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# HIV/AIDS-Related Stigma and Discrimination Toward Women Living with HIV/AIDS in Enugu, Nigeria

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# Walden University

College of Health Sciences

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Chinyere Nnajiofor

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Walden University 2016

#### Abstract

HIV/AIDS-Related Stigma and Discrimination Toward
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by

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MEd, University of Texas Pan American at Edinburg, 2004

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Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Health Services

Walden University

July 2016

#### **Abstract**

HIV/AIDS-related stigma and discrimination (S&D), lack of social support, poverty, and gender inequalities have been identified as factors in the increased prevalence rate of HIV transmission in Enugu, Nigeria, especially among women ages 15 to 49 years. Despite the funding of reduction programs, HIV/AIDS-related S&D remain a major driving force in the increased rate of new HIV cases in Enugu. This study addressed a perceived need for behavioral change intervention approaches that span all societal factors to reduce the HIV infection rate in Enugu Nigeria. The study was guided by Goffman's (1963) social S&D theory. The sample was composed of 132 women living with HIV/AIDS WLWHA ages 21 to 54 years, purposefully sampled from the 4 HIV and AIDS comprehensive initiatives care centers in Enugu, Nigeria. Fifteen WLWHA were interviewed and 114 participated in an online survey. The descriptive statistics and a multiple linear regression analysis and comparison revealed a convergent significant relationship between the S&D determinants (social, political, psychological, environmental, and cultural) and HIV/AIDS-related S&D towards WLWHA in Enugu F(4,109) = 45.09, p < .001). It also revealed that the cultural determinant of S&D was a significant predictor of HIV/AIDS-related S&D towards WLWHA in Enugu ( $\beta = 0.81$ , p < 0.001). The implications for positive social change include providing public health professionals evidence-based data to inform policy change, plan and to implement programs that will change societal attitudes and mobilize broad-based community actions to eradicate HIV/AIDS-related S&D toward WLWHA in Enugu, Nigeria, and in Sub-Saharan African Countries.

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#### Dedication

The completion of my doctor of philosophy in health care services-health care administration would not have been possible without the love and support of my family and my close friends, Rev. Fr. Andre Bakajika Kazadi and Rev. Fr. Rigobert Poulang Mot. I am very grateful to my sons and daughters, Francis-Kingsley, Anthony, Victor-Marius, Olivia, Linda, and Uzoma, who patiently stayed at my side throughout this journey. I thank you all for your love and inspiration. To all of my brothers, sisters, son-in-law, daughters-in-law, and my grandchildren, I say: Thank you for your support and encouragement. To my lovely mother, Angela E. Mokwe, I say: You did it!

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# Chapter 1: Foundation of the Study

#### Introduction

Approximately 35.3 million people currently live worldwide with HIV (UNIAIDS, 2013; UNICEF, 2013; World Health Organization [WHO], 2013). Countless deaths from HIV/AIDS have been recorded globally, and an estimated 2.3 million new infections took place in 2012, at a reduced adult prevalence rate of 0.8% (UNAIDS, 2013). Approximately 52% of people living with HIV/AIDS (PLWHA) are women, primarily as a result of global gender inequalities, differential access to health services, and social violence (UNIAIDS, 2013).

# **Background**

According to UNIAIDS (2013), 70%(1.4million) of new HIV infections worldwide occur in Sub-Saharan African countries, As a result, nine of every 10 PLWHA in the world are from nonindustrialized countries (UNAIDS, 2013): And in 2012, of the estimated 2.3 million new HIV cases 1.6 million (71%) were from Sub-Saharan African countries, an adult prevalence increase of 4.9% of new HIV cases in comparison to a global increase rate of 0.8% from 2001 to 2012. Despite the fact that only 12% of the global population resides in Sub-Saharan Africa, these countries have recorded higher total number of deaths from HIV/AIDS than developed countries have (WHO, 2013a). According to health observatory data from the WHO (2013b), Out of 1.1million HIV/AIDS deaths recorded in Sub-Saharan countries, Nigeria recorded about 210,000 HIV/AIDS deaths in 2011, Ghana recorded 15000 HIV/AIDS deaths in 2011, Cameroon had 34,000 HIV/AIDS deaths, and South Africa had 270,000 deaths in the same year,

respectively. In contrast, the number of HIV/AIDS deaths in 2011 was much lower in developed countries like the United Kingdom, which recorded fewer than 500 deaths, and the United States, which recorded 20,000 HIV/AIDS deaths (WHO, 2013b).

Approximately 3 million of Nigeria's 169 million inhabitants are infected with HIV/AIDS (WHO, 2013). About 56% of these individuals are women between the ages of 15 and 49 years, and 15% are children under the age of 15 years (WHO, 2013). Many Sub-Saharan African countries have an HIV/AIDS prevalent rate greater than 1%, significantly higher than the global rate of 0.8 %(WHO, 2013a). Eight of every 10 women and 9 of every 10 children live with HIV/AIDS in Sub-Saharan African countries, and the infection rate is 6 times higher among young women than men (UNAIDS, 2015). Approximately 71% of PLWHA in Sub-Saharan Africa are women and children.

UNIAIDS (2013) asserted that social determinants of health, including gender inequalities, differential access to health services, social violence, and socioeconomic status (SES) have contributed to disparities in HIV transmission rates. These inequalities have posed serious development challenges for Sub-Saharan African countries.

Individuals, families, and communities are negatively affected by this pandemic (Kaiser Family Foundation, 2006). The burden of care usually falls on family members who have not been infected with HIV/AIDS; when a family's main wage earner has died, there are not enough resources left to take care of other ill family members, and children who are orphaned are deprived of both parental care and financial support (WHO, 2008).

#### **Problem Statement**

Several studies have suggested that behavioral, psychosocial, and environmental factors contribute to the increased rate of HIV transmission in Sub-Saharan Africa and play a role in both reducing the quality of life and hastening the premature deaths of PLWHA (e.g., Healthy People, 2000, 2010; Siegrist, 1996). These identified factors include, but are not been limited to, discrimination, lack of social support, restricted access to health care services, stigma and discrimination (S&D) toward PLWHA, gender inequalities, and job insecurity leading to depression. Cohen, Chavez, and Chehimi (2007) and Schneiderman, Speers, Silva, Tomes, and Gentry (2001) argued that environmental factors such as the lack of access to medical equipment and health care also could jeopardize the well-being of PLWHA.

Opinions vary on the effectiveness and limitations of behavioral change intervention programs in preventing HIV/AIDS and prolonging the lives of all PLWHA. However, behavioral change intervention approaches to HIV prevention and care need to span all societal factors and must be tailored specifically to the determinants of HIV transmission within different groups, especially in regard to the vulnerabilities faced by women and children (Gillespie, Kadiyala, & Greener, 2007).

#### **Purpose Statement**

The purpose of this case study was to explore the experiences of women living with HIV/AIDS (WLWHA) in Sub-Saharan Africa. It specifically explored the experiences of WLWHA between the ages of 21 and 54 years in Enugu State, Nigeria, and designed to generate an in-depth description and analysis of HIV/AIDS-related S&D

toward WLWHA. The analysis of the findings helped to shed more light on the suffering of WLWHA in Enugu. The findings are also intended to enable program developers and grant funding agencies to plan effective intervention and prevention program initiatives that will reduce the determinants of S&D toward WLWHA in Enugu.

# **Nature of the Study**

I conducted this mixed methods study in Enugu City, the capital of Enugu State, cultural center of the Ndi Igbo people of eastern Nigeria. I collected and analyzed qualitative and quantitative data to provide alternative viewpoints because of the cross-comparison of the findings of the two data sets. Generalizations were formed during the data analysis as a consequence of the comparison (Denscombe, 2007).

Sammons et al. (2005) justified using mixed methods research in conditions where "complex and pluralistic social contexts demand analysis that is informed by multiple and diverse perspectives" (p. 221). This viewpoint stipulates that conclusions drawn from research are strengthened by the use of a mixed methods approach. I used a qualitative, case study approach to identify and develop new concepts and understandings of the social, psychological, political, environmental, and cultural determinants and consequences of HIV/AIDS-related S&D. I anticipate that the results can be used to design relevant policies and programs in a variety of cultural settings.

Case studies are less defined and more open ended than other qualitative methods such as grounded theory, ethnography, and phenomenology. I collected the case study data using a semistructured, in-depth interview process with the purposefully selected sample of WLWHA in Enugu City, Nigeria. The in-depth interview instrument was based

on the Enugu Ministry of Health's standard field guide used across Enugu State and Nigeria in general. I asked all participants the same interview items (see Appendix A). The interviews were conducted in English and sometimes in the local language of each of the four target communities. The interviews were audiotaped, recorded in diaries, transcribed, coded, and computerized for easy analysis using NVivo v.10. The audiotaped records and field notes provided comparable rich data that enhanced reflections to achieve objectivity in the data analysis process (Patton, 2002).

Any data analysis procedure depends on the research design and the sample. The qualitative part of this case study followed an exploratory, discovery, and inductive logic model. I analyzed the data by focusing on specific findings and the building of general patterns and themes that emerged from the coding of the interview responses. The categories or themes emerged from the analysis of the responses to the open-ended interview questions.

I conducted the quantitative component of this mixed methods study to investigate the social processes in various contexts. Using a quantitative method allowed me to compare the different social processes and understand the different sources and forms of HIV/AIDS-related S&D in Enugu State that span cultural and natural boundaries in Nigeria. The quantitative part of the study validated the concepts that emerged from the qualitative part and identified opportunities and future priorities for intervention and prevention programs to reduce the factors driving HIV/AIDS-related S&D.

The quantitative method integrated qualitative data that I used to assess the level of HI/AIDS-related S&D by using inferential statistics and statistically quantified the results of the categorical data numerically to draw from the strengths of the quantitative data and minimize weaknesses in the qualitative data in drawing inferences from the results (Tashakikori & Teddlie, 2010). The quantitative survey questions mirrored the interview questions regarding the respondents' experiences and perceptions. The quantitative instrument was a survey based on the preexisting HIV-Related Stigma Index Scale (HSS; see Appendix B), developed by UNAIDS and Network of People Living with HIV and AIDS in Nigeria (NEPWHAN & GNP+, 2011). The HSS instrument is in the public domain and therefore needs no preauthorization for public use. The HSS items were used to assign numerical values to the S&D determinant variables so that I could conduct a multivariate test (Cozby, 2007). The participants answered the survey using a 4-point Likert-type range of responses of 1 (strongly disagree) to 4 (strongly agree). Multivariate statistical analysis was conducted to test the hypotheses of the quantitative research question (RQ).

# **Research Questions**

The study was guided by two primary RQs:

- 1. What are the sources and forms of HIV/AIDS-related S&D in Enugu State?
- 2. Do social, cultural, psychological, political, and environmental determinants of population health predict HIV/AIDS-related S&D in Enugu, Nigeria?

#### Theoretical Framework

According to Goffman's (1963) social S&D theory, people stigmatize others because the others are different, and often label the others with undesirable characteristics that diminish their social status. I used the Goffman's theoretical framework as a lens view and identify factors that predicts HIV/AIDs related S&D to help community health providers and policymakers, counselors, and HIV/AIDS control and prevention program developers to make informed decisions in providing quality care and equal access to health care services, and designing effective HIV/AIDS intervention and prevention programs.

#### **Definitions of Terms**

Cultural determinants or factors: The public attitudes rooted in cultural beliefs and societal norms of communities or tribes that drive S&D toward WLWHA.

*Environmental determinants or factors:* The lack of access to medical equipment, health care services, and public amenities that can jeopardize the well-being of PLWHA.

HIV (human immunodeficiency virus): This is a virus that causes AIDS which may be passed from one person to another when infected blood, semen, or vaginal secretions come in contact with an uninfected person's broken skin or mucous membranes(National Center for HIV/AIDS, Viral Hepatitis, STDS, and TB Prevention, n.d).

Political determinants: In the context of this study, factors related to HIV/AIDS-related S&D that originate in local and state government laws and policies, as well as

ineffective enforcement of local and state laws and policies or lack of consideration of human rights laws that jeopardize the health and well-being of WLWHA.

Psychological determinants/factors: The personal fear of negative reactions from others, lack of knowledge, low-risk perceptions, and moral values in the generally internalized S&D that devalue the self-esteem and self-perceptions of WLWHA.

Social factors: S&D; lack of social support; restricted access to health care services; gender inequalities; exclusion from work, families, family friends, religious organizations, and village meetings; and job insecurity that lead to depression and affect the general health of WLWHA (Healthy People, 2010).

## **Assumptions, Limitations, and Delimitations**

# **Assumptions**

I assumed that in the qualitative part of the study, the respondents would answer the interview questions truthfully and comfortably. I also assumed that because the respondents were aware of their rights and the research benefits toward the management and control of HIV/AIDS, they would be comfortable and willing to share their experiences, despite the fact that issues of HIV are quite sensitive. I assumed that because they were comfortable, they would not give false answers about their experiences, because when interviewers use structured open ended questions as used in this research, the respondents tends to fully express their viewpoints and experiences(Creswell, 2007). The reliability and validity of the study depended on the participants providing truthful answers to the interview questions. If the responses could not be trusted, the data could have become skewed and useless. These assumptions were confirmed to be true because

the WLWHA in Enugu City were very open when describing their experiences during the face-to-face interviews.

#### Limitations

The study was limited to the views and responses of a sample of WLWHA in Enugu. Participants were from four subcities in Enugu only (Ogui, Independent layout, Uwani, Abakpa, and Emene). I selected four settings from which to obtain the purposeful sample of WLWHA in Enugu: (a) outpatients in Enugu Parkling Teaching Hospital; (b) Abakpa Nike Enugu city health centers; (c) 82 Military Division outpatients clinic; and (d) a nongovernmental clinic, Annunciation Hospital Emene, located in Enugu. No other towns or areas were considered.

#### **Delimitations**

The study had several delimitations, one of which was the amount of time available to conduct the study. The study also was delimited by the geographical setting. The study location was bounded by four centers in Enugu where HIV and AIDS comprehensive care initiative program exists. The findings cannot be generalized beyond this setting to other parts of Nigeria, Sub-Saharan African states, or areas outside of Sub-Saharan Africa.

# Significance of the Study

This study gave me insight into the suffering of women who have been diagnosed with HIV and the types of S&D that WLWHA in Sub-Saharan Africa experience as HIV transmission rates continue to increase. I conducted this study to understand, clarify, and

describe the social, political, cultural, psychological, and environmental determinants of public health driving the S&D of WLWHA in Enugu State in Nigeria.

The purpose of the study was to shed light on the S&D experienced by WLWHA ages 21 to 54 years. The findings are intended to inform policymakers, HIV/AIDS program interventionists, public health practitioners, and HIV/AIDS prevention and control funding agencies and institutions so that they can make decisions about programs and intervention approaches that will help to reduce or eliminate S&D of WLWHA in Enugu. The significance of this case study is to stimulate communities to mobilize and empower PLWHA and encourage Enugu community leaders to initiate efforts that would reduce S&D toward WLWHA in Enugu City and eliminate inequality determinants (WHO, 2005) against vulnerable women and children (Gillespie et al., 2007).

#### Chapter 2: Literature Review

#### Introduction

This chapter includes all information of previous research literature performed through the academic search engines via Walden University and McAllen public library. The primary sources used include academic and clinical publications, electronic databases, and statistical analysis of collected tangible data, using previous research to identify, explore HIV/AIDS –related stigma and discrimination driving factors in a broader concepts, and their observed impacts. HIV/AIDS related stigma and discrimination burdens to women living with HIV/AIDS and their families were explored. Exploratory research approach was employed in part, to explore and define the issue globally, through detail analysis of looking at collected data, identifying various HIV/AIDS related stigma and Discrimination(S & D), investigating the disproportionate designing of programs for prevention, implementation, evaluation and intervention of HIV/AIDS – related S & D (Public Health, 2014). This chapter began with exploration of the multifaceted nature of HIV/AIDS -related S & D issues predominance in African American population in United Stated to shed light on the global case of HIV/AIDS related S & D as major driving force in the increase rate of new HIV transmission, especially in Sub Sahara Africa. Reviews of several previous literatures that include background information on Nigeria that highlights the, geography, history, culture and the Igbo people("ndi Igbo")community behavior towards the target population were discussed in detail. I explored and exposed gaps in the literature on the socio-cultural behavior patterns and pre-existing stigma and discrimination towards women in Igbo

land, which Enugu state is a subset. Consequently, the last part of this chapter was focused on the issues of HIV/AIDS -related S & D in Africa, and then in Nigeria, with respect to the target population, women living with HIV/AIDS (WLWHA) aged 24-54years in Enugu State. The socio –demographics data obtained from reviewing the issues within the African -American population in USA was used to hypothesize what commonalities the USA population shares with respect to HIV/AIDS related Stigma, with the population of WLWHA in Enugu state of Nigeria. To describe in great detail, in order to fully understand the sources of all the driving factors or determinants of HIV/AIDs related S & D towards women in Enugu Nigeria, the history and cultural characteristics of "ndi Igbo" (Enugu people) were x-rayed, what pattern this population presents and at what context does the HIV/AIDS S & D occur was studied. I explored gaps in the literature on the Igbo community or societal behavior patterns toward women and pre- existing factors such as marginalization of women in Igbo land, which many researchers argued may have contributed major driving factors that fueled HIV/AIDS related S & D towards women living with HIV/AIDS in this region (Ezejiofor, 2008, Ezumah 2003, Smith, 2004). The last part of this chapter examined several previous research studies and the ineffectiveness of HIV/AIDS related S & D reduction programs and reviewed conclusive but varied opinions on why the reduction programs failed, in order to fully understand and hypothesize intricate roles the social, cultural, environmental and political determinants of HIV/AIDS -related S & D have played in the continued rise of new HIV transmission among women and children above 15 years of age in Enugu State of Nigeria.

# History of HIV

HIV first began to sweep through the United States in the early to mid-1980s (Gillett, 2011). Of the approximately 200,000 new infections reported each year, 60% of the cases were European American men (Xiao, Wang, Zhang, Feng, & Liu,. (2013). Because of their concern about HIV, many men in the homosexual community promoted early detection efforts and the use of condoms to prevent the spread of the disease. Many of their efforts were very successful, reducing the rate of infection among European American homosexual men sharply (Xiao et al., 2013).

HIV and sexually transmitted disease (STD) rates have generally gone down, from 1997 to 2006. As an example, the rate of HIV infection of about 40,000 new cases per year in the United States has held steady since 2007 (CDC, 2008), despite the high concentration of new cases in urban African American communities (Kagan et al., 2012). Of the 40,000 infections that occur each year, more than 50% are in African American people; the incidence of STDs also is on the rise in the African American population, (CDC, 2012).

The CDC (2008) asserted that HIV epidemic is taking advantage of the vulnerability of some people in the United States. Some of this vulnerability has to do with information that these people should have access to, but do not, but it also has to do with the fewer psychological and socioeconomic resources available that are needed not only to combat the disease but also to change the types of behaviors that can lead to HIV/STDs (CDC, 2008).

In poor urban neighborhoods, HIV/STD cases are at epidemic rates among African Americans (Kagan et al., 2012). However, the people living in these neighborhoods are not the only African Americans who are contracting the virus. It is not easy to explain why HIV/STDs are so widespread in the African American community, particularly because no particular type of person or place is seen as relevant to the issue of HIV/STDs (Kagan et al., 2012).

In Alameda County in California, for example, 60% of HIV/STD cases are in the African American community (Wilson, Arayasirikul, & Johnson, 2013). Officials in the county declared a state of emergency several years ago so that they could address the issue. These officials, along with doctors in the area, identified middle-class people as well as individuals who are poor, young, or old as population cohorts that can contract the disease (Wilson et al., 2013). This affirms a research report which stated that contrary to theories that poverty acts as an underlying driver of human immunodeficiency virus (HIV) infection in sub-Saharan Africa, an increasing body of evidence at the national and individual levels indicates that wealthier countries, and wealthier individuals within countries, are at heightened risk for HIV(Fox, 2010). Rather, the issue of HIV/AIDsrelated stigma has been portrayed as a third phase of the HIV pandemic which poses a serious threat to prevention and treatment of HIV and AIDS, globally(Mann, 1987). Therefore, what may be true is the disproportionate rates in new HIV transmission in developed world such as USA, and in developing countries like Nigeria depends on strategizing and implementing behavioral change intervention approaches to HIV prevention and care that span all societal factors and tailored specifically to the

determinants of HIV transmission within different groups of people of the world, framed with respect to socio-cultural and environmental determinants of health of each population group(Gillespie, Kadiyala, & Greener, 2007, Ezejiofor 2008).

Gallo and Montagnier (2003) wrote a qualitative review of the research and history that led to the discovery of HIV as the cause of AIDS. The tale of scientific discovery began in the late 1970s, when researchers thought that industrialized nations were beyond the reach of epidemic diseases. Gallo and Montagier suggested that a variety of lessons were learned from the intense early period of research and concluded that great modesty is required for science. Basic research facilitated by the work of numerous investigators was critical in providing the technical and conceptual tools that led to the discovery of HIV as the cause of AIDS. Although discovering the cause of an infectious disease like AIDS is an important step in medical research, the development of therapies and strategies to eliminate a disease or reduce its transmission rate does not guarantee a cure (Gallo & Montagnier, 2003). Despite all strategies and plans to combat HIV/AIDS, Nigeria the most populous black nation in the world with a population of about 169 million accounts for 10% the global HIV burden (UNAIDS, 2011). Women above age of 15 are disproportionately impacted by HIV transmission (U.S. Embassy in Nigeria & NARHS, 2013). Women with the age of 15 -49 years have a HIV prevalence of 52% compared to men above the age of 15 years that have 37% prevalence.

#### **HIV Statistics Trends in Africa**

Many surveillance studies have reported that there are approximately 35.3 million PLWHA and that countless deaths are caused by HIV/AIDS globally. Approximately

52%, or more than half, of PLWHA in the world, are women, mainly because of the impact of global gender inequalities, differential access to health services, and increased social violence (WHO, 2013; UNIAIDS, 2013; UNICEF, 2013) ).

As previously reported 70% of new HIV infections have occurred mostly in countries in Sub-Saharan African. UNAIDS also reported that 90% of PLWHA come from developing or underdeveloped countries. By 2012, 71% of PLWHA were from countries in Sub-Saharan Africa. This percentage was a 4.9% increase from 2001 and a higher rate than the global increase of 0.8% from 2001 to 2012. Although only 12% of the global population resides in Sub-Saharan African countries, these countries have recorded higher death rates from HIV/AIDS than developed countries have (WHO, 2013b). According to the WHO's (2013a) global health observatory data repository, Sub-Saharan countries such as Nigeria recorded about 210,000 HIV/AIDS deaths in 2011. Ghana recorded 15000 HIV/AIDS, Cameroon 34,000 deaths, and South Africa 270,000 deaths in 2011, respectively. The United Kingdom recorded fewer than 500 deaths in 2011, and the United States reported 20,000 deaths from HIV/AIDS in 2011.

Furthermore, the WHO (2013b) reported that 3 million of the 169 million people living in Nigeria are infected with HIV/AIDS. About 56% of the population is women between the ages of 15 and 49 years, and 15% are children under the age of 15 years. Many Sub-Saharan Africa countries have HIV/AIDS prevalent rate greater than 1%; the global rate is 0.8%.

In Sub-Saharan Africa, 80% of women and 90% of children live with HIV/AIDS.

In addition, the infection rate is 60% higher among young women than among men

(UNAIDS, 2015). Approximately 71%, or more than half, of PLWHA are women and children. Social determinants of health such as gender inequality, differential access to health services, increased social violence, and SES have contributed to disparities in HIV transmission rates between men and women (UNIAIDS, 2013). These disparities have posed serious development challenges for Sub-Sahara African countries. According to the Kaiser Family Foundation (2007), the HIV pandemic has affected individuals, families, and whole communities because the burden of care lies with the families of the infected individuals

Behavioral, psychosocial, and environmental factors have contributed to the increased rate of HIV transmission in Sub-Saharan Africa and have played a major role in reducing the quality of life and hastening the premature deaths of PLWHA (Fortson, 2011; Rosen & Fox, 2011). The factors have included, but have not been limited to, discrimination, lack of social support, restricted access to health care services, S&D toward PLWHA, gender inequalities, and job insecurity that leads to depression (Siegrist, 1996; Healthy People, 2000, 2010). Cohen et al. (2007) and Schneiderman et al. (2001) argued that environmental factors such as lack of access to medical equipment and health care also could jeopardize the well-being of PLWHA. Opinions vary on the effectiveness and limitations of behavioral change intervention programs in preventing HIV/AIDS and prolonging the lives of all PLWHA; however, what is clear is that behavioral change intervention approaches to HIV prevention and care need to span all societal factors and must be tailored specifically to the drivers of HIV transmission, especially among vulnerable women and children (Gillespie et al., 2007). Monjok, Smasny, and Essien

(2009) argued that HIV/AIDS-related S&D can have a significant impact on achieving universal access to HIV prevention, treatment, care, and support programs needed by PLWHA.

Unfavorable social, political, environmental, psychological, and cultural conditions in many communities result in large disparities in the provision of health among population subgroups (Cohen et al., 2007). Consequently, research efforts geared toward ways to reduce or eliminate HIV/AIDS-related S&D must apply new approaches to explore, identify, and analyze concepts that take into account the social, cultural, political, psychological, and environmental determinants of S&D (USAID, 2002). Previous research has emphasized the need to explore these processes in the range of contexts to guide the development of programs and interventions to reduce HIV-related S&D (Cohen et al., 2007).

# **HIV Rates in Nigeria**

According to a UNAIDS study (2009), there are an estimated 3.3 million PLWHA in Nigeria and that approximately 220,000 people died from AIDS that same year (UNGASS, 2010). The first case of HIV/AIDS was recorded in Nigeria in 1985. Initially, the Nigerian government was in denial and was slow to respond to the increasing transmission rates (Kanki & Adeyi, 2006), which rose from 3.8% in 1993 to 4.5% in 1998 (Sofo, Ali, & Pyke, 2003).

In 2001, Nigeria's President Olusegun Obasanjo established the National Committee on AIDS, and his government developed an AIDS emergency action plan.

However, despite the increased effort to control the epidemic, by 2006, an estimated 10%

of the infected population of women and men were on antiretroviral therapy (ART), with 7% of pregnant women receiving treatment to reduce the risk of mother-to-child HIV transmission (UNAIDS, 2008). Nigeria's proposed HIV/AIDS intervention plan from 2010 to 2015 was in danger of failure because of funding issues and HIV/AID-related S&D. UNGASS (2010) reported that HIV in Nigeria particularly affects women, and in 2009, among adults older than 15 years of age, 56% of PLWHA in the country were women. UNGASS also reported that HIV is transmitted mainly through heterosexual intercourse, blood transfusions, and mother-to-child transference that affects about 57,000 babies annually.

# **History of the Igbo People**

Understanding the history of the Igbo people will shed more light on the general place of women in Enugu State, where 99% of the residents are from the Igbo tribe. The Igbo people reside in southeastern Nigeria, the Ikwerreland of Rivers State, and the Igbo West of the Niger in Delta State. Understanding the history of the Igbo people is difficult because of the dearth of written material pre-19 century. Jones (as cited in Ijoma, 2010), late professor in the School of Oriental and African Studies of the University of London, claimed that the Igbo history is a neglected area of inquiry. Afigbo (1991) also claimed that there has been scant research on the Igbo history when compared to research on other Nigerian cultural groups like Edo, Yoruba, and Hausa. According to Afigbo, the first Igbo historians did not reveal anything that could have been considered essential to the history of the Igbo people. Early historians who studied the Igbo focused only on the effects of European activities on the Igbo. However, Afigbo also claimed that famous

Igbo historians have had difficulty preparing a comprehensive record of the Igbo historians because of their focus on Western philosophy and research methodologies.

The question of where the Igbo originated from has provoked considerable interest. Because historians have not been able to investigate this topic, three theories about the origins of the Igbo have emerged: Oriental, Niger/Benue confluence area, and Igbo homeland or Independent origins (Ijoma, 2010). The Oriental theory asserts that the Igbo migrated from northwestern Africa. Under this theory, it was speculated that the Igbo might have been one of the last tribes of Israel or Egypt. For unknown reasons, they had to leave northeastern Africa and travel until they reached their current homeland. The theory arose because of cultural similarities between the Igbo and other people from northeastern African, including the practice of circumcision, the manner in naming children, sentence structure, common words, and religion as well as ritual symbols.

The Niger/Benue confluence area is the second theory. One of the proponents of the theory is Afigbo (1981), who claimed that the Igbo originated from the Niger/Benue Confluence area. However, this claim was based largely on linguistic theory. Under this theory, all speakers of the Kwa subfamily languages of Ijo, Edo, Yoruba, and Idoma, among others, came from the Niger/Benue confluence area. The proponents of this theory believe that speakers of these languages came from this area before migrating to different parts of West Africa. They also claim that aside from the languages they used, the antiquity of yam cultivation is part of the basis of their argument. The importance of yam cultivation in the Igbo culture is said to be a proof that the Igbo come from the Niger/Benue confluence area, where yams can thrive. They claimed that yams would not

thrive in the current Igbo areas, so the culture must have started somewhere else. The Niger/Benue confluence area is forest-savanna borderland that offers cultivation opportunities of yam.

The last theory is the Igbo homeland or independent origins theory. The areas where the Igbo migrated from are Nri/Awka, Orlu/Owerri, and parts of Okigwe. From the heartland, the people migrated to several current Igbo locations. The proponents of this theory have traced this migration by using archeological tools proving that human habitation and exploitation took place in these areas. Excavations in the Ezi-Ukwu Ukpa Rock shelter, near Afikpo, also led to the discovery stone tools and pottery shreds whose radiocarbon dates (2935  $\pm$  15 B.C.) provided evidence of human activity in that part of Igboland for several hundred years.

# Beliefs of the Ndi Igbo of Nigeria

Aside from the effects of Christianity, one important custom of the Igbo is the kola nut custom. Despite the influence of Christianity and Western civilization on the Igboland, the kola nut, or oji, is a unique mainstay in the traditional life of the Igbo people. It is the first food to be deserved at any important occasion. Kola nuts are used to start discussions and express gratitude to God and ancestors for the new day.

In some Igbo communities, particularly in the Onitsha and Riverine areas, elderly women or those with titles who are treated with great respect and consideration are always given the privilege of breaking the kola nuts, even if this practice is usually reserved for men. If there are no such women, this practice is given to the elderly men, ozoo men, and ndi nze. Kola nuts also are offered to God to help them in their daily tasks.

Houses without kola nuts can be considered embarrassing, especially for men, and can spark spousal quarrels. Men who cannot offer kola nuts to their visitors often feel ashamed. Kola nuts represent joy, harmony, peace, and love, thus underscoring the importance of the kola nut custom in Igbo society.

Another important feature of Igbo society is their instinct to survive, which is largely derived from environmental factors. The migration of the Igbo from the heartland to other parts of Igboland is but one manifestation of their survival instinct. The protracted use of limited land by a dense population, along with the deterioration of land resources, pushed the Igbo to leave Igboland for other parts of Nigeria. This survival instinct has remained with them, even though they are already residing in parts of Nigeria. The Igbo believe in social mobility as well as achieved status; they do not believe in ascribed status. Because they have limited land space and the ongoing depletion of land resources, they have to struggle to survive outside their environment.

Okwu (1995) noted that according to Igbo traditional education theorists, education in Igbo communities is based on the "beauty and richness" of family values; however, the nature of Igbo traditional educational thought and practice remains unclear. In addition to changes in Igbo education, there have been changes in the underlying philosophical base of Igbo society. For this reason, how they view their religion also has changed. There have been many sociocultural changes within Igbo society because of the influence of Western missionaries and their Christian evangelism (Okwu, 1995). The Igbo, as well as other African societies, were deemed preliterate until the influx of missionaries in the 19 century and the Western culture and education that they brought

with them (Kanu, 2001). Traditional, or precolonial, Igbo saw women as primary educators supporting the cultural values and morality, particularly for young women and their future roles in rearing children.

The focus of this study was on the Igbo people in Enugu State, which began around the Nike Village of Ogui, which in the Igbo language means "with strength or power." At a time when transatlantic slavery was a way of life, the Nike people conquered most of the lands and used slaves for defense. They also allied with the Aro people of Abia State and traded with the Hausas from northern Nigeria. The Aros and the Hausas migrated back and forth to what is now Enugu State. From being the capital of the Southern Provinces, Enugu became the capital of the Eastern region (Enugu: The Coal City State).

## Women's Place

Traditional Igbo philosophy arose in a culture that saw land as a source of life. Traditional culture considers the land and women in Igbo society as procreators and the caretakers of human life, which were seen as sacred tasks (Kanu, 2001). This ideology formed the cultural sense of morality and conduct (Kanu, 2001). Women, in particular were seen as the "guardian of the ritual and social health of the people" (Kanu, 2001, p. 3). Traditional Igbo culture adheres to a value system that respects human life, hard work, high achievement, and fruitfulness in terms of fertility and prosperity.

In an analysis of the gender roles and generational changes as perceived by students in Nigeria, Abidogun (2007) found evidence of changing gender roles along the lines of Western Judeo-Christian teaching, along with little traditional history and cultural

teaching, in the modern curriculum. Because of the previously described role of women in traditional Igbo society, these gender role changes can be seen as having an important influence on cultural and religious beliefs.

# HIV/AIDS Among Igbo People in Enugu and Nigeria in General

According to the WHO (2010), approximately 33 million people have been diagnosed with HIV/AIDS. In 2008, 2.7 million new infections were documented. In the same year, 2 million deaths were attributed to HIV/AIDS. The WHO statistics also showed that new HIV/AIDS infections for 2008 affected the Nigerian population disproportionately. Nigeria is considered one of Africa's most populous countries, with an estimation of 140 million people. The HIV/AIDS prevalence rate in the country continues to rise.

Peel and White (2007) claimed that Nigeria has an HIV/AIDS prevalence rate close to 10%. In 2009, around 56% of HIV/AIDS-infected individuals at least 15 years of age were women (WHO, 2010). Measured against Nigeria's population, these rates mean that 11 to 13 million Nigerians were infected with HIV/AIDS between 2003 and 2005. This makes the Nigerian population the second highest number of people infected with HIV/AIDS among all Africans. Nigeria, as a result, is second only to South Africa on this high HIV/AIDS prevalence rate.

Anambra State is one of 36 states in Nigeria; it has an unofficial population count of 3 million and a high HIV/AIDS prevalence rate. The largest indigenous ethnic group in Anambra State is the Igbo, around 98%. Aggravating the problem is the lack of public health facilities (Okoye, Okagbue, Oranya, Madu, & Soyombo, 2001). According to

Okoye et al. (2001), Anambra State only has one HIV/AIDS health center, which is located in Akwa, the capital city. The lack of treatment centers has led to various economic and social problems, some of which relate to the dwindling size of the workforce, a surging infant mortality rate, and the high costs of providing infrastructures for orphans.

Because of the Igbo traditions in Anambra State related to the aura of maleness, these problems have become more complicated to understand and resolve. According to Ezumah (2003), inequality and disparity in gender relations can negatively impact the cohesiveness in familial health. Because of the gender inequality in this state, women live in fear of both abandonment and rejection, and men continue to assert their superiority over them (Ezumah, 2003; Smith, 2004).

# HIV/AIDS Prevalence among Igbo Women in Enugu and Nigeria in General Marginalization of women.

According to Ezejiofor (2008), the marginalization of women is evident in Anambra State. Women in Igbo society have the cultural role of breeders and homemakers and are outside the patriarchal lineage. In addition, male promiscuity is tolerated in Igbo culture, but if women engage in this behavior, they are persecuted. Women who are promiscuous are viewed as needing cleansing from the gods and goddesses of the land. Male children are allowed to continue the family lineage; female children are married off so that they can contribute to the lineages of other families (Ezejiofor, 2008).

Polygamy. Igbo women also have to contend with polygamy, which is widespread in Anambra State. The women in the study agreed that polygamy devalued their personal integrity as women and also led to personal, psychological, and sexual torture to happen more frequently to them while married. The sexual fantasies of men engaged in polygamy made second-class citizens out of the women within their marriages. It also elevated the status of the men and made them culturally prominent as well as socially relevant. Polygamy aggravated the inequality between men and women. The literature showed that husbands could marry other women without the approval of the other wives (Boshego, 2006; Mbachu, 2003). Because polygamy is culturally tolerated, it, as well as the marginalization of women, are widely known as factors in in the transmission of HIV/AIDS, especially from men to women (Ezejiofor & Campus, 2012).

According to Ozumba (2005), polygamy makes women vulnerable to their husbands' lifestyle choices, especially in regard to HIV/AIDS. It was during the mid-1980s that the HIV/AIDS pandemic in the state was diagnosed. It was determined that polygamy was the main vehicle for spreading various types of STDs, including HIV/AIDS. In a culture where condom use in uncommon, especially between married partners, contraction of HIV/AIDS by either one of the many wives that a husband has or the husband himself might mean contraction to all (Ezejiofor & Campus, 2012).

Concubinage. Aside from polygamous relationships, concubinage and surrogate wife/husband practices also have led to the transmission of HIV/AIDS in Anambra State.

These practices are common in Anambra State because of their prioritization of male

children over female children. The importance of producing male children undermines women's rights. Husbands frequently resort to polygamy or offer their wives to friends as surrogate wives for the sole purpose of giving birth to male children. These practices disempower the women and subject them to the caprices of their male counterparts. This covert yet popular cultural practice makes HIV/AIDS transmission easier and faster (Ezejiofor & Campus, 2012). Men act as the hosts and agents facilitating the spread of HIV/AIDS locally and across Anambra State (Famuyiwa, Williams, Lawal, Oduwole, & Abdulkarim, 2014).

Female genital cutting. Female genital cutting (FGC) is another widespread practice in Anambra State that subordinates women to men. The procedure is the initiation of girls into womanhood meant to protect girls' virginity until they get married, attenuate girls' sexuality, improve the sexual pleasure of their husbands, and enhance matrimonial harmony(Ezejiofor & Campus, 2012). The spread of HIV/AIDS is aided by this practice of FGC because local healers often use unsterilized surgical instruments that are sometimes tainted with the virus (Ezejiofor & Campus, 2012).

Occupational marginalization. Women are subjected to occupational marginalization, which can indirectly increase their chances of contracting and spreading HIV/AIDS. Women are considered more suitable for service occupations only (Ezejiofor & Campus, 2012). Professional occupations are reserved only for men. Women are not allowed to enroll in technological courses in colleges and universities. This type of marginalization can force women into early marriages, which can ultimately be risky and polygamous in nature. These marital arrangements make them vulnerable to contracting

HIV/AIDS. According to Orji, even though more than 100 years have passed since the introduction of Christianity to the Igbo, they are still not willing to change their cultural practices, which are mostly gender biased and unprogressive (as cited in Ezejiofor & Campus, 2012).

Ugwu (2009) specifically looked at how HIV transmission takes place in Enugu state, especially among farm women. The researcher found that in Enugu state in particular, like in some Nigerian states, various factors fuel HIV spread and aggravate the negative effects of HIV/ADIS among women-in-agriculture as well as women in their households. The researcher found poverty to be one of the main factors associated with transmission and aggravation of HIV/AIDS. Ugwu also determined harmful traditional practices, sociocultural factors, inadequate information, ignorance, and illiteracy, and stigma, social discrimination to all lead to HIV transmission and aggravation of HIV or AIDS.

HIV/AIDS and poverty. According to Ugwu (2009), in general, HIV/AIDS and poverty are linked. In Enugu State, in particular, 75% of rural dwellers and 42% of urban dwellers, the majority of whom are women, live in poverty. Ugwu claimed that this poverty status facilitates the spread of HIV/AIDS, especially among women and young Enugu people. Ugwu used his survey results to show that because of their limited access to productive resources, particularly land and credit, nearly 86% of the women who were farmers could not interfere with the negative effects of HIV/AIDS. WLWHA also sink deeper into poverty. The effects of having HIV/AIDS has led to the loss of as much as

60% of farm women's income in Enugu State, and the costs associated with the health maintenance and care of PLWHA has the potential to affect 75% of a family's income. Ugwu found the same effects of harmful traditional practices in Enugu State. Polygamy, wife inheritance, FGC, facial marking/tattooing, holding-brief ghost marriages, and the inability of women to discuss and negotiate sex with their husbands, among others, all have led to high rates of HIV/AIDS among farm women in Enugu State (Ugwu, 2009).

Ugwu (2009) noted that particularly among Enugu farm women, one factor leading to high HIV/AIDS rates is the lack of correct information. Ugwu claimed that women who are farmers are more disadvantaged than others by the lack of information on HIV/AIDS prevention, care, and support strategies. Nearly 64% of the farm women in Ugwu's study were found to have either no information or no access to the right information regarding HIV/AIDS, thus aggravating the problem of increase rate of HIV transmission.

In Enugu State, women, especially widows, do not have a lot of rights. First, they often have low SES. Losing their husbands to AIDS does not afford them inheritance rights to the lands, input on farming the land, cash crops, and farm assets of their husbands. They are secluded, isolated, and treated harshly by their late husbands' families, a situation that affects their food security and livelihood sustainability. Women who are infected with HIV/AIDS because of their husbands suffer even more (Ugwu, 2009).

## Stigma Against Igbo Women With HIV/AIDS in Enugu and Nigeria in General

The Igbos call HIV/AIDS *obiri n"aja ocha*, a disease that ends in the grave (Maduike & Care, 2010). This assumption makes people fear PLWHA instead of giving them the care that they need. Muoghalu and Jegede (2013) assessed the perceptions of HIV/AIDS among the Igbo of Anambra State and determined that perceptions of HIV/AIDS significantly shaped the prevalence rate of HIV/AIDS among the population. According to the researchers, perceptions can affect the discriminatory behaviors and attitudes of people against PLWHA and can aggravate the problems that these individuals are experiencing.

Muoghalu and Jegede (2013) assessed the perceptions and knowledge of the people of Anambra and how they affected or led to effective intervention programs designed to reduce the S&D linked to the pandemic. The researchers focused on people living in the Idemmili North and Oyi local government areas of Anambra State. They used qualitative and quantitative methods to gather information from a sample of adult males and females 18 years of age and older. The data collection instruments were a questionnaire and an in-depth interview protocol. The questionnaire was administered to 1,000 respondents; 13 people were interviewed.

Results showed that the majority of the respondents believed that HIV/AIDS is a disease that immoral people deserve as a punishment from God. A limited number of participants believed that HIV/AIDS can affect anyone, even those that are moral. Many of the respondents were aware that HIV/AIDS is widespread, but they did not have enough knowledge of the disease. Muoghalu and Jegede (2013) found significant

relationships between educational level, sex, occupation, income influence, and perceptions and people's reactions and knowledge of HIV/AIDS to HIV-positive status of a relative but no significant relationships between these variables) and knowledge of HIV/AIDS. The researchers concluded that because of people's lack of knowledge about HIV/AIDS and their cultural belief systems, they had negative perceptions of the disease and of PLWHA.

Muoghalu and Jegede (2013) also found that study participants who had negative perceptions of PLWHA had common SES characteristics. The results revealed that HIV/AIDS awareness programs were not effective. The researchers claimed that effective intervention programs would be able to change the behaviors of people and improve their knowledge of HIV/AIDS, ultimately reducing the S&D toward PLWHA and the spread of HIV/AIDS itself.

According to Dibua and Agweda (2010), even though Nigerians in general have heard of and understand the symptoms of STDs such as gonorrhea, syphilis, and even HIVs, they have a lot of misconceptions about these STDs. The majority of Nigerians in their study recognized STDs as *nsi-nwanyi*, which means *woman's poison*. Some participants believed that PLWHA are loathsome. The vast majority still believed that AIDS is the result of poisoning or witchcraft and can even be spread by mosquito bites, handshakes, and the sharing of sleeping spaces or towels, among other misconceptions. It is therefore critical for this study review previous research to investigate the cultural context of stigma, health seeking behavior and the role both perceived and community stigma play in HIV/AIDS—related S & D reduction programs. A research study argued that a

significant research and full understanding of many ethnic and cultural settings that constitute Nigeria, are important tool to identify and describe in full detail the complex interacting hidden factors that are impediments to effective prevention and HIV/AIDS-related S & D reduction programs geared towards WLWHA( Monjok, Smensy, \$ Essien, 2009).

# Behavioral and Psychosocial Aspects of HIV

Multipartner behavior is a critical influence concerning the spread of HIV/AIDS (Weitz, Reddy, Van Den Borne, Kok, & Pietersen, 2003). Weitz et al.'s large sample, despite being geographically specific, produced great insight into the prevailing belief systems of the participants. One of the more interesting findings had to do with the participants' specific beliefs supporting their negative attitudes toward condom use. Many of the participants believed that condom use could lead to the waste of sperm, loss of masculinity, and discontinuity of a clan name. Weitz et al. stated that knowing these cultural biases of South African males could be useful when developing behavioral change intervention programs.

Future researchers of this topic might consider including other regions of South Africa to ensure that these same beliefs exist in other South African communities. In addition, for behavioral change strategies to take effect, it is important that the social environment support these changes (Cully et al., 2012). More research is needed not only to gain the general community's understanding of the ways in which current gender constructions are facilitating the spread of STDs, including HIV/AIDS, but also whether communities are willing or able to develop and support strategies that can address these

gender constructions effectively (Edström, 2010). Only in this way can effective strategies be developed and implemented successfully and become part of the change process (Edström, 2010).

Rosenfeld et al. (2006) conducted a quantitative analysis of research to explore the prevalence and predictors of patients' desire for a hastened death when faced with advanced AIDS. The study involved 372 patients with advanced AIDS who had been recently admitted to a palliative care facility, either one of two skilled nursing facilities or one medical center.

The study had several important findings. First was the finding that less than 10% of the participants indicated elevated levels on either one of the two measures of a desire for a hastened death. This percentage was in stark contrast to previous research with cancer patients indicating that 8.5% to 16% of patients had a desire for a hastened death (Rosenfeld et al., 2006). In addition, Rosenfeld et al. found a significantly higher rate of clinical depression in patients with AIDS than previous research involving cancer patients, despite the fact that fewer desired a hastened death. Twenty-seven percent of participants demonstrated a major depressive disorder, in comparison to 12% to 17% of cancer patients. There also was a greater association between symptoms of clinical depression and hopelessness and the desire for a hastened death among the AIDS patients than those with cancer. Eighty percent of the studied patients in Rosenfeld et al.'s analysis with a high desire for hastened death also met the criteria for major depressive disorder, versus 47% to 58% of cancer patients in previous studies (Rosenfeld et al., 2006).

Rosenfeld et al.'s (2006) study was important to consider in this literature review because the researchers highlighted the psychological factors affecting patients with advanced AIDS. They found a clear relationship between depression and a sense of hopelessness and the desire for a hastened death. Less clear were the associations between a desire for hastened death and adequate social support, physical symptom distress, to patients' physical functioning. What the researchers were not able to determine was a connection between hopelessness, depression, and a desire for a hastened death and the appropriateness of assisted-suicide policies.

The emergence of the debate on assisted suicide was the initial impetus for Rosenfeld et al.'s (2006) research, yet their findings did not uncover prudence of a desire for a hastened death. Further research needs to be conducted on how to treat patients with a desire for a hastened death the most effectively. Future research could include similar studies on the prevalence and predictors of the desire for a hastened death in other groups of patients with less advanced forms of AIDS to find more effective ways to improve the physical and psychological quality of life for these patients (Breitbart et al., 2010; Catalan et al., 2011; Colson, 2013).

## **HIV Interventions**

I studied the Igbo population of Enugu State in Nigeria because there has been a dearth of literature on HIV interventions focusing on this population. A review of HIV interventions in other settings, particularly among minority groups in the United States, lends support to this section. The focus on minority groups and culturally sensitive interventions shows that they are experiencing the same problems as the Igbo in Nigeria.

Meija, Vasquez, and Sanchez (2006) highlighted the importance of community-based participatory research (CBPR) as one way to prevent HIV/AIDS in the Latina community. The impetus for their research was the fact that the changing demographics in the United States have meant that the Hispanic American population is a vital target group when addressing health issues such as the prevention of HIV. Thirteen percent of the U.S. population has a Hispanic background, but 20% of new HIV/AIDS cases are among the Hispanic American population. The incidence of HIV/AIDS among Hispanic Americans in 2000 was nearly 4 times that of European Americans (30.4 cases per 100,000 vs. 7.9 cases per 100,000). Meija et al. reported that 61% of Hispanic Americans are alive 9 years after an AIDS diagnosis versus 64% of European Americans and 69% of Asian Americans. According to the researchers, HIV/AIDS is the third leading cause of death among Latinas between the ages of 35 and 44 years, clearly indicating the need for HIV/AIDS prevention strategies and programs in the Latina community.

Meija et al. (2006) cited Minkler to define CBPR, which is different from simple community-based research. The latter centers on research in the community, but it does not involve community members in the research, whereas CBPR seeks participation from community members to obtain their knowledge and facilitate social change that will improve the health of the community. Meija et al. found that the Latina population at high risk of contracting HIV/AIDS and that CBPR is a potentially effective research tool. Meija et al.'s results are useful in demonstrating the higher risk in the Latina population of contracting HIV/AIDS. They also discussed the importance of culturally specific prevention programs in preventing the spread of HIV/AIDS.

The relationship between CBPR and the need for culturally specific prevention programs is not clear, especially in regard to the Latina community (Rhodes et al., 2012). According to Rhodes et al. (2012), to support the need for culturally specific preventative programs, further review of the qualitative literature on this subject would be useful. Research on the effectiveness of CBPR, particularly among minority communities, and the culturally specific development and implementation of preventative health care programs is warranted

Cheemeh, Montoya, Essien, and Ogungbade (2006) discussed the need for culturally competent care that understands the beliefs and practices of the Igbo culture and the ways in which this care should be different from Western health practices. They also identified the need for more treatment facilities for women, especially pregnant women. Sexual behavior education programs that are culturally appropriate are lacking. In addition, they noted the need for reliable and comprehensive epidemic data. In the end, the researchers concluded that behavioral change will produce the most effective results in reducing HIV/AIDS transmission rates. Achieving these results would involve the study of high-risk groups and the development and implementation of intervention strategies. These programs have not yet begun in the Middle East (Cheemeh et al., 2006).

Coyle et al. (2006) conducted a quantitative evaluation of All4You, a preventative intervention program designed to reduce risky sexual behaviors associated with HIV/AIDS, other STDs, and unplanned pregnancies. The researchers randomly selected 14 schools to receive the All4You! Intervention program and 11 schools to be the control group. The two components of the All4You! Program were delivered over 14 sessions for

approximately 26 hours. These components included a skills-based curriculum regarding HIV, other STDs and pregnancy prevention, within the alternative school classroom, as well as service-learning activities, where the students visited various volunteer sites, including preschool and elementary schools, senior centers, AIDS service organizations, and an organization that was creating a public mural (Coyle et al., 2006).

Coyle et al. (2006) found that the students who took part in the prevention program were statistically less likely to have had intercourse without a condom in the previous 3 months, as well as the last time they had had intercourse, with both steady and nonsteady partners. However, at the 12- and 18-month follow-ups, this positive effect was diminished. At the 6-month follow-up, the students who received the intervention reported having intercourse fewer times than the control students, but the difference attenuated with time. Coyle et al. determined that the All4You! program had a short but positive effect on students in regard to improving the frequency of unprotected sex, despite the long-term effects diminishing.

Coyle et al. (2006) provided insight into this topic. It was surprising that the results were contrary to the hypothesis that the psychosocial variables that were based on their theoretical model were impacted only in a limited way by the intervention. This information was useful not only in evaluating the effectiveness of the program but also in improving future intervention programs. Further research needs to be done to clarify these results, including whether this specific program was effective; whether another intervention program would be effective, and to what extent; and whether another program would have more enduring results. Research also could be conducted to

determine the effectiveness of each component alone or in combination with the other one.

Also, the study subjects were specifically students attending community day schools, which is a specific type of alternative school setting. Other alternative school settings may provide different results. Also, traditional (non-alternative) school settings may also provide different results. Therefore, it would be prudent to repeat this research (Cohen et al., 2011).

Rabkin, McElhinney, Rabkin, McGrath, and Ferrando (2006) investigated the effectiveness of the use of dehydroepiandrosterone (DHEA) in the treatment of HIV/AIDS patients with nonmajor depression. They found that DHEA was superior to the placebo, with response rates 62% and 33%, respectively. In addition, few adverse events were reported by either treatment group (Rabkin et al., 2006). Rabkin et al.'s findings are significant. Depression is a common problem among patients with HIV/AIDS, so it is important to identify effective treatment programs for their depression. The results were further supported by the low attrition rate in the sample. This low rate, combined with the requests for extended open-label treatment, further supported the use of DHEA as an effective intervention (Rabkin et al., 2006). Future researchers should focus on expanding the identification of effectiveness of DHEA among other subgroups (Bradley, McElhiney, & Rabkin, 2012).

Rabkin et al. (2006) focused solely on patients with nonmajor depressive disorders. Future studies could include samples comprising patients with major depression. Another major exclusion in their particular study was no mention of

substance use disorders, thus pointing to the need for further research. In addition, the effectiveness of DHEA in the treatment of HIV-positive women with nonmajor depressive disorders could not be generalized because of the small percentage of female participants (Bradley et al., 2012). Lastly, given the positive results of Rabkin et al.'s study with patients who were taking multiple concurrent medications, further research could investigate the effectiveness of DHEA in other groups of patients for whom mild depression is a concern, such as cancer patients (Relf, Eisbach, Okine, & Ward, 2013). More importantly, further research should include a study solely on women (Bradley et al., 2012). Long-term follow-up research is needed to determine the long-term response as well as endocrine and other effects of DHEA.

# **HIV Risk Reduction Programs**

There are ways that individuals can reduce their risk of HIV/STDs that can be relevant to the development and implementation of education programs and treatment programs. In general, individuals can undertake eight specific steps to lower the risk of HIV/AIDS/STDs:

- 1. There must be strong intention to implement behavior that leads to avoidance or risk reduction (Alemu et al., 2013).
- 2. There should be no barriers within the individuall's environment that will block the change in behavior (Ngure et al., 2012; O'Leary et al., 2012).
- 3. The individual should have the skills necessary to execute the change in behavior (Malow et al., 2012).

- 4. Walter and Vaughan (1993) cited the importance of understanding that the perceived "pros" of the new behavior will be greater than the perceived "cons."
- 5. Individuals also should believe and see that their peers are supporting them in changing their behavior.
- 6. There must be consistency of the new behavior as meeting the self-image that an individual has (Walter & Vaughan, 1993).

The aforementioned researchers also claimed that this new behavior must be reinforced in a positive way and that the individual believes that he or she can carry out this new behavior and remain so. Individuals who can look at these six issues and understand their importance will do much better in ensuring that they do not contract HIV/AIDS or other STDs (Walter & Vaughan, 1993). The pressing question then becomes one of how to ensure that these individuals see these eight issues as being important and work toward changing their behavior (Walter & Vaughan, 1993). Programs can change the various risk behaviors of individuals (Card et al., 2011; Padian et al., 2011). One way to do this is through programs in schools (Fonner, Armstrong, Kennedy, O'Reilly, & Sweat, 2014; Miller, Hallfors, Cho, Luseno, & Waehrer, 2013). Several specific issues must be looked at in school-based HIV/AIDS/STD prevention and education programs. Programs should be based on social learning theories that focus on the reduction of risky sexual behaviors that might lead to HIV/AIDS, other STDs, and unwanted pregnancies, and provide reliable and accurate basic information that deals with the risks of and methods to avoid unprotected sexual activity (Atwood et al., 2012;

Nkansah-Amankra et al., 2011). In addition, when developing programs, consideration must be given to the influences of society and the media on sexual behaviors (Atwood et al., 2012; Nkansah-Amankra, 2011). Programs should reinforce appropriate and clear values that do not support unprotected sexual activity (Atwood et al., 2012; Nkansah-Amankra et al., 2011). Programs must model and practice the negotiation and communication skills that individuals need to deal with this issue. By ensuring that individuals understand the importance and significance of what they are doing, perhaps fewer individuals will contract diseases such as HIV/AIDS or spread it to other individuals through intravenous drug use or unprotected sexual contact (Coyle, 2011).

## **HIV Interventions in Africa**

Mitchell et al. (2005) discussed the teachers and community health workers in rural South Africa who work with youth with HIV/AIDS. Drawing on previous research on photo-voice techniques, as well as memory and photography and self-representation through photography, Mitchell et al. concluded that although many projects use photography to give voice to the participants, it is especially significant in giving a voice to community health workers and teachers in rural South African communities. In these remote areas, community members do not have to wait for researchers to provide the answers to problems; instead, they can take action themselves and give a visible face to the plight of HIV/AIDS (Mitchell et al., 2005). Through the creative use of photography, these communities can express themselves in entirely new ways.

Mitchell et al. (2005) were able to present a nonconventional approach to communicating. The premise of the research, that is, how best to give health care workers

and teachers a voice in the fight against HIV/AIDS, extended beyond medical and scientific issues and touched on psychological and sociological issues. The researchers showcased the need to give people involved in the community a way to express their own opinions.

However, further research needs to be conducted. The methodological premise of the value of photo-voice is sound, but specific interventions studies that focus on rural South African communities and the HIV/AIDS plight might be worthwhile (Norton, Jones, & Ahimbisibwe, 2011). Although health care workers and teachers might have found photography useful in expressing their thoughts and feelings about the challenges and solutions surrounding HIV/AIDS, it would be interesting to learn if their voices were heard by the greater community (Norton et al., 2011).

Yoshikawa et al. (2003) discussed the insufficient number of prevention programs designed to prevent HIV/AIDS among immigrant groups residing in the United States. The researchers' goal was to develop behavioral theories for Asian/Pacific Islanders (A/PIs) immigrant communities. Although A/PIs generally appear to be at lower risk of contracting HIV/AIDS, certain A/PIs subgroups are at increased risk. These subgroups include young gay A/PI men, who have a higher incidence of HIV/AIDS than gay European American men. In addition, the researchers cited a previous study by Mays indicating that between 21% and 53% of AP/I men having sex with men self-reported having unprotected anal intercourse within the last 6 months.

The purpose of Yoshikawa et al.'s (2003) study was to inform both researchers and practitioner audiences. They chose a methodology that allowed them to assess and

describe theories of change, as well as create practical and immediately useful information for community-based organizations (CBOs). An empowerment evaluation approach was undertaken, and with the assistance of staff of a participating CBO, the study was conceptualized, and the measures and data analysis procedures to be used were developed. In the end, the researchers discovered that one way to address a taboo topic such as HIV/AIDS with A/PIs was to pair it with a positive cultural symbol. They also determined that "diffusion of innovation processes are more efficient under conditions that address the particular meanings of sex and HIV/AIDS in A/PI cultures" (p. 801-816).

In addition, Yoshikawa et al. (2003) identified several risk factors inherent to contracting HIV/AIDS: retention of cultural values from their home country that stigmatized protected sex, perceived low risk of contracting the disease, length of residency in the United States, and level of education. Lastly, Yoshikawa at al. asserted that processes on the social network, behavior setting, and community levels directed toward the cultural preferences and attitudes of A/PI populations are lacking in U.S. HIV/AIDS prevention programs.

Yoshikawa et al.'s (2003) research was instrumental in helping to publicize the lack of culturally specific behavioral theory regarding immigrant communities and HIV/AIDS prevention programs in the United States. Their results were contrary to the mainstream belief in one-size-fits-all prevention programs. HIV/AIDS prevention programs in the United States do not address the cultural preferences and attitudes of immigrant populations such as A/PIs (Royal, 2012; Woody, 2014).

Future qualitative and quantitative research is needed to explore the predictors of HIV risk among A/PI populations in order "to expand the database on culturally anchored theories suitable for HIV prevention. In addition, quasi-experimental and experimental evaluation of culturally anchored strategies such as the ones reported by the peer educators in this study is urgently needed" (Yoshikawa et al., 2003, p. 58-143). Their research should be repeated with more diverse samples. The sample comprised 35 peer educators from AIDS-CBOs serving A/PI communities in a northeastern U.S. city. A larger and more geographical diverse sample would either confirm or refute their conclusions.

# Negative Effects of HIV/AIDS-Related Stigma and Discrimination

This section is a review of studies on the negative effects of HIV/AIDS-related S&D. Regardless of the setting, HIV/AIDS-related S&D can lead to certain negative effects, making it more difficult for individuals to cope with the disease and seek help. S&D can have a major impact on individuals' decisions, behaviors, and outcomes. In addition, HIV/AIDS-related S&D can negatively affect their willingness to be tested for HIV/AIDS and receive the necessary treatment (Sambisa, Curtis, & Mishra, 2010) or engage in preventive behaviors. S&D also can make people reluctant to join educational meetings and counseling sessions on HIV/AIDS (Airhihenbuwa, Ford, & Iwelunmor, 2014). Because HIV/AIDS-infected women are afraid to be labeled negatively, they will refuse to participate in programs that can teach them to avoid transmitting HIV/AIDS to their children (Airhihenbuwa et al., 2014).

Stigma and Discrimination can negatively affect lifestyle choices and quality of life of HIV/AIDS-infected persons. Because of the S&D associated with HIV/AIDS, people are less likely to engage in HIV/AIDS prevention programs, testing, and treatment. They do not want to be associated with HIV/AIDS services and publicize their HIV-positive status (Pitpitan et al., 2012).

Early diagnosis and care are critical to the survival of HIV/AIDS-infected persons (Musheke et al., 2013). If their status is diagnosed early and they receive proper treatment, PLWHA are more likely to survive and less likely to transmit HIV/AIDS to others, including their own children. Kalichman (2004) explored ways to reduce HIV-related stigma in Uganda and found that providing HIV home testing (i.e., screening) services led to increased screening rates across Uganda.

Wong et al. (2009) focused on Project Accept, an intervention meant to increase testing in communities by changing community norms and ultimately reducing the S&D associated with HIV/AIDS. Results showed that reducing S&D increased testing rates fourfold. Wong et al. asserted that reducing stigma can significantly increase individuals' willingness to participate in HIV/AIDS prevention and treatment activities, especially by testing for HIV/AIDS so that early diagnoses and care can be provided.

Young et al. (2010) claimed that HIV/AIDS testing is needed to reduce the number of PLWHA in South Africa. However, HIV/AIDS-related S&D, along with perceptions that there is a low chance of societal HIV/AIDS testing, leads to reduced testing rates, making early diagnoses and treatment impossible. The researchers took data from Soweto and Vulindlela, the South African sites focused on in Project Accept, a

multinational HIV/AIDS prevention intervention. Young et al. gathered data based on self-reported HIV/AIDS testing, S&D, and social norms to analyze how HIV testing, S&D, and perceptions of societal testing rates are interrelated.

S&D can be negative attitudes toward HIV/AIDS-infected people, negative perceptions toward HIV/AIDS-infected individuals, and negative perceptions of fair treatment. Through a univariate logistic regression, decreased negative attitudes toward HIV/AIDS-infected people were found to lead to higher rates of HIV/AIDS testing (Young et al., 2010). Increased perceptions that HIV/AIDS-infected individuals experience discrimination and should be treated fairly also were found to lead to increased rates of HIV/AIDS testing. The researchers reported the finding that individuals who have already been tested for HIV/AIDS tend to think that the majority of people have already undergone the same test. The researchers concluded that interventions such as Project Accept can address S&D and perceptions of societal testing effectively, ultimately having a positive effect on testing rates.

S&D against PLWHA is not limited to South Africa. In the United States, men who have sex with other men who do not know that they have HIV have claimed that they are afraid of getting tested because of HIV/AIDS-related S&D (Stall et al., 1996). Gay Adults are afraid to be tested because they are worried about the possible positive results and the associated S&D (Herek, Capitanio, & Widaman, 2002).

South African research has confirmed these U.S.-based studies. The 2002 South African survey showed that nearly 20% of the respondents were reluctant to be anywhere near PLWHA and 26% did not want to share meals with PLWHA. Approximately 6%

claimed that they would not engage in conversations with or even talk to people whom they suspected of having or knew to have HIV/AIDS (Shisana & Simbayi, 2012). Such strong S&D associated with HIV/AIDS can impede getting tested for HIV/AIDS so that early diagnosis and treatment can be received. Something must be done to reduce S&D and the wrong perceptions about HIV/AIDS so that more people will be tested (Young et al., 2010).

In non-Western countries such as Nigeria, there is a misconception that HIV and STD is a gay disease. In Western countries, there is a notion that it is an African American disease (Malebranche et al; 2013; Sharpe et al., 2012). It should be understood that HIV/AIDS and other STDs are not specifically gay diseases or African American diseases, even though the number of cases are the highest in these two groups. Second, HIV and AIDS are not the same infection, but I used the terms together in my study for ease of understanding (Malebranche et al., 2013; Sharpe et al., 2012). The actual definitions of the terms, however, are more specific: HIV is the virus that causes AIDS, and AIDS is the full-blown disease. Included in this section was a discussion of the limited amount of research that has focused on the effects of S&D not only on the Igbo people but also on populations outside of Nigeria.

One of the major issues stopping community response efforts in many areas of the world is a movement that has been loosely identified as "not in my backyard" (NIMBY). This movement refers to the responses from communities when someone or something that they are uncomfortable with attempts to move into their communities (Rogers & Ginzberg, 1989). Originally, individuals who were mentally ill or homeless were seen as

being the two largest NIMBY groups that communities wanted to avoid (Phelan, Link, & Tehranifar, 2011). Now that HIV/AIDS and other STDs have become so prevalent in the last 20 years or so, communities are working to keep the individuals afflicted with these diseases out (Earnshaw & Kalichman, 2013; Earnshaw, Smith, Chaudoir, Amico, & Copenhaver, 2013). There has been so much education, along with research and medical advancements, about HIV/AIDS and other STDs that one would think that they pose no threat to communities; however, it appears that people still seem to feel that there is a contagious aspect to people infected with HIV/AIDS and other STDs and that they do not way them in their communities or neighborhoods (Earnshaw & Kalichman, 2013; Earnshaw et al., 2013).

Successful programs must have a many great things, but one of the most important is cultural competency (Jin et al., 2014). Messages about the prevention and treatment of HIV/STDs must be tailored to the specific needs of populations or they will not be effective. These messages must demonstrate several factors. First, they must be sensitive to the particular cultures that the messages are trying to reach. This sensitivity must consider educational level, sex, age, sexual orientation, geography, race, norms, values, beliefs, and other significant issues (Jin et al., 2014). Consideration also should be given to the appropriateness of the messages to the developmental status of the intended audience, especially if the audience is from a different cultural background, such as the people of Igbo, Nigeria. The messages should be appropriate to the level and style of language of the cultures receiving the messages (Jin et al., 2014).

Although a government might feel that it is conveying a message that will have mass appeal, it might actually be producing a message that has very narrow appeal. The reason might be that different cultures view the message content differently and might not speak about certain topics or might discuss them only in certain circumstances (Uusi-Tarkka & Winch, 2013). By not being sensitive to these considerations, the message might be disregarded by some cultures and not seen as relevant (Uusi-Tarkka & Winch, 2013).

This tailoring of a research approach to involve the participation of the target population was applied to the current study of WLWHA within the Igbo population in Nigeria. I focused on the accounts of WLWHA on their perceptions and experiences of HIV/AIDS-related S&D in Enugu City, where they lived and worked, because the way to help individuals from other cultures is to study them and identify issues important to them from psychological perspectives (Uusi-Tarkka & Winch, 2013).

## **Transition and Summary**

Much more has to be done for people afflicted with HIV/AIDS/STDs. This includes people in African communities and the Black community elsewhere in the world. Statistics have indicated that the incidence of HIV/STDs in urban Black communities is growing rapidly, so information about how to handle this problem and what types of cultural differences must be dealt with in order to ensure that these individuals receive treatment and education about prevention strategies must be dealt with. It is clear that what the government has done up until this point has not been

working well; different strategies must be created if the epidemic of HIV/STD cases among adolescent Black is going to decline.

HIV is not something that is entirely a Black disease. European American and Latino Americans, as well as individuals from other population groups, also contract the virus. However, the alarming number of young Black individuals who are contracting HIV/STDs indicates that they are becoming a much more pressing problem for these individuals than it is for other ethnic groups.

By examining this issue in the context of Black individuals in urban areas, plans can be implemented to help these individuals to learn new ways of avoiding the disease and being treated for it so that its spread will be diminished. HIV rates are growing rapidly in the Black community, but little has been done to stop the spread from destroying whole families and communities. The problem will continue until a way is found to stop the spread of HIV/STDs in Black communities that is culturally relevant to these individuals' lives.

Moreover, nothing tried in Black communities will have the same effectiveness that it does in European American communities. This is a concern not just for Black individuals in these communities but also for the agencies that must deal with these individuals as well as the doctors and hospitals that must treat an increasing number of HIV/STD patients who are young and Black. Across the world, not only in Igbo, Nigeria, Black communities might be dealing with cultural issues that are leading to high HIV rates that could influence the current study. The purpose of this study was to understand, clarify, and describe in detail the complex social, cultural, political, psychological, and

environmental determinants of health that driving the S&D toward WLWHA ages 24 to 54 years living in Enugu City in Nigeria.

The information that adolescent Black people are receiving must be relevant to them and their culture, and it must make sense so that they will take it to heart and understand that it really can affect them. When a culturally relevant message can spread, the incidence of HIV/STDs in Black America will start to drop. However, despite the abundance of HIV research, not enough studies have been designed to explore the hardship and difficulties of women who have been diagnosed with HIV and who continue to suffer from different forms of S&D. Not giving enough attention to this issue can lead to the ongoing increase in the rates of HIV transmission in Sub-Saharan Africa because women with HIV might be reluctant to seek the help they need. The next section explains the methodology that I used to conduct this study.

## Chapter 3: Research Method

## Introduction

The purpose of this study was to understand the experiences of and develop an indepth description as well as analysis of HIV/AIDS-related stigma and discrimination of Women living with HIV/AIDS (S&D of WLWHA) in Enugu State, Nigeria. Specifically, I explored the social, political, psychological, cultural, and environmental determinants of health driving HIV/AIDS-related S&D of WLWHA in Enugu City in Enugu State, Nigeria. This chapter includes a discussion of the research method and design of the study; further identification of the target population, sampling procedure, sample size, and data collection procedures; and descriptions of the data collection instruments. The data collection and data analysis processes also are explained. Discussions of the threats to validity, issues of trustworthiness, and ethical procedures to protect the participants conclude the chapter.

## **Research Design and Rationale**

I conducted this mixed methods study, in Enugu City, the capital of Enugu State, a cultural center of the Ndi Igbo people of eastern Nigeria. The qualitative and quantitative data provided distinct viewpoints because of the cross-comparison of the findings that facilitated the development of generalizations during the data analysis, as recommended by Denscombe (2007). Sammons et al. (2005) justified using a mixed methods approach in conditions where "complex and pluralistic social contexts demand analysis that is informed by multiple and diverse perspectives" (p. 221). This viewpoint posits that conclusions drawn from the research are generally strengthened by the use of a

mixed methods approach. I used this approach to acknowledge the multidimensional shape of HIV/AIDS-related S&D.

I used a qualitative research design to explore and identify HIV/AIDS-related S&D of WLWHA within a broader social, cultural, political, environmental, and psychological framework. The results of the qualitative component showed how the five determinants resulted in social inequalities caused by collective public attitudes, not individual actions, toward WLWHA in Enugu. The result of this exploratory study can contribute to a more in-depth understanding of the multiple complex and deep-rooted determinants driving HIV/AID-related S&D of WLWHA in Enugu State, Nigeria.

The rationale for using multiple methodologies was to combine qualitative and quantitative analyses to enhance the quality and credibility of the data (Collins & O'Cathain, 2009; Patton, 1993). In addition, this approach offered a framework for understanding S&D as social processes that create inequalities and health disparities (Cohen et al., 2007). Using a sequential research design facilitated the implementation of various data collection strategies (Creswell, 2009).

This mixed methods design was the most appropriate for this study because it allowed me to analyze the results from the interview and survey responses. I used an exploratory and quantitative study design to identify the social, cultural, political, environmental, and psychological sources of S&D and the ways in which they manifested, as well as analyze and determine which determinants were significant in the predicting HIV/AIDS-related S&D of women in Enugu (Piot, 2000).

Patton (2002) noted that mixed methods research can help to elucidate complementary aspects of the same phenomenon. Triangulation of data sources can capture different views that enable researchers to compare and understand in complex detail the reasons for the differences (Patton, 1993). Patton (1993) argued that triangulation can explain differences in divergent sources of data and contribute to the overall credibility of the findings.

The primary research approach to this multiple case study was bounded by time and location. I used a qualitative method to identify, understand, and describe the perceptions of a sample of WLWHA in Enugu as well as empower the women to tell their stories (Creswell, 2009). A case study is appropriate when the goal is to investigate outcomes and describe the connections between actions and outcomes by examining differences among the cases to reach a better understand of how the outcomes are achieved (Leedy & Ormrod, 2010). Case study is a qualitative approach that facilitates the exploration of a phenomenon within its context using a variety of data sources (Cozby, 2007).

A case study was appropriate to analyze the themes emerging from the interview responses and provide enough depth from the analysis to support and expand the propositions of a particular situation in a group of people, and it did not purport to build an underlying theory from the investigation (Merriam, 2009). The emerging themes of HIV/AIDS-related S&D viewed through the theoretical framework of Goffman's (1963) social theory on stigma were described. Face-to-face interviews that were guided by open-ended and close-ended questions were used to collect the data.

I used a qualitative case study approach to understand the social, cultural, political, psychological, and environmental determinants of HIV/AIDS-related S&D of WLWHA. The outcomes can be used to construct relevant policies and programs that might contribute to the development of more effective responses to HIV/AIDS-related S&D in different cultural settings.

Case studies are less defined and more open ended than other qualitative methods, namely, narrative research, grounded theory, ethnography, and phenomenology. I collected the data using a semistructured, in-depth interview protocol with a purposefully selected sample 15 of WLWHA from Enugu City in Enugu State Nigeria. The interviews items were constructed based on a standard field guide used across Nigeria and Enugu State. I asked each participant the same interview items in English or in the local languages of the participants, if they so preferred. The responses were audiotaped, recorded in field notebooks, transcribed, coded, and stored on a computer for analysis using NVivo v.10. I used the audiotapes and field notes to obtain rich data and make immediate reflections to ensure the objectivity of the data analysis (Patton, 2002).

Data analysis depends on the chosen research design and the audience. This case study followed an exploratory, discovery, and inductive logic model and a quantitative, inductive model. I analyzed the data by focusing on specific findings and themes, and by building on general patterns and subthemes that emerged from the coding of the interview responses.

#### **Role of the Researcher**

I collected data from two principal sources: interviews and an online survey. I conducted the interviews and then audiotaped and transcribed the responses. I used the 45-item HSS (NEWPHAN & GNP+, 2011) to collect data for the quantitative component of the study. The survey was computer-programmed for all the online respondents. I later retrieved and organized the survey data. The descriptive and multivariate multiple regression analyses were analyzed and interpreted with the help of a statistician. I also was responsible for ensuring the anonymity, confidentiality, and safety of the respondents during their participation in the study.

I created a foundation of understanding to help to evaluate issues at the local level, which required the use of skills appropriate to conduct a case study and established an observer relationship with the respondents. In addition, the information sessions with the respondents allowed me to explain the purpose of the study and my role as researcher. I did not have personal biases about the study because I did not have any prior experience in the subject manner. I ensured that the collected data were valid, reliable, and free of biases, and I informed the respondents that any information that they provided would be shared with them to ensure that the information was valid and reliable.

I did not have any professional relationships or connections with the respondents involved in this study, and neither knew nor worked with any of the respondents prior to conducting the study. The interviews and my interactions with the respondents during the study were handled in an unobtrusive manner. The participants did not receive any monetary compensation for being in the study. I did not conduct the interviews or

administer the survey until I received approval from Walden University's Institutional Review Board (IRB approval #07-15-15-0177555 expires July 2016).

# **Study Sample**

I conducted the study in Enugu State, the cultural center of the indigenous Ndi Igbo tribe of eastern Nigeria. At the time of this study, Enugu State had a population of roughly 2,101,016 (992,104 male and 1,108,912 female citizens), with more than 500,000 people residing in Enugu City (Government of Enugu State of Nigeria, 2012). To be in the study, the potential participants had to be WLWHA between the ages of 21 and 54 years. Participants were from four subcities in Enugu State (i.e., Ogui, Uwani, Abakpa, & Emene). I recruited the 132 participants from four settings: outpatients in Enugu from the Parkling Teaching Hospital, Abakpa Nike health centers, 82 military division clinics, and a nongovernmental clinic (Annunciation Hospital) in the busy commercial city of Enugu.

For the qualitative part of the study, I recruited 15 WLWHA from the total sample of 132 to be interviewed. Polkinghorne (2005) recommended that the sample sizes of qualitative studies range from five to 25 participants. In qualitative studies, the samples can be smaller simply because larger samples do not guarantee more in-depth or comprehensive findings (Green & Thorogood, 2009). For the quantitative part of the study, I surveyed 114 WLWHA from Enugu State.

#### Instrumentation

# **Qualitative Component**

I collected the qualitative data from personal interviews with 15 participants. Previous to interviewing the participants, I conducted a pilot study interview to not only validate the qualitative instrument, but also to gain insights into the participants' experiences and views regarding their HIV/AIDS status. The three pilot participants reviewed the appropriateness and clarity of the interview questions and requested modifications where applicable.

I conducted individual interviews with 15 participants using semi structured, open-ended questions (Streubert & Carpenter, 2011). The use of open-ended questions allowed the respondents to shape their responses regarding their feelings about, experiences with, and suffering related to HIV/AIDS-related S&D resulting from the increased rate of HIV transmission in Sub-Saharan Africa (King & Horrocks, 2010). The use of open-ended interview questions encouraged the participants to provide rich, indepth responses (Groenewald, 2004). They also allowed the participants to communicate their experiences spontaneously (Denscombe, 2007).

To prepare for the individual interviews, I gave each of the 15 respondents an interview guide containing the open-ended questions. With a predetermined set of questions, the likelihood that all the key topics would be discussed increased. I was the

primary data collection instrument and framed the interviews based on the approved interview questions.

# **Quantitative Component**

I used the HIV Stigma Scale (HSS; Appendix A Appendix C) developed by network of people living with HIV/AIDS in Nigeria in conjunction with Global network of people living with HIV/AIDS( NEPWHAN & GNP+,2011), to collect the quantitative data. Surveys facilitate the straightforward collection of data from various resources in a timely manner (Dillman, 2000). Gay, Mills, and Arasian (2009) asserted that surveys facilitate the study of people's attitudes, concerns, and practices. I compared the survey results with the interview responses. The comparison increased the validity and reliability of the study.

The HSS is a 45-item survey used to assess HIV/AIDS-related S&D toward adults in Nigeria. The HSS primarily asks about the social and emotional aspects of having HIV. The HSS measures five dimensions of HIV stigma: social, psychological, political, cultural, and environmental. These dimensions are personalized stigma, perceived stigmatizing consequences of others knowing of one's HIV status; disclosure concerns, fear of disclosing one's HIV status and fear that those who know would tell others; negative self-image, experiencing oneself as tainted and not as good as others because of one's HIV status; and concerns about public attitudes, conceptions of what people might think about a person with HIV.

The HSS responses are rated on a 4-point Likert scale of responses ranging from 1 (strongly disagree) to 4 (strongly agree). The summed scores are obtained for the

questions on the five dimensions to obtain respective scores for each dimension; a total score is obtained to get an overall measurement of the five determinants. Higher scores indicate higher levels of HIV/AID-related S&D.

The validity and reliability of the HSS were established in previous studies. According to Berger, Ferrans, and Lashley (2001), the measures of the five dimensions are highly internally consistent with Cronbach's alpha coefficients between 0.90 and 0.93 for the five dimensions and an overall Cronbach's alpha coefficient of 0.96 for the entire 45-item instrument. Construct validity of the HSS was supported because the measures of HIV/AIDS-related S&D were found to be related to the constructs of self-esteem, depression, social support, and social conflict (Berger et al., 2001). External validity of the HSS was supported in a significant correlation between the HSS scales and a similar instrument, the DISABKIDS Chronic Generic Module (Wiklander et al., 2013). In general, the HSS had more than acceptable reliability and validity.

# Procedures for Recruitment, Participation, and Data Collection Qualitative Component

The first stage of the analysis required the collection of qualitative data from 15 WLWHA between the ages of 21 and 54 years who were living in Enugu State at the time of the study. As already mentioned, I conducted personal interviews with the women at the four HIV/AIDS comprehensive care initiative centers in Enugu City in Enugu State

First, I distributed an invitation to participate in the interviews via e-mail or posted it on the announcement boards at the four HIV/AIDS comprehensive care initiative centers for 2 weeks before conducting the interviews. I explained the purpose of

the study and the data collection process in the invitation. Once potential participants agreed to join the study, I contacted them either in person or via e-mail or telephone to clarify the interview and survey protocols. In some cases, participants asked to meet with me so that I could explain and clarify the purpose and nature of the research, as well as their role in the study. I gave them the informed consent to read, sign, and return to me. The informed consent contained detailed information about the purpose of the research, assurances of confidentiality, and details about the data collection process. This study followed ethical principles and guidelines by maintaining the confidentiality of the participants during and after the fieldwork. No personal information was collected or recorded during the interviews.

I interviewed 15 participants only after they provided oral consent and returned the signed consent form to me; the 114 survey participants had to sign the consent form digitally. The participants committed to 30-minute interview sessions, which ran smoothly. I reminded them at the beginning of their sessions that could stop or discontinue the interviews at any time. I eliminated interviewer bias by asking all 15 respondents the same interview questions consistently and reviewing their responses with them at the end of the interview.

The respondents expressed their personal experiences and opinions freely and fully during the interviews. Upon receiving permission from the respondents to do so, I recorded all of the interviews and then reviewed them to ensure that the written responses matched the audiotaped data in preparation for the transcription process. It is important mention that the interviews took place in an environment that made the WLWHA

comfortable and relaxed enough so that they answered the questions freely. The interviews at each of the four locations were held in quiet places mutually agreed upon by the researcher and the participants.

# **Quantitative Component**

To conduct the quantitative component of the study, I inputted the 45 items from the HSS on to the Survey Monkey website and then gave the 114 survey participants access to the link so that they could complete the survey. None of the 15 interviewees or the three pilot participants completed the survey. Providing the survey online eased the data collection process (Sorensen, 2009). The survey link was posted on the bulletin boards at the four study sites so that the respondents understood how to access the survey. I collected all of the survey results within 4 weeks.

The online survey, which included a consent form and my contact information, was made available through Survey Monkey. Once the participants gained access to the survey link, they were screened to ensure the recruitment of only women who met the inclusion criteria (i.e., residents of Enugu State, WLWHA, and within the age range of 21 to 54 years). The screening involved answering using yes/no options. Participants who answered "no" to any of the information were automatically logged out of the process. For participants who met the inclusion criteria, the informed consent form immediately loaded up and asked them if they had read and understood the informed consent and were willing to participate in the study.

The consent form provided the participants with information about the purpose of the study and the potential benefits of the results to them. It was clearly stated that all information would remain confidential and that no personal or identifying information would be collected. A yes/no button regarding the consent form and information was made available. Participants were required to click *yes* to confirm their consent.

Participants who answered *no* were not allowed access to the rest of the survey.

A summary of the interview responses was downloaded through the Survey Monkey website. Once the number of responses reached 114, the site was no longer open. Participants were not contacted following the study, but I did provide them with my contact information in case they had questions about the study. To protect the anonymity of participants, I told them not to disclose their names on any documentation related to the study. All participants completed the survey on the SurveyMonkey website.

# **Data Analysis Plan**

# **Qualitative Component**

Case study research follows exploratory, discovery, and inductive logic model; as such, the primary analyses focused on building specific themes, general patterns, and subthemes as they emerged. The subcategories or subthemes of the data analysis emerged from the open-ended interview responses. I conducted open coding of the responses to obtain subthemes or subcategories from the summary and tabulation of the interview data. Coding is the process of analyzing the data that moves them from diffuse and messy text to organized ideas (Portney & Watkins, 2009). Open coding was accomplished by segregating the interview response data into words, phrases, sentences, or paragraphs that emphasized the functional relation between parts and the whole of the entire responses from the open-ended questions using the Nvivo v.10 software program. At this point in

studies, researchers must differentiate and combine the data retrieved and make reflections about the information (Streubert & Carpenter, 2011). Consequently, I conducted the interviews, undertook immediate summarization and comparison of interview responses, compared notes and the audiotaped data, reflected on collected data, transcribed and coded all the interview responses in order to prevent bias from multiple observers.

Because this study was a single, local case study, I derived only themes within the given case (i.e., within-case analysis), as specified by Pokinghorne (2005). I used open coding, as recommended by Krippendorff's (2004) analytic questions:

- Which data are analyzed?
- How are they defined?
- What is the population from which they are drawn?
- What is the context relative to which the data are analyzed?
- What are the boundaries of the analysis? and
- What is the target of the inferences?

I used these six questions as a guide to code the interview data and develop thematic categories and constituents as a summary of the interview data collected.

Coding in this study allowed the reader to distinguish each topic easily and read the participants' own accounts describing their experience with each topic. I used the coded emerging subthemes and categories for the inductive data analysis and grouped them under subcategories related to determinants of stigma:

- employment-based discrimination,
- HIV screening and identification,
- social contact and interaction,
- disclosure of HIV status (social determinants);
- internalized and personalized stigma (psychological determinants);
- cultural beliefs and societal norms (cultural determinants); 1
- laws and policies (political determinants); and
- environmental determinants (access to ART medication, equipment, etc.; Ulasi et al., 2009).

# **Quantitative Component**

I analyzed the responses to the HSS statistically using descriptive and inferential multivariate analyses of the responses to the five determinants:

- social (gender inequalities, homophobia, poverty, economic underdevelopment;
- cultural (public behavior and actions, threats, harassments, public beliefs, and societal norms, negative judgment of WLWHA by the public);
- psychological (fear of negative reactions by others, lack of knowledge, low risk perceptions, moral values);
- environmental (lack of rights in the workplace, lack of access to information and services); and
- political (laws and policies such as poor implementation of human rights laws,
   passage of laws that promote discrimination, restrictions on travel and migration).

Specifically, the coefficient of multiple discriminants indicated the percentage of variation in HIV/AIDS-related S&D explained by variations in the IVs such as psychological, social, cultural, environmental, and political factors. I conducted an *F* test to the determine statistical significance of the HIV/AIDS-related S&D. SPSS v.23 was used to conduct the statistical analysis, and the results of the multiple regression were tabulated and interpreted.

## Threats to Validity

Shank (2006) indicated that validity can be difficult to define and that researchers do not readily agree on its definition. Creswell (2009) suggested that issues regarding validity often raise questions pertaining to a researcher's ability to affect the desired outcome resulting from the research rather than being suggestive of some other unrelated variable. Ary et al. (2009) recommended that validity be considered in the qualitative research paradigm and naturalistic approach to research. External threats tend to arise when researchers make validated inferences and generalizations about the sample size (Creswell, 2009). These threats typically concern particular uniqueness of individuals as well as the settings selected for the studies and the timing of the experiments (Creswell, 2009). These threats are eliminated by the use of qualitative and quantitative research methods to overcome any limitations (Johnson & Turner, 2003).

The results of qualitative interviews can be used to identify unobserved heterogeneity in quantitative data, as well as explain previously unknown variables and miss-specified models. A hypothesis-generating method of study (quantitative) might help to discover a lack of validity of qualitative measurement, operations, and

instruments. Quantitative methods use statistical data to complement qualitative studies by helping to identify structural constraints that negate effective responses in intervention programs designed to minimize HIV/AID-related S&D (Miles & Huberman, 1994).

#### **Issues of Trustworthiness**

Shank (2006) asserted that reliability is accuracy in measurement. Shank, as well as Rajendran, (2009) suggested that it is critical for case study researchers to present their findings openly and clearly and to be aware of self-imposed bias. Presenting accurate reviews of prior literature and the nonbiased presentation of the findings must be executed to ensure research validity. Shank suggested rotating between literature sources to ensure that the researcher's insights are synchronized to increase reliability. There was no issue in my study regarding the reliability of the HSS because its reliability had been established in previous studies. However, the self-developed interview questions were pilot tested to ensure their trustworthiness.

A pilot test was conducted to ensure that the questions asked what was intended. I asked three of the 132 participants to evaluate the questions. The pilot test assessed the external validity of the interview questions using a two-step approach. First, the participants were asked to examine each interview question and then evaluate it based on comprehension, clarity, ambiguity, and potential difficulty in responding. Each participant was asked whether the questions were clear enough to capture what was intended. In the second step, reliability was determined through testing and retesting the interview questions, more often known as test-retest reliability. In this step, the participants were asked whether the interview questions asked the right question

regarding the objectives of the study. Interview questions that were repetitive were removed. The comments were used to improve the interview questions.

#### **Ethical Procedures**

Ethical issues typically arise when research involves human participants (Creswell, 2009). Butin (2010) cautioned against covert research and stated that observation methods and interview responses should be overt. Denscombe (2007) supported full disclosure of the purpose of interviews and surveys to the participants in qualitative studies. I ensured that ethical procedures were applied in the current study.

Before conducting the research, I had to obtain approval from Walden University's IRB. As mentioned earlier, each participant had to read and sign the informed consent, which contained detailed information about the purpose of the research, assurances of confidentiality, and the data collection procedures. I assured the participants that this study would follow ethical principles and guidelines as well as maintain their privacy and the confidentiality of their data.

## Summary

Included in this chapter was a discussion of the research design; mention of the RQs and hypotheses; and explanations of the population and sampling, the data collection, and the data analysis. I determined that a mixed methods research design was the most appropriate design using an interview and a survey to address the RQs. A case study approach was best suited to this research. The next chapter presents the results of the study.

## Chapter 4: Results

#### Introduction

As stated earlier, despite various local and international funding from the Presidential Emergency Plan for AIDS Relief(PEPFAR); Global Fund(GB); World Bank(WB); the United Kingdom Department for International Development(DFID); United Nation(UN); the domestic private sector, and the domestic public financing geared toward prevention, control, and care programs for PLWHA in Nigeria, HIV/AIDS remains the leading cause of death and disease among women of productive age (i.e., 15-49 years) in Nigeria (UNAIDS, 2013). The prevalence of HIV/AIDS among women ages 15 to 24 years is estimated to be 3 times higher than that among men of the same age group and the same demographic details such as location (U.S. Embassy in Nigeria & NARHS, 2013). The U.S. Embassy in Nigeria & NARHS Fact Sheet (2013) reported that each year, 55% of AIDS deaths are recorded in Nigeria among women and girls. Women constitute 58%, or approximately 1.72 million, of the 3.1 million PLWHA in Nigeria, ranking the country second only to South Africa in the number of PLWHA (WHO, 2009). This study focused on WLWHA in from the Igbo population in Enugu State, who generally are viewed as child breeders and homemakers who should be seen, not heard.

The inequality and marginalization of this vulnerable population of women and girls have contributed to the increased rate of transmission of HIV/AIDS in Enugu State (Ezejiofor & Campus 2012). A recent study by UNAIDS (2012) ranked Enugu State second to Benue State in Nigeria in its HIV/AIDS rates. However, despite different views on the effectiveness and limitations of care programs meant to reduce HIV/AIDS-related

S&D and prolonging the lives of PLWHA in Enugu State, a major gap remains in behavioral change intervention approaches spanning all societal factors; this gap has resulted in the continued increased rate of HIV transmission among women and children in Africa (Gillespie et al., 2007). Having an in-depth understanding of S&D as collective societal processes rather than individual behaviors and actions can facilitate the redesign of HIV/AIDS care and prevention programs as broader community-based programs that can empower individuals at the community level (Parker, Aggleton, Attawell, Pulerwitz, & Brown, 2002).

I conducted this mixed methods study to obtain the perspectives of WLWHA from Enugu State about the social, cultural, political, environmental, and psychological factors driving HIV/AIDS-related S&D toward them. I identified, recorded, and documented the factors relevant to the RQs as contributing to evidence-based advocacy, community behavioral change, policy changes, and HIV/AIDS care and intervention program initiatives to address and reduced the HIV/AIDS-related S&D toward WLWHA. Social identity theory describes part of one's self-concept as derived from perceived membership in a relevant social group; according to this theory, individuals who experience S&D can take action to resist such negative forces (Castells, 1997; Hall, 1999).

It was important to hear from a sample of women experiencing HIV/AIDS-related S&D in an effort to redesign effective S&D reduction programs and policies to address their concerns and alleviate their suffering. I tried to empower WLWHA in this part of Sub-Saharan Africa by asking them to share their experiences regarding the S&D that

they experienced daily since disclosing their HIV/AIDS status. The WLWHA who participated in this study believed that the findings would contribute to the mobilization of the Enugu community and the Ndi Igbo in general to change their negative behaviors toward WLWHA. The results are intended for use in improving universal and equal access to prevention, treatment, care, and support efforts toward WLWHA in Enugu State, Nigeria; the larger Sub-Saharan Africa region; and other countries across the globe.

#### **Research Questions**

The study was guided by two Research Questions (RQs):

- 1. What are the sources and forms of HIV/AIDS-related S&D in Enugu State?
- 2. Do social, cultural, psychological, political, and environmental determinants of population health predict HIV/AIDS-related S&D in Enugu State, Nigeria?

I used these RQs to explore and analyze the relevant social, cultural, political, environmental, and psychological factors driving HIV/AIDS-related S&D toward WLWHA in Enugu State, Nigeria. I collected my data using two instruments, namely, an interview guide comprising 44 open-ended, semistructured items (qualitative component) and the HSS, a 45-item survey (quantitative component).

The mixed methods case study followed an exploratory, discovery, inductive, and deductive logic model. The qualitative component focused on identifying general patterns and themes that emerged from the data; the quantitative component focused on the broader cultural, social, environmental, political, and psychological determinants of HIV/AIDS-related S&D using a statistical analysis logic model of multiple regressions to predict the determinants of HIV/AIDS-related S&D. The quantitative investigation was

framed around the five IVs of social, cultural, political, environmental, and psychological factors. I used multiple linear regression to analyze the survey data downloaded from SurveyMonkey. The original RQ2, "What are the social-cultural, psychological, cultural political, and environmental determinants and consequences of HIV/AIDS-related S&D," was redrafted as, "Do social, cultural, psychological, political, and environmental determinant predicts HIV/AIDS-related S&D towards WLWHA in Enugu, Nigeria?" Null Hypothesis 2 was written as, "Social, cultural, psychological, political and environmental determinants of S&D do not predict HIV/AIDS-related S&D."

## **Pilot Study**

I developed the 44 interview questions using the 45-item HSS as a guide. I also pilot tested them with three of the 132 participants to ensure that the questions were comprehensible, clear, and without ambiguities. They did not participate in the survey or the interview. The three pilot participants, who were working as HIV coordinators at three of the four HIV/AIDS comprehensive care initiative centers selected, were randomly selected. They were WLWHA living in Enugu State at the time of the study. Like the other participants, they were not residents of a nursing home, a rehabilitation center (prison), or a mental institute. Upon receiving the question template, the pilot test participants read the interview question worksheet and gave their assessments. The question categories and their respective themes were reviewed, and the three participants approved the use of all 44 questions.

Pilot Interviewee 2 endorsed the survey instrument, stating:

I have a good knowledge of this type of questions, for it looks as if my HIV disease state has positively blessed me, for I have a good job, I have travelled [to] many countries speaking to audiences about my HIV/AIDS experiences and the fate of women, especially in Sub-Sahara Africa. The questions are ok. I approve of them.

I also used the pilot test to further review the interview protocol. All three participants approved the protocol.

# **RQ1: Qualitative Results**

# **Analytic Approach**

My objective was to identify factors relevant to RQ1: What are the sources and forms of HIV/AIDS-related S&D in Enugu State? I conducted a total of 15 interviews to help answer this question. Each interview was viewed as a single incident and was considered individually in the analysis. Common emerging themes were identified across the data which includes but not limited to Employment-Based Discrimination, HIV Screening and Identification, Disclosure of HIV Status, Stigma Related to Social Contacts and Interactions, Internal Stigma and Psychological Effects, Cultural Stigma, political stigma, environmental stigma determinants (Both interpersonal and Societal stigma levels)

# Data Analysis

Data analysis involves "making sense out of text and data...and preparing the data for analysis, conducting different analyses, moving deeper and deeper into understanding the date, representing the data, and making an interpretation of the larger meaning of the

data" (Creswell, 2009, p. 183). I looked for patterns, themes, and dimensions in the data through an initial analysis of the interviews, coding of the data, and further analysis as themes and patterns emerged. My goal was to describe the participants' subjective experiences and views.

The case study followed an exploratory, discovery, and inductive logic model; as such, my primary analysis focused on identifying general patterns and themes as they emerged from the responses to the open-ended interview questions and from personal observations. Open coding was conducted to obtain various themes or categories that summarized the interview data. Researchers accomplish the goal of open coding by segregating interview data into words, phrases, sentences, or paragraphs that emphasize the functional relation between the parts and the whole of all responses. Because this study was a single, local case study, I identified only themes within the given case (within-case analysis; Pokinghorne, 2005). I used open coding in a way recommended by Krippendorff (2004). In previous research by Ulasi et al. (2009), where the emerging themes were classified under four categories: Employment-Based Discrimination, HIV Screening and Identification, Disclosure of HIV Status, and Social Contact and Interaction Stigma.

This paper was able to identify and clarify the cited complexity of HIV/AIDS related stigma and its diversity in a broader concepts of social, political, cultural, environmental and psychological contexts and provided a stronger evidence based data obtained from the individuals that live with HIV/AIDS stigma and discriminations. The emergent of cultural determinant as a major predictor of HIV/AIDs - related stigma

towards women living with HIV/AIDs in Enugu provided a solution to the much of the rhetoric and literature cited about the complexity of HIV/AIDS-related stigma definitions which were reported as the primary reasons for limited effective responses to eliminate HIV/AIDs—related stigma (Mahaja et al, 2008). This study considered both societal levels of stigma and interpersonal levels rather than the interpersonal levels stigma approach considered by Ulasi et al.(2009)

For the qualitative part of the study, the first level of identification occurred during my initial review of each interview transcription. Upon receiving the transcripts, I read them carefully; analyzed the data; and then conducted open coding using NVivo v.10, an analytic tool to facilitate the coding process.

Open coding is technique described by Corbin and Strauss (2008) as a way to "open up the data to all potentials and possibilities contained within them" (p. 160). In open coding, researchers thoroughly review the data before beginning to group and label concepts. The process of coding requires pulling concepts out of the raw data, developing their properties and dimensions, and grouping them into themes. The data analysis included the following steps:

- 1. Review all interview transcripts notes.
- 2. Import the data into NVivo v.10.
- 3. Code the data in NVivo v.10 using open coding.
- 4. Define the properties of the dominant themes.
- 5. Create categories that represent major and minor themes (Streubert & Carpenter, 2011).

The themes that emerged were classified into eight categories: Employment-Based Discrimination, HIV Screening and Identification, Disclosure of HIV Status, Stigma Related to Social Contact and Interaction(social process) Internal Stigma and Psychological Effects, Cultural Stigma(cultural process), HIV Care Experiences, and Agency and Empowerments(political process), rather than a narrow interpersonal levels of stigma constructs of screening and identification of HIV positive individuals, revelation of HIV status and individual social contact stigma, approach by Ulasi et al, (2009). I employed a broader conceptual framework and investigated the HIV/AIDS related S & D under social processes rather than as a process of what individuals do to other individuals (Parker et al, 2002).

This paper viewed HIV/AIDS related S & D through social actions such as political, cultural, and social processes. The broader conceptual framework was necessary to fully understand all ways in which the HIV/AIDS- related stigmatization and discrimination appear and the contexts in which they occur. This approach is to help HIV/AIDs prevention and intervention program developers to relate the current thinking in developing and evaluating HIV/AIDS-related S &D reduction programs that will effectively address and minimize the impact of HIV/AIDS –related S & D towards women living with HIV/AIDS. The themes were described in the Summary of the Research Findings section of the Qualitative data.

# Validity, Trustworthiness, and Reliability

I ensured the validity, trustworthiness, and reliability of the study by employing various mechanisms. Qualitative validity, according to Creswell (2009), means that the researcher checks for the accuracy of the findings by employing certain procedures. Validation of the findings in qualitative research occurs throughout the steps in the process of the research (Creswell, 2009). I checked throughout the coding process to ensure that the coding did not drift from the original intent (i.e., the semistructured themes).

I used an electronic codebook within NVivo v.10 to code the data. Because I was solely responsible for analyzing the data, there was no need to check for intercoder agreement. Qualitative researchers must examine the trustworthiness of their data; I did so by member checking with the participants.

# **Coding**

The coding process identified primary themes delineated into the following eight thematic categories: Employment-Based Discrimination, HIV Screening and Identification, Disclosure of HIV Status, Social Contact and Interaction Stigma, Internal Stigma and Psychological Effects, Cultural Stigma, HIV Care Experiences, and Agency and Empowerment. The findings are summarized, and I used quotations from the interviews to support the themes and subthemes.

# **Research Findings**

RQ1 asked about the sources and forms of HIV/AIDS-related S&D toward WLWHA in Enugu State. The eight primary categories and their respective themes answering RQ1 are summarized in this section, which also includes tables summarizing the identified themes, their frequency, and the number of interviewees who mentioned specific themes. Each category and its respective themes are discussed.

# **Category 1: Employment-Based Discrimination**

I placed two primary themes in Category 1: (a) HIV is affecting work, and (b) lack of employment opportunities. Table 1 shows the themes, definitions, and frequency of the themes.

Table 1

Themes, Definitions, and Frequency of Responses for Category 1: Employment-Based Discrimination

Theme	Definition	Frequency mentioned
HIV is affecting	Being HIV positive is affecting work because people don't	5
work	want contact with HIV-positive people at work.	
Lack of employment	Being HIV positive is associated with a lack of	2
opportunities	employment opportunities.	

**HIV** is affecting work. The most frequently occurring theme under Category 1 referred to the participants' perceptions that being HIV positive affects work because people do not want contact with HIV positive people at work. It was mentioned in five interviews.

Interviewee 1 mentioned, "I think people lost their Job because of fear among coworkers and employers."

Interviewee 2 felt that people who are HIV positive experience discrimination "because their employer are not well knowledgeable about HIV."

Interviewee 8 explained that she experienced this "because my employer was afraid she will contact the virus through me."

**Lack of employment opportunities.** The second theme under Category 1 referred to the lack of employment opportunities because of HIV-positive status. This theme was mentioned in two interviews.

Interviewee 1 shared, "No job. I am a trader, but I applied, though, but no one has called me for a job yet."

Interviewee 3 reflected, "If that happened (no job), it will be because I'm infected."

# **Category 2: HIV Screening and Identification**

Six primary themes emerged under Category 2: (a) tested after symptoms,
(b) Unintentionally screened, (c) contracted HIV via partner, (d) tested because of
partner's illness, (e) had no symptoms of HIV, and (f) prevents the spread of HIV. Table
2 shows the themes, definitions, and frequency of the themes.

Table 2

Themes, Definitions, and Frequency of Responses for Category 2: HIV Screening and Identification

Theme	Definition	Frequency
		mentioned
Tested after symptoms	Participants' HIV-nositive status was revealed after they	6

	were tested after experiencing symptoms.	
Unintentionally screened	Participants were unintentionally screened for HIV.	5
Contracted HIV via partner	Participants contracted HIV from sexual partners.	3
Tested because of partner's	Participants were tested for HIV because of their partners'	3
illness	illness or symptoms.	
Had no symptoms of HIV	Participants had no symptoms of HIV prior to being tested	3
• •	for HIV.	
Prevents the spread of HIV	Participants indicated that they intentionally try to prevent	2
	the spread of HIV to others.	

**Tested after symptoms.** The most frequently occurring theme in Category 2 referred to being tested after symptoms, meaning that the participants' HIV-positive status was revealed after they were tested after experiencing symptoms. This theme was mentioned in six interviews.

Interviewee 1 shared, "I went for a test concerning a lump on my neck it was in that process the test came back HIV positive."

Interviewee 13 said, "[I] was sick and got tested."

Interviewee 12 was tested because she experienced diarrhea.

Interviewee 8 was tested after having "waist pain."

**Unintentionally screened.** The next theme in Category 2 referred to being unintentionally screened for HIV. It was mentioned in five interviews.

Interviewee 10 was screened after she "had an abortion and got it through blood transfusion."

Interviewee 11 was screened "because of marriage."

Interviewee 2 mentioned, "My husband took me for testing at a lab for malaria, only to be told that I am HIV positive."

Interviewee 4 stated, "I went for treatment for a minor sickness."

Contracted HIV via partner. The next theme under Category 2 referred to participants contracting HIV from their sexual partners. This theme was mentioned in three interviews.

Interviewee 10 shared she got HIV "through my fiancé."

Interviewee 12 said, "I got the Virus through my boyfriend."

Interviewee 3 also got it "through my fiancé."

**Tested because of partner's illness.** The next theme under Category 2 referred to participants being tested for HIV because of partner's illness or symptoms. This theme was mentioned in three interviews.

Interviewee 15 said, "Me & my husband got tested after he was so sick."

Interviewees 5 and 6 were tested "because of my husband's sickness."

Had no symptoms of HIV. The next theme under Category 2 referred to participants having no symptoms of HIV prior to being tested for HIV. This theme was mentioned in three interviews. When asked, "Did you experience symptom?"

Interviewees 5, 7, and 11 all stated, "No."

**Prevents the spread of HIV.** The next theme under Category 2 referred to participants indicating that they intentionally tried to prevent the spread of HIV to others. This theme was mentioned in two interviews.

Interviewee 5 commented, "Yes, I was enlightened about family planning. That's why my husband is not infected. He is not HIV negative."

Interviewee 3 shared, "Yes I was told about family planning, but I am avoiding sex."

# **Category 3: Disclosure of HIV Status**

The two primary themes under Category 3 were (a) avoids disclosing HIV status, and (b) status disclosed by others. Table 3 shows the themes, definitions, and frequency of the themes.

Table 3

Themes, Definitions, and Frequency of Responses for Category 3: Disclosure of HIV Status

Theme	Definition	Frequency
		mentioned
Avoids disclosing	Participants avoid disclosing status to prevent negative reactions	7
HIV status	from others.	
Status disclosed by	Participants' HIV positive status was revealed by others to the	2
others	community or other people.	

**Avoids disclosing HIV status.** The most frequently occurring theme under Category 3 referred to participants avoiding disclosing status to prevent negative reactions from others. It was mentioned in seven interviews.

When asked if her coworkers knew her HIV status, Interviewee 15 said, "No, they don't know."

When asked about her extended families' knowledge of her HIV status,

Interviewee 3 stated, "No they didn't tell me to leave because I have not told them I have

HIV."

Interviewee 4 mentioned, "No, I didn't disclose my status."

Interviewee 8 said, "My senior sister heard, but I denied not having it."

Interviewee 10 State, "No I cannot afford to tell anybody, because of shame."

**Status disclosed by others.** The next theme under Category 3 referred to the participants' HIV-positive status being revealed by others to the community or other people. This theme was mentioned in two interviews.

Interviewee 1 explained her experiences with other disclosing her status, "Yes, I have from my co wife [my in law's wife] she spread the rumours to everyone in the community."

Interviewee 3 disclosed, "My co-wife spread the news everywhere."

# Category 4: Stigma Related to Social Contact and Interaction

The three primary themes under Category 4 were (a) fear, (b) social exclusion due to HIV status, (c) and social isolation. Each theme was further classified into subthemes.

Table 4 shows the themes, definitions, and frequency of the themes.

Table 4

Themes, Definitions, and Frequency of Responses for Category 4: Stigma Related to Social Contact and Interaction

Theme	Subthemes	Definition	Frequency mentioned
Fear			memoned
	Has fear of others	Participants have fear of others because of being harassed or threatened because of HIV status.	11
	Fear of physical assault	Participants have been physically assaulted because of HIV status and a result, they fear further assaults.	5
	No fears	Participants do not fear other people.	3
Social exclusion due to HIV status			
	People	Participants perceive that people discriminate against	12
	discriminate	those with HIV because they lack knowledge about	Table 4
	because they lack knowledge.	HIV.	Cont'd
	People avoid those with HIV	Participants perceive that people avoid those with HIV because of fear.	9
	No discrimination	Some participants reported no experiences with HIV-related discrimination.	8
Social isolation			
	Avoids social interaction	Participants avoid social interaction and isolate themselves because of their HIV status.	9
	Does not isolate	Participants do not avoid social interaction or isolate themselves because of their HIV status.	8

**Fear.** The most frequently occurring theme under Category 4 was fear. This theme was further classified into three subthemes: (a) has fear of others, (b) fear of physical assault, and (c) no fears.

*Has fear of others*. This subtheme referred to the participants' fear of others because of being harassed or threatened because of HIV status. It was mentioned in 11 interviews. When asked if they had been fearful of people, Interviewees 1, 2, 3, 6, 7, 8, 10, 11, 12, 13, and 14, simply said, "Yes."

*Fear of physical assault*. This subtheme referred to the participants having been physically assaulted because of their HIV-positive status. It was mentioned in five interviews. When asked whether they had been physically assaulted, Interviewees 8, 10, 11, 12, and 14 simply said, "Yes."

**No fears**. This subtheme referred to the participants not fearing other people. It was mentioned in three interviews. When asked whether they had been fearful of people, Interviewees 4, 5, and 15 said, "No."

Social exclusion due to HIV status. The next theme under Category 4 referred to social exclusion due to HIV status. This theme was further classified into three subthemes: (a) People discriminate because they lack knowledge, (b) people avoid those with HIV, and (c) no discrimination.

**People discriminate because they lack knowledge**. This subtheme referred to the participants perceiving that people discriminate against those with HIV because they lack knowledge about HIV. It was mentioned in 12 interviews.

Interviewee 10 explained why people discriminate against those who have HIV, stating that "they thinking living with them will get them infected. FEAR" She also noted, "Ignorance and fear of contacting it. Lack of proper education, stigmatizing, discrimination of the affected persons."

Interviewee 11 said that "people discriminate because of lack of proper education, stigmatizing, discrimination of the affected persons."

Similarly, Interviewees 12, 13, 14, and 15 mentioned, "Ignorance and fear of contacting it, lack of proper education, stigmatizing, discrimination of the affected persons."

Interviewee 3 said that people discriminate "out of ignorance."

Interviewee 8 said that they discriminate "because they think the HIV can get to them through me."

Interviewee 9 explained that they discriminate "because they think they will contact it by talking to somebody."

**People avoid those with HIV.** This subtheme referred to people avoiding those with HIV because of fear. It was mentioned in nine interviews.

Interviewee 1 explained that people avoid her because of her HIV status, "including my family is avoiding me and I can't continue selling food because no one wants to buy food from a HIV infected person because people think I am going to spread the HIV virus to them."

Interviewees 2, 11, 13, and 14 expressed similar experiences, in that "some people close to me are afraid others will reject them if it becomes known that I have HIV."

Interviewee 2 felt that people avoid her "because people think I am going to spread the HIV virus to them."

Interviewee 3 explained that "it's affecting my family life because everyone including my family is avoiding me."

Interviewee 8 said, "My family isolated me. Interviewee 8 later further explained, "Yes, I don't mix very with my family. Because of the HIV virus."

*No discrimination*. The subthemes of n discrimination referred to some participants reporting no experience with HIV-related discrimination. It was mentioned in eight interviews. When asked whether they have experienced HIV-related discrimination in various settings, Interviewees 4, 5, 6, 7, 9, 10, and 12 said, "no."

**Social isolation.** The final theme under Category 4 was social isolation. This theme was further classified into two subthemes: (a) avoids social interaction, and (b) does not isolate.

**Avoids social interaction.** This subtheme referred to the participants avoiding social interactions and isolating themselves because of their HIV status. It was mentioned in nine interviews.

Interviewee 1 explained that she "took decision to stop working" because of her HIV status.

Interviewees 1, 2, 3, 11, and 15 said, "I withdrew from school."

Interviewees 2, 3, 8, 10, 11, 12, and 14 mentioned, "I have isolated myself from family members and friends."

Interviewee 3 said, "No I've not experienced that one yet, but I don't go anywhere."

**Does not isolate.** This subtheme referred to the participants not avoiding social interaction or isolating themselves because of their HIV status. It was mentioned in eight interviews. Participants were asked about isolating themselves in a variety of areas, including not attending social gatherings, isolating themselves from family members and

friends, deciding to stop working, and withdrawing from school. Interviewees 5, 6, 7, 8, 9, 11, 12, and 13 said, "No."

# Category 5: Internal Stigma and Psychological Effects

The six primary themes for Category 5 were (a) blames self, (b) low self-esteem, (c) feels guilty, (d) feels shame, (e) experiences negative emotions, and (f) blames others. Table 5 shows the themes, definitions, and frequency of the themes.

Table 5

Themes, Definitions, and Frequency of Responses for Category 5: Internal Stigma and Psychological Effects

Theme	Definition	Frequency mentioned
Blames self	Participants report blaming themselves for their HIV positive status.	7
Low self-esteem	Participants report having low self-esteem because of their HIV-positive status.	6
Feels guilty	Participants report feeling guilty because of their HIV-positive status.	5
Feels shame	Participants report feeling shame because of their HIV-positive status.	4
Experiences negative emotions	Participants report negative emotions because of their HIV-positive status.	3
Blames others	Participants blame others for their HIV-positive status.	2

**Blames self.** The most frequently occurring theme under Category 5 referred to the participants blaming themselves for their HIV-positive status. It was mentioned in seven interviews. When asked whether they blamed themselves for contracting HIV, Interviewees 1, 2, 3, 8, 9, 14, and 15 responded, "Yes."

**Low self-esteem.** The next theme under Category 5 referred to the participants reporting low self-esteem because of their HIV-positive status. This theme was

mentioned in six interviews. When asked whether they had low self-esteem because of their HIV status, Interviewees 6, 7, 8, 9, 10, and 14 said, "Yes."

**Feels guilty.** The next theme under Category 5 referred to the participants feeling guilty because of their HIV-positive status. It was mentioned in five interviews. When asked whether they felt guilty because of their HIV status, Interviewees 5, 6, 11, 12, and 14, said, "Yes."

**Feels shame.** The next theme under Category 5 referred to the participants feeling shame because of their HIV-positive status. This theme was mentioned in four interviews. When asked whether they felt ashamed because of their HIV status, Interviewees 5, 10, 11, 14, said, "Yes."

**Experiences negative emotions.** The next theme under Category 5 referred to the participants reporting negative emotions because of their HIV-positive status. This theme was mentioned in three interviews. When asked whetehr they felt negative emotions because of their HIV status, Interviewees 1, 2, and 3 said, "Yes."

**Blames others.** The next theme under Category 5 referred to the participants blaming others for their HIV-positive status. This theme was mentioned in two interviews. When asked whether they blamed others because of their HIV status, Interviewees 1 and 7 said, "Yes."

# Category 6: Cultural Stigma

The two primary themes under Category 6 were (a) culture contributes to stigma, and (b) cultural beliefs about HIV. Table 6 shows the themes, definitions, and frequency of the themes.

Table 6

Themes, Definitions, and Frequency of Responses for Category 6: Cultural Stigma

Theme	Definition	Frequency
		mentioned
Culture contributes to	Participants feel that culture contributes to HIV-related	12
stigma	stigma.	
Cultural beliefs about HIV	Participants feel that there are cultural beliefs about HIV and the causes of HIV.	6

Culture contributes to stigma. The most frequently occurring theme under Category 6 referred to the participants feeling that culture contributes to HIV-related stigma. It was mentioned in 12 interviews.

Interviewee 1 said, "It is making it worse because of our cultural belief."

**Cultural beliefs about HIV.** The next theme under Category 6 referred to the participants feeling that there are cultural beliefs about HIV and the causes of HIV. This theme was mentioned in six interviews.

Interviewee 12 stated, "Women are discriminated upon in my culture and labeled with disrespectful names in matters of STD and HIV."

Interviewee 14 explained:

Our cultural practices worsen the faith of women living with HIV and AIDS, they call us all sorts of bad names and isolate us in many normal daily activities, avoid any close associations with most of us. I found strength in coming to this clinic where I could at least interact with others of the same faith, as I.

Interviewee 15 commented:

The level of ignorance of the history of HIV transmission is very high in my community. Our society is males' world, a man contacts the disease no body calls him any name, but they rain abuses on women who are diagnosed of HIV positive. They find a way of explaining away the men's cause and blame everything in a woman because of our cultural beliefs.

Interviewee 2 indicated, "They are not well enlightened about HIV. It is making it worse because of our cultural belief."

Interviewee 3 mentioned, "It is making it worse because of our cultural belief."

Interviewee 4 said, "It is making it worse because of our cultural norms and belief in the Igbo society."

Interviewee 6 said, "The culture makes it bad, and they put the blame on both of us."

# **Category 7: HIV Care Experiences**

As reflected in Table 7, the five primary themes for Category 7 were (a) has access to HIV care, (b) avoids care, (c) health care discrimination, (d) no health care discrimination, and (e) no denial of care.

Table 7

Themes, Definitions, and Frequency of Responses for Category 7: HIV Care Experiences

Theme	Definition	Frequency mentioned
Has access to HIV care	Participants have access to HIV care as needed.	15
Avoids care	Participants avoid HIV care at local clinics and hospitals.	10
Health care discrimination	Participants experience health care discrimination or have been forced into care.	6
No health care discrimination	Participants do not experience health care discrimination.	5
No denial of care	Participants have not been denied access to care because of their HIV-positive status.	4

**Has access to HIV care.** The most frequently occurring theme under Category 7 referred to the participants having access to HIV care as needed. It was mentioned in 15 interviews. When asked, "Have you access to ART, even if not currently taken?" and "Do you have access to care?" Interviewees 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 said, "Yes."

**Avoids care.** The next theme under Category 7 referred to the participants avoiding HIV care at local clinics and hospitals. This theme was mentioned in 10 interviews. When asked whether they avoided going to local clinics when I needed or avoided going to the hospital when I needed, Interviewees 1, 2, 3, 8, 9, 10, 11, 13, 14, and 15 said, "Yes."

Interviewee 13 added, "I refused to go to any other clinic since I was diagnosed of HIV positive to avoid shame and insults."

**No health care discrimination.** The next theme under Category 7 referred to the participants perceiving that they had not experienced any health care discrimination. This theme was mentioned in six interviews. When asked, "Have you been forced to submit to

a medical or health procedure (including HIV testing)?" and "Have you been detained or arrested or quarantined or isolated because of HIV status?" Interviewees 2, 3, 4, 5, 7, and 15 said. "No."

Health care discrimination. The next frequently occurring theme under Category 7 referred to the participants experiencing health care discrimination or having been forced into care. It was mentioned in five interviews. When asked, "Have you been forced to submit to a medical or health procedure (including HIV testing)?" Interviewees 8, 9 10, 11, and 13 said, "Yes."

Interviewee 11 also stated, "Nurses and doctors are scared of attending to my dental need because of fear of contracting HIV."

**No denial of care.** The next theme under Category 7 referred to the participants' perceptions that they had not been denied access to care because of their HIV positive status. This theme was mentioned in four interviews. When asked, "In the past 12 months, have you been denied health services, including dental care because of your HIV?" Interviewees 5, 9, 12, and 15 said, "No."

#### **Category 8: Agency and Empowerment**

The three primary themes under Category 8 were (a) shares experiences with others, (b) power to influence social change, and (c) challenges others. Table 8 shows the themes, definitions, and frequency of the themes.

Table 8

Themes, Definitions, and Frequency of Responses for Category 8: Agency and Empowerment

Theme	Definition	Frequency
		mentioned
Shares experiences with others	Participants share experiences with discrimination with others to increase HIV awareness.	4
Power to influence social change	Participants feel they have the power to influence social change around HIV.	8
Challenges others	Participants challenge others' attitudes, prejudices, and behaviours in regard to HIV.	7

Shares experiences with others. The most frequently occurring theme under Category 8 referred to the participants sharing their experiences with discrimination with others to increase HIV awareness. This theme was mentioned in three interviews.

# Interviewee 1 said:

I go to meetings and gathering to educate women about HIV and how to prevent themselves from contacting it. That's called LACA and ESACA. The only power I have is when we all come together in one voice to educate and create awareness about HIV.

## Interviewee 2 mentioned:

I'm presently divorced but I now work as a spokesperson for this hospital talking about HIV and creating awareness that it's real. I was enlightened about family planning that why it's easy for me to go and speak about it to women and children in my community...I go to meetings and gathering to educate women about HIV and how to prevent themselves from contacting it. I go about speaking about HIV.

Interviewee 3 said, "Yes. I informed the Enugu state local govt. control of AIDS. Local person. I go to meetings and gathering to educate women about HIV and how to prevent themselves from contacting it."

**Power to influence social change.** The next theme under Category 8 referred to the participants feeling that they had the power to influence social change around HIV. This theme was mentioned in eight interviews. When asked, "Do you feel you have the power to influence decisions in local government and national policies affecting WLWHA?" Interviewee 8, 9, 11, 12, 13, 14, 15 said, "Yes."

Interviewee 3 also shared, "The only power I have is when we all come together in one voice to educate and create awareness about HIV."

Challenges others. The final theme under Category 8 referred to the participants challenging others' attitudes, prejudices, and behaviors in regard to HIV. It was mentioned in seven interviews. When asked, "In the past 12 months, have you confronted, challenged, or educated someone who was stigmatizing and/or discriminating against you?" Interviewees 1, 4, 5, 9, 11, 12, and 15 said, "Yes."

# **Summary**

RQ1 for the qualitative analysis was restated: What are the sources and forms of HIV/AIDS-related S&D that abound in Enugu State? The eight primary categories and their respective themes and subthemes were summarized. This section included a summary of the data analysis approach and tables summarizing the identified themes as well as the frequency of mention by the participants. Quotes from the interview transcriptions supported the themes and subthemes.

### **RQ2: Quantitative Results**

# **Quantitative Data Preparation and Analysis**

RQ2 was answered using survey data. The RQ asked: Do social, cultural, psychological, political, and environmental determinants of population health predict HIV/AIDS-related S&D in Enugu State, Nigeria? RQ2 was accompanied by five null hypotheses:

 $H_{02a}$ : Social determinants do not predict HIV/AIDS-related S&D experienced by WLWHA in Enugu State, Nigeria.

 $H_{02b}$ : Cultural determinants do not predict HIV/AIDS-related S&D experienced by WLWHA in Enugu State, Nigeria.

 $H_{02c}$ : Psychological determinants or factors do not predict HIV/AIDS-related S&D experienced by WLWHA in Enugu State, Nigeria.

 $H_{02d}$ : Political determinants do not predict HIV/AIDS-related S&D experienced by WLWHA in Enugu State, Nigeria.

 $H_{02e}$ : Environmental determinants do not predict HIV/AIDS-related S&D experienced by WLWHA in Enugu State, Nigeria.

The survey data from SurveyMonkey were imported into SPSS v.23 for statistical analysis. Frequencies, descriptive statistics (*M* and *SD*), and multiple linear regression were used to analyze the quantitative data. I used frequencies to display a general overview of the sample's demographic characteristics. I used multiple linear regressions to address RQ2. I used regression analysis to interpret the relationship among the social, political, environmental, cultural, and psychological determinants of S&D.

# **Participants**

One hundred and fourteen women completed the survey; all were between the ages of 21 and 54 years, lived in Enugu State, were members of the Igbo tribe, and had HIV/AIDS. None was a resident of a nursing home, a prison, or a mental institution, and none was mentally disabled. The participants ranged in age from 21 to 54 years, with an average age of 37.12 (SD = 7.91)

# Creation of Composite Scores for the HSS

To analyze the data, I scored the HSS and created composites. The 44 HSS items were summed to form scales. Table 9 provides a description of the scales.

Table 9

Description of the HSS Scale Composites

# of survey items	HSS items
Fear of exclusion due to disclosure (social	9, 11, 12, 14, 19, 21, 24, 25, 26, 34, 37, 39, 40, 44, 18,33
determinant of stigma)	
Personalized stigma (psychological	9,12, 10, 16, 23,31, 43,45,14 ,15,20, 30
determinants of stigma)	
Rights, laws, and policies (political	16, 29, 35, 36,46, 51, 27,32, 38,42,48,49,51, 52
determinants)	
Access to work and health education	13, 32, 41,47,49,50, 17, 22,24, 27,34,35,36, 39, 51
services (environmental determinants)	
Fear of negative self-image due to public	9, 11, 12, 14, 18, 17, 20, 23, 27, 30, 33, 38, 46, 42, 48, 52,
attitude (cultural determinants)	,22, 25,28,36,40
Total HSS score	All items

The descriptive statistics for the composite variables are presented in Table 10. Scores for the social determinants ranged from 31.00 to 58.00 (M score = 46.71; SD = 3.65). Scores for the psychological determinants ranged from 26.00 to 42.00 (M score = 32.38; SD = 2.90). Scores for the political determinants ranged from 29.00 to 52.00 (M score = 37.85; SD = 3.91). Scores for the environmental determinants ranged from 31.00 to 54.00 (M score = 41.98; SD = 3.39). Scores for cultural determinants ranged

from 48.00 to 78.00 (M score = 57.67; SD = 5.65). Total HSS scores ranged from 105.00 to 157.00 (M score = 121.03; SD = 8.76). The reliability coefficients (Cronbach's alpha) for the composite variables ranged from .63 to .83; thus, the composite scores were fairly reliable.

Table 10

Descriptive Statistics and Cronbach's Alphas for Composite Variables and DVs

DVs (Determinants)	Min	Max	M	SD	# of survey items in score	Cronbach's Alpha
Social	31.00	58.00	46.71	3.65	16	.66
Psychological	26.00	42.00	32.38	2.90	12	.67
Political	29.00	52.00	37.85	3.91	14	.67
Environmental	31.00	54.00	41.98	3.39	15	.63
Cultural	48.00	78.00	57.67	5.65	21	.77
Total HSS score	105.00	157.00	121.03	8.76	44	.83

Next, I used Pearson correlations to explore the correlations among the composite variables. I found several statistically significant correlations (see Table 11). The social determinants were positively and significantly correlated with the political determinants (r = .37, p = .001); environmental determinants (r = .66, p = .001); cultural determinants (r = .71, p = .001); and psychological determinants (r = .61, p = .001). As the social determinants increased, the political, environmental, cultural, and psychological determinants also increased.

The political determinants were positively and significantly correlated with the environmental determinants (r = .61, p = .001); cultural determinants (r = .68, p = .001), and psychological determinants (r = .45, p = .001). As the political determinants increased, the environmental, cultural, and psychological determinants also increased.

The environmental determinants were positively and significantly correlated with the cultural determinants (r = .71, p = .001) and the psychological determinants (r = .51, p = .001). As environmental determinants increased, cultural and psychological determinants also increased. Finally, the cultural and psychological determinants were positively and significantly correlated (r = .77, p = .001). As the cultural determinants increased, the psychological determinants also increased.

Table 11

Two-Tailed Pearson Correlations Among the Composite Variables

DVs (Determinants)	1	2	3	4	5
Social	1				
Political	.37*	1			
Environmental	.66*	.61*	1		
Cultural	.71*	.68*	.71*	1	
Psychological	.61*	.45*	.51*	.77*	1

*Note.* \* indicates that the correlation is significant at p = .01

The composite variables were used in the multiple linear regression for RQ2 to examine this RQ and test the hypotheses. For the regression model, the social, political, environmental, and cultural determinants were the IVs in the model.

The model as a whole was statistically significant, F(4,109) = 45.09, p = .001) and accounted for 62.4% of the variance in the psychological determinants ( $R^2 = .62$ ). The test of the regression model indicated that the cultural determinants (B = .41, p = .001) were significantly associated with the psychological determinants. Based on the regression coefficients in Table 12, with all other variables being constant, cultural determinants were associated with a .41 increase in psychological determinants. None of the other variables in this regression model weas statistically significant. Per Tabachnick and Fidell (2007), multicollinearity is not a problem when the tolerance values are above

.20. The tolerance values in my study ranged from .27 to .38, so multicollinearity was not a problem in this model.

Table 12

Regression Coefficients for the Relationship Among the Social, Political, Environmental, Cultural, and Psychological Determinants of Stigma

Model	В	SE	β	t	p	Tol.	VIF
Social determinants of stigma	.10	.07	.12	1.33	.18	.38	2.60
Political determinants	06	.06	09	-1.03	.30	.43	2.27
Environmental determinants	07	.08	09	95	.34	.38	2.60
Cultural determinants	.41	.05	.81	7.28	.001	.27	3.63

Given the multivariate findings, I accepted Null Hypotheses 1, 2, 3, and 4 for RQ2. I rejected Null Hypothesis 5 because in the regression model, cultural determinants emerged as a statistically significant and positive predictor of S&D.

# **Summary**

This chapter included an analysis of survey data obtained from 114 participants. I used multiple linear regression models were used to examine this RQ. The test of the regression model indicated that the cultural determinants ( $\beta$  = .81, p = .001) were significantly associated with the psychological determinants. Based on the regression coefficients in Table 12 with all other variables being constant, I concluded that the cultural determinants were associated with an 81% increase in the psychological determinants.

# **Comparative Summary of the Results**

A mixed methods research design was appropriate for this case study because it employed two separate research methods (i.e., exploratory and hypothesis-generating design) and identified and developed new emerging concepts and the understanding all prepositions that encompass the social, cultural, political, environmental, and psychological determinants and consequences of HIV/AIDS-related S&D toward WLWHA in Enugu State, Nigeria. The themes and subthemes derived from the qualitative results fell into eight categories: Employment-Based Discrimination, HIV Screening and Identification, Disclosure of HIV Status, Stigma Related to Social Contact and Interaction, Internal Stigma and Psychological Effects, Cultural Stigma, HIV Care Experiences, and Agency and Empowerments.

### **Qualitative Results**

The qualitative results indicated that the conceptualization of S&D as a deeply rooted social process has different manifestations at various social levels. The most frequent subthemes were the following:

- 1. HIV is affecting work.
- 2. Unintentional HIV screening and identification.
- 3. Tested after symptoms.
- 4. \*WLWHA avoid disclosing HIV status.
- 5. \*WLWHA have fear of others.
- 6. \*People discriminate because they lack knowledge about HIV/AIDS.

- \*People avoid social interaction with WLWHA because of fear of HIV contagion
- 8. \*WLWHA blame themselves.
- 9. \*WLWHA feel guilty.
- 10. \*WLWHA experience low self-esteem.
- 11. \* Twelve of 15 WLWHA responded that culture contributes to S&D.
- \*WLWHA avoid care at local HIV care clinics near them because of fear of stigmatization.
- 13. Health care discrimination because of fear of HIV contraction.
- 14. \*Ineffective enforcement of existing anti-S&D laws and policies.

These \*subthemes that propagates various forms of HIV/AIDS-related S&D toward WLWHA in Enugu are the most occurring subthemes which are major drivers of the broader determinants factors, such as cultural determinants (culture framed in public beliefs, public attitudes (fear of contagion), and societal norms, ) and psychological determinants (internalized stigma-feeling of guilt, feeling ashamed, self-isolation because fear of public physical and verbal abuse). The qualitative results found that fears of contracting HIV/AIDS as well as existing S&D perpetuated negative public behaviors associated with HIV/AIDS-related S&D.

# **Quantitative Results**

The quantitative results found that broader (instead of individual approach) stigma determinants model was statistically significant, F(4, 109) = 45.09, p = .001, accounting for about 62% of the variation in psychological determinants experienced by WLWHA in

Enugu State. The quantitative results identified the cultural determinants of HIV/AIDS-related S&D as a statistically significant ( $\beta$  = 0.81; p = .001) predictor of HIV/AIDS-related S&D toward WLWHA in Enugu State.

The quantitative results validated the qualitative results, which indicated that the majority of the WLWHA in the study identified negative public attitudes, verbal abuse, threats, physical violence, social isolation, and public discrimination as the result of Enugu community members' cultural beliefs, ignorance of HIV/AIDS mode of transmission, and public fear of contagion. The qualitative and the quantitative results showed that the cultural determinants of HIV/AID-related S&D toward WLWHA in Enegu state, Nigeria, were associated with the psychological determinants (fears of social interaction, low self-esteem, feeling ashamed and feeling guilty and lack of self-worth, and resolve to avoid HIV status disclosure). The two data sets confirmed that HIV/AIDS-related S&D toward WLWHA in Enugu State, Nigeria, were caused by social processes, and not by individual actions.

### Chapter 5: Discussion, Conclusions, and Recommendations

#### Introduction

Despite funding from various local and global sources, including Presidential Emergency Plan for AIDS Relief (PEPFAR), Global Fund(GF), World Bank(WB), The United Kingdom Department for International Development(DFID), and the United Nations( UN); the domestic private sector; and the public purse, toward HIV transmission prevention and care in Nigeria, HIV remains the leading cause of death and disease among women ages 15 years and older (UNAIDS, 2013). Nigeria accounts for 10% of the global HIV burden (U.S. Embassy Report, 2011); approximately 215,000 Nigerians died from HIV/AIDS in 2010. The report stated that HIV/AIDS has become a major contributor to the reduced life expectancy of women in Nigeria from 54 years in 1991 to 48 years in 2010.

Each year, 55% of AIDS deaths occur among women and children in Nigeria. Women constitute 58%, or 1.7 million, of people living with HIV/AIDS (AIDS PLWHA) in Nigeria. Consequently, Nigeria ranks second among 53 countries in Africa in the number of persons infected with HIV (UNAIDS, 2013). According to Ezejiofor and Campus (2012), female members of the Igbo tribe in Enugu are generally viewed as breeders and homemakers who should be seen, but not heard. The marginalized and subservient treatment of Igbo women and wives, along with such harmful cultural beliefs and sociocultural practices as polygamy, have taken away their assertiveness, lowered their self-esteem, and increased their vulnerability of acquiring HIV/AIDS (Famuyiwa et al., 2014; Ugwu, 2009). Inequality and marginalization of these vulnerable members of

Enugu City, hub of the Ndi Igbo people, have contributed to the increased rate of HIV/AIDS among women in Enugu (Ezejiofor & Campus, 2012; Ugwu, 2009).

Ezejiofor and Campus (2012) noted that Nigeria ranks Enugu State second only to Benue State as having the largest infection rate of HIV/AIDS among women. However, despite different views on the effectiveness and limitations of all programs developed to reduce HIV/AIDS-related S&D and prolong the lives of all PLWHA in Enugu State, Nigeria, a gap remains in the behavioral change intervention approaches to reduce HIV/AIDS-related S&D and develop prevention and care programs that span the social, cultural, political, psychological, and environmental factors that drive the increased rate of HIV transmission among women and children (Gillespie et al., 2007).

Mitchell et al. (2005) contended that although many research reports have used photography to give voice to the participants, it is especially significant and useful to give a voice to the target population that will allow them to express their thoughts and feelings about their lives and well-being. Until now, many countries have used indexes from general population surveys to measure stigma (National HIV/AIDS Reproductive Health Survey, Nigeria Demographic Health Survey, 2013). Other researchers have attempted to measure stigma; health, education, and community sectors. Despite these efforts, identifying various forms of HIV/AIDS—related S & D and determining the contexts in which they occur were noted as a continued challenge(Piot, 2000). Research has shown that When a research study is conducted with people whose life—world and meaningful actions are under the study especially the marginalized individuals in our society, it does

not only provide a voice for the participants, but also raises their consciousness, or advance an agenda for social change that improve their lives(Creswell, 2009).

This study gave voice to WLWHA in Enugu State, Nigeria, to shed light on the S&D that they experienced after being diagnosed with HIV/AIDS. I sought to identify, describe, and analyze the determinants of the HIV/AIDS-related S&D of WLWHA in Enugu State, Nigeria. The results of the study successfully identified, described and analyzed ways in which HIV/AIDS related stigma and discrimination appear and noted the contexts in which they occur as narrated by the WLWHA, themselves. The research evidence may help influence the decisions of HIV/AIDS caregivers, policymakers, and program developers to develop effective prevention and care programs that span all population health determinants or factors driving the HIV/AIDS-related S&D of WLWHA in Enugu. I described the nature of the S&D toward WLWHA in Enugu in an effort to reduce and possibly eliminate them. The results of this study will contribute to research on HIV/AIDS prevention and care to improve the quality of life of PLWHA, especially vulnerable groups such as women and children. The objective is to relieve the families and societal burden on WLWHA that devalues their social status and reduces their quality of life.

I purposefully and randomly sampled 132 adult WLWHA ages 21 to 54 years living in Enugu State at the time of the study. Excluded from the study were women who were incarcerated or living in nursing homes or mental rehabilitation institutes, as per the Enugu Ministry of Health IRB regulations. I screened three participants for the pilot test interviews, 15 participants for the study interviews, and 114 participants for the online

survey during the information session day. I gave interested women the informed consent and advised them that their participation was voluntary. They also received an explanation of the interview protocol.

Responses to the 45 items on the HSS were downloaded from SurveyMonkey, cleaned, and then organized. I conducted a statistical analysis of the quantitative data, excluding the pilot data. The qualitative data obtained from the interviews were audiotaped, transcribed, coded with NVivo v.10, and categorized on frequency tables.

The study was guided by two RQs, and the findings emerged based on the analysis of the collected data:

- 1. What are the sources and forms of HIV/AIDS-related S&D in Enugu State?
- 2. Do social, cultural, psychological, political, and environmental determinants of population health predict HIV/AIDS-related S&D in Enugu, Nigeria? Alternatively, do social, cultural, psychological, environmental, and political determinants (stigma) predict HIV/AIDS-related S&D toward WLWHA in Enugu?

# **Summary of Key Findings**

RQ1 guided the qualitative component of the study. I used a coding process to identify primary themes. The issues were separated into eight thematic categories:

Employment-Based Discrimination, HIV Screening and Identification, Disclosure of HIV Status, Social Contact and Interaction Stigma, Internal Stigma and Psychological Effects,

Cultural Stigma, HIV Care Experiences, and Agency And Empowerment. Themes and subthemes emerged, as indicated by the number of interview responses that identified and

described the determinants of HIV/AIDS-related S&D of WLWHA in Enugu. Certain S&D subdeterminant themes resulted in higher number of occurrences than others, such as fear, low self-esteem, and social isolation.

# **Qualitative Findings**

The 15 interview respondents revealed that HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria, interacted with and were strengthened by preexisting S&D associated with social, cultural, political, psychological, and environmental determinants (i.e., sexual preferences, gender, societal norms and beliefs, ineffective enforcement of local and state human rights and anti-S&D laws and policies).

Analysis of each identified deep-rooted and complex S&D variables that helped to perpetuate HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria. The findings are categorized and explained as follows:

Category 1: Employment-based discrimination. Five (33%) respondents stated that HIV/AIDS-related S&D affected their chances for employment. One in three respondents blamed it on the lack of public knowledge about the mode of transmission of HIV. More than eight (50%) respondents explained that fear of contagion by employers and coworkers might have been the reason for the employment-based discrimination that they experienced.

Category 2: HIV screening and identification. Among the seven subthemes in this category, six (6%) respondents expressed that they were tested after symptoms appeared. Five (33%) respondents became aware of their HIV status through unintentional testing.

Category 3: Disclosure of HIV status. The most frequent determinant of HIV/AIDS-related S&D subtheme was "avoids disclosing HIV status." Approximately 7 (46%) of the 15 WLWHA who were interviewed explained that not disclosing their HIV status to friends, family members, and the public was their way of avoiding adverse public reactions toward them.

Category 4: Social contact and interaction. The most frequent determinant of HIV/AIDS-related S&D subtheme was fear. Twelve (80%) of the WLWHA respondents had experienced social exclusion because of the fear of contagion by others and the lack of public awareness and education about HIV transmission. Eleven (73%) respondents feared being harassed or threatened because of the negative impact of their HIV/AIDS status on their social contacts and interactions. Nine (60%) respondents avoided social interactions because people who were uneducated about the mode of HIV transmission labeled them with undesirable characteristics that devalued their social status. About nine (60%) respondents mentioned that even though people discriminated against them and stigmatized them, they remained very active in their social and sexual lives: They attended parties, had boyfriends, and were willing to marry.

Category 5: Internal stigma and psychological effects. Almost seven (50%) respondents blamed themselves for their HIV status, six (40%) experienced low selfesteem, five (33%) felt ashamed of their HIV status, and five (33%) admitted feeling guilty. These responses reflected the internalized stigma and adverse psychological effects of HIV/AIDS by WLWHA in Enugu.

# Category 6: Cultural stigma.

Thirteen (87%) respondents voiced that the cultural beliefs of the Enugu community, the majority of whom are members of the Igbo tribe, contributed to their HIV/AIDS-related S&D. Cultural beliefs and the lack of public education to raise awareness about HIV/AIDS and the place of Igbo women in society were associated with HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria.

Category 7: HIV care experiences. All 15 respondents (100%) had easy access to ART medication. Eleven (73%) participants intentionally avoided HIV care centers at local clinics and hospitals near their homes because they feared being stigmatized by people who knew them. They worried about the potential insults, harassment, gossip, and threats from friends and family members if they found out about their HIV/AIDS status. The results showed that even though the WLWHA had easy access to ART medication, six (40%) still expressed bitterness about the lack of access to general health care not related to HIV/AIDS because of the S&D by health care professionals in traditional hospitals and clinics, especially dental clinics, around Enugu.

# Category 8: Government agencies and empowerment.

About 8 out of 15 WLWHA respondents felt empowered to influence local and state laws and policies affecting the lives of WLWHA. The women had challenged other people's prejudices and biases against WLWHA by addressing gatherings of women to explain the history and mode of transmission HIV and by being advocates for one another.

This qualitative study explored and identified the social, political, psychological, environmental, and cultural determinants of HIV/AIDS-related S&D of WLWHA in

Enugu, Nigeria. The most frequent determinants identified by the respondents included, but were not limited to, cultural beliefs about HIV/AIDS, place of women in Enugu society, social exclusion resulting from the public's fear of HIV contagion, self-blame, low self-esteem, sense of guilt, lack of organized HIV screening and identification processes, lack of public knowledge about HIV/AIDS history and mode of transmission awareness, nondisclosure of HIV status, public threats, public harassment, public negative opinion, and unequal access to health care.

# **Quantitative Findings**

One hundred and fourteen participants completed the 45-item HSS, developed by the Global Network of PLWHA and UKAID (UNAIDS, 2011). The survey data were used in the statistical analysis to answer RQ2: Do social, cultural, psychological, political, and environmental determinants of population health predict HIV/AIDS-related S&D in Enugu, Nigeria?

The average ages of the 114 participants ranged between 21 and 37 years (SD=7.91). Before conducting the multivariate analysis, I performed a test for collinearity of the IVs (social, political, psychological, cultural, and environmental determinants) to determine whether two or more IVs contained strongly redundant information (Norušis, 2011). If the variables had been collinear, there would not have been enough specific information for the multiple regressions to operate correctly. I avoided errant results in the data analysis by performing a comparative analysis among the five determinants. In any case, where the HIV/AIDS-related S&D determinants were

highly correlated, as indicated by an overlap at r > .7, the research analysis combined or discarded one of the variables.

I used the results of Pearson correlations to explore the relationships among the composite IVs. As mentioned in Chapter 4, the cultural and psychological determinants were positively and significantly correlated (r = .77, p = .001). Therefore, the psychological IV was discarded in the multivariate analysis.

I used multiple linear regression models to examine the RQs and their corresponding hypotheses:

 $H_{01}$ : Social determinants do not predict HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria.

 $H_{\rm al}$ : Social determinants do predict HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria.

 $H_{02}$ : Political determinants do not predict HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria.

 $H_{\rm a2}$ : Political determinants do predict HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria.

 $H_{03}$ : Environment do not predict HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria.

 $H_{\rm a3}$ : Environment determinants do predict HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria.

 $H_{04}$ : Cultural determinants do not predict HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria.

 $H_{a4}$ : Cultural determinants do predict HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria.

From the multivariate regression coefficients described in Chapter 4, the p-value for the social determinants of S&D was .18 (t = 1.33), .30 (t = -1.03) for the political determinants, .34 (t = -.95) for the environmental determinants, and .001 (t = .81) for the cultural determinants. The multivariate findings identified an association between these IVs and the DV of HIV/AIDS-related S&D. However, the social, political, and environmental determinants were not significant statistical predictors of HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria, so their null hypotheses were accepted. The null hypothesis that cultural determinants do not predict HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria, was rejected, and the alternative hypothesis was accepted.

In summary, the quantitative component of the study strengthened the qualitative results indicating that that the cultural determinants of S&D, with a p-value = .001, were significantly associated with the psychological determinants of S&D. Therefore, with the other IVs remaining constant, the cultural determinants were associated with a 41% increase in the psychological determinants. The cultural and psychological determinants were strongly related to the HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria, at a p-value of .001, or a 99% confidence interval.

# **Interpretation and Findings**

The mean age of WLWHA in Enugu, Nigeria, is 37 years. The average age of all of the WLWHA who participated in this study conformed with previous literature indicating that women of child-bearing ages have been disproportionately infected with

HIV/AIDS in Enugu, Nigeria (Ezugwu, 2015). A comparison of the data sets for the qualitative and quantitative components of this mixed methods study facilitated the emergence of various themes and subthemes relevant to HIV/AIDS-related S&D. The eight primary categories that answered the qualitative RQ were Employment-Based Discrimination, HIV Screening and Identification, Disclosure of HIV Status, Stigma Related to Social Contacts and Interactions, Internal Stigma and Psychological Effects, Cultural Stigma, HIV Care Experiences, and Agency and Empowerment.

The cultural determinants of S&D were the most positively correlated factors driving HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria. A total of 87% of the respondents experienced S&D fueled by the cultural determinants of public beliefs, place of women in the Igbo tribe, and ignorance of the mode of HIV transmission; 73% of the respondents experienced S&D through social contacts and interactions; 60% experienced S&D resulting from the fear of public threats, public harassment, and discrimination by others; 82% experienced HIV/AIDS-related S&D because of the lack of knowledge of the mode of HIV transmission and isolation from friends and family; and 60% avoided social interactions to keep their HIV status secret. Psychological factors were measured by self-blame (56%), low self-esteem (50%), feelings of shame (46%), and feelings of guilt (60%), as well as internalized stigma.

Previous researchers have identified the drivers of HIV/AIDS-related S&D as being multifaceted, complex, and deep rooted in Enugu society. The qualitative findings confirmed the quantitative results. The quantitative statistical analysis indicated that cultural and psychological determinants were the strongest predictors of HIV/AIDS-

related S&D of WLWHA. These results showed that the primary drivers of HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria, were culturally based (p = .001). The cultural determinants perpetuated the psychology determinants of HIV/AIDS-related S&D of WLWHA.

The findings support previous literature that the cultural beliefs, cultural practices, and the place of women in Enugu society, particularly among the Igbo people, devalue women and consider them second-class citizens. For example, women have been and continue to be persecuted for being promiscuous, but the same behavior by men is tolerated (Ezejiofor, 2008). Just as Ezejiofor and Campus (2012) pointed out, women must accept the polygamous practices of men, even though such practices devalue women's personal integrity and social status because they are generally tolerated. These polygamous practices impact the psychological well-being of women and perpetuate the sexual torture of married women (Ezejiofor & Campus, 2012). Because polygamy is culturally tolerated among the Igbo people, it has led to the marginalization and sexual abuse of women, especially rural dwellers, resulting in an increase in HIV transmission rates (Ezejiofor, 2008; Ezejiofor & Campus, 2012).

In the current study, 13 (87%) interview respondents mentioned that culture contributed to their being characterized by undesirable names because of their HIV/AIDS status. Most of the women mentioned that family members and friends harassed them; threatened them; and blamed their HIV/AIDS status on their supposed promiscuousness, infidelity, and waywardness. This result confirmed Maduike and Care's (2010) assertion that the Igbo people called HIV/AIDS "obiri n' aja ocha," a disease that ends in the

grave. Other researchers have stated that people's poor knowledge of HIV/AIDS, as well as their cultural belief systems have broadened the negative perceptions of WLWHA and have made them believe that individuals with HIV/AIDS are being punished by God (Dibua & Agweda, 2010; Muoghalu & Jegede, 2013). I explained that the Igbos of Nigeria generally refer to STDs such as gonorrhea, syphilis, and HIV as*nsi nwanyi*, meaning *woman's poison*. These terms or labels were mentioned by most of the respondents.

All 15 respondents reported having experienced different forms of S&D from the Enugu community, friends, and family members. The multivariate analysis indicated that the p-value of the cultural determinants was much less than .05 ( $\beta$  = .81; p = .01). The results strengthened the qualitative results and led to the conclusion that the cultural factors driving HIV/AIDS-related S&D were associated with a larger increase in the psychological effects, thus having a negative impact on the quality of life of WLWHA in Enugu. Cultures vary from place to place, so HIV/AIDS care and intervention programs that are effective for one region might not be effective in another region simply because of people's beliefs and ways of life (Ugwu, 2009).

### **Limitations of the Study**

The study was limited by the bounded location and time of women living with HIV/AIDS (WLWHA) interview respondents in Enugu city. The interview of the WLWHA respondents could have been duplicated in different cities of Enugu State. A multiple case studies of women living with HIV/AIDs in various cities of Enugu State may have helped to increase the reliability of the five determinants of stigma:

environmental determinants, with a Cronbach's alpha 0.63; social determinants, with a Cronbach's alpha of 0.66; political determinants, with a Cronbach's alpha of 0.67; cultural determinants, with a Cronbach's alpha of 0.83; and psychological determinants, with a Cronbach's alpha of 0.67. Because Cronbach alpha measures how well variables measure a single latent determinant construct, it is commonly accepted to determine the average correlation of items in surveys or psychometric instruments in order to measure reliability or internal constituency.

According to Nunnally (1978), in natural science, a Cronbach's alpha of 0.70 is considered acceptable, but in the social sciences, a Cronbach's alpha of less than 0.60 has been recognized as acceptable (Hatcher, 1994). Consequently, by rounding the Cronbach's alphas of 0.66 and 0.67 to 0.70, respectively, I found the social, psychological, and political determinants of S&D acceptable (Nunnally, 1978). A Cronbach's alpha of 0.63 for the environmental determinants of HIV/AIDS-related S&D was considered low. The survey items measuring environmental determinants had a factor loading range of 0.31 to 0.54, which was considered acceptable. Though the Cronbach's alpha was marginal, the environmental determinants of S&D were positively and significantly correlated with the cultural (r = .71, p = .001) and the psychological (r = .51, p = .001). Although there was less emphasis on the environmental determinants, the results suggested that future research be conducted to reassess the interview questions that were asked. The restriction of data collection to Enugu State limited the generalization of the results to other states in Nigeria.

The study was limited to the views and responses of a sample of 132 WLWHA from Enugu State (three for the pilot interview, 15 for the study interview, and 114 for the survey). Despite the limitations, this study identified and provided useful insight for the reconceptualization of HIV/AIDS-related S&D with a broader social, cultural, political, environmental, and psychological framework rather than on individual contexts such as HIV screening or isolation constructs.

#### Recommendation

The commonly accepted definition of stigma as a discrediting attribute and the S&D of individuals as having undesirable differences ignore S&D as phenomena that have been socially constructed to devalue the social status of other members of a community (Goffman, 1963; Marshall, 1998). Describing stigmatization with individual attributes has resulted in many previous studies, limiting the analysis of underlying causes and possible HIV/AIDS-related S&D reduction and intervention programs to static individual features or characteristics (Kegeles, Coates, Christopher, & Lazarus, 1989).

The analyses of the qualitative and quantitative results showed that because the Igbo cultural system in Nigeria places greater emphasis on individual responsibility, it holds women accountable for their HIV/AIDS status (Kegeles et al., 1989). According to the WLWHA who participated in the study, members of the Enugu community perceive HIV/AIDS as a reflection of the personal irresponsibility of WLWHA and blame the women themselves for contracting HIV/AIDS. The results showed that the Igbo cultural system influences not only the responses of the communities to HIV/AIDS but also the

manifestation of HIV/AIDS-related S&D (Warwick et al., 1998). Future studies are needed to extend this investigation into other states of Nigeria that have different cultural practices and societal norms in an effort to develop effective national HIV/AIDS-related S&D reduction programs for all vulnerable populations.

Further research also is needed to identify ways in which research and behavioral intervention programs can address HIV/AIDS-related S&D of women throughout Sub-Saharan Africa. There is an urgent need for more research on behavioral intervention programs that span the social, cultural, environmental, political, and psychological factors that drive the S&D toward women. More case studies will help to identify and hasten the development of new concepts and understanding of the determinants driving HIV/AIDS-related S&D of WLWHA in Sub-Saharan African countries. Exploratory and experimental studies will help to mobilize community behavioral change and support cultural transformation (Parker et al., 2002).

### **Implications for Social Change**

The effectiveness of HIV/AIDS-related S&D reduction intervention programs have been constrained by the multifaceted and deep-rooted nature of the drivers of S&D (Parker et al., 2002). This mixed methods study identified the social, political, environmental, psychological, and cultural factors driving HIV/AIDS-related S&D of WLWHA in Enugu State, Nigeria. The increased rate of transmission of HIV among women in Enugu was found to be associated with cultural and psychological determinants.

I concluded that HIV/AIDS care and prevention efforts should be geared toward educational interventions and behavioral changes in the Enugu community toward WLWHA. The implications for social change rest with HIV/AIDS policymakers, program developers, health care professionals, and funding agencies to review the adequacy and appropriateness of current reduction interventions, design and implement policies and intervention programs, and empower and engage WLWHA in HIV/AIDS care and prevention programs.

Health care workers, funding agencies, policymakers, and program developers can use the results to engage in professional development to acquire or develop their of communication skills to disseminate HIV/AIDS educational intervention awareness messages to the public. Despite copious funding on treatment and prevention strategies in Nigeria, particularly in Enugu, between 2005 and 2015, the prevalence rate of HIV/AIDS transmission among women in Enugu, Nigeria, continues to rise.

Government policy can be a powerful tool in the prevention of HIV/AIDS, especially when used in concert with community efforts and media advocacy (Cohen et al., 2007). This study can help to restructure HIV/AIDS care and prevention initiatives programs that take into account the historical and cultural factors shaping the experiences of WLWHA in Enugu State. This study also contributes to the body of knowledge that advocates for HIV/AIDS care and prevention interventions for all segments of society, including women and children. There is a need for health care providers to tailor HIV/AIDS-related S&D reduction programs to the cultural and psychological determinants driving HIV/AIDS-related S&D of WLWHA in Enugu State.

### **Implications for the Theoretical Framework**

I used Goffman's (1963) theoretical framework to identify and discuss the determinants associated with HIV/AIDS-related S&D of WLWHA in Enugu State. The theoretical framework gave me insight into the successes and failures of previous HIV/AIDS care and prevention intervention initiatives. The results of this study will contribute to the process of change, community mobilization efforts, and cultural transformation in response to HIV/AIDS-related S&D of WLWHA in Enugu State.

#### **Conclusion**

I conducted this mixed methods study to identify and explain the multiple complex factors associated with HIV/AIDS-related S&D of WLWHA in Enugu, Nigeria. The most prevailing determinants were cultural (cultural beliefs, adverse public reactions, societal norms, place of women in Igbo society, and cultural practices). The culture of the Enugu people, the place of women in Igbo society, and the lack of public awareness of the history and mode of HIV transmission have given rise to public fears about HIV contraction and negative public reactions, abuse, threats, harassment, and physical assaults of WLWHA in Enugu. These adverse societal attitudes, social isolation, and S&D had adverse psychological and emotional impacts on the participants and made them internalize the undesirable characteristics given to them by the public. The adverse impact was presented in the subthemes of feeling ashamed, feeling guilty, having low self-esteem, and blaming themselves, all of which led to nondisclosure of their HIV status to everyone but the workers at the HIV care centers. This general nondisclosure of status has helped to drive the increased rate of HIV/AIDS transmission among women in

Enugu. The results of this case study also concluded that the place of women in Enugu contributed to the disproportionate increased rate of HIV transmission among sexually active women ages 15 to 54 years. Cultural practices and beliefs drove the HIV/AIDS-related S&D toward WLWHA in Enugu City in Enugu State, Nigeria. It negatively impacted the WLWHA in this study, who chose to go about their normal daily business and social activities as long as their HIV/AIDS status was not exposed in order to avoid the psychological effects of the public's negative behavior and actions towards them.

Every respondent interviewed was on ART medication. They reported that they no longer felt sick as long as they were on the medication. All of the participants expressed concern about the lack of money to buy fruits and vegetables, along with some multivitamins, to prevent opportunistic illnesses. The results indicated that despite easy access to ART medication, the participants stated that HIV/AIDS-related S&D inhibited the efforts of HIV/AIDS care initiatives funded by local and global agencies.

HIV/AIDS-related S&D toward WLWHA in Enugu State were found to be associated with the actions and behaviors of families, communities, and societies (WHO, 2003). These findings correlate positively with previous research on population health determinants (WHO, 2005). There is a need for public health surveillance studies to reduce and possibly eliminate the adverse health impact of HIV/AIDS-related S&D of WLWHA in Enugu State, prolong their lives, and improve their quality of life.

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## Appendix A: HIV Stigma Index Scale

This study asks about some of the social and emotional aspects of having HIV. For most of the questions, just circle the letters or numbers that go with your answer. There are no right or wrong answers. Feel free to write in comments as you go through the questions.

This first set of questions asks about some of your experiences, feelings, and opinions as to how people with HIV feel and how they are treated. Please do your best to answer each question. For each item, circle

your answer: Strongly disagree (SD), disagree (D), agree (A), or strongly agree (SA)

		Strongly	Disagree	Agree	Strongly
_	2 110	disagree			agree
1	In many years of my life, no one knows that I have HIV.	SD	D	A	SA
2	I feel guilty because I have HIV.	SD	D	A	SA
3	People's attitudes about HIV make me feel worse about myself.	SD	D	A	SA
4	Telling someone I have HIV is risky.	SD	D	A	SA
6	People with HIV lose their jobs when their employers find out.	SD	D	A	SA
7	I work hard to keep my HIV a secret.	SD	D	A	SA
9	I feel I am not as good a person as others because I have HIV.	SD	D	A	SA
10	I never feel ashamed of having HIV.	SD	D	A	SA
11	People with HIV are treated as outcasts.	SD	D	A	SA
12	Most people believe that a person who has HIV is dirty.	SD	D	A	SA
13	It is easier to avoid new friendships than worry about telling someone that I have HIV.	SD	D	A	SA
14	Having HIV makes me feel unclean.	SD	D	A	SA
15	Since learning I have HIV, I feel set apart and isolated from the rest of the world.	SD	D	A	SA
16	Most people think that a person with HIV is disgusting.	SD	D	A	SA
17	Having HIV makes me feel l'm a bad person.	SD	D	A	SA
18	Most people with HIV are rejected when others find out.	SD	D	A	SA
19	I am very careful who I tell that I have HIV.	SD	D	A	SA
20	Some people who know l have HIV have grown distant.	SD	D	A	SA
21	Since learning I have HIV I worry about people discriminating against me.	SD	D	A	SA
22	Most people are uncomfortable	SD	D	A	SA

	around someone with HIV.				
23	I never feel the need to hide the fact	SD	D	A	SA
	that I have HIV.				
24	I worry that people may judge me	SD	D	A	SA
	when they learn that I have HIV.				
	Having HIV in my Blood is	SD	D	A	SA
	disgusting to me				

Many of the times in this section assumes that you have told other people that you have HIV, or that others know. This may not be true for you. If the item refers to something that has not actually happened you, please imagine yourself in that situation. Then give the answer (strongly disagree", "disagree," "agree", "strongly disagree") based on how you think you would feel or how you think others would react to you.

	sy alongeou y casou on non you ammi ye	Strongly disagree	Disagree	Agree	Strongly agree
25	I have been hurt by how many people reacted to learning I have HIV.	SD	D	A	SA
26	I worry that people who know that I have HIV will tell others.	SD	D	A	SA
27	I regret having told some people that I have HIV.	SD	D	A	SA
28	As a rule, telling others that I have HIV has been a mistake.	SD	D	A	SA
29	Some people avoid touching me once they know that I have HIV.	SD	D	A	SA
30	People I care about stopped calling after learning I have HIV.	SD	D	A	SA
31	People have told me that having HIV is what I deserve for how I lived my life.	SD	D	A	SA
32	Some people close to me are afraid others will reject them if it becomes known that I have HIV.	SD	D	A	SA
33	People don't want me around their children once they know I have HIV.	SD	D	A	SA
34	People have physical backed away from me when they learn I have HIV.	SD	D	A	SA
35	Some people act as though it's my fault I have HIV.	SD	D	A	SA
36	I have stopped socializing with some people because of their reactions to my having HIV.	SD	D	A	SA
37	I have lost friends by telling them I have HIV.	SD	D	A	SA
38	I have told people close to me to keep secret the fact that I have HIV.	SD	D	A	SA
39	People who know that I have HIV tend to ignore my good points.	SD	D	A	SA
40	People seem afraid of me once they learn I have HIV.	SD	D	A	SA
41	When people learn you have HIV, they look for flaws in your character.	SD	D	A	SA

42	I am aware of local government, state government and national government policies and programs for people living with HIV.	SD	D	A	SA
43	I have you access to ART, even if not currently taken?	SD	D	A	SA
44	I am aware of any group or network that provide emotional and physical referral support services for people living with HIV/AIDS	SD	D	A	SA
45	I think the place of a woman in Igbo Community cultural norms and beliefs played a major role in the negative attitude of people towards me since my disclosure.	SD	D	A	SA

## Appendix B: Interview Questions

Demo	ographic Information: General information a	bout the participant and her house/hold.
1	Are you 21 years or and above?	YES/NO
2	Do you live in Enugu?	YES/NO
3	What is your material Status?	Married/Single/Divorce/Separated/Widower/Cohabit ing
4	What is your level of education completed?	No formal education/Primary school/Secondary/Technical college/University
6	What is your employment status?	Full time/Part time/Self-employed/Unemployed Retired /Disability
7	What is your economic status	High/Low/Mid
9	Do you have children?	YES/NO
10	What is your primary tribe?	Igbo/Yoruba/Hausa /Any other
11	Are you (choose one)	Male/ female
Socia	l factor of Exclusion	
12	Can you tell me how you were with the disease?	
13	When did you get diagnosed with HIV?	
14	How do you got Tested for HIV?	
15	Did you experience symptom?	
16	How does the disease affect your family life, work situation and, and Social?	
17	Have you been excluded from social gatherings, religious activities, in the past 12 months?	
18	What reasons, do you think caused your Exclusion from religious activities, and social gathering?	
19	Have you experienced exclusion within the family, in the past 12 months?, and why?	
20	Why do you think that you have experienced HIV-related stigma and discrimination, in the past 12 months?	
21	Physical Environmental Determinant(acc	ess to work, health, and education
21	In the past 12 months, have you been forced to change your place of residence or been unable to rent accommodation?	
22	Why were you forced to change residence or denied accommodation?.	
23	In the past 12 months, have you lost a job or other source of income?	
24	Why do you think you lost the job or other source of income?	
25	In the past 12 months, have you been denied health services, including dental care because of your HIV?	
26	Tell me more about your access to family planning services or reproductive health services in the previous year since the disclosure of your HIV status?.	

27	In the past 12 months have been avaluded	
27	In the past 12 months have been excluded	
	from attending any educational institution	
20	since your HIV disclosure?	
28	Did you ever get detained, quarantined,	
	isolated or segregated because of your HIV	
20	status?	
29a	Have you access to medication for	
	opportunistic infections, even if you are	
	not currently taken it?	b. Have you access to ART, even if not currently
		taken?
	Psychological Determinant (Internalized S	Stigma and Fear)
30	Have you experienced any of the following	Feeling Ashamed, Feeling guilty, blaming Self,
	feelings because of your HIV status in the	Blaming others, feeling low self-esteem, Feel that
	past 12 months (answer YES or No to each	you should be punished, Feeling Suicidal.
	one.)	
31	Have you engaged in any of the following	a. Choose not attend social gathering.
	because of you HIV Status in the past 1	b. I have isolated myself from family members and
	year? (answer YES or NO to each one)	friends.
		c. I took decision to stop working.
		d. I decided not apply for job. I withdrew from
		school.
		e. I decided not to get married,
		f. I decided not to have sex, I decided not to have
		(more) children.
		g. I avoided going to local clinics when I needed.
		h. I avoided going to the Hospital when I needed.
33	Have you been fearful of any of the	a. Have been fearful of people.
	following happening to you (Say YES or	b. Have been fearful of being physically harassed or
	NO)	threatened
	,	c. Have been physically assaulted.
34	Can you tell me more on how fearful you	
	have been?	
	Political Determinant (Rights, Laws, and	policies)
35	In the past 12 months, have any of the	a. Have you been forced to submit to a medical or
	following violations happened to you	health procedure (including HIV testing).
	because of your HIV status?	b. Have you been detained or arrested or
	(Response: Yes or No )	quarantined or Isolated because of HIV status?
		c. Have none of these ever happened to you?
36	Have you informed any local government	
	employee(s), local or national politicians,	
	or community head, about how you been	
	treated because of your HIV status?	
37	What was the result of your effort to have	
	any violations of your rights as a person	
	living with HIV redressed?	
38	In the past 12 months, have you	
	confronted, challenged, or educated	
	someone who was stigmatizing and/or	
	discriminating against you?.	
39	Do you know of any Federal or state	
	government laws and policies that are put	
	in place to protect the right of people	
		1

	living with HIV/AIDS?	
40	Do you know any organizations or groups you can go to if you experience stigma and discrimination?	If yes, Which kinds of organizations or groups do you know about?
41	Do you feel you have the power to influence decisions in local government and national policies affecting women living with HIV/AIDS?	
42	Some people close to me are afraid others will reject them if it becomes known that I have HIV.	
43	How has Enugu society cultural practices contribute to your experiences as a women living with HIV/AIDS.	
44	How has society norms contribute to your experiences as a women living with HIV/AIDS	

## Nigeria



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