for the not-so-encouraging global statistics on the uptake of VCT. This statistic prompted the body to introduce what is now widely known as the provider-initiated testing and counselling (PITC) (WHO, 2007a, 2007b). One of the main reasons for introducing PITC, according to the WHO (2007a), was to augment the traditional VCT utilization globally, with particular attention to LMIC. VCT is said to be provider-initiated when health care personnel make it part of routine health care services offered to all individuals (Kennedy et al., 2013) who visit clinics or hospitals across the country. The significant difference between the traditional VCT and PITC is that while the former involves patients actively seeking the service, the latter entails patients being offered the service by health care providers.

It is worthy of note that PITC was associated with an increase in the uptake of VCT in sub-Saharan Africa as originally intended (Medley & Kennedy, 2010). However, PITC came with some challenges, one of which was the possibility of patients being coerced into getting tested (Bayer & Edington, 2009). Secondly, even though the uptake of VCT increased during PITC introduction, patients receiving their results did not experience a concurrent increase (Groves, Maman, Msomi, Makhanya, & Moodleyb, 2010), although this is a major problem shared by both traditional VCT and PITC (van Dyk, 2013). Overall, the objective of VCT in further reducing the spread of the virus cannot be wholly met if patients are not aware of their HIV status. Therefore, the need to

address the challenges facing the uptake of VCT in Africa, especially Nigeria, becomes imperative.

By and large, VCT's main role was, and still is, to help reduce the spread of HIV infection. Even though PITC has helped to improve the overall picture, more still needs to be done in countries like Nigeria, where some authors have observed that youth and residents of rural communities are greatly affected by low utilization of VCT (Iliyasu et al., 2006; Odimegwu, Adedini, & Ononokpono, 2013).

The Youth and Rural Community

There are several definitions pertaining to who constitutes a "youth." While some believe a youth is any unmarried person, others are of the opinion that being a youth is a perception and not necessarily age-determined. For this study, the WHO definition of youth was adopted: any individual between the ages of 15 and 24 (WHO, 2014, p. 1). This stage of young adulthood comes with high-risk sexual activity and an increased chance of being infected with HIV. Additionally, this developmental stage can be challenging because it represents a period of trying to belong, the search for an identity, and little concern for future consequences of one's actions (Agardh, Cantor-Graae, & Ostergren, 2011). This age group is a subset of the population with the highest HIV prevalence in Nigeria (NACA, 2014, p. 17). For this reason, targeting this age group in the fight against the disease in Nigeria can be highly significant.

Little work has been done to study the contribution of this age group in rural southwest Nigeria to the national HIV epidemic. Additionally, more resources are usually directed towards the urban youth as compared to the rural youth in most LMIC (Hansen, Dalsgaard, & Gough, 2010). This is surprising because the resolution adopted by the

United Nations General Assembly (of which Nigeria was a part) in 2011 showed significant concern for youth in the declarations made about HIV (UNAIDS, 2012, p. 29). A review of the resolution shows that members agreed that there was grave concern for people between the ages of 15 and 24, as they account for more than one third of all new HIV infections, with figures showing that 3,000 young people are infected daily (UNAIDS, 2012, p. 29). The reasons adduced to this staggering figure included that most youth (mainly in LMIC) still have limited access to quality education, and only 34% of the young people had adequate knowledge of HIV. Additionally, in some instance, laws and policies exclude the youth from HIV-related services such as voluntary testing and prevention education. Furthermore, only 33% of countries had specific prevalence targets for the youth (United Nations General Assembly, 2011, p. 5). The members of the assembly, therefore, concluded that specific measure that actively engage youth in the fight against HIV should be put in place. Intensifying national HIV testing campaigns and significant expansion of community testing and counselling were recommended as plausible interventions. This UN report reflected the low level of attention currently given to the youth, both globally and nationally, on HIV-related issues, even though it has been documented that youth are the most affected by the disease in Nigeria (Azuonwu, Obire, Putheti, & Nwankwo, 2010).

It is widely acknowledged that national and cultural differences make it difficult to arrive at a universally accepted definition of a rural community (WHO, 2009, p. 6). For this study, a rural location was viewed as one that is underserved regarding access to health care, where the vulnerable and poorer population reside (p. 6). Rural communities account for approximately 54% of Nigeria's population (WHO, 2013). It requires two to

three hours by road to reach facilities in an urban centre. This limited access to primary health care services, including VCT, is associated with preventable new infections in these hard-to-reach places (Iliyasu et al., 2006; Jamda et al., 2014; Odimegwu et al., 2013; Yahaya et al., 2014).

Furthermore, the United Nations General Assembly (2011) highlighted the need to redirect resources towards strengthening evidence-based health sector prevention interventions for rural and hard-to-reach places. Several authors have shown that many health care approaches employed in LMIC target the urban areas, sidelining the rural communities (Hansen et al. 2010; Iliyasu et al., 2006; Odimegwu et al., 2013). This further buttresses the need to pay attention to the rural population if any meaningful progress is to be made with the HIV-prevention programs.

Lastly, VCT showed plenty of promise in the fight against HIV illness; however, limited success has been achieved in the reduction of the mortality of the disease. Even though there is overwhelming evidence to suggest that VCT is beneficial in effectively combating the spread of the virus, utilization remains weak (mainly in Africa). Therefore, efforts are now being directed towards identifying obstacles to the uptake of VCT so as to maximize its advantages effectively among the youth and in rural environments in Nigeria.

Importance of VCT in Disease Control

The benefit of VCT in reducing the prevalence and incidence of HIV has been shown by many researchers (Corbett et al., 2006; Matovu & Makumbi, 2007; Tewabe et al., 2012). A discussion of the treatment challenges encountered when managing HIV patients and the role of VCT in addressing disease control is provided in this section.

Treatment challenges. ART has accounted for a reduced number of AIDS-related deaths (UNAIDS, 2014). The success achieved so far with ART has been referred to as one of the most remarkable achievements in recent public health history (UNAIDS, 2012). Between 1995 and 2013, ART averted approximately 5 million deaths in sub-Saharan Africa alone (UNAIDS, 2014). However, barriers to successful treatment have been identified, some of which are social, political, or cultural in nature (Sumartojo, Doll, Holtgrave, Gayle, & Merson, 2000; Yahaya et al., 2014). For instance, some patients believed that there is a significant inverse relationship between adherence to ART and faith in God (Kagee & Delport, 2010). This phenomenon was demonstrated by Kagee and Delport (2010, p. 6):

You also get people from a religious perspective, they will leave their medication because they believe that God has told them (to do so), and those people have an unyielding influence on their congregation, that they do not have to drink it. (p. 6)

Low adherence to ART contributes significantly to the number of AIDS-related deaths in Nigeria. Some scholars revealed that only eight countries accounted for about 58% of the global mortality figures for AIDS in 2013, with Nigeria topping the list with a 14% death burden (Granich et al., 2015). Furthermore, late initiation of ART in AIDS patients, even when they are clinically eligible, has been cited as one of the most critical factors for decreased survival (Zolopa et al., 2009).

While the use of ART has been successful in ensuring HIV patients live longer and healthier lives in many other countries, this progress report has not been effectively implemented in sub-Saharan Africa especially Nigeria, and the current AIDS-related deaths corroborate this claim (Granich et al., 2015; Puhan, Natta, Palella, Addessi, &

Meinert, 2010; UNAIDS, 2012). This unacceptably high number of AIDS-related deaths in LMIC has been attributed to factors such as reduced access to health care services, ignorance, lack of knowledge of the disease, and infrequent or lack of VCT uptake (Yahaya et al., 2014; Zolopa et al., 2009). Simply speaking, the more people are aware of their HIV status, the higher the chances of those who test positive to the disease enrolling for ART, leading to fewer AIDS-related deaths.

VCT intervention. There are various interventions currently being used to fight HIV and AIDS globally (Alsallaq et al., 2013). However, the role of VCT has been deemed pivotal in achieving the global goals of HIV prevention and care (Odimegwu et al., 2013). In spite of the importance that has been adduced to VCT, its acceptance, patronage, and uptake have been very discouraging in some LMIC (Odimegwu et al., 2013). Figures from demographic and health surveys by the Nigeria National Population Commission (2013, p. 246) showed that 80.8% of the people between 15 and 24 years of age have never utilized VCT, even though findings from the survey revealed that 56.2% of this age group knew where these VCT services were being offered. The study showed that 77.4% of those living in urban areas and 47.9% residing in rural communities knew where they could undergo VCT. However, only 7.9% of all youth and 7.1% of the overall rural Nigerian population used VCT within the 12-month period preceding the survey.

Furthermore, a survey of the literature revealed numerous expectations were placed on VCT in the late 1980s and early 1990s. These expectations prompted researchers, who believed change in high-risk behaviour is crucial to the control of the spread of HIV infection in LMIC, to consider the effect of VCT uptake on the behaviour of the recipients (Allen et al., 1992; Bayer, 1989; Miller & Pinching, 1989).

Allen et al. (1992) conducted a study in Rwanda, in which they tried to find out if the rate of condom use decreased or increased following uptake of VCT. Findings revealed a marked increase in condom use (i.e., support for HIV prevention measures) by discordant couples from 4% to 57% before and after the VCT uptake respectively, within a 1-year period. The authors hypothesized that uptake of VCT caused a large increase in condom use, followed by a lower rate of new infections. The results showed about 57% of the discordant couples used a condom as compared to the 14% of the larger cohort who did not use a condom. The researchers concluded that VCT is a potentially useful health care approach in controlling the spread of HIV in African countries. However, this study was conducted among illiterate people who could have had difficulty understanding the educational video presented to them. Therefore, the conclusion that the behavioural change displayed by the participants was solely due to their understanding of the benefits of VCT was later contested (Beardsell, 1994).

A more recent study on the importance of VCT as a significant HIV prevention measure was conducted in 2008 by Denison and colleagues. The authors did a meta-analysis of seven studies, with a focus on examining the relationship between VCT uptake and behavioural risk reduction in some African countries within a 15-year period. Findings revealed that the odds of participants who had undergone VCT engaging in unprotected sex (i.e., high-risk behaviour) were significantly less when compared with their counterparts who had not received VCT, although the length of the impact of VCT on recipients' behaviour varied across the reviewed studies, with none exceeding a one-year period from the baseline. Also, there have been mixed views on how VCT uptake specifically impacts behavioural change among individuals (Denison et al., 2008;

Gadegbeku, Saka, & Mensah, 2013; Weinhardt et al., 1999). While some scholars argued that VCT uptake caused people to change their behaviour regardless of the test results, others were of the opinion that only those who tested positive for HIV demonstrated a behavioural change (Matovu & Makumbi, 2007; Odimegwu et al., 2013).

Another significant benefit of VCT is its ability to help reduce the spread of HIV across the globe. Authors have shown that some countries have successfully used VCT to bring the spread of the disease in their respective countries to a considerable halt (Mall, Middelkoop, Mark, Wood, & Bekker, 2013). Additionally, among other preventive strategies, VCT has been shown as one of the most effective methods of reducing the spread of the virus in LMIC such as Nigeria (Alemu, Abseno, Degu, Wondmikun, & Amsalu, 2005), especially considering the ability of VCT to serve as an entry point to treatment and behaviour change (Asiyanbola, Adejumo, & Arulogun, 2016; Iliyasu et al., 2006).

Obstacles Affecting VCT Uptake

The Nigeria National Population Commission's (2009) demographic health survey on the utilization of VCT revealed that Nigeria has much work to do in harnessing the benefits of VCT as an effective HIV prevention measure (Chan et al., 2010; Iliyasu et al., 2006). The survey revealed an uptake level of VCT as low as 1.9% in rural Nigeria (Chan et al., 2010). Even though there was overwhelming evidence to show that VCT can significantly reduce HIV transmission, uptake remains low in Nigeria, especially in the rural environment (Iliyasu et al., 2006).

Corbett et al. (2006) conducted a study in a city in Zimbabwe to learn if the attitudes of employees towards VCT was influenced by the proximity of the service to

their workplace. The controlled cluster randomized trial used two VCT procedures during the intervention phase of the study: (a) an on-site VCT, to conduct HIV testing instantly; and (b) an off-site VCT voucher, to be used at a convenient time in a free testing centre. The sample size was 7,482 employees, who were pooled from 22 eligible businesses within the territory considered for the data collection, and the study lasted two years. Results revealed mean uptake rates of 51.1% and 19.2% for on-site VCT and off-site VCT respectively. The authors observed that there was general enthusiasm shown by the recipients of the on-site VCT testing, suggesting that accessibility and convenience might play pivotal roles in individuals' decisions. On the other hand, even though the two VCT procedures were made available for a 2-year term, uptake of VCT by the employees declined with time. The percentage of repeated visits made for testing by the two groups within 3-month intervals was 9.6% for on-site testing and 5.1% with the off-site VCT voucher. Nonetheless, Corbett et al. concluded that accessibility and convenience play significant roles in the uptake of VCT in communities of developing countries. Therefore, improving the existing VCT models could be of immense value in HIV prevention and care in countries such as Nigeria.

A similar study was conducted on the impact of accessibility on the uptake of VCT in Uganda (Matovu & Makumbi, 2007). The researchers saw the problem of a low uptake of VCT from an access point of view; they looked at how VCT could be expanded through alternative methods, in addition to the current regular VCT model, in order to improve uptake in hard-to-reach places. Matovu and Makumbi (2007) tried to differentiate the existing, traditional VCT model (Creek et al., 2007; Fylkesnes & Siziya, 2004) from relatively new alternative VCT delivery approaches. They recommended that

alternative methods, such as mobile VCT that involves delivering services from a van in rural communities, should be considered. However, mobile VCT comes with a high cost of delivery to clients, prompting calls for governmental assistance for its efficient delivery in rural communities, where the majority of the people are impoverished (Asingwire, 2004). Another strategy mentioned by Matovu and Makumbi in their study was the home-based VCT model, which primarily involves carrying out the testing and counselling service in the client's home. The home-based VCT has been practiced in some African countries with a high rate of success (Were et al., 2006; Wolff et al., 2005).

Yoder and colleagues' (2006) community-based survey revealed that 93% of the participants agreed to participate in the home-based testing exercise. Interestingly, one of the participants made a remarkable statement: "No one can tell what is happening in your home, so they cannot spread unnecessary rumors. But if they see you going to a hospital, they begin to suspect you are sick and ask questions" (p. 46). This study showed how improving on the accessibility concerns, in terms of cost and time, associated with the traditional VCT and addressing confidentiality issues might increase VCT uptake in Nigeria.

The Centers for Disease Control and Prevention sponsored a project (also in rural Uganda) on home-based AIDS care, between May 2003 and December 2004 (Were et al., 2006). Of the 2,373 family members enrolled in the study, 99% offered to take home-based VCT. Results showed that 74% of the members who tested positive to the virus had never been tested before, and 34% of the 74% who tested positive were clinically eligible for ART (Were et al., 2006). This 34% would have missed an opportunity for early initiation of ART if it were not for home-based VCT (Matovu & Makumbi, 2007). These

two studies are classic examples of the beneficial effects of VCT, when used effectively, in combating HIV illness. It is little wonder that Uganda has been used as a reference point by researchers investigating how VCT-centred interventions can help combat HIV (Green, Halperin, Nantulya, & Hogle, 2006; Stoneburner & Low-Beer, 2004).

However, like mobile VCT, home-based VCT can be expensive for clients, especially in rural communities and hard-to-reach places (Asingwire, 2004).

Furthermore, the home-based testing can be non-beneficial when a client is not willing to let family member(s) know of his/her HIV serostatus (Matovu, Kigozi, Nalugoda, Wabwire-Mangen, & Gray, 2002). Based on the studies reviewed above, it can be deduced that proximity and cost of VCT can be significant hindrances to VCT utilization in LMIC. However, not so much has been done to study these obstacles (i.e., cost and access) in Nigeria, especially in rural areas and among the youth (Iliyasu et al., 2006).

The studies reviewed by Matovu and Makumbi (2007) showed some encouraging signs of VCT use in rural communities, probably due to little or no monetary cost to the participants. This could have been responsible for the enthusiasm shown by most of the recipients for the study. If these alternative models, such as mobile VCT and home-based testing, are to be considered as possible interventions in poverty-stricken rural communities, then cost concerns would have to be addressed to replicate this success in Nigeria (Iliyasu et al., 2006). By and large, Matovu and Makumbi's conclusion gave a perspective of how successful VCT uptake can be in rural Nigeria, especially if barriers such as accessibility (i.e., cost and time) can be eliminated among the youth population.

Kalichman and Simbayi (2003) and other scholars (Mall et al., 2013; Meiberg, Bos, Onya, & Schaalma, 2008) saw the problem of uptake in an entirely different light, concluding that the major cause of low acceptance of VCT in South Africa was a social barrier (i.e., fear of stigma and/or discrimination). Using a quantitative design, Kalichman and Simbayi sought to discover the HIV testing attitudes in a black township in Cape Town, including the role of stigma in influencing VCT access. They carried out a venue interception survey with participants (224 men and 276 women) with a median age range of 21 to 25 years (i.e., predominantly youth population). The participants completed a self-administered questionnaire in either English or the community's native language. In measuring the impact of stigma on VCT uptake, the authors used a 13-point AIDS stigma scale, which highlighted negative beliefs held about people with HIV. The findings revealed that 44% of the participants had used VCT at some time, while 53% had never used it, and most of the participants who had been tested (33%) had only used the VCT once in their lifetime. A number of those who had been tested did not wait to receive their results (38%). The participants who never used VCT said that "they believed any HIV-positive individual must have done something wrong or dirty" (Kalichman & Simbayi, p. 3). However, there was no evidence to show that those who took the HIV test but failed to receive their results held any stigmatizing beliefs. Kalichman and Simbayi concluded that the negative attitude displayed by individuals who had never been tested was more of a stigma concern than any other factor mentioned by the participants. Surprisingly, the participants who failed to learn their results after testing and those who had never been tested believed VCT was beneficial in the fight against AIDS and agreed they were willing to know their HIV status. This finding suggests that stigma might not be the only

factor for not testing, as was also concluded in a later study by Kalichman (2009). More importantly, Kalichman was able to offer another plausible intervention (i.e., anti-AIDS stigma campaigns), other than solving accessibility problems (Matovu & Makumbi, 2007), that can be used in increasing the uptake of VCT in rural Nigeria.

Odimegwu et al. (2013) discussed the impact of stigma on VCT utilization in Nigeria by examining people's attitude and perception towards people living with HIV. Their qualitative research was a mixed-methods design conducted in two urban areas of the country. They interviewed traditional rulers, religious leaders, and community heads to gather detailed information about people's knowledge and awareness about HIV-prevention programs, including VCT. The authors discovered that even though there was a relatively high level of HIV awareness, there was still a considerable degree of misconception, especially about transmission of the virus. More concerning was the level of stigma or discrimination displayed towards people living with AIDS in Nigeria. One of Odimegwu et al.'s participants referred to people living with the illness as "living ghosts" (p. 6). The deduction that can be drawn from the studies conducted by both Kalichman (2009) and Odimegwu et al. is that stigma played a crucial role in the disease dynamics and people's willingness to get counseled and tested for HIV. Therefore, the influence of stigma on the uptake of VCT in Nigeria cannot be underestimated.

Further review of studies conducted in Nigeria on the uptake of VCT revealed two articles relevant to my research interest. Yahaya et al.'s (2014) study mirrored my research question, but was a quantitative study conducted in an urban area. The results showed that ignorance, fear of being positive, the cost of VCT, and few centres for VCT influenced its uptake. Interestingly, religion and gender had no significant impact on the

perception of the participants regarding the uptake of VCT. In furtherance to this, the Likert scale of agreement could have put participants in a “box,” as ticking “I agree” with no further explanation by participants, which could be vague. A qualitative design would have been able to capture these varying interpretations in detail. Additionally, the participants used in the study included both rural and urban dwellers; the majority resided in the urban centre. However, Yahaya et al. agreed that the area of residence influenced the two groups’ perceptions of barriers for VCT. These results further justified the need for a research focus on the factors responsible for low uptake of VCT in a rural youth population in southwest Nigeria, as efforts to make VCT more accessible have been mostly directed towards the urban areas (Iliyasu et al., 2006).

Unlike Yahaya et al. (2014), Iliyasu et al. (2006) conducted their study in a rural community in northern Nigeria, but did not specifically target the youth. The primary focus was to investigate the extent of HIV knowledge among adults and their attitudes towards VCT. It was a cross-sectional descriptive survey, which involved the administration of a questionnaire to 210 adults. The results showed a conscious awareness of HIV and AIDS, with 97% of the participants stating they had heard the acronym HIV. However, about 59% had no idea of the causative agent of the disease. Interestingly, 10% of the participants attributed being infected with HIV to destiny, while 1% thought it was caused by an evil spirit. This confirmed the need for more enlightenment programs on HIV in these rural areas (Iliyasu et al., 2006).

Unlike Yahaya et al.’s (2014) findings, which showed no gender difference in VCT uptake, Iliyasu et al. (2006) discovered women showed more willingness to access VCT (82.8%) as compared to their male counterparts (57.7%). Iliyasu et al. concluded

that as the knowledge of HIV continues to rise in rural northern Nigeria, the need for concurrent scale-up services for VCT also keeps increasing. In the same vein, as the willingness to be tested increases in these rural areas, non-governmental organizations and concerned parastatals should re-direct efforts to increase the accessibility of VCT in “underserved” rural communities (Iliyasu et al., p. 6). While Iliyasu et al. showed there was increased willingness to uptake VCT in rural Nigeria, the study design did not allow the participants to express their reasons for not using VCT. Even though the majority of the participants demonstrated willingness toward testing, the level of uptake reflected otherwise.

Findings have shown that a researcher cannot afford to be absorbed with the thought that there is just a single perspective to the problem being researched and one plausible intervention to solving the problem (Van de Ven, 2007). This perspective explains the varying conclusions made by different researchers on the underlying factors affecting the uptake of VCT in Africa. While some scholars believed social barriers such as fear of stigmatization and discrimination are scaring people away from the benefits of knowing their HIV serostatus (Iliyasu et al., 2006; Yahaya et al., 2014), others were of the opinion that if interventions that address accessibility challenges are put in place, the rise in VCT use will be inevitable (Corbett et al., 2006; Matovu & Makumbi, 2007).

By and large, there seemed to be agreement on the existence of the problem of low VCT uptake in LMIC. Most of the studies conducted on VCT in this region used a quantitative approach, which was beneficial in showing the presence of factors affecting the utilization of VCT service in rural Nigeria. However, the significant limitation common to the study designs was that the participants were not able to express the

reasons behind their infrequent or lack of VCT use, even though they were willing to know their status. This limitation can be addressed by a qualitative research design that seeks to explain the “why” of a problem.

The Youth Perspective on Factors Affecting Voluntary Counselling and Testing Uptake

A study was conducted in Ghana to examine the attitude of youth towards VCT in the nation’s capital (Gadegbeku, Saka, & Mensah, 2013). It was a cross-sectional study, and the participants were between 18 and 23 years old. One of the findings was that the youth saw places like churches and schools as being beneficial sites for VCT services. However, they cited fear of VCT officers and discrimination as barriers. Furthermore, the youth spoke about convenience being a critical determinant of how often they access VCT, with some of the participants mentioning home-based testing as an acceptable option. In addition, the youth also highlighted factors such as the cost of accessing VCT services and confidentiality concerns. Gadegbeku et al. (2013) therefore concluded that increased educational campaigns can significantly aid in improving the attitude of Ghanaian youth towards VCT utilization. A study conducted in a southwestern area of Nigeria revealed that the knowledge of HIV is foundational to improving people’s attitudes to seeking HIV care and support (Salako et al., 2013). Additionally, these studies indirectly validated the need to study the youth population, since the highest HIV prevalence was seen in the sexually active group. Youth constitute a major percentage of the sexually active population and, therefore, need attention. Salako et al. (2013) therefore deduced that there is a need to increase VCT among the youth.

Summary

The problem of HIV prevalence and mortality in Nigeria deserves urgent attention. It has been theorized, with overwhelming support from the literature, that increasing the effective use of VCT is critical to achieving the desired goals of HIV prevention and control. Researchers have shown that VCT might help HIV-positive patients present early for ART, leading to an increased chance of these patients living a healthier and longer life. In spite of documented evidence of VCT benefits, a low level of VCT uptake across the country persists, especially in rural communities. This has prompted calls for a scale-up of VCT services in low-resource settings such as southwestern Nigeria. Existing studies on VCT use in Africa, especially Nigeria, differed on the factors responsible for the problem of low uptake.

While some authors concluded that AIDS-related stigma and discrimination account for the apathy shown towards knowing one's HIV serostatus (Iliyasu et al., 2006; Yahaya et al., 2014), others were of the opinion that interventions focusing mainly on the addressing the accessibility concerns would suffice (Corbett et al., 2006; Matovu & Makumbi, 2007). However, few qualitative studies exist on the perspective of the youth. Even though current reports on HIV show Nigeria trailing in the fight against AIDS-related deaths, very few studies have been done on the impact of interventions, such as VCT uptake, in slowing down the disease progression and mortality in the country. Most studies carried out on VCT in Nigeria have been quantitative.

It is, therefore, imperative to carry out qualitative research among the youth in rural Nigerian communities, with a focus on examining the factors affecting the uptake of VCT displayed by this group. Findings from the current research will help the Nigerian

government and other concerned stakeholders achieve the desired goals of reducing the number of people living with HIV illness in Nigeria through a scale-up of HIV prevention activities in the country. This feat has already been achieved in some countries like Uganda and Zimbabwe with the efficient use of VCT in their respective countries (Bunnell et al., 2006; Halperin et al., 2011).

CHAPTER THREE: METHODOLOGY

In this chapter, I identify and justify my choice of naturalistic inquiry as a methodology for the study, as well as discuss my philosophy of inquiry. Additionally, my research setting and data collection, management and analysis are presented. Finally, I also address the ethics and qualitative rigor of this study.

Research Design

Pratt (2009) explained that not every phenomenon warrants being studied, so a researcher needs to show why the chosen phenomenon merits resources and time. To the best of my knowledge, no study has been conducted in Nigeria to examine the factors responsible for the low uptake of VCT among rural youth. As there are no existing qualitative data on this topic, I chose to carry out my research using qualitative methodology. As much as the surveys done in this area have helped to show the existence of challenges to the utilization of VCT in Nigeria, it is imperative to have a rich description of why the problem exists, as such information might inform a rounded perspective of the interventions being considered and might strengthen the voice of data gathered during quantitative research (Bryman & Bell, 2007).

My Philosophy of Inquiry

My perspective and background played a significant role in my choice of study design. I have an immense respect for the interpretivism and subjectivism views of the social world. I am of the opinion that reality is subjective and is a function of an individual's interpretation of events (Bryman & Bell, 2007; Van de Ven, 2007). Accurate information of this perspective can only be gathered through close, in-depth conversations with knowledgeable individuals. Careful review of research methodologies in the

literature revealed that the primary goal in a quantitative approach to inquiry is to reflect the researcher's views. The qualitative researcher seeks to allow the participants to share their experiences on the research topic, which is important when presenting findings for implementation (Bryman & Bell, 2007). Aligning this view of Bryman and Bell (2007) with my subjective perspective of the social world further strengthened my resolve to approach this study with a qualitative research design.

Bryman and Bell (2007) identified six main steps in a qualitative research design, which will be applied to the current study. The steps include (a) identify the general research questions, (b) select relevant sites and subjects, (c) collect relevant data, (d) interpret the data, (e) ensure rigor/trustworthiness, and (f) address ethical considerations. It is worthy of special mention that the activities surrounding these steps are not necessarily sequential, but rather iterative.

Underlying propositions. Firstly, a low uptake of VCT exists in Nigeria, mainly in rural communities. Secondly, some youth harbor the fear of testing positive to the virus, which drives them away from utilizing the VCT service, while others have expressed grave concerns with respect to stigmatization and discrimination associated with either showing intentions to be counseled and tested or being HIV-positive in rural Nigeria. Lastly, there may be other yet-to-be identified reasons affecting utilization of VCT services that justify the qualitative research approach.

My philosophical assumptions. Four philosophical assumptions underlay my research. The first assumption related to ontology, meaning that youth have individual reasons for not utilizing VCT, and getting close to them is necessary to understand them. The second assumption relates to epistemology, meaning the opinion of the youth counts

heavily towards the factors affecting VCT uptake. The lesser the distance between the researcher and this population group, the better the quality of data on the problem of VCT. The third assumption related to axiology, meaning my experiences with the two clients discussed in Chapter One played significant roles in the phenomenon being researched. The fourth assumption related to methodology; this involves giving exploratory and detailed accounts of the youth considered in the study, so as to ensure their views are authentically expressed (Bryman & Bell, 2007; Creswell, 2013).

The underlying philosophy of qualitative research is that people's experiences shape their perspectives of the world, which in turn inform their decisions and actions. This idea explains why individuals respond differently to similar situations (Bryman & Bell, 2007). A number of factors can be responsible for the attitude of rural youth towards the uptake of VCT, and an exploratory approach is appropriate to observe these differences. Additionally, observing the youth and giving them the opportunity to share their perspectives on the topic of interest is a key part of knowledge creation in qualitative research. Therefore, I examined the different kinds of qualitative methodologies available in the literature, and I discovered that naturalistic inquiry is a qualitative approach suited to my research question.

Naturalistic Inquiry

Naturalistic inquiry is the method I chose for this study. My choice stemmed from the fact that a greater understanding of the problem would be facilitated through in-depth interviews with participants in their natural setting (Blummer, 1969; Lincoln & Guba, 1985; Patton, 2002). The natural setting of these participants encompasses facets such as the social, political, financial, policy, and emotional environments. Therefore, there was a

need to study the research problem in such a manner that ensured the natural setting of the participants' environment was duly preserved and justified, which has also been emphasized by scholars (Athens, 2010).

Naturalistic inquiry afforded me the opportunity to observe the factors influencing the attitudes and practices of youth regarding the use of VCT in a rural Nigerian community. These observations were gathered and documented through the use of techniques such as in-depth interviewing in the participants' usual settings (Athens, 2010). A qualitative inquiry allows the scholars to be both the observers and interviewers during data collection (Mambanga, Sirwali, & Tshitangano, 2016). Additionally, the researchers are also afforded the opportunity to be immersed in the data extensively shared by their participants. This notion is one of the merits of naturalistic inquiry.

Research Setting

Data were collected from participants in the rural community selected for this study. This community is located in the southwestern region of Nigeria, approximately 300 km from the closest large city, and has a population of 200,000. This area has a government-controlled health care centre that only offers consultations on minor ailments and limited health care services. Sadly, very limited health care services are routinely carried out from this care centre, and VCT is not classified as a primary health care service.

Participants and Participant Recruitment

I employed the strategy of purposive sampling for this study. This method has been shown to be beneficial in identifying individuals who can respond to a particular research interest, especially in the field of exploratory research (Neuman, 2004). In this

instance, the purpose was to select youth who would share their experiences on access to VCT services in their community. Participants were to be recruited at soccer game-viewing centres, fast-food centres, religious organizations, and relaxation venues where I put posters inviting eligible individuals to contact me. However, only the religious organization (a church) yielded all the participants for this study. Unforeseen contingencies resulted from (a) some participants withdrawing their interest in the interview due to some personal issues, and (b) previously identified interview venues being used for other functions. The unforeseen circumstances made collecting data, apart from the church, practically impossible. I had initially planned to recruit 10 to 15 people of both genders within the age range of 18 to 24 years, but was only able to find 10 participants. I had anticipated difficulties discussing the research topic with my participants, especially the females. HIV is a sensitive topic, and issues around sexuality can be difficult for me to initiate with the opposite sex. I employed snowballing sampling technique, which means I requested each interviewed participant to invite anyone within his or her circle of friends who might be willing to take part in the study (Creswell, 2013). The inclusion criteria for participants were that they be within the age range of 18-24 years, willing to discuss VCT, able to do the interview in English, a resident of the selected community, and willing to provide informed consent.

I used an information and consent letter (Appendix A) that explained the purpose of my study, the benefits and risks of participation, how the data were to be protected and used, and the process of giving consent or withdrawing from the research. I meticulously took each participant through the consent form and requested his/her signature on the

form. I also collected their demographic information. Pseudonyms were used to protect participants' privacy.

Data Collection

Gaining the trust of the participants through rapport building and giving reassurance to the participants that their confidentiality would be respected formed the context of this phase of my research (Bryman & Bell, 2007). I ensured the participants were allowed to share their experiences comprehensively (Bryman & Bell, 2007; Liamputtong, 2013). I used in-depth interviewing and also thoroughly observed the participants during my time in the field. I made note of the key issues raised after each interview. Interviews lasted for approximately ten to fifteen minutes. I had three interviews in the morning and the rest later in the evening over two days. I had a half hour to forty five minutes break in between each interview. This short break gave me an opportunity to update my field notes and spend some time with each participant at the end of the recording. I used a journal to keep details of my observations about the world of the participants (Lincoln & Guba, 1985). These field notes became an integral part of the data and extended my understanding of the participants' experiences regarding the use of VCT among rural youth.

I used an interview guide (Appendix B) to facilitate conversations with participants. The use of a guided probing technique did help activate the memories of the participants to cogent issues not previously mentioned during the interviews. Even though an interview guide was used for this study, I ensured my probing did not hinder the participants from freely expressing their experiences pertaining to VCT uptake. With the consent of my participants, I audio-recorded these interviews.

Data Management

After each interview session, I uploaded the digital interviews to my computer and ensured they were password protected. When I returned to Canada, I made sure that the hard copies of the data and related materials were secured in a locked cabinet, and electronic copies were kept in my Dropbox folder as a backup. I also ensured all the participants' information, the field notes, my journal, and flash drive containing my research information were password-protected and stored in a safe place.

Data Analysis

Inductive thematic analysis was employed as I organized and interpreted the participants' words and actions (Braun & Clarke, 2006). I chose this approach because it reduces the chances of a researcher fitting the data to any pre-existing frame or his opinion of the topic of interest (Braun & Clarke, 2006). Therefore, the analysis solely emanated from the data and not from existing theories (Braun & Clarke, 2006). According to Liamputtong (2009), thematic analysis helps the researcher make meaningful deductions from the participants' information. It involves reading through the transcripts, so as to make meaning of what each participant is saying about the issue at hand and what participants are saying collectively (Minichiello, Aroni, & Hays, 2008). This analysis of transcripts, individually and collectively, helped me in the generation of codes, categories, and themes from the data (Braun & Clarke, 2006). I studied the responses from the participants while conducting subsequent interviews to study the patterns and nuances. It was important to start the analysis while conducting interviews because it drew my attention to any salient points raised by the participants already interviewed; this became crucial in the subsequent questioning of other participants.

Beginning this transcription process promptly not only helped me stay within my timelines, but also helped me review the transcripts with my participants while still in Nigeria, making member checking a possibility.

Firstly, I acquainted myself with the data, by reading through the transcripts several times, making notes while I was looking for codes, themes, and statements as related to the topic of interest. I also revisited the field notes taken during the data-collection phase of this study and used them in my code generation.

Secondly, I generated codes by making a catalogue of notes, paying attention to details and hidden meanings in the participants' statements. This process of generating codes and themes was done with the help of my supervisor. These codes were then categorized and given clear and concise interpretations. Thirdly, I observed the themes and determined the relationships among these themes. The codes were analyzed with the help of the meaning initially attached to each code. Codes that I found difficult to put under existing themes were placed in a category and made use of during the discussion of my results.

Bazeley (2009) suggested the use of matrix displays in analyzing one's data. I drew these by hand; they helped me see the patterns and themes as they emerged. I followed Bazeley's advice not to rely solely on participants' quotes for evidence in deriving my themes. My field notes and observations augmented the quotes in deriving my themes and sub-themes. In addition, Richards (2005) talked about how a researcher knows he has the necessary materials to begin the analysis of qualitative data. Those ideas prompted me to check for the following key elements in my data: simplicity; coherence; robustness; and sensible to the audience.

Rigor and Trustworthiness

The trustworthiness criteria consist of four components that were addressed to ensure rigor in my research (Bryman & Bell, 2007; Lincoln & Guba, 1986). These include credibility, transferability, dependability, and confirmability.

Credibility. Credibility is the potential threat of misinterpreting participants' comments. A robust understanding of participants' perspectives does not only entail paying attention to what these participants say, but also how they say it (Bryman & Bell, 2007; Creswell, 2013; Neuman, 2004). Firstly, I asked the participants to clarify any response I perceived to be ambiguous during the data collection process. Secondly, I did a member check (i.e., summarizing the transcript with participants via phone) so as to limit the chance of misinterpreting any of the responses (Bryman & Bell, 2007).

Transferability. Transferability can be defined as the desire of every researcher to arrive at findings that can be safely generalized to a larger population (Van de Ven 2007). Scholars in qualitative research have suggested that rather than struggle with how much generalization can be achieved from a qualitative study, a researcher can instead concentrate on giving a detailed description of his research (Bryman & Bell, 2007; Creswell, 2013; Geertz, 1973; Neuman, 2004). Additionally, I strived to achieve what Morse (1994, p. 34) defined as "recontextualization," which consists of the development of theories or conceptual frameworks in a qualitative study that can then be applied to future research. Based on this premise, I ensured that the interview sessions allowed for the in-depth collection of rich qualitative data and the generation of theoretical concepts that can be applied in other settings. Lastly, the observations noted in my field journal and the interviews with the youth helped achieve thick description of the experience and

understanding of VCT services among the rural youth participants (Geertz, 1973). I also noted in my journal any event that challenged my perspectives on the topic of interest while conducting the research.

Dependability. Dependability entails making sure a detailed account of one's research activities is available if the need arises for other scholars or peers to audit the findings (Lincoln & Guba 1986). This detailed record keeping can also help anyone who later decides to build on the results of my research. For this reason, I maintained a detailed record of each step of the research process.

Confirmability. Confirmability explains how a researcher's previous experiences can influence research outcomes by imposing a bias. To limit the chances of this happening, I clearly stated my preferences in my journal and referred to them from time to time, as this helped to ensure that my personal views did not sway or influence the research outcome significantly (Bryman & Bell, 2012). More importantly, I was in touch with my supervisor from time to time, and this helped ensure that my personal views exerted minimal influence on my research findings. Additionally, throughout the research phases, ethical guidelines were followed.

Ethics

The Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada (Tri-Council; 2014) have provided a framework to guide scholars in conducting research of high ethical standards. The guideline entails three principles that have been my watchword throughout this study: "Respect for persons, concern for welfare, and justice" (p. 6).

Respect. Respect for persons explains that in as much as the anticipated outcomes of my research may serve to benefit others, this positive end did not give me leeway to treat people as though they were tools to be used to achieve my personal goal of completing a thesis (Bryman & Bell, 2007). With this in mind and with the aid of the information letter (Appendix B), I helped the participants to understand why the study was being done and how it could benefit others (Bryman & Bell, 2007). I ensured that the participants, who constitute a vulnerable population, understood their right to withdraw from the interview at any time without any penalty. I did not, in any way, coerce any participant for any piece of information, and from time to time, I reiterated that their identities would remain confidential. I shared with the participants my intention to take the findings from this study to those who are responsible for making policies on health-related issues in the state. I ensured the participants felt valued by making them realize their voice would be heard by those in authority.

Concern for welfare. According to the Tri-Council (2014), “The welfare of a person is the quality of that person’s experience of life in all its aspects” (p. 7). Concern for welfare was exercised during my rapport building with the participants. I listened to the participants as they discussed their concerns about their cost and quality of living and how it affects their health-seeking behaviour. My show of concern for their well-being helped me gain the trust of the participants during the data-collection process. I also ensured that the privacy and confidentiality of participants were respected, both during and after the study. I took each participant through the consent form and also let them understand they reserved the right to withdraw from the interview at any time. I arranged for a psychologist to help counsel participants, if the need arose, due to the sensitivity of

the topic of HIV and AIDS in Nigeria. I offered light refreshments to each participant during the interview sessions. The worth of the snacks was approximately a thousand naira (eight CAD). I let the participants know that under no condition would they have to refund the money used to purchase the snacks, even if they decided to withdraw from the study.

Justice. Justice ensures that the participants, mostly poor and vulnerable, did not feel exploited. This concept prompted me to hold an information session with prospective participants to help explain the benefits of my study and how it would serve to help the youth in rural communities in the fight against the threat posed by HIV (Bryman & Bell, 2012).

Summary

My philosophy of inquiry, which aligns with interpretivism led me to employ a qualitative research methodology. Naturalistic inquiry afforded the participants an opportunity to extensively share their experiences during the interviews. These interviews, along with field notes gathered during my time in the field, allowed me to have a rich description of participants' responses. The next chapter will involve the presentation of my findings and the interpretation of these data.

CHAPTER FOUR: FINDINGS

This chapter involves my presentation and interpretation of the data. The overarching question that guided this study was: “What are the factors affecting the uptake of voluntary counselling and testing among youth in rural Nigeria?” A total of 10 youth between 18 and 24 years of age participated in this study. Half of the participants were in the first or second year of their university program, and the rest were in their third or final year. They will be described later in this chapter.

The youth revealed varying opinions towards VCT use. They showed that interactions among a range of influential factors were multilayered and dynamic. The central theme, (Dis)Approving Voices, demonstrates the complexity and tension experienced by participants as they considered their options around VCT. Interestingly, they believed that engaging in VCT had potential benefits, but there were also other forces that discouraged them from accessing this service. The minds of the youth can be seen as an arena of complex interactions among these dissenting voices that ultimately informed their decisions around VCT.

(Dis)Approving Voices was chosen as the central theme because it captures the continuum of views expressed by the participants. This overarching theme gave birth to three themes: (a) External Voices, (b) Internal Voices, and (c) Voices of Acceptance (Table 1). As detailed further in this section, each of these themes has its own sub-themes that provide greater insight into the research question.

Table 1: *Themes and Sub-Themes*

Themes	Sub-Themes
External Voices	Knowledge level and understanding Community influence Religious belief
Internal Voices	Perception of risks and benefits Perceived barriers Pervasive denial
Voices of Acceptance	Improving access Increasing inclusivity Normalizing VCT and HIV

Together, the three themes highlight some personal and societal forces affecting VCT utilization among the participants in rural Nigeria. The first theme, External Voices, explains the societal factors affecting and influencing the attitudes of youth towards VCT. The second theme, Internal Voices, describes the participants' reasons for either engaging in VCT or not, their perceptions of the service, and their own expectations of themselves. The third theme, Voices of Acceptance, discusses some ways to maximize the use of VCT and its benefits as suggested by the participants themselves. A description of the participants and a detailed discussion of findings are provided in the next sections.

The Research Participants

The participants interviewed for this study consisted of ten young adults--five females and five males (Table 2). Even though they identified with the Yoruba ethnic group from the south-western part of Nigeria, there were three different dialects spoken by the participants. The interviews were therefore conducted in English, a language common to all. Participants were all Christian university undergraduate students. Being a

student in Nigeria depicts total dependence on parents or guardians to help meet daily needs. The participants were unemployed and lived with their parents; the majority were from low-income families, and none of them had a regular income. The participants typically spent each day going to classes, studying, and attending church meetings. The interviews were conducted in a church yard, which participants found to be a conducive and comfortable environment. While all had heard of the risks associated with HIV transmission, only half had accessed VCT services in the past.

Table 2: *Characteristics of the Participants*

Name ¹	Gender	Age	Prior VCT Usage	University Year
Adeyemi	Male	20	No	2
Busola	Female	22	Yes	3
Hephzibah	Male	24	No	4
Michael	Male	19	Yes	1
Olaoluwa	Male	22	No	3
Oreoluwa	Female	23	Yes	2
Seyi	Male	20	Yes	1
Grace	Female	23	Yes	3
Yinka	Female	21	No	2
Toluwani	Female	23	No	3

¹ The participants' names are pseudonyms.

(Dis)Approving Voices

This central theme describes the many societal voices that interacted with and informed the youths' perceptions of VCT. These complex interactions caused tensions and made it difficult for the youth to decide how to approach VCT patronage. Most participants mentioned that several external social forces influenced their perceptions and attitudes towards VCT. They also explained how their own perceptions of VCT and its

benefits influenced their intentions to use the service. While some voices have a negative impact on youth uptake of VCT, other voices encouraged the use of this service. Furthermore, participants believed that VCT was a useful strategy that, in a more supportive environment, could be undertaken by all without concern for negative judgment by others. In the next section, the three themes will be discussed.

External Voices

Participants identified the following external factors that influenced their attitudes towards VCT uptake: (a) knowledge and understanding; (b) community influence; and (c) religious beliefs.

Knowledge and understanding. Knowledge about VCT benefits and HIV played a crucial role in influencing the attitude of participants towards use of VCT services. Some participants reflected their knowledge of HIV by attempting to explain (not always correctly) the full meaning of the acronym and the transmission of the disease.

I know that HIV is the Human Immune Virus. It's the virus that is introduced into the body, and then it breaks down the immune system of the body, making the carrier of the virus prone to diseases. Common cold, malaria, headache, and all that, and then eventually if it continues after a time or period, it becomes full-blown AIDS, where the person's immune system is totally down, and the person is susceptible to almost every disease that comes into the body, with nothing to fight against it. So I believe that's HIV. (Busola)

When someone catches the virus it attacks the immune system, so that it weakens it. The antibodies will not be able to fight against diseases and then it can become AIDS, that's Acquired Immune Deficiency Syndrome. (Michael)

Most of the participants did not understand the concept of VCT. Some knew that HIV testing existed, but had never heard of VCT service. I observed and noted in my journal that “the right and quality information needs to be out there if VCT and HIV knowledge is to increase.”

No, this is the first time I am hearing it. (Olaoluwa)

In fact a lot of my friends don't know what VCT means, when they hear it they didn't know what it means. So I think it's because of the low level of awareness is the reason why they have not gone out for the test. (Yinka)

Even though some of the participants had no knowledge of VCT, they shared their knowledge of other HIV prevention programs such as education about sexual reproductive health. One of the participants referred to VCT as a counselling and testing service rather than VCT as a concept.

But if the person gets to know by opening up to this occasional counselling and testing, then the person comes to the point of being aware of what their health status. (Oreoluwa)

I partook in one UNICEF program, Adolescent Sexual Reproductive Health, so it was majorly about HIV AIDS prevention. (Michael)

Some of the participants cited both secondary and post-secondary institutions as the primary source of information about HIV. Other sources of information were churches, non-governmental organizations, and the mass media such as television.

Well as a young lady, I heard about it when I was in my teens, and I think via the media I heard about HIV via the media. (Oreoluwa)

The participants spoke about the media's role in increasing their knowledge of HIV and VCT. Some participants said radio stations and newspapers were an important source of awareness about HIV.

I heard about HIV and counselling in the radio, I think I was a little bit younger then. (Yinka)

While some participants' knowledge of HIV was consistent with current facts, others had misconceptions about the illness. For instance, some youth believed that HIV was brought to Africa by "white people" from the developed world. This belief is expressed in the following comments:

I heard it from my elder brother who said it was some animals, those white people, they have come again with something they shouldn't do, and have given us another thing to work with. (Adeyemi)

It wasn't, it didn't look like it was real, then it looked like a disease from the whites. (Grace)

I noted in my journal during transcription that “if youth believe the western world is the source of HIV problem, it might be difficult to see them accept any solution proffered by organizations, such as the WHO.”

Many participants believed that sexual intercourse is the most common route of HIV transmission. Most believed other routes of HIV transmission are neither relevant nor significant to the disease burden. For instance, one of participants discussed how contracting the virus through needles or clippers in salons is less likely to occur as compared to sexual means.

I've heard of a case of a woman who got HIV not because she was promiscuous, but because of a needle that sowed her hair, the person who came to sow earlier was HIV positive. (Busola)

For those who are not sexually active, I believe they should do it regularly every 6 months you can do it because of exposure to syringes and clippers. (Busola)

The participants explained that the community's belief that anyone who becomes HIV positive is promiscuous, accounts for most of the stigma associated with the disease.

Sometimes its disgust, especially when through counselling they get to know that you got it through sexual means, it might not be open disgust but you can feel it. (Grace)

Participants' level of knowledge and awareness about HIV influenced how they approached VCT. How the community perceived the service had an impact on the youths' attitude towards VCT as well. The influence of the community members on the use of VCT among youth was also mentioned by participants.

Community influence. According to the participants, the community exerts a significant influence on the youths' attitude towards VCT use. This influence tends to be far more negative than positive. Some participants believed that the community's negative perception of the service discouraged youth from expressing their VCT intentions. This means that when the level of acceptance of VCT increases in the community, the youth might feel more comfortable with disclosing their intentions to get tested.

Wow! The response of the community today is still very poor, and like I said earlier, I guess that's the reason why the openness to VCT is very low. (Busola) So this particular person in question that had the disease or the virus, when I got to know about, it was just few of us that were present there in the room, where the tests were conducted. We had to decide to make it a secret not to disclose it to anyone, because if we should disclose it, there will be stigmatization and people will withdraw from such person. (Olaoluwa)

The community has not yet gotten to the knowledge of the fact that people with the virus can live as normal human beings and they are still like them so I think the community still finds it difficult to relate with people with the virus. (Yinka)

In contrast, some participants explained that their family members and friends encouraged them to use VCT. They also received various forms of support, including information on where VCT service is located and how it can be accessed.

It was like a group of friends, everybody just went like okay, let's go check out this thing what's up ,and of course we all joked about it, it was like a friends thing. (Busola)

My mum is a health worker, so sometimes she talks to us. She told us about one lady that has HIV. We didn't even know her then; she just gave us the stories about her just to educate us then. (Michael)

The participants' views, therefore, revealed a relationship between their fear or acceptance of VCT and the attitude of community residents towards the service. The

participants believed the community's perception of VCT can also be influenced by their religious beliefs.

Religious beliefs. Participants explained how religious practices and beliefs play crucial roles in their attitude towards VCT and HIV in general. The community in which the study was conducted is a religious setting and influenced how the participants perceived people, including family and friends. For instance, the community frowned upon pre-marital sex, having multiple partners, and frequent medical check-ups (which can depict a lack of faith in God). These religious views, among others, influenced the youths' attitude towards VCT and could explain their reluctance to disclose their VCT intentions. Religious beliefs are a subset of community beliefs, and the participants believed that people tend to judge those who showed intentions to use VCT. One of the participants explained that his friends often questioned his sexual activities when he discussed his intentions to go for VCT. In addition, the community's perception that sexual transmission is the most significant route of HIV transmission affected how people who use VCT are treated in their religious organization.

*For those who are sexually active, I think every 3 months. Well, yeah there is a part where will trust yourself, and you will trust your partner. But for security sake I think every 3 months, it is advised to do it every 3 months. For those who are not sexually active, I believe they should do it regularly every 6 months.
(Busola)*

In other words, promoting the use of VCT among friends can portray an individual as promiscuous and cause discrimination. I observed that the pastors' and friends' views on the participants' sexual activity influenced the latter's health-seeking behaviour. For instance, some of the participants repeatedly said their pastors and friends will judge a person for showing frequent intentions to use VCT or engaging in premarital

sex. Some of these observations were noted in my journal but not necessarily captured in the recordings. These nuances led me to write in my journal that the participants' religious beliefs and the view of their church leaders influenced their attitude towards VCT. I also noted in my journal that "these guys are listening to their pastors." The following comments were made by the participants.

They [pastors and friends] believe that once you go for HIV test, then you must have maybe a hidden agenda about going for the test. (Hephzibah)

Well, I think the community's response to VCT is a bit low. In that, Nigeria is a country that is quite religious. (Toluwani)

Some participants said it is against their religious faith and suggestive of a lack of faith in God to accept going frequently for VCT.

So, until there is a very visible reason for them to go for VCT, I believe that most Nigerians will just prefer to hide under the umbrella of religion, and their belief system, rather than taking into the medical aspect. (Toluwani)

Then some people feel skeptical about it, like when they talk about HIV, they are like no God forbid! You know that still boils down to our belief. (Seyi)

Participants often spoke in the third person and were sometimes quick to share other people's VCT experiences and not their own. This subtle denial by the participants could be interpreted in various ways and shows that there are factors affecting the attitude of youth towards VCT use. Furthermore, HIV is a sensitive topic and could explain the participants' reluctance to share their personal VCT experiences. These social forces and sources intertwined to shape the attitudes of youth and community towards VCT and to inform their choices. The next section addresses the perspectives and decisions made by youth with regard to VCT uptake and HIV.

Internal Voices

Participants discussed how their perceptions of VCT use and its benefits affected their attitudes towards the service. The fear of knowing one's HIV status prevented the use of VCT among youth. As well as the anticipation of stigma and rejection by the community was also an important contributor to the attitude of participants towards VCT.

Because everybody thinks the moment you want to go test for HIV, something has to be wrong with you, probably you are falling sick, and then you don't want them to know. (Busola)

There is still some level of stigma that is related to peoples' relationship with people that have the virus. For example, market woman around, when they see people that are infected, they feel even with touching they can be infected with the virus. So they try to segregate themselves from people with the virus. (Yinka)

To me it's a two-way thing. Firstly, for someone that is not learned and doesn't even know much about HIV, once the person hears the first thing is like what they stand to become if probably they are infected, so they decide not to just want to go for the test. (Adeyemi)

Some of the participants discussed how beneficial VCT can be to other youth, but the participants themselves did not see the need to be part of the testing process. This perception could be linked to their personal assessment of risk or their fear of being rejected and stigmatized.

No [laughing], I'm always running away from VCT. I think it's just a deep seated fear. (Grace)

These internal voices influencing youth uptake of VCT are further explained by the following sub-themes: (a) perception of risks and benefits; (b) perceived barriers; and (c) pervasive denial.

Perception of risks and benefits. Participants revealed that their personal beliefs about risk influenced their perceptions of HIV and the need to access VCT. For instance,

one of the participants said that because she had never had a sexual contact in her lifetime, she had no reason to doubt she was HIV negative. She, therefore, did not see the need to go for VCT.

I kept insisting I'm a virgin, I'm a virgin, and the woman said no I should go and do HIV test. (Busola)

Because the participants perceived themselves to be at low risk of HIV infection, they were less motivated to undergo VCT. These quotations highlight the youths' experiences of VCT uptake.

So, one of the things that prompt people to go for VCT is when they know they need help with that particular subject area. (Seyi)

From my own observation, it's a general issue around here that we seldom go for testing, not until you are probably having a symptom in your body, so it's still not in our, in our nature. (Michael)

Another participant said she did not see the need to use VCT because she had no knowledge of the benefits of this service:

I have no reason to go there. Nobody has come to me to give me any reason to go there for the testing or the counselling. The awareness is not that much, so that was the reason. (Yinka)

The perceptions of the youth as to the level of risk associated with their sexual activities and the state of their well-being dictated their willingness to access VCT. The youth highlighted several barriers.

Perceived barriers. Participants mentioned the guilt, rejection, stigma, and lack of access as the main barriers to VCT uptake.

I think the community still finds it difficult to relate with people with the virus. (Yinka)

Yes it's not loving, it's not loving. They set you apart even at the hospital, that kind of thing. So it's not something people will open up to, until it starts manifesting physically. (Grace)

The nurse may not say anything to you but there is this look on their face. (Grace)

Participants shared their experiences of VCT use. While some perceived their experiences as positive or rewarding, others saw their experiences as negative and traumatizing. This range of reactions from the participants was influenced by external pressures. For instance, youth who were stigmatized by their family and friends after receiving VCT were discouraged from going for another test. I had noted a thought in my journal that there is definitely nowhere to run if family and friends, along with the community, stigmatize the youth. Some participants explained that they were frequently harassed by people in the community for undergoing testing.

Someone is going for HIV test. Does the person have it? You know people will be skeptical about it and might misinterpret actions. So people might not really want to go for it, except they see a need to go for it. (Olaoluwa)

In this part of the country where I live in, stigmatization is still an issue. Here, I can say categorically stigmatization, even among the elites, it's still an issue, so talk less of people that are probably not too educated. (Michael)

Some participants mentioned that their difficulties accessing VCT centres as well as their low level of awareness about HIV were perceived as major reasons for the low uptake of VCT among youth in general. One participant specifically mentioned the difficulty he encountered when he tried to use VCT in his community:

There was a time I actually wanted to do it. I just felt like, "Let me just do it to know my HIV status." So when I got to the centre, then the people they were not having enough equipment, so I could not do it that time, so just got discouraged, and I did not do it again until later. I later did it in 2011. (Michael)

Additionally, the cost of accessing VCT hindered participants' access to VCT.

For people that could make it free, it's fine, but if the monetary aspect is not too high, I believe it would encourage people to do it. (Oreoluwa)

Lastly, participants agreed that low level of awareness about HIV illness and the benefits of VCT are hindrances to increased utilization of the service. The following comments are examples of this discussion:

There is this idea the community have about it, because of the fact that there is really not much knowledge base of people concerning it. I believe if the community can actually be well educated as to what HIV is. (Oreoluwa)

Well, I think the thing is because the awareness to go for such counselling and testing is not that pronounced. There is not much awareness around. I hardly see people around to tell us about. In fact, a lot of my friends don't know what VCT means when they hear it. They don't know what it means, so I think it's because of the low level of awareness, is the reason why they have not gone out for the test. (Yinka)

Participants spoke about ways to improve the uptake of VCT services.

Interestingly, they suggested that other youth, although not themselves, need to frequently engage in VCT. This subtle denial of the need for the service is addressed in the next section.

Pervasive denial. The participants discussed the need for increased engagement in VCT services by youth. While some participants discussed how they intend to engage in VCT, others displayed denial of the need to personally use VCT. One of the participants was direct and said she had been “*running away from the test.*” Other comments included:

Well, I will say I would strongly say that for every opportunity that presents itself people should test themselves regularly, in fact, six months at most, maximum six months because anything could have happened over the time. (Seyi)

Interestingly, one of the participants did not see a need to engage on an ongoing basis in the counselling component of VCT. He believed that if the patient was “properly” counseled in the first instance, the effect of the message should be lasting, and

participants should be able to see a need to frequently do HIV testing without being counseled.

Counselling, I believe should be done once, if the person gets the counselling right at the onset, I don't think there is necessary for further counsel in it but testing should be frequent. (Olaoluwa)

Participants said that those who regularly engage in sexual activities or have multiple sexual partners should be frequently tested. This explains the participants' denial of the need for them to use VCT, especially considering their claim that they are not sexually active. In the same vein, the participants' identification of those who should access VCT merits attention. This could signal that the participants are among those who actively discriminate against VCT users. Since this research revealed that the youth tend to respect the opinions of their pastors and religious heads, they could be internalizing and repeating the discriminatory messages coming from their role models.

I'm always running away from VCT. Well for me I have practically kept myself away from all the things that could expose me to HIV. (Grace)

The barriers, such as fear of rejection, were presented by participants as a reason for avoiding the use of VCT. The participants believed that normalizing its use and accepting that HIV exists could increase the numbers of those accessing this service, as discussed in the next section.

Voices of Acceptance

Participants noted that increased acceptance of HIV patients and VCT users could be improved in rural communities. They shared ways in which barriers to VCT might be addressed. Participants believed that the level of acceptance shown towards those who have cancer should be extended to HIV patients and VCT users. Comments included:

People know about cancer, breast cancer for example, well. Although it's terrible thing, but people still go for checkups. Like, they accept or they embrace people with breast cancer. They feel sympathy for them; they don't withdraw from them. (Olaoluwa)

I have seen a couple of cases [of HIV], but there was a particular case whereby despite the lady's infection or testing positive to the disease, she got a lot of support from her family. (Hephzibah)

I believe that having HIV is not the end of the world. Yeah things happen, I've heard of a case of a woman who got HIV not because she was promiscuous. Now that kind of woman if she steps out and you treat her like probably she messed around and that's why she might not take it well. (Busola)

This hope of increased acceptance is discussed in detail under the following sub-themes:

(a) improving access; (b) increasing inclusivity; and (c) normalizing VCT and HIV.

Improving access. One of the major concerns raised by participants was a perceived lack of access to VCT. Participants mentioned difficulty in locating VCT centres as one of their challenges to utilizing the service. One participant cited an example of a friend who utilized VCT on a particular day. This was not because the friend had initially planned to get tested that day, but because he had stumbled on a VCT centre and decided to get tested:

Well, he was actually just moving into campus, going around in campus. Then he saw them. He saw a centre for conducting tests, so he just went there to do it. Not because there was anything propelling him to do it. He just saw the centre, and he felt a need for it. (Adeyemi)

Some participants highlighted how low levels of awareness of VCT and HIV can hamper access to VCT use. They suggested the need for increased health education among youth about the benefits of VCT. Comments on this topic included:

So I believe if people are sensitized to know the effects the benefits of it is it will also sensitize more people to go for VCT. (Seyi)

Furthermore, a participant highlighted the need for mobile VCT centres, which he believed would help improve access. He further suggested that these mobile VCT centres should be set up in such a way that they are attractive to the youth in rural communities. He recommended having video games and other sporting activities to help encourage the young people to access VCT centres. Comments in support of this view included:

Ok I will advise that there should be mobile centres where people like many youths can come and these mobile centres should have a kind of attractive sessions. Probably games should be introduced during the programs, games that attract youths. You know tell them about what it means and the importance of being tested, so that the youths can be aware of this virus, and they can know the necessary things that they are supposed to know. There should be mobile centres so that it will be facilitated. It shouldn't be just stationary centres because people don't see the reason why they should go there. There should be things like games, you know other things that will attract youths to this mobile centres so that they will be counseled and tested for the virus. (Yinka)

It depends on the environment. You might just want to meet them at what catches their attention, probably a movie is a good option. Then the business folks, probably a seminar or course something at their level that you will seat them down for hours. (Adeyemi)

Additionally, one participant said that making VCT affordable, and even free if possible, might help improve utilization:

Well one of the ways that I see that, all these campaigns that we do like on campus. There is a center where free HIV testing can be done. (Michael)

Lastly, some participants explained that increasing the number of VCT centres in rural areas and across the country could be a critical gateway to improving uptake. Interestingly, one participant suggested that VCT centres should be named differently to enhance secrecy, so as not to discourage intending users. Grace stated:

I think the centres should not be so publicized like HIV testing centre. I think if it was more hidden it will encourage people to do their private business there.

My field notes reflected my experience while working in an HIV clinic in a hospital in Nigeria. The building was isolated from the main hospital and was called a “special treatment centre.” The fact that people had to go to a different building generated a lot of uproar among the health care personnel and especially the patients. I shared my experience with Grace, and she saw the downside of “hiding” VCT centers. It is noteworthy that some of the participants had confidentiality concerns which contributed to the fear associated with learning their status. If the youth were confident that their HIV results would not be revealed indiscriminately, they might feel encouraged to be tested. Therefore, addressing access challenges was seen as an important strategy to help improve the overall uptake of VCT among the youth.

Increasing inclusivity. Inclusivity involves how people living with HIV or using VCT can be re-integrated into the community. It also entails measures that can be taken to prevent stigmatization of VCT service users. These points are further discussed under the sub-headings of: (a) attitude change; (b) engagement of agencies and institutions; and (c) communication and education.

Attitude change. This change signifies increased acceptance and reduced discrimination and persecution towards VCT users. The participants shared their experiences of how they or people close to them suffered discrimination as a result of accessing VCT. They gave suggestions about changing this behaviour at the community level. Comments included:

Those living with HIV, they will want to go for the test, if there is no stigmatization. (Olaoluwa)

I believe people are getting a lot of orientation about stigmatization, but at least it's still a major issue around here. Most people living with HIV, they probably will not even want to let their relatives know, except maybe some people that can care. (Michael)

The participants' comments showed that there is a need to demonstrate positive attitude towards VCT which can in turn improve utilization of the service.

Engagement of agencies and institutions. According to the participants, government, non-governmental organizations, schools, churches, and other related institutions can play a crucial role in motivating youth to engage in VCT service. Some participants gave examples of how their access to VCT was facilitated by educational institutions and non-governmental organizations. Comments included:

For example, in a school, now you know maybe a principal has been informed on the benefit of HIV VCT, and the principal calls the students and like ok, educate them about, it brings people like there is this body in NYSC [National Youth Service Corps] called PET [Peer Educators Trainers]; they educate people about HIV in schools. I believe such bodies when they actually make people see reasons why they should do it. (Oreoluwa)

USAID [United States Agency for International Development] started the awareness as it were in Nigeria because a lot of people were calling it the slim disease. They didn't know what it was. They just knew some people were just losing weight, becoming very slim, and after a while they died. Yes, lots of sensitization has been going on from different NGOs [non-governmental agencies] and different, you know, health bodies. (Busola)

Communication and education. This entails improved communication among all the stakeholders responsible for the provision of VCT services in communities.

Specifically, some participants highlighted the need for health education programs that promote awareness of the benefits of VCT services. This increased knowledge level, according to participants, would help reduce the barriers to VCT uptake, thus improving

attitudes and the overall acceptance of the service and HIV education in Nigeria. A participant provided the following comment:

Well firstly to make it easier you have to come to everybody's level, unlearned folks to come down to their level. For example, it should just be something you will tell them in a day, and probably just a session like consistently seeing them, and teaching them along that line before the test. (Adeyemi)

Normalizing HIV and VCT uptake. Some of the participants believed regulations and measures need to be put in place, such that VCT becomes a normal, routine medical process. According to the participants, this would encourage youth not to feel isolated when they show intentions to be tested. Making VCT mandatory for university admission or employment by an organization is another way of improving the numbers of those accessing VCT in the country. Participant statements on this issue included the following:

It was because it was compulsory in my school it was a job for a house parenting rule, and you have contacts with students. (Grace)

Because this is an issue that really calls for attention so if the government can actually, maybe dedicate, maybe a time or a day in the year and make it compulsory. Maybe just like national population census, make it compulsory for people, even give people incentives to go through it, I believe it will improve people's responses and it will help us get better results. (Seyi)

Conclusion

All three themes, External Voices, Internal Voices, and Voices of Acceptance, consolidate to explain the overarching theme, (Dis)Approving Voices. The External Voices theme describes the external and societal forces influencing the attitude of the youth. The youths' attitude is a reflection of their Internal Voices. In addition, a detailed look into both the External and Internal Voices revealed a call for Voices of Acceptance. Therefore, (Dis)Approving Voices captures the complex interactions between society's

and youths' perceptions of VCT. The findings revealed that there are numerous voices influencing rural Nigerian youth's attitude towards VCT. These voices either encourage or discourage the youth from engaging in VCT services. Participants identified barriers such as low levels of VCT awareness, inaccessibility, and low perception of personal risk. According to the participants, stigma and discrimination played a significant role in reducing the level of VCT uptake in rural Nigerian communities. Participants suggested that the overall uptake of VCT can be improved with attitude changes towards both VCT and people living with HIV. I will discuss the implications of my research findings and recommendations for implementing strategies to enhance the uptake of VCT by youth in the next chapter.

CHAPTER FIVE: DISCUSSION

This chapter begins with a summary of the research question, purpose, and design. Interpretation and discussion of my findings and how they relate to the current literature are then presented. Implications and recommendations for future research and policy development will also be considered. Lastly, the limitations of this study will be mentioned.

Study Overview

While the number of people dying through HIV globally has experienced a sharp decrease, the estimated 1.2 million AIDS-related deaths in 2014 remain cause for concern (WHO, 2015). The current burden of HIV in Nigeria has been linked to low VCT use (Yahaya, 2014). Low utilization of VCT in Nigeria continues to be a significant public health concern, even though VCT has been shown to be a critical gateway to further reduce HIV prevalence (Asiyanbola et al., 2016). In addition, the perspectives of youth on VCT use have not been extensively researched. This population has been shown to be highly vulnerable to sexually transmitted infections because of their high level of sexual activity, not all of which is protected (Mishra, Barrere, Hong, & Khan, 2008). Additionally, rural communities have been neglected when employing preventive measures such as VCT services (Thomas, Fawole, & Al-ameen, 2015). Studies revealed that the current estimate of youth living with HIV in Nigeria is approximately 3% of the nation's population (NACA, 2015). The current population of Nigeria (which sits at 177 million) makes the percentage of HIV-infected youth troubling. Therefore, the need to study the perspectives of the youth on VCT cannot be overemphasized (Yahaya et al., 2014).

The purpose of this study was to uncover the factors affecting the uptake of VCT among the youth in the southwestern part of Nigeria. Additionally, the goal was to see how obstacles to VCT use can be addressed, including strategies to encourage VCT use and policies to reduce HIV prevalence. The research question that guided this qualitative study is: “What are the factors affecting the uptake of voluntary counselling and testing among youth in rural Nigeria?”

Naturalistic inquiry, a qualitative research method, was chosen because it offered the researcher an opportunity to gather rich data from participants using in-depth interviews in their natural setting (Patton, 2002). Interviews took place in a rural area, the Ilobu community in southwestern Nigeria. Five men and five women, all Christian university students between the ages of 18 and 24 years, shared their day-to-day experiences and perspectives regarding VCT. An inductive thematic analysis was used to analyze the data.

Participants identified factors affecting the utilization of VCT. The overarching theme was (Dis)Approving Voices and the three themes were External Voices, Internal Voices, and Voices of Acceptance.

Discussion

HIV continues to be a global public health concern, with Nigeria being one of the hardest hit by the virus (NACA, 2014, p. 13). While current studies show tremendous progress has been made in the fight against HIV globally (UNAIDS, 2012, p. 15) and in Nigeria specifically (NACA, 2014), there is the need to accelerate this progress in Nigeria. VCT has been identified as a gateway in achieving further reduction in the number of AIDS-related deaths (Okonkwo, Reich, Alabi, Umeike, & Nachman, 2007;

Yahaya et al., 2014). Additionally, a report showed that youth play a crucial role in the fight against the disease and also the uptake of VCT in hard-to-reach communities (United Nations General Assembly, 2011). Sadly, youth and those living in rural Nigerian communities do not have specific programs targeting HIV and AIDS among these populations (Iliyasu et al., 2006). The participants identified factors that affected their attitude toward VCT such as community influence, religious beliefs, knowledge level, stigma, accessibility, and perception of risks. Participants also mentioned recommendations such as attitude change, improved access, increased engagement, normalizing uptake of VCT, and increased communication among stakeholders. I will discuss these influences in the ensuing section.

The Significance of External Influences and Internal Fears

The participants' knowledge of HIV and VCT varied; my findings revealed that the participants had heard more about HIV than VCT. Religious institutions such as churches as well as the media had been significant sources of information for the youth. The level of awareness can be critical in improving VCT patronage and reducing HIV spread in Nigeria. On the impact of awareness, some scholars studied the determinants of people's attitude towards VCT (O'Donnell et al., 2004; Yahaya et al., 2014). The findings from these studies revealed that there is an inverse relationship between the level of awareness and participation in VCT services. This relationship is consistent with what I learned from my participants. Thus, there remains an attendant need to increase the enlightenment of the youth to increase the patronage of VCT.

A study revealed that even though some university students had a high level of VCT knowledge, VCT usage remained low and risky sexual behaviours remained

prevalent (Higher Education HIV and AIDS Programme, 2010). This challenges the notion that increasing VCT awareness can increase uptake. Even though some of my participants had knowledge of HIV and VCT, patronage of VCT was not encouraging. This shows that factors other than awareness can account for the attitude of the youth towards VCT use. For instance, some of the participants perceived themselves to be at low risk, and therefore did not see VCT as beneficial to them. Even though the participants saw themselves as low risk, the current data about HIV among the youth suggest otherwise. Estimates reveal that of the 3 million people currently living with HIV in Nigeria (UNAIDS, 2012), approximately 87 % are 15 years and above (NACA, 2014).

Furthermore, the findings from this study revealed that the participants' source of knowledge could influence their attitude towards VCT. Religious leaders influenced youths' attitude towards VCT services by reminding the youth of how utilizing the service is unreligious. It is little wonder that some of the participants believed that frequently accessing VCT is against their religious doctrines. One of the participants even said that seeking VCT can signify a "lack of faith in God." This religious stance is a barrier to VCT usage and knowledge of one's status, thereby contributing to the potential spread of the virus. As Paula, Shapira, and Todd (2014) noted, knowing one's HIV status can lead to a reduction in high risk behaviours and therefore a reduction in transmission.

Perception of risk can influence attitudes towards VCT uptake. Some participants believed that only sexually active individuals need to use VCT. In addition, participants said when people feel well, it is challenging to convince them to use VCT. However, this is a worrying stance, as researchers have shown that there is a window period in which an already infected individual can appear well yet is capable of transmitting the virus

(Kenyon, Bunnell, Buyze, Kaharuzza, & Kirungi, 2015). Therefore, it is important to intensify efforts to educate youth on the benefits of periodic and appropriate use of VCT. It can be inferred that the influence of community leaders on the youth appears to be stronger than awareness of the role and importance of VCT.

On the other hand, some of the participants saw factors other than religious beliefs as influences on their attitude towards VCT. For instance, the fear of testing positive for the virus discouraged the youth from accessing VCT. Some participants shared their experiences of close friends who were stigmatized for using VCT. Furthermore, participants revealed that the fear of testing positive for HIV and consequently being segregated from the community, family, and friends discouraged people from using the service. Nigerian scholars have shown that HIV-related stigma plays a significant role in the prevalence of HIV in their country (Yahaya et al., 2014); many other scholars around the world have recognized the disturbing impact of stigma on decisions regarding testing and treatment (Adeoye-Agboola, Evan, Evans, & Hewson, 2016; Iliyasu, Abubakar, Babashani, & Galadanci, 2011).

Furthermore, discrimination by health care professionals, people in positions of power, was identified as particularly devastating. One participant (Busola) related the attitude of a physician, who made her feel “less than a person.” Therefore, stigma and discrimination need to be addressed if VCT use is to increase among the youth whose fears of rejection appear to outweigh their knowledge of VCT and their willingness to get tested.

Participants revealed how family or community support can influence their attitude towards VCT. Olaoluwa said that disclosing the intention to use VCT can lead to

social disapproval from friends or family members. This was consistent with what Shinsasa and Simbayi discovered in 2002; their participants discussed how they would relate with someone they knew was HIV positive. While some said they would not talk to an HIV-positive individual, others said they would neither share a meal nor sleep in the same room with such individuals.

A more recent study conducted in Nigeria showed that the fear of not getting the desired support or being hastily accused of infidelity can discourage the disclosure of one's HIV status (Adeoye-Agboola et al., 2016). Other authors showed how a participant exercised restraint towards using a home-based HIV test solely because he was not comfortable with any of his family members having knowledge of his HIV status (Matovu et al., 2002). On the other hand, Matovu and Makumbi (2007) discovered some participants were more concerned about concealing their HIV status from members of their community than from family members; therefore, they embraced self-testing in their respective homes. This is consistent with what was found by Yoder et al. (2006); one of their participants made a profound statement: "No one can tell what is happening in your home, so they cannot spread unnecessary rumors. But if they see you going to a health centre, they begin to suspect you are sick and ask questions" (p. 46). Therefore, there is a need to address the level of support given to those living with HIV and those willing to use VCT. When there is a feeling of insecurity about the level of support an individual is likely to receive from loved ones, one is more likely to withdraw from VCT. Participants revealed various reasons behind youths' attitude towards VCT use. Varying experiences were shared by the participants on what influenced their response to VCT.

Additionally, the participants talked about how the fear of community's response affected how they perceive VCT. Firstly, some of the participants discussed how people are likely to avoid interacting with anyone who undertakes VCT. One participant corroborated her view with a personal story of when she took her sister to the clinic to see a medical doctor, but she had blisters from cold sores. To her utmost surprise, the physician concluded she had HIV without carrying out any test, and she was walked out of the physician's office. This is just one of the AIDS-related stigma experiences occurring in Nigeria, and it is consistent with what has been shared by other scholars (Maughan-Brown, 2010).

Studies have been carried out to determine if there is an association between negative attitudes, such as avoidance, and the level of VCT uptake (Mall et al., 2013). Some researchers discovered that as the degree of discrimination reduced, people seemed to be more encouraged to utilize VCT. In the same vein, when the level of support and affection showed towards those uptaking VCT increases, the youth are more likely to utilize VCT. This opinion was shared by some of my study participants; one said that only when community members are equipped with the knowledge of welcoming HIV patients and VCT users with open arms will the desired increase in VCT use be seen in rural areas.

Researchers have shown that perceived support can play a crucial role in the reduction of HIV in Nigeria. Mall et al. (2013) found that those who knew a family member who died from AIDS or who was HIV-positive exhibited a lower level of stigma towards people living with the disease. Additionally, the authors also showed that when the level of rejection towards VCT use reduces, the youth are more likely to accept the

service. Conversely, those who attribute a high level of stigma to VCT use and those living with HIV are less likely to uptake VCT (Pettifor, MacPhail, Suchindran, & Delany-Moretlwe, 2010). Furthermore, my participants often used a passive voice and a third-person pronoun when discussing the need to engage in VCT. This finger pointing to those requiring VCT can be interpreted as subtle or discriminatory denial. There might be a relationship between the fear of being rejected or stigmatized in the community and the denial shown by the participants. Therefore, to see the desired rise in VCT use, there is a need to address the discrimination and avoidance associated with VCT use in Nigeria.

Increasing the acceptance of those living with HIV or using VCT was mentioned by the participants. Segregation and discrimination towards people living with HIV were seen as leading reasons why the youth refuse to use VCT. Participants explained how disclosing VCT intentions can cause discrimination. This fear of discrimination prompted one of the participants to suggest concealing VCT centres. The participants, therefore, recommended a change of attitude of the community towards VCT use.

One participant highlighted how people with other ailments such as breast cancer are widely accepted and expressed a wish for similar acceptance towards HIV and VCT. Interestingly, religious institutions have been indirectly responsible for not encouraging people to use VCT (Yahaya et al., 2014). It is widely believed among religious circles that those who show VCT intentions are either promiscuous or have multiple partners. This religious belief supports stigmatization of VCT users. This pattern of discrimination towards those using VCT or living with HIV has been studied by a number of scholars, and there seems to be a consensus that HIV-related stigma plays a crucial role in the level of uptake of VCT (Mall et al., 2013; Shisana & Simbayi, 2002; Yahaya et al., 2014).

There is a need for a mindset change on how to relate to those using VCT or living with the virus, so as to improve the youths' attitude towards VCT.

The youth believed that improving access to VCT and promoting attitude change can help increase its utilization. Additionally, the participants agreed the government, schools, non-governmental organizations, and religious institutions need to be more involved in meeting the objectives of VCT. Of course, the objectives associated with VCT must be expanded to include the ultimate goal of normalizing HIV to the point that no one with the illness is subjected to judgment or discrimination of any kind.

The participants highlighted that effective communication and education could help reduce the discrimination and stigmatization shown towards VCT users. They explained the need for more enlightenment on how to lead a normal life even when one is HIV-positive. Furthermore, campaigns and conferences on the benefits of VCT need to be increased across the country, especially in rural Nigeria. Additionally, some of the participants said that youths' enlightenment needs to improve on the routes of HIV transmission. They believed the misconception about HIV fuels the discrimination towards VCT users. For instance, a study conducted in rural northern Nigeria revealed that people believed HIV was caused by an evil spirit (Iliyasu et al., 2006). Interestingly, one of my study participants shared a brother's belief that HIV was a disease of the West. Other scholars have also shown that increased educational campaigns on VCT in clinic waiting rooms increased VCT uptake (Mall et al., 2013). Therefore, educating the youth on the benefits of using VCT can help reduce the disease prevalence and mortality.

Furthermore, the participants discussed the need to find ways to normalize VCT. Some of the participants even suggested that VCT should be made compulsory. With

respect to normalization, some of the participants believed that if it becomes normal for the majority of the residents to go for VCT, then it will cease to be an awkward thing when youth share their intentions to use this service. However, as it pertains to compulsion, the youth cited instances in which the only time(s) they have had to use VCT was because they were left with no choice other than to do the test. For example, the participants shared their experiences on how getting tested had become a prerequisite to getting employed in some organizations or becoming admitted into some universities. One of the participants shared how a friend used VCT because his employer said it was a criterion before being considered for the employment position. While making VCT mandatory can certainly increase the number of youth uptaking VCT, there is an attendant risk of abusing people's fundamental human rights. For instance, there are stories of discriminations from employers when they are aware of their employees' HIV status. People have been sacked from their jobs in Nigeria simply because they made their HIV status known.

Therefore, making VCT use compulsory can help improve VCT uptake, but it can also increase stigmatization and the abuse of people's rights to make choices about their health care. The ethics surrounding such an intervention have been questioned by scholars. However, other procedures such as opt-out testing have been employed, even in high-income countries such as the United States. The opt-out testing implies you are automatically enrolled for HIV testing unless you state otherwise. Reports showed that about 17 states in the United States have legislation supporting this intervention (Noland, Schlecht, Sun, & Vaughn, 2015). Interestingly, all 20 participants interviewed by Noland et al. (2015) supported the idea of opt-out testing and felt it would increase VCT uptake.

Additionally, some countries have also employed mandatory testing for pregnant women, and this has helped to reduce HIV mortality among babies and also the number of mother-to-child transfers of the virus (Noland et al.). By and large, there needs to be a balance between achieving the VCT goals, such as through making VCT mandatory, and not abusing the rights of individuals in making decisions on whether to use the service or not.

The participants shared their experiences on what prompted them to uptake VCT. While some engaged in VCT because it was a prerequisite to university admission, others did not think VCT should be mandatory. Interestingly, most of the participants agreed there was a need to utilize VCT services at regular intervals; while some suggested quarterly, others felt every six months is more realistic. Irrespective of the intervals chosen to uptake VCT, the primary goal of VCT would be met, which is to help people know their HIV serostatus early enough so as to enrol those who test positive for the virus for therapeutic intervention and encourage those who test negative to limit their engagement in high-risk behaviours (Okonkwo et al., 2007; Pignatelli et al., 2006).

The participants explained that the cost of accessing VCT can be an obstacle to utilizing VCT. The cost concerns raised by the participants in accessing VCT did not come as a surprise, as reports have shown that a greater part of Nigeria's population is still impoverished, with those in the rural communities more significantly affected by these scarce resources (Nwaka, 2015). Although universal health coverage has been declared by the national government as its goal, corruption, poor funding, and inefficient administration is making this goal an unrealistic target (Okpani & Abimbola, 2015). Sadly, available resources are often directed to urban centres, neglecting those residing in

hard-to-reach places (Nwaka, 2015). In reality, most health care services are paid for out of pocket. Limited economic resources can make paying for VCT services low on youths' priority list. Therefore, expanding universal health coverage to include VCT services is critical to improving uptake.

Subsidizing VCT was another suggestion made by the participants. Some participants even said it should come to the youth at little or no cost, which they believed would help encourage the use of the service. Nwachukwu and Odimegwu (2011) found that employment status of the youth played a significant role in how often they utilized VCT services. Furthermore, they discovered that as wealth status increased among this population, the VCT uptake level also increased. Therefore, improving the socio-economic status of the youth can go a long way in increasing not only the level of VCT uptake among this group, but also their overall quality of life. When the youth are empowered economically, it can contribute to their health seeking behaviour. Reducing the percentage of unemployment among the youth can be helpful in empowering them. Removing obstacles to universal health coverage, which can make access to healthcare affordable for the Nigerian populace, can be very crucial to improving the overall uptake of VCT (Okpani & Abimbola, 2015).

The youth discussed ways to improve the overall picture of VCT uptake in Nigeria. They suggested that the location of VCT centres is critical in determining how often they use VCT. One participant cited an example of VCT centres being mostly located in urban areas, neglecting the rural communities. Studies revealed that the government and non-governmental organizations tend to concentrate health care resources to the cities and less commonly to the rural Nigerian communities (Jamda et al.,

2014; Okpani & Abimbola, 2015; Yahaya et al., 2014). This is a deplorable situation, considering that rural communities account for approximately 54% of the country's population (WHO, 2013) and also constitute the majority of the more vulnerable and poorer people (WHO, 2009, p. 6). Therefore, there is a need for redirection of resources to bring the VCT services closer to the youth.

Furthermore, increasing the level of awareness and education about VCT is vital to improving its utilization. Some participants shared that their friends and family members educated them on the benefits of VCT, and noted that the most enlightened people are the ones uptaking VCT. Participants suggested that all youth should be enlightened through consistent and widespread exposure to campaigns and meetings on the need for VCT. Scholars have shown that the youth with a higher level of education, compared with those with a lower level or no education at all, are more likely to access VCT in Nigeria (Nwachukwu & Odimegwu, 2011). A universal primary education (UPE) policy was formulated in 1976, which offered every child the right to free and compulsory education. However, this program was plagued with a number of challenges such as inadequate educational facilities and an uneven distribution of teachers across the nation (Nwachukwu & Odimegwu, 2011). Therefore, the government revamped this policy in 1999 and tagged it Universal Basic Education (UBE). The goal of UBE was to make education available for all by 2015. Obviously the goal has not been met, as the challenges still persist till today, with many parts of the country yet to have access to education (Bolaji, Campbell-Evans, & Gray, 2016).

Additionally, a study conducted in north-central Nigeria found that the promotion of the benefits and usefulness of VCT increased the level of acceptance of the service

(Yahaya et al., 2014). These authors also credited the government, non-governmental organizations, and religious institutions with increasing the awareness level of VCT. However, they also discovered that the level of knowledge about VCT among rural residents was much lower than that of the urban residents, prompting them to recommend that more health care personnel and VCT counselors be made available to those living in rural areas. Other authors have revealed that increasing the number of VCT centres in some African countries improved VCT use (Tewabe et al., 2012; Yahaya et al., 2014). With one VCT centre per 100,000 adults in Nigeria (WHO, 2014, p. 1), the need to invest more resources in making VCT centres available and affordable cannot be overemphasized.

Summary of Interventions

The desired increase in VCT use in Nigeria cannot be actualized if the limitations and obstacles to caring for people with HIV are not adequately addressed (Yahaya et al., 2014). Various intervention programs are already employed successfully by some other African countries (Bwambale et al., 2008; Halperin et al., 2011). These programs not only helped to improve VCT uptake, but also contributed significantly to reduction in the spread of HIV (Bwambale et al., 2008; Halperin et al., 2011). As well, an increased level of collaboration among concerned stakeholders (e.g., health care personnel, counselors, the youth, the government, and non-governmental organizations) has been recommended by scholars as one of the ways of improving VCT uptake in low-income countries (Yahaya et al., 2014). This increased partnership can help promote the level of VCT awareness. The rural communities are generally neglected when interventions are being

considered in the fight against HIV. Therefore, the need to pay particular attention to challenges peculiar to rural areas when developing policies is essential.

Providing a platform for concerned groups to share their experiences and offer insights on the way forward will be particularly useful in rural Nigeria. Currently, there is no existing structure for carrying out health campaigns and modalities for executing awareness programmes regularly in the country. Therefore, having an annual or quarterly focus group meetings with rural youth, and bringing a health official to such meetings, might be helpful. For example, such meetings can be used to facilitate crucial discussions such as seeing HIV as the common enemy. It is noteworthy that society tends to label individuals, and not the ailment, as the enemy which fuels discrimination. Therefore, there is a need to integrate efforts in fighting the factors, such as poverty and illiteracy, that strengthen the spread of HIV, and not the persons affected by the disease.

Furthermore, the use of health campaigns and workshops could help increase the awareness of the level of VCT among the youth in rural Nigeria. Other researchers in Nigeria have also suggested that there is a need to have more awareness programs (Arogundade & Falore, 2012; Oladeinde, Odia, Omoregie, & Osakue, 2016; Yahaya et al., 2014). Going into sports centres to hold pre- or post-match meetings could also serve as an avenue to gather the youth and relay valuable information pertaining to HIV prevention and VCT uptake. Additionally, Matovu and Makumbi (2007) recommended that alternative methods such as mobile VCT units should be embraced; this approach might solve the access problem associated with the traditional VCT (Kevany et al., 2016). Additionally, participants suggested that government assistance will be needed to make more VCT counsellors available. Another strategy mentioned by Matovu and Makumbi

was the home-based VCT model, which involves administering the service in the client's home. The home-based VCT has been practiced in some African countries with a high rate of success (Were et al., 2006; Wolff et al., 2005). A more recent intervention is the self-testing approach employed in some parts of Africa. Self-testing can serve as a useful alternative for those who are uncomfortable with going to health care facilities to uptake VCT (Johnson et al., 2014). While self-testing can also solve the problem of access to VCT, there are concerns about the reliability and the quality of the testing kits (Njau, Abdullahi, Boule, Damian & Mahews, 2016; Njau, Muhlbacher, Ostermann, Reddy, & Thielman, 2014). For the youth's VCT uptake to increase as desired, these interventions merit attention.

Increased cooperation among stakeholders will help improve uptake of VCT. Furthermore, making VCT more affordable and accessible through deploying self-testing HIV kits and the use of home-based VCT services can be beneficial. Increased awareness and education through improved health campaigns can also be helpful.

Implication for Subsequent Studies

While this study emphasized identification of the factors affecting VCT among the youth, there is a need to also study other groups (e.g., pregnant women) and regions of the country where HIV prevalence varies. Additionally, the current state of the polity in Nigeria reflects that religious affiliation of citizens significantly affects their decision making, including their health-seeking behaviour. Therefore, future studies should be done to look at the youth with different religious backgrounds and their role in influencing perceptions of HIV and VCT. In addition, the participants interviewed were at

different levels at the university; there might be a need to examine more closely the perceptions among those who do not have access to either secondary or post-secondary education. Furthermore, my survey of the literature revealed that no study has been done employing both qualitative and quantitative methods (i.e., mixed design) to observe the barriers and facilitators of VCT use in rural Nigeria.

Limitations of Study

This study was carried out using an exploratory method and was done in one rural community, making it difficult to extrapolate to other rural communities and other youth across the nation. However, the thick description offered by participants facilitates a robust understanding of the research context, ensuring transferability of at least some of the findings (Geertz, 1973).

The youth interviewed for this study were between the ages of 18 and 24. The challenges involved in getting the consent of less-than-18-year-old youth did not allow for the selection of younger informants. It is possible that teenagers might express different attitudes and perspectives towards VCT. Additionally, one of the criteria used to gather participants for this study included being able to communicate in English, which means potential participants with a unique perspective about the topic of interest could have been excluded due to language restrictions.

Reflexivity

Before starting this research, I had only done studies using quantitative methodology and had never learned about qualitative research. My educational background in Pharmacy and my work in HIV treatment clinics shaped how I viewed and approached the research topic. Furthermore, I am a Christian by faith, and this helped me

relate with the youth's experiences on how their religious beliefs influenced their attitude towards VCT utilization. However, coming to the University Of Lethbridge School Of Graduate Studies has been a huge learning process for me. I have gathered significant knowledge and experience on what conducting a qualitative research entails. Although I had initially thought I had a good grasp of the topic of interest and how to go about the study, I soon realized I had much to learn about HIV and VCT in Nigeria, especially in rural communities.

My data collection process did not go as smoothly as I had hoped. While some of the participants were willing to share their experiences, others were not as forthcoming as I had anticipated. The challenges encountered with the unwilling youth served as a source of discouragement to me, being a novice researcher. The participants' attitude taught me that a researcher cannot plan for all possibilities before going into the field to collect data. That being said, I later summoned the courage and was able to not only meet the target set for the number of participants but to also gather a rich qualitative data.

While I cherish my personal experiences on what VCT uptake entails in Nigeria, I did not anticipate the difficulty I encountered in ensuring my perceptions and opinions did not interfere with participants' views. However, the knowledge I gained from one of my research courses became invaluable, as I had been taught to keep a journal throughout the study period. For instance, when one of my participants shared her experience of how a physician accused her of being HIV-positive because of her cold sores, I became very emotional, to the extent that it was almost obvious to my research participant. This prompted me to note in my journal that these health care practitioners need serious enlightenment and I need to be more discreet in my subsequent interviews. This practice

of documenting my reflections helped identify my bias during the questioning of my participants and interpretation of results. Furthermore, I also learned how difficult it could be not to interrupt one's study participants, especially when the researcher feels the participant carries a misconception about the topic being discussed. However, I later realized that such differing views served to enrich the data.

The whole research process has been a grand experience for me, and I am grateful for the opportunity to be able to say my knowledge of qualitative research has taken a quantum leap in the past three years. Additionally, I look forward to seeing how the results from this study can help shape policies and programs to improve VCT use.

Summary

The purpose of this study was to identify the factors affecting the attitude of Nigerian youth towards VCT in an attempt to understand the interventions necessary to further reduce the prevalence and mortality from in Nigeria (Iliyasu et al., 2006; Yahaya et al., 2014). This research revealed that there are External Voices, Internal Voices, and Voices of Acceptance from youth on VCT use. The three themes come together to explain the overarching theme: (Dis)Approving Voices. Findings from the study show that there could be significant benefits to youth in Nigeria associated with the removal of barriers to VCT. Greater effort must be directed towards youth in the rural areas in Nigeria.

REFERENCES

- Adeoye-Agboola, D. I., Evans, H., Hewson, D., & Pappas, Y. (2016). Factors influencing HIV disclosure among people living with HIV/AIDS in Nigeria: A systematic review using narrative synthesis and meta-analysis. *Public Health, 136*, 13–28. doi:10.1016/j.puhe.2016.02.021
- Agardh, A., Cantor-Graae, E., & Ostergren, P. (2012). Youth, sexual risk-taking behavior and mental health: A study of university students in Uganda. *International Journal of Behavioral Medicine, 19*(2), 208–216. doi:10.1007/s12529-011-9159-4
- Alemu, S., Abseno, N., Degu, G., Wondmikun, Y., & Amsalu, S. (2005). Knowledge and attitude towards voluntary counselling and testing for HIV: A community-based study in northwest Ethiopia. *Age, 15*(19), 52. doi:10.1186/1471-2458-13-714
- Allen, S., Tice, J., Van de Perre, P., Serufilira, A., Hudes, E., Nsengumuremyi, F. . . . Hulley, S. (1992). Effect of serotesting with counselling on condom use and seroconversion among HIV discordant couples in Africa. *British Medical Journal, 304*(6842), 1605–1609.
- Alsallaq, R. A., Baeten, J. M., Celum, C. L., Hughes, J. P., Abu-Raddad, L. J., Barnabas, R. V., & Hallett, T. B. (2013). Understanding the potential impact of a combination HIV prevention intervention in a hyper-endemic community. *PloS One, 8*(1), e54575.
- Arogundade, O., & Faloore, O. (2012). HIV/AIDS awareness as a predictor of university students' dating behaviour in South-Western Nigeria. *International Journal of Psychology and Behavioral Sciences, 2*(1), 9-14. doi:10.5923/j.ijpbs.20120201.02
- Asefa, A., & Mitike, G. (2014). Prevention of mother-to-child transmission of HIV services in Adama town, Ethiopia: Clients' satisfaction and challenges experienced by service providers. *BMC Pregnancy and Childbirth, 14*(1), 57. doi: 10.1186/1471-2393-14-57
- Asingwire, M. (2004). *Feasibility study of the mobile van for voluntary counselling and testing for HIV/AIDS*. Final report submitted to the Uganda Program for Human and Holistic Development (UPHOLD), Kampala, Uganda. Retrieved from http://uphold.jsi.com/Docs/Resources/Research/HIVAIDS/mobile_van_for_voluntary_counselling_and_testing.pdf
- Asiyanbola, O., Adejumo, P. O., & Arulogun, O. (2016). Appraisal of HIV counselling and testing services provided for pregnant women in selected government hospitals in Ibadan metropolis, Nigeria. *SAGE Open, 6*(2), 1-9. doi: 10.1177/2158244016643350

- Athens, L. (2010). Naturalistic inquiry in theory and practice. *Journal of Contemporary Ethnography*, 39(1), 87–125. doi:10.1177/0891241609343663
- Azuonwu, O., Obire, O., Putheti, R., & Nwankwo, M. E. (2010). Prevalence and risk factors of human immunodeficiency virus (HIV) in Ndoki communities of Nigeria. *Journal of Pharmacy Research*, 3, 1607–1611.
- Bayer, R. (1989). Ethical and social policy issues raised by HIV screening: The epidemic evolves and so do the challenges. *AIDS*, 3(3), 119–124.
- Bayer, R., & Edington, C. (2009). HIV testing, human rights, and global AIDS policy: Exceptionalism and its discontents. *Journal of Health Politics, Policy and Law*, 34, 301–323.
- Bazeley, P. (2009). Analysing qualitative data: More than ‘identifying themes’. *Malaysian Journal of Qualitative Research*, 2(2), 6-22.
- Beardsell, S. (1994). Should wider HIV testing be encouraged on the grounds of HIV prevention? *AIDS Care*, 6(1), 5–19.
- Blummer, H. (1969). *Symbolic interactionism: Perspective and method*. Englewood Cliffs, NJ: Prentice-Hall.
- Bolaji, S. D., Campbell-Evans, G., & Gray, J. (2016). Universal basic education policy implementation in Nigeria. *KEDI Journal of Educational Policy*, 13(2), 137-158.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. doi:10.1191/1478088706
- Bryman, A., & Bell, E. (2007). *Business research methods*. Don Mills, ON, Canada: Oxford University Press.
- Bunnell, R., Ekwaru, J. P., Solberg, P., Wamai, N., Bikaako-Kajura, W., Were, W. . . . Rutherford, G. (2006). Changes in sexual behavior and risk of HIV transmission after antiretroviral therapy and prevention interventions in rural Uganda. *AIDS*, 20(1), 85–92.
- Bwambale, F., Ssali, S., Byaruhanga, S., Kalyango, J., & Karamagi, C. (2008). Voluntary HIV counselling and testing among men in rural western Uganda: Implications for HIV prevention. *BioMed Central Public Health*, 8, 263. doi:10.1186/1471-2458-8-263
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada. (2014). *Tri-Council policy statement: Ethical conduct for research involving humans*. Retrieved from http://www.ethics.gc.ca/pdf/eng/tcps2/TCPS_2_FINAL_Web.pdf

- Cates, W., Jr., & Handsfield, H. H. (1988). HIV counselling and testing: Does it work? *American Journal of Public Health*, 78, 1533–1534.
- Chan, M., Sidibe, M., & Lake, A. (Eds.). (2010). *Towards universal access: Scaling up priority HIV*. Retrieved from http://www.who.int/hiv/pub/2010progressreport/full_report_en.pdf
- Corbett, E., Dauya, E., Matambo, R., Cheung, Y., Makamure, B., Bassett, M., . . . Butterworth, A. (2006). Uptake of workplace HIV counselling and testing: A cluster-randomized trial in Zimbabwe. *PLoS Medicine*, 3(7), e238. doi:10.1371/journal.pmed.0030238
- Creek, T., Ntumy, R., Seipone, K., Smith, M., Mogodi, M., Smit, M., . . . Mazhani, L. (2007). Successful introduction of routine opt-out HIV testing in antenatal care in Botswana. *Journal of Acquired Immune Deficiency Syndrome*, 45, 102–107. doi:10.1097/QAI.0b013e318047df88
- Cremin, I., Nyamukapa, C., Sherr, L., Hallett, T. B., Chawira, G., Cauchemez, S., . . . Gregson, S. (2010). Patterns of self-reported behaviour change associated with receiving voluntary counselling and testing in a longitudinal study from Manicaland, Zimbabwe. *AIDS and Behavior*, 14, 708–715.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Denison, J., O'Reilly, K., Schmid, G., Kennedy, C., & Sweat, M. (2008). HIV voluntary counselling and testing and behavioral risk reduction in developing countries: A meta-analysis, 1990-2005. *AIDS and Behaviour*, 12, 363–373. doi:10.1007/104610079349
- Doll, S. L., & Kennedy, B. M. (1994). HIV counselling and testing: What is it and how well does it work? *AIDS Testing*, 302–319.
- Fylkesnes, K., & Siziya, S. (2004). A randomized trial on acceptability of voluntary HIV counselling and testing. *Tropical Medicine & International Health*, 9, 566–572. doi:10.1111/j.1365-3156.2004.01231
- Gadegbeku, C., Saka, R., & Mensah, B. (2013). Attitude of the youth towards voluntary counselling and testing (VCT) of HIV/AIDS in Accra, Ghana. *Journal of Biology, Agriculture and Healthcare*, 3(11), 133–140.
- Geertz, C. (1973). *The interpretation of cultures: Selected essays* (Vol. 5019). New York, NY: Basic Books.

- Granich, R., Gupta, S., Hersh, B., Williams, B., Montaner, J., Young, B., & Zuniga, J. M. (2015). Trends in AIDS deaths, new infections and ART coverage in the top 30 countries with the highest AIDS mortality burden: 1990–2013. *PloS One*, *10*(7), e0131353.
- Gray, P. (2004). HIV and Islam: Is HIV prevalence lower among Muslims? *Social Science Medicine*, *58*, 1751–1756. doi:10.1016/S0277-9536(03)00367-8
- Green, E., Halperin, D. T., Nantulya, V., & Hogle, J. A. (2006). Uganda's HIV prevention success: The role of sexual behavior change and the national response. *AIDS and Behavior*, *10*, 335–346. doi:10.1007/s10461-006-9073-y
- Groves, A. K., Maman, S., Msomi, S., Makhanya, N., & Moodleyb, D. (2010). The complexity of consent: Women's experiences testing for HIV at an antenatal clinic in Durban, South Africa. *AIDS Care*, *22*, 538–544. doi:10.1080/09540120903311508
- Gupta, A., Nadkarni, G., Yang, W., Chandrasekhar, A., Gupte, N., Bisson, G. . . . Gummadi, N. (2011). Early mortality in adults initiating antiretroviral therapy (ART) in low-and middle-income countries (LMIC): A systematic review and meta-analysis. *PloS One*, *6*(12), e28691. doi:10.1371/journal.pone.0028691
- Halperin, D. T., Mugurungi, O., Hallett, T. B., Muchini, B., Campbell, B., Magure, T., . . . Gregson, S. (2011). A surprising prevention success: Why did the HIV epidemic decline in Zimbabwe? *PLoS Med*, *8*(2). <http://dx.doi.org/10.1371/journal.pmed.1000414>
- Hansen, K. T., Dalsgaard, A. L., & Gough, K. (2010). Youth and the city in the Global South. *Children, Youth and Environments*, *20*, 350–353.
- Helleringer, S., Kohler, H., Frimpong, J., & Mkandawire, J. (2009). Increasing uptake of HIV testing and counselling among the poorest in sub-Saharan countries through home-based service provision. *Journal of Acquired Immune Deficiency Syndromes*, *51*, 185–193. doi:10.1097/QAI.0b013e31819c1726
- Higher Education HIV and AIDS Programme. (2010). *HIV prevalence and related factors: Higher education sector study, South Africa 2008-2009*. Retrieved from <http://www.dhet.gov.za/Reports%20Doc%20Library/HEAIDS%20Sero%20Prevalence%20Sector%20Report.pdf>
- Iliyasu, Z., Abubakar, I., Babashani, M., & Galadanci, H. (2011). Domestic violence among women living with HIV/AIDS in Kano, Northern Nigeria. *African Journal of Reproductive Health*, *15*(3), 43-53.

- Iliyasu, Z., Abubakar, I., Kabir, M., & Aliyu, M. (2006). Knowledge of HIV/AIDS and attitude towards voluntary counselling and testing among adults. *Journal of the National Medical Association, 98*, 1917–1922.
- Jamda, M., Lawson, L., Nnodu, O., Ajani, M., Umobong, E., Fredrick, C. . . . Cuevas, L. (2014). Treatment outcome of patients co-infected with tuberculosis and HIV in Abuja, Nigeria. *Nigerian Journal of Basic and Clinical Sciences, 11*(2), 72. doi:10.4103/0331-8540.140313
- Johnson, C., Baggaley, R., Forsythe, S., Van Rooyen, H., Ford, N., Mavedzenge, S. N. ... & Taegtmeier, M. (2014). Realizing the potential for HIV self-testing. *AIDS and Behavior, 18*(4), 391-395.
- Joint United Nations Programme on HIV/AIDS. (2004). *2004 report on the global HIV/AIDS epidemic: 4th global report*. Geneva, Switzerland: Author.
- Joint United Nations Programme on HIV/AIDS. (2012). *Global report: UNAIDS report on the global AIDS epidemic 2012*. Retrieved from http://www.unicef.org/pacificislands/UNAIDS_Global_Report_2012.pdf
- Joint United Nations Programme on HIV/AIDS. (2014). *The gap report 2014*. Retrieved from http://www.unaids.org/en/resources/documents/2014/20140716_UNAIDS_gap_report
- Kagee, A., & Delpont, T. (2010). Barriers to adherence to antiretroviral treatment: The perspectives of patient advocates. *Journal of Health Psychology, 15*, 1001–1011. doi:10.1177/1359105310378180
- Kalichman, S. (2009). *Denying AIDS: Conspiracy theories, pseudoscience, and human tragedy*. New York, NY: Springer.
- Kalichman, S., & Simbayi, L. (2003). HIV testing attitudes, AIDS stigma, and voluntary HIV counselling and testing in a black township in Cape Town, South Africa. *Sexually Transmitted Infection, 79*, 442–447.
- Katibi, A. H., & Adegoke A. A. (2013). Correlates of HIV/AIDS knowledge and uptake of HIV counselling and testing among youths in Nigerian institutions of higher learning. *Centrepoint Journal (Humanities ed.), 15*(1), 25–38.
- Kennedy, C. E., Fonner, V. A., Sweat, M. D., Okero, F. A., Baggaley, R., & O'Reilly, K. R. (2013). Provider-initiated HIV testing and counselling in low-and middle-income countries: A systematic review. *AIDS and Behavior, 17*, 1571–1590.
- Kenyon, C. R., Kirungi, W., Kaharuzza, F., Buyze, J., & Bunnell, R. (2015). Who knows their partner's HIV status? Results from a nationally representative survey in Uganda. *Journal of Acquired Immune Deficiency Syndromes, 69*, 92–97.

- Kevany, S., Chingono, A., Khumalo-Sakutukwa, G., Morin, S., Singh, B. (2016). Global health diplomacy, monitoring & evaluation, and the importance of quality assurance & control: A phase III randomized controlled trial of community mobilization, mobile testing, same-day results, and post-test support for HIV in Sub-Saharan Africa and Thailand. *PloS One*, *11*(2), 1-13.
- Lawal, B. (2008). HIV/AIDS awareness among secondary school teachers in Kwara, Lagos and Ogun states of Nigeria. *European Journal of Scientific Research*, *22*(3), 399–341.
- Liamputtong, P. (2009). *Qualitative research methods*. New York, NY: Oxford University Press.
- Liamputtong, P. (2013). *Research methods in health: Foundations for evidence-based practice*. New York, NY: Oxford University Press.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.
- Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Program Evaluation*, *1986*(30), 73–84.
- Lyn, R. (2005). *Handling qualitative data: a practical guide*. SAGE Publications Ltd. London.
- Mall, S., Middelkoop, K., Mark, D., Wood, R., & Bekker, L. G. (2013). Changing patterns in HIV/AIDS stigma and uptake of voluntary counselling and testing services: The results of two consecutive community surveys conducted in the Western Cape, South Africa. *AIDS Care*, *25*(2), 194–201.
- Mambanga, P., Sirwali, R. N., & Tshitangano, T. (2016). Factors contributing to men's reluctance to seek HIV counselling and testing at primary health care facilities in Vhembe District of South Africa. *African Journal of Primary Health Care & Family Medicine*, *8*(2), 7.
- Maartens, G., Celum, C., & Lewin, S. R. (2014). HIV infection: Epidemiology, pathogenesis, treatment, and prevention. *The Lancet*, *384*(9939), 258-271.
- Matovu, J., Gray, R., Makumbi, F., Wawer, M., Serwadda, D., Kigozi, G., . . . Nalugoda, F. (2005). Voluntary HIV counselling and testing acceptance, sexual risk behavior and HIV incidence in Rakai, Uganda. *AIDS*, *19*(5), 503–511.
- Matovu, J. K., Kigozi, G., Nalugoda, F., Wabwire-Mangen, F., & Gray, R. H. (2002). The Rakai Project counselling programme experience. *Tropical Medicine & International Health*, *7*, 1064–1067.

- Matovu, J., & Makumbi, F. (2007). Expanding access to voluntary HIV counselling and testing in sub-Saharan Africa: Alternative approaches for improving uptake, 2001-2007. *Tropical Medicine and International Health*, 12, 1315–1322.
- Maughan-Brown, B. (2010). Stigma rises despite antiretroviral roll-out: A longitudinal analysis in South Africa. *Social Science & Medicine*, 70(3), 368–374.
- Medley, A. M., & Kennedy, C. E. (2010). Provider challenges in implementing antenatal provider-initiated HIV testing and counselling programs in Uganda. *AIDS Education & Prevention*, 22(2), 87–99.
- Meiberg, A. E., Bos, A. E., Onya, H. E., & Schaalma, H. P. (2008). Fear of stigmatization as barrier to voluntary HIV counselling and testing in South Africa. *East African Journal of Public Health*, 5(2), 50–51.
- Miller, J., Chalamilla, G., Hirschhorn, L., Kaaya, S., Mhalu, A., Siril, H., . . . Tito, J. (2014). Patient satisfaction with HIV/AIDS care at private clinics in Dar es Salaam, Tanzania. *AIDS Care*, 26, 1150–1154.
- Miller, D., & Pinching, A. J. (1989). HIV tests and counselling: Current issues. *AIDS*, 3(1), S187–S194.
- Minichiello, V., Aroni, R., & Hays, T. (2008). *In-depth interviewing: Principles, techniques, analysis*. Available from <http://arrow.monash.edu.au/hdl/1959.1/211848>
- Mishra, V., Barrere, B., Hong, R., & Khan, S. (2008). Evaluation of bias in HIV seroprevalence estimates from national household surveys. *Sexually Transmitted Infections*, 84(1), 63–70.
- Morin, S. F., Khumalo-Sakutukwa, G., Charlebois, E. D., Routh, J., Fritz, K., Lane, T. . . . Coates, T. J. (2006). Removing barriers to knowing HIV status: Same-day mobile HIV testing in Zimbabwe. *Journal of Acquired Immune Deficiency Syndromes*, 41, 218–224.
- Morse, J. (Ed.). (1994). *Critical issues in qualitative research methods*. Thousand Oaks, CA: Sage.
- Mutale, W., Michelo, C., Jurgensen, M., & Fylkesnes, K. (2010). Home-based voluntary HIV counselling and testing found highly acceptable and to reduce inequalities. *BioMed Central Public Health*, 10(1), 347.
- National Agency for the Control of AIDS. (2015). *Global AIDS response: Country progress report*. Abuja, Nigeria, Africa: First October Press. Retrieved from http://www.unaids.org/sites/default/files/country/documents/NGA_narrative_report_2015.pdf

- National Agency for the Control of AIDS. (2014). *Global AIDS response: Country progress report*. Abuja, Nigeria, Africa: First October Press. Retrieved from http://www.unaids.org/sites/default/files/country/documents/NGA_narrative_report_2014.pdf
- Neuman, W. L. (2004). *Basics of social research*. Toronto, ON, Canada: Pearson.
- Nieburg, P. I., Cannell, T., & Morrison, J. S. (2005). *Expanded HIV testing: Critical gateway to HIV treatment and prevention requires major resources, effective protections*. Retrieved from https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/media/csis/pubs/0501_expandedhivtesting.pdf
- Nigeria National Population Commission. (2013). *Demographic and health survey*. Retrieved from <https://dhsprogram.com/pubs/pdf/FR293/FR293.pdf>
- Njau, B., Abdullahi, L., Boulle, A., Damian, D., & Mathews, C. (2016). The effects of HIV self-testing on the uptake of HIV testing and linkage to antiretroviral treatment among adults in Africa: a systematic review protocol. *Systematic Reviews*, 5(1), 52.
- Njau, B., Brown, D., Mühlbacher, A., Ostermann, J., Reddy, E., & Thielman, N. (2014). HIV testing preferences in Tanzania: a qualitative exploration of the importance of confidentiality, accessibility, and quality of service. *BMC Public Health*, 14(1), 838.
- Noland, C. M., Vaughn, N. A., Sun, S., & Schlecht, H. P. (2015). Understanding patients' perspectives on opt-out, incentivized, and mandatory HIV testing. *International Journal of Health Sciences*, 9(3), 293–303.
- Nwachukwu, C. E., & Odimegwu, C. (2011). Regional patterns and correlates of HIV voluntary counselling and testing among youths in Nigeria. *African Journal of Reproductive Health*, 15(2) 131–146. Available from <http://www.ajol.info/index.php/ajrh/article/view/69631/57640>
- Nwaka, G. I. (2015). 107: Poverty and the challenge of urban health in Nigeria [Abstract]. *BMJ Open*, 5(Suppl. 1). Retrieved from http://bmjopen.bmj.com/content/5/Suppl_1/bmjopen-2015-forum2015abstracts.107.abstract
- Odimegwu, C., Adedini, S. A., & Ononokpono, D. N. (2013). HIV/AIDS stigma and utilization of voluntary counselling and testing in Nigeria. *BMC Public Health*, 13(1), 1.
- O'Donnell, M. R., Knight, S. K., Campbell, L., Van-Amdel, P., Zeinick, J. R., & Rand, W. (2004). *Factors associated with participation in HIV voluntary counselling and testing among TB patients in a rural South African hospital*. Paper presented at a WHO / UNAIDS International Conference on AIDS, South Africa.

- Okonkwo, K. C., Reich, K., Alabi, A. I., Umeike, N., & Nachman, S. A. (2007). An evaluation of awareness: Attitudes and beliefs of pregnant Nigerian women toward voluntary counselling and testing for HIV. *AIDS Patient Care and STDs*, 21(4), 252–260.
- Okpani, A. I., & Abimbola, S. (2015). Operationalizing universal health coverage in Nigeria through social health insurance. *Nigerian Medical Journal*, 56(5), 305.
- Oladeinde, B. H., Odia, I., Omoregie, R., & Osakue, E. (2016). Public knowledge of HIV/AIDS in three rural communities of Nigeria. *Social Work in Public Health*, 32(2), 131-140. doi:10.1080/19371918.2016.1230083
- Osborn, M., & Obermeyer, C. M. (2016). Understanding client satisfaction with HIV testing and counselling services: a mixed-methods study in four African countries. *AIDS Care*, 28(6), 689-694.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Paula, Á. D., Shapira, G., & Todd, P. E. (2014). How beliefs about HIV status affect risky behaviors: Evidence from Malawi. *Journal of Applied Econometrics*, 29(6), 944–964.
- Pettifor, A., MacPhail, C., Suchindran, S., & Delany-Moretlwe, S. (2010). Factors associated with HIV testing among public sector clinic attendees in Johannesburg, South Africa. *AIDS and Behavior*, 14, 913–921.
- Pham, Q., Wilson, D., Law, M., Kelleher, A., & Zhang, L. (2014). Global burden of transmitted HIV drug resistance and HIV-exposure categories: A systematic review and meta-analysis. *AIDS*, 28, 2751–2762. doi:10.1097/QAD.0000000000000494
- Phillips, K. A., & Coates, T. J. (1995). HIV counselling and testing: Research and policy issues. *AIDS Care*, 7(2), 115–124. doi:10.1080/09540129550126623
- Pignatelli, S., Simpoire, J., Pietra, V., Ouedraogo, L., Conombo, G., Saleri, N., . . . Carosi, G. (2006). Factors predicting uptake of voluntary counselling and testing in a real-life setting in a mother-and-child center in Ouagadougou, Burkina Faso. *Tropical Medicine & International Health*, 11, 350–357.
- Pratt, M. G. (2009). For the lack of a boilerplate: Tips on writing up (and reviewing) qualitative research. *Academy of Management Journal*, 52, 856–862.
- Puhan, M. A., Natta, M. L. V., Palella, F. J., Addessi, A., & Meinert, C. (2010). Excess mortality in patients with AIDS in the era of highly active antiretroviral therapy: Temporal changes and risk factors. *Clinical Infectious Diseases*, 51, 947–956.

- Quinn, C. T. (1996). Global burden of the HIV pandemic. *The Lancet*, 348(9020), 99–106. doi:10.1016/S0140-6736(96)01029-X
- Reeves, J. D., & Doms, R. W. (2002). Human immunodeficiency virus type 2. *Journal of General Virology*, 83, 1253–1265.
- Salako, A., Jeminusi O. A., Osinupebi, O. A., Sholeye O. O., Abiodun O. A., & Kuponiyi O. T. (2013). Characteristics of clients accessing HIV counselling and testing services in a tertiary hospital in Sagamu, Southwestern Nigeria. *Nigerian Journal of Clinical Practice*, 15(4), 391–396.
- Shinsasa, O., & Simbayi, L. (2002). *Nelson Mandela/HSRC study of HIV/AIDS: South African national HIV prevalence, behavioral risks and mass media, household survey 2002*. Cape Town, South Africa: Human Sciences Research Council.
- Simon, V., Ho, D. D., & Karim, Q. A. (2006). HIV/AIDS epidemiology, pathogenesis, prevention, and treatment. *The Lancet*, 368(9534), 489–504.
- Skinner, D., & Mfecane, S. (2004). Stigma, discrimination and the implications for people living with HIV/AIDS in South Africa. *Journal of Social Aspects of HIV/AIDS Research Alliance*, 1(3), 157–164.
- Steen, T., Seipone, K., Gomez Fde, L., Anderson, M., Kejelepula, M., Keapoletswe, K., & Moffat, H. (2007). Two and a half years of routine HIV testing in Botswana. *Journal of Acquired Immune Deficiency Syndromes*, 44, 484–488.
- Stoneburner, R. L., & Low-Beer, D. (2004). Population-level HIV declines and behavioral risk avoidance in Uganda. *Science*, 304(5671), 714–718.
- Sumartojo, E., Doll, L., Holtgrave, D., Gayle, H., & Merson, M. (2000). Enriching the mix: Incorporating structural factors into HIV prevention. *AIDS*, 14, S1–S2.
- Tewabe, T., Destaw, B., Admassu, M., & Abera, B. (2012). Assessment of factors associated with voluntary counselling and testing uptake among students in Bahir Dar University: A case control study. *Ethiopian Journal of Health Development*, 26(1), 16–21.
- Thomas, K. A., Al-ameen, M., & Fawole, O. (2015). HIV/AIDS voluntary counselling and testing: Perspectives of rural youths in Oyo State, Nigeria. *International Journal of Agricultural Economics & Rural Development*, 7(1), 52–58.
- United Nations General Assembly. (2011, July 8). *Political declaration on HIV and AIDS: Intensifying our efforts to eliminate HIV and AIDS* (Vol. Sixty-fifth session). Retrieved from http://www.unaids.org/sites/default/files/sub_landing/files/20110610_UN_A-RES-65-277_en.pdf

- Van de Ven, A. H. (2007). *Engaged scholarship: A guide for organizational and social research: A guide for organizational and social research*. Oxford, England: Oxford University Press.
- Van de Ven, A. H., & Johnson, P. E. (2006). Knowledge for theory and practice. *Academy of Management Review*, 31, 802–821.
- van Dyk, A. C. (2013). Client-initiated, provider-initiated, or self-testing for HIV: What do South Africans prefer? *Journal of the Association of Nurses in AIDS Care* 24(6), 45–56.
- Weinhardt, L. S., Carey, M. P., Johnson, B. T., & Bickham, N. L. (1999). Effects of HIV counselling and testing on sexual risk behavior: A meta-analytic review of published research, 1985-1997. *American Journal of Public Health*, 89, 1397–1405.
- Were, W. A., Mermin, J. H., Wamai, N., Awor, A. C., Bechange, S., Moss, S., . . . Bunnell, R. E. (2006). Undiagnosed HIV infection and couple HIV discordance among household members of HIV-infected people receiving antiretroviral therapy in Uganda. *Journal of Acquired Immune Deficiency Syndromes*, 43, 91–95.
- Wolff, B., Nyanzi, B., Katongole, G., Deo Ssesanga, D., Ruberantwari, A., & Whitworth, J. (2005). Evaluation of a home-based voluntary counselling and testing intervention in rural Uganda. *Oxford Journal*, 20(2), 109–116.
- World Health Organization. (2007a). *Guidance on provider-initiated HIV testing and counselling in health facilities*. Retrieved from <http://www.who.int/hiv/pub/vct/pitc2007/en/>
- World Health Organization. (2007b). *Improving HIV testing and counselling services*. *HIV*, 11(1), 1–4. Retrieved from http://apps.who.int/iris/bitstream/10665/70614/1/WHO_HIV_11.01_eng.pdf
- World Health Organization. (2009). *Increasing access to health workers in remote and rural areas through improved retention*. Retrieved from http://www.who.int/hrh/migration/background_paper.pdf?ua=1
- World Health Organization. (2013). *Nigeria statistics summary (2002-present)*. Retrieved from <http://apps.who.int/gho/data/node.country.country-NGA?lang=en>
- World Health Organization. (2014). *Nigeria statistics summary (2002-present)*. Retrieved from <http://apps.who.int/gho/data/node.main.625TC>
- World Health Organization, Media Centre. (2014). *HIV/AIDS*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs360/en/>

- World Health Organization. (2015). *Global Health Sector Response to HIV, 2000-2015: Focus on innovations in Africa: Progress report*. Retrieved from <http://apps.who.int/iris/handle/10665/198065>
- Wringe, A., Isingo, R., Urassa, M., Maiseli, G., Manyalla, R., Chagalucha, J., . . . Zaba, B. (2008). Uptake of HIV voluntary counselling and testing services in rural Tanzania: Implications for effective HIV prevention and equitable access to treatment. *Tropical Medicine & International Health*, *13*, 319–327.
- Yahaya, L. A., Jimoh, A. A. G., & Balogun, O. R. (2014). Factors hindering acceptance of HIV/AIDS voluntary counselling and testing (VCT) among youth in Kwara state, Nigeria. *African Journal of Reproductive Health*, *14*(3), 159–164.
- Yoder, P. S., Macro, O., Katahoire, A. R., Kyaddondo, D., Akol, Z., Bunnell, R., & Kaharuza, F. (2006). *Home-based HIV testing and counselling in a survey context in Uganda*. Calverton, MD: ORC Macro.
- Zolopa, A. R., Andersen, J., Komarow, L., Sanne, I., Sanchez, A., Hogg, E., . . . Powderly, W. (2009). Early antiretroviral therapy reduces AIDS progression/death in individuals with acute opportunistic infections: A multicenter randomized strategy trial. *PLoS One*, *4*(5), e5575.

APPENDIX A:**LETTER OF INFORMATION AND CONSENT**

Student Investigator: **JONES OLAKUNLE**

Phone number: + [phone #]

Dear Participant

My name is Olakunle Jones, and I am a graduate student of the Faculty of Health Sciences at the University of Lethbridge, Alberta, Canada. I am inviting you to talk with me about things that affect your decisions around using voluntary counselling and testing (VCT). I will appreciate your willingness to be part of this study.

I will ask you some questions about VCT and if it is important to you and your peers. I would like to talk with you for about an hour. If you do not want to answer any of the questions, please feel free to stop me. It is okay if you don't want me to go on asking you questions, or if you do not want to talk about VCT anymore. If I have more questions after our talk, I would like to ask if we can meet again. If you do not want to talk any more, you are free to tell me that. We will meet in a place where you feel at ease. I will like to record what you say, including your consent, on an audio recorder so that I can listen to it later and write down what you say.

What you tell me will only be known to my teacher and me. In case you feel uneasy and do not want to answer any questions, I can rub out what you said in the tape. After listening to the tape, I will write down your answers and then rub out what you said in the tape.

If you feel uneasy after the interview because of the answers you gave me and decide to talk about it, please let me know so that I can provide support. If you would like to talk to someone other than me, I will do my best to get help for you from someone trained to help on emotional matters. I will ensure that all necessary steps will be taken to ensure your safety and comfort during the interview.

Your name or any other information about you will not form any part of my final report, so as not to reveal who you are. While your responses are important for my study, your name is not. Details about your identity will be put under lock and key for five years and destroyed after then.

One of the objectives of this study is to help health care workers and officials in the fight against HIV/AIDS. Your responses are very important and may be used by the health workers and decision makers.

If you decide to take part in this interview, you will be offered a bottle of drink and a snack during the questioning. This refreshment does not, in any way, mean you

cannot withdraw from the interview at any time if you wish. Your refusal to further participate (in case you decide to withdraw) will attract no punishment, and all previous information gathered from you will be destroyed.

If you require further clarification or questions about this study, feel free to contact Olakunle Jones (the Researcher) on +[phone #] or Dr Jean Harrowing (the Overseer), Faculty of Health Sciences, University of Lethbridge on +[phone #] or via email at [email address]. Questions regarding your rights as a participant in this research may be addressed to the Office of Research Services, University of Lethbridge (Phone: [phone #] or Email: [email address])

I agree to participate in this interview.	Yes	No
I agree with my voice being recorded during this interview.	Yes	No
I wish to receive a copy of the final report.	Yes	No
Olakunle Jones has explained what the study is about; I understand it, and I am willing to share my knowledge about it.	Yes	No

Your signature below means that you are happy to be part of this study:

Participant's Name	Signature	Date
Researcher's Name	Signature	Date

A copy of this form has been given to you for your records.

Contact information for transcribed interview and/or summary of the findings

Phone number or Mailing address:

APPENDIX B:
INTERVIEW GUIDE

The following questions will serve as a guide during the interview sessions with my prospective participants. This is only a guide, and other unanticipated follow-up questions may come up that will aid having a rounded perspective of the participant's understanding.

1. Can you briefly tell me what you know about HIV?
2. How did you hear about HIV and VCT?
3. Can you share your opinion on how often one should participate in HIV counselling and testing and why?
4. What factors informed your decision about asking for HIV-VCT in the past?
In what way have these factors helped you make a decision?
5. Do you think your friends have gone for VCT? What do you think are their reasons?
6. How does your community respond to the idea of VCT?
7. How do your friends respond to someone who is HIV positive? How would you describe the response of the community to HIV positive person?
8. What are your suggestions on how HIV testing can be made easier?