# HIV RISK AND PREVENTION NEEDS AMONG YOUNG WOMEN IN KIBRA, KENYA

by

Florine Ndakuya-Fitzgerald

A Dissertation Submitted in

Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy

in Nursing

at

University of Wisconsin, Milwaukee

August 2020

ABSTRACT

HIV RISK AND PREVENTION NEEDS AMONG YOUNG WOMEN IN KIBRA, KENYA

by

Florine Ndakuya-Fitzgerald

The University of Wisconsin-Milwaukee, 2020
Under the Supervision of Professor Peninnah M. Kako, PhD, RN, FNP, BC, APNP

While HIV infection trends in most groups have been declining, certain population groups including young women globally, and especially those who reside in sub-Saharan Africa (SSA), continue to experience increasing HIV risk. In Kenya, young people aged 15-24 years have been reported to have the highest number of new HIV infections, with young women being twice as likely to be infected as their men counterparts. The rate is even higher among young women residing in urban areas.

A review of the literature demonstrates that while studies guided by behavioral theories have yielded results in response to HIV, there is still a persistent disparity in new HIV infections between young men and women in Kenya. In addition, an increasing number of scientists and organizations are calling for a structural approach to HIV research.

Guided by postcolonial feminist epistemology and a conceptual framework developed from the theory of gender and power and postcolonial theory, the purpose of this qualitative dissertation study was to explore the HIV risk and prevention needs among young women who reside in Kibra, Nairobi Kenya. Seventy-three young women participated in this study. Data were collected through individual and focus group interviews.

Data was managed using MAXQDA where transcripts were analyzed centering young women's stories. Data was analyzed using thematic analysis. This study reports on young

women's daily lived experiences, how young women experience HIV, and how structural factors including gender norms, ethnicity and poverty intersect to exacerbate HIV risk.

Findings in this study show that young women experienced HIV risk through factors such as navigating poverty, gender norms and ethnicity. This study has implications on the critical need to understand gender norms, age, poverty, religion, and ethnicity not just as individual factors impacting young women's HIV risk in Kibra, but also as intersecting with each other to exacerbate risk.

© Copyright by Florine Ndakuya-Fitzgerald, 2020
All Rights Reserved

## TABLE OF CONTENTS

ABSTRACT ..... ii

**LIST OF FIGURES** ..... xi

**LIST OF TABLES** ..... xii

**ACKNOWLEDGMENTS** ..... xiii

**Chapter 1: Introduction and Background** ..... 1

**Background** ..... 3

**Statement of the Problem** ..... 6

**Study Population and Location** ..... 7

**Ethnicity Make-Up in Kenya** ..... 8

**Research Approach** ..... 10

**Study Significance** ..... 11

**Assumptions** ..... 12

**List and Definition/Operationalization of Significant Terms** ..... 13

**Summary** ..... 15

**Chapter 2: Conceptual Framework and the Literature Review** ..... 16

**Conceptual Framework** ..... 16

**Postcolonial Feminist Epistemology** ..... 17

**The Theory of Gender and Power** ..... 20

**Postcolonial Theory** ..... 23

**Conceptual Framework: Components** ..... 26

**Literature Review** ..... 27

**Introduction** ..... 27

**Global Overview of HIV and AIDS** ..... 30

**Regional Overview of HIV and AIDS** ..... 31

**Kenya, a General Profile** ..... 32

**Context of Health Systems in Kenya Related to HIV and AIDS** ..... 37

**HIV Among Young People** ..... 42

**Literature Review Strategy** ..... 45

**Inclusion and Exclusion Criteria** ..... 45

**Data Extraction** ..... 46

**Summary of Studies Included in the Review** ..... 47

**Literature Review Results** ..... 47

**Factors that Impact HIV Risk, Risk Perceptions and Behaviors** ..... 47

**Present Study** ..... 52

**Chapter 3: Methods** ..... 55

**Qualitative Research Approach** ..... 55

**Study Design** ..... 57

**IRB Approval** ..... 59

**Recruitment** ..... 59

**Research Sample** ..... 62

**Data Collection Tools and Procedure** ..... 63

**Data Management and Analysis** ..... 65

***Informed Consent*** ..... 67

***Parental Consent*** ..... 67

***Possible Coerced Participation*** ..... 68

***Confidentiality*** ..... 69

***Emotional Stress*** ..... 70

**Scientific Rigor** ..... 70

**Summary** ..... 72

**Chapter 4: Findings** ..... 73

**Demographic Data** ..... 73

**Personal Information** ..... 73

**Socioeconomic Status** ..... 73

**Health Information** ..... 74

**Presentation of Themes** ..... 75

**Research Question 1: Daily Lived Experiences** ..... 75

**Home Life Expectations** ..... 75

**Housing Conditions** ..... 78

**Neighborhood Environment** ..... 80

**Research Question 2: How Young Women Experience HIV Risk** ..... 86

**HIV Knowledge** ..... 86

**Experiencing HIV Risk** ..... 91

**Research Question 3: How Structural Factors Intersect to Exacerbate HIV Risk.** ..... 102

**Traditional Practices** ..... 103

**Gender Norms** ..... 105

**Gendered Opportunities** ..... 110

**Religion** ..... 112

**Navigating Poverty** ..... 113

**Research Question 4: HIV Prevention Needs** ..... 116

**Help Girls Go to School** ..... 116

**Create Jobs** ..... 117

**Ensure Young People are Not Idle** ..... 119

**Summary** ..... 120

**Chapter 5: Discussion and Implications** ..... 122

**Discussion** ..... 122

**Conceptual Framework Revisited** ..... 122

**Gender Norms** ..... 123

**Age** ..... 127

**Traditional Practices** ..... 128

**Religion** ..... 131

**Implications** ..... 132

**Nursing Practice Implications** ..... 132

**Policy Implications** ..... 133

**Research Implications** ..... 135

**Limitations** ..... 136

**Conclusion** ..... 137

**References** ..... 138

**Appendices** ..... 167

**Figure 4: Kibra, a Closer Look** ..... 170

**Appendix 1: Screening Questions for Participants** ..... 204

**Appendix 2: Informed Consent** ..... 205

**Appendix 3: Parental Consent** ..... 211

**Appendix 4: Semi-Structured Interview Guide** ..... 217

**Appendix 5: Focus Group Interview Guide** ..... 220

**Appendix 6: Demographic Data Sheet** ..... 222

**Appendix 7: Community Resources** ..... 225

**Appendix 8: Organization of Findings** ..... 226

**Figure 7: Conceptual Framework Revisited** ..... 228

**CURRICULUM VITAE**..... 232

## LIST OF FIGURES

**Figure 1: Map of Kenya** ..... 167

**Figure 2: Map of Kenya with 47 Districts** ..... 168

**Figure 3: Map of Kibra** ..... 169

**Figure 4: Kibra, a Closer Look**..... 170

**Figure 5 : Conceptual Framework** ..... 1

**Figure 6: Prisma Diagram**..... 2

**Figure 7: Conceptual Framework Revisited** ..... 228

## LIST OF TABLES

**Table 1: Literature Review Table** ..... 173

**Table 2: Descriptive Statistics** ..... 229

## ACKNOWLEDGMENTS

I would first like to thank my community in Kibra for the lessons they taught me and the motivation to keep going. A special thanks to all 73 young women who participated in this study. Your voices will live on through this study. To Calvince Ochieng and Molvin Owino, your hard work was greatly appreciated.

To my biological parents – Grace and Joel Ndakuya – and those adults in Kibra who nurtured me as if I was their child, thank you for your guidance, prayers, support, and sacrifices. This would not have been achieved without you. To my sister Emelda Magomere, my brothers Gilbert Ndakuya and Duncan Ndakuya, my nieces Gigi and Yuvi and nephews Russel and Rusev, thank you for being in my life.

To my husband Daniel Fitzgerald, thank you for learning what postcolonial feminist meant and for listening to me go on about my theoretical framework. Your partnership means everything to me and this dissertation is a celebration of our compatibility. To our daughter, you mean the world to me and I hope you grow up to be a strong woman as were those who were a part of this study.

To my friends Kara Mannor and Renee Scampini, thank you for your feedback through our "Badass writing group". To my dear friend Dr. Oluwatoyin Olukutun, it is hard to imagine my college and graduate school life without you. To Julie Hutsick, Heather Harrington, Kim Hollis, Heather Anderson, Anita Grant, and all my All Saints coworkers, thank you for listening to me every time and for willing to work with me when I needed to focus on school-work.

To the woman who started it all-Dr. Sandra Underwood, words are not enough. Your mentorship, guidance, encouragement, and support are the reasons I decided to pursue my Ph.D.

and the reasons I have made it this far. I hope I made you proud and thank you so much for who you are.

To Dr. Jennifer Kibicho, thank you for taking me under your wing at the beginning of my graduate school studies and showing me what professionalism, hard work, and collaboration look like. Thank you also for introducing me to the MAXQDA program.

To my major professor Dr. Peninnah Kako and my committee members: Lorraine Halinka Malcoe, Dr. Lucy Mkandawire-Valhmu, and Dr. Anne Dressel, thank you for all your hard work in guiding me and allowing me to grow and learn. To my in-country supervisor Dr. Charles Nzioka, thank you for your support and advice. To my UWM community including Late Dr. Aaron Buseh, Jennifer Daood, Dr. Julie Snethen, and all the other professors whom I crossed paths with, I learned something from each of you and I am grateful you all created a conducive environment to learn and grow.

I also want to thank the graduate school at UWM for both financial support and for the boot camps which helped to jump-start my writing every time. Last but certainly not least, I have to thank the following organizations: St. Aloysius Gonzaga high school in Nairobi, Kenya, the National Black Nurses Association, the Midwest Nurse Research Society, Sigma Theta Tau International, the University of Wisconsin-Parkside community, and the women of Alpha Delta Kappa for their support in various ways.

## Chapter 1: Introduction and Background

The introductory chapter of this dissertation provides a general introduction to the study, including the background, the study's significance, a general description of the study location and population, a list of terms, and lastly my assumptions as a researcher.

Although tremendous strides and important milestones have been achieved in response to the Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) globally, such as the decreased number of deaths from AIDS as well as better life outcomes for those living with HIV, these improvements have varied by population groups and communities, with some groups missing the benefits entirely (Alsallaq et al., 2017; Bekalu, Eggermont, & Viswanath, 2017). Groups that have seen mixed results in the area of HIV risk and prevention include young women globally and especially those who reside in sub-Saharan Africa (SSA). The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates that in 2018 young women aged 15-24 accounted for 32 percent of all new HIV infections globally despite only being 10 percent of the world population. In SSA, young women in the same age group accounted for 25 percent of all new HIV infections. In Kenya, young people aged 15-24 accounted for 51 percent of all new HIV infections, with young women being twice as likely to be infected as their men counterparts (National AIDS Control Council [NACC], 2016). Overall, as the HIV trend continues to decline globally, there is a greater concentration of the infection in SSA, home to 54 percent of those living with HIV globally (UNAIDS, 2018). Additionally, Kenya saw a 17 percent increase in the number of new HIV infections between 2014 and 2015 among youth aged 15-24, with young women and those in urban areas most at risk (NACC, 2016). Although the number of new HIV infections has been trending down from 2016 to 2018,

the disparity between young women and young men remains the same (UNAIDS, 2018). Guided by postcolonial feminist epistemology and a conceptual framework developed from the theories of gender and power, and postcolonial theory, the purpose of this dissertation study was to explore HIV risk and prevention needs among young women who reside in a periurban slum in Kenya.

While exploring literature on HIV risk especially among youth HIV, there is increasing literature on the concept of risk perception and less on HIV prevention. Risk perception as a concept was first explored using individually focused theories such as the Health Belief Model (Hochbaum, Rosenstock, & Kegels, 1952), Theory of Planned Behavior (Ajzen, 1985) and Protection Motivation Theory (Buzi, Smith, Weinman, & Novello, 2013; Rogers, 1975), which explicated the connection between one's perception of risk and behavioral change. Risk perception in HIV research has been linked to sexual risk behaviors such as sex without condoms and sex with multiple partners, to sharing needles, and to factors related to HIV transmission (Macintyre, Rutenberg, Brown, & Karim, 2004). In exploring the literature on HIV risk perceptions among young people, studies have also identified structural factors such as harmful gender norms, gender inequalities, violence, poverty, sexual reproductive health, lack of education, and food insecurity to be associated with women's increased HIV (Burgoyne & Drummond, 2008; Dworkin et al., 2013; Muzyamba, Broaddus, & Campbell, 2015). Notably, similar studies have proposed individual interventions to tackle such structural factors. Although some studies have linked structural factors to risk perceptions, studies on risk perception as a precursor to HIV risk also limit interventions to the individual level (Bekalu et al., 2017).

Another gap in the literature is the lack of studies that explore risk perceptions, HIV risk, and HIV prevention among young women in peri-urban slums in Kenya. This study addressed

identified gaps by utilizing two theories, the theory of gender and power, and postcolonial theory to move beyond risk perception by exploring how structural factors including gender, ethnicity, and class, within the history of colonialism in Kenya, impact HIV risk and prevention needs of young women in a broader political, economic and geographic context of living in a peri-urban slum. Different from the definition of slums offered by United Nations (UN) Habitat (United Nations Human Settlements Programme, 2010) or the definition of periurban offered by The United Nations Children's Fund (UNICEF) (United Nations Children's Fund [UNICEF], 2013), a peri-urban slum in this study refers to a geographical location located proximal to a major city that is characterized by increasing population size and departure from agriculture as the main economical source (Laquinta & Drescher, 2000), whose occupants are faced with intersecting socio-spacial forces such as urbanization and informal settlements (Ezeh et al., 2017). Utilizing a narrative inquiry qualitative approach to guide data collection and analysis, this study will contribute knowledge in a much-needed area of young women's HIV risk and prevention needs.

**Background**

Despite the enormous progress made towards eradicating and containing the HIV and AIDS-related epidemic, globally young women continue to be disproportionately affected by the HIV epidemic compared to young men. According to a report by UNAIDS (2016), young women aged 15-24 represented 15% of the total women living with HIV globally, with 80% of these being young women who reside in SSA. In SSA, young women are at an especially heightened HIV risk. Studies from SSA report that compared to young men, young women are twice as likely to be infected with HIV (UNAIDS, 2018). In Kenya, a country located in the Eastern region of SSA, young people represent 40% of the population—approximated at 41 million people (Kenya National Bureau of Statistics [KNBS], 2014) and accounted for 33

percent of all new infections according to the 2018 report by NACC with the rates among young women being twice that of young men. Nairobi county contributed 14 percent of all new HIV infections in 2017 (NACC, 2018), highest in the country. This statistic is alarming not only for young people but for countries in SSA such as Kenya that bear the greatest burden from the disease.

The main modes of HIV transmission in Kenya are sexual, drug injection, and mother to child (NACC, 2016). Of the three modes of transmission, NACC reported that between 2010 and 2017, the greatest progress was seen in reducing mother to child transmission by 41 percent (13,500 to 8,000). Although there was a decline in HIV rates via sexual transmission by 30% (63,700 to 44,800) in the same period, sexual transmission is the primary mode of transmission for HIV in Kenya (NACC, 2018). Among adults in Kenya including young women, the main mode of HIV transmission is through heterosexual sex (Ng'eno et al., 2018; National AIDS and STI Control Programme [NASCOP],2014). As such, there has been a push for interventions that target the reduction of sexual risk behaviors. These interventions include encouraging condom use, advocating HIV testing, educating the public on HIV, and encouraging fidelity among sexual partners (NACC, 2018). Although these interventions, as well as the wide availability of antiretroviral drugs, have lowered the overall adult HIV prevalence to 4.9 percent (NACC, 2018), variations between counties (with the highest number of new HIV infections being reported in Nairobi) and by gender (with young women having double the number of new HIV infections compared to young men) call for more innovative and targeted interventions for young women and those who reside in high prevalence counties.

To achieve HIV prevention, studies have suggested focusing on risk perceptions as a link between behaviors and HIV transmission (Akwara, Madise, & Hinde, 2003; Janine L Barden-

O'Fallon et al., 2004). Risk perceptions have an inverse relationship with risky behaviors in that having a high HIV risk perception leads to a low probability of engaging in risky sexual behaviors (Tenkorang & Maticka-Tyndale, 2014). Since the most frequently reported mode of HIV transmission among young people in Kenya is through risky sexual behaviors (Ng'eno et al., 2018), risk perception is an important concept to understand in this population as it is linked to HIV risk behaviors.

When exploring literature related to young women in Kenya, there is limited information on their HIV risk perception. A broader review of literature on HIV risk perceptions among young people who reside in SSA revealed that while risk perceptions affect behavioral change, HIV risk perception is impacted by systemic issues (Nkomazana & Maharaj, 2014; Yared, Sahile, & Mekuria, 2017). High HIV risk perception was associated with behaviors such as delayed age of first sexual encounter (Anderson, Beutel, & Maughan-Brown, 2007), frequent condoms use (Cederbaum, Gilreath, & Barman-Adhikari, 2014; Kabiru & Orpinas, 2009; MacPhail, Sayles, Cunningham, & Newman, 2012; Maswanya et al., 1999) and abstinence (Eriksson, Lindmark, Haddad, & Axemo, 2014). Low HIV risk perception, on the other hand, was associated with having multiple sexual partners as well as increased sexual activity (Do & Meekers, 2009; MacPhail et al., 2012). While the literature on risk perceptions has yielded some results in understanding risk behaviors, expanding the focus to explore HIV risk can be beneficial in understanding how structural factors impact risk behaviors especially among young people. There is a push from organizations such as the U.S. National Institutes of Health (NIH), the United Nations, and from HIV researchers to focus on systemic issues such as how gender inequities place women at a higher risk of HIV than their men counterparts (Adimora & Auerbach, 2010; Tenkorang & Maticka-Tyndale, 2014).

**Statement of the Problem**

Studies of HIV risk perceptions in SSA have been done using behavioral theories and thus recommended individual-level interventions such as abstinence and monogamy. The interventions that have been widely adopted in Kenya and other SSA countries emphasize the ABC model of abstinence, be faithful, and condomize (Kvasny & Chong, 2008). The focus on individual behaviors recommended by the ABC model has been criticized for oversimplifying HIV risk, especially among women and youth as these studies assume that all individuals are in a position to choose and do not account for broader structural conditions of these populations (Kvasny & Chong, 2008; Muzyamba, Broaddus, & Campbell, 2015).

Social norms, poverty, and gender inequality are structural issues that impact all women in Kenya (Swart, 2013; Vantyler, 2012). Like most countries, Kenya is a patriarchal society with policies and structures in place that reinforce masculinity and femininity (Kako, Stevens, Karani, Mkandawire-Valhmu, & Banda, 2012). However, Kenya is also a post-colonial society (Magaziner, 2018). Thus, studies of risk perception and HIV risk behaviors in Kenya need to examine how historical periods such as colonialism continue to shape societal gender norms and thus HIV risk (Kirkham & Anderson, 2010).

Before being colonized by the British in the 1900s, Kenya's economy relied mainly on agriculture, and Kenyans roamed freely in the country sharing responsibilities related to farming and reproduction. Men and women had children to help with land labor through pragmatic polygamy (Dworkin et al., 2013). When the British settled to rule in Kenya, they implemented a divide and conquer strategy among Kenyans (Nyaura, 2018). The British implemented policies to control the fertile land and use local Kenyans as labor (Shutzer, 2012). To maintain control, British colonizers appointed chiefs to lead and maintain a sense of control (Shutzer, 2012). These

chiefs were mainly men whose incentive was land ownership in the natural reserves. After Kenya gained its independence in 1963, the chiefs continued to be the elite but utilized the ethnic divide and land ownership to maintain power and thus control resources (Shutzer, 2012). Colonialism, therefore, was instrumental in the genderization process seen in society within which present-day concepts of masculinity and femininity are constructed (Casale et al., 2011). The impact of colonialism on the daily lives of young women in Kenya today needs to be explored in more detail as a possible cause of the gender disparity in HIV.

**Study Population and Location**

This dissertation study was conducted in Kibra, one of the largest peri-urban slums in Kenya that is located within Nairobi, the capital city of Kenya. Kibra sits approximately 7 kilometers from Nairobi's city center and contains five wards. A ward is an electoral administrative unit represented by a councilor. Like other slums, this geographic location is characterized by an influx of residents in transition, mostly youth, migrating from rural Kenya to the city of Nairobi in search of job opportunities that do not involve agriculture (Benoit et al., 2013; Marx, Stoker, & Suri, 2013). Kibra has an approximate population of 2.5 million residents who occupy 2.5 square kilometers of land (Benoit et al., 2013). Residents in Kibra face unique challenges related to poverty, gender and sexual violence, and ethnic conflict/clashes, all of which have been shown to impact HIV risk (Krishnan et al., 2008; Swart, 2013).

Residents of Kibra, unlike rural residents who can grow food and build a shelter in the fields, depend on the cash economy to be able to afford necessities such as food and shelter (Gallaher, Kerr, Njenga, Karanja, & WinklerPrins, 2013). This makes their challenges with HIV risks even more unique. For those living in Kibra, life is characterized by poverty. Residents in Kibra deal with a lack of water, poor sanitation, limited services, poor housing, and

unemployment. All these factors exacerbate HIV risk behaviors (VanTyler & Sheilds, 2015; United Nations Population Fund [UNFPA], 2020).

For young women, gender inequality and societal norms – such as the devaluation of women's education – exacerbate other socioeconomic and geographic challenges that impact HIV risk and HIV prevention (Kimosop, Otiso, & Ye, 2015; Schaefer et al., 2017; Tenkorang & Adjei, 2015). Additionally, since this particular age group of 15-24 represents the age of transition from adolescent to adulthood in terms of neural development (Ernst, 2014), this population group is likely to be easily influenced by environmental and contextual factors and more likely to experiment with alcohol and sex (Eggers et al., 2017; Park, Scott, Adams, Brindis, & Irwin, 2014).

**Ethnicity Make-Up in Kenya**

Kenya is a multiethnic country comprised of 43 tribes. These tribes fall into three main ethnicities: Nilotes, Cushites, and Bantu (Kimuna, Tenkorang, & Djamba, 2018; Kenya Bureau of Statistics [KNBS], 2019). Kikuyu, Taita, Luhya, Meru, and Kamba are some ethnic groups in the Bantu category which makes up the largest number of ethnicities. Luos belong to the Nilotes. In this study, the largest number of participants were from Luo, Luhya, and Kisii ethnic groups. In all colonized countries in Africa including Kenya, division of land by colonizers was based on ethnic composition such that individuals from the same ethnicity were assigned particular geographic land. The purpose of this division was to divide and conquer (Nyaura, 2018). This division remains and is why most provinces and regions are comprised of homogeneous tribes. This cluster of tribes in different regions of Kenya thus means different specific cultural and traditional practices across tribes (Kimuna et al., 2018). For example, among the Luos, the most common documented practice is the practice of wife inheritance where the widow marries a

relative of the deceased (Kimuna et al., 2018; Nyarwath, 2012; Oluoch & Nyongesa, 2013; Perry et al., 2014).

Given the patriarchal nature of Kenyan societies, most traditional practices engrained in different tribes seem to negatively impact women particularly in the area of violence be it sexual or physical. Despite the government's efforts to ban or enact laws against practices such as female genital cutting, ethnic groups still adhere to traditional practices and social norms more than the law in certain instances, due to tradition or lack of awareness of such laws (Kimuna et al., 2018). Social norms that uphold men's dominance and subordination of women encourage the acceptance of traditional practices such as the practice of wife inheritance that could lead to sexual violence which has been linked to HIV. In this study, one aim was to explore how ethnicity intersects with issues of poverty and gender to exacerbate HIV risk.

**Study Purpose and Specific Aims**

Guided by postcolonial feminist epistemology, the purpose of this study was to explore HIV risk and prevention needs among young women who reside in a peri-urban slum in Kenya. This study was undertaken in Kibra, Nairobi Kenya, one of the peri-urban slums in Kenya. It was hoped that learning more about HIV risk and prevention needs using the theory of gender and power, and postcolonial theory would provide a better understanding of how to serve the most marginalized. This study will also help to shed light on how to reduce HIV burden by exploring how gender, ethnicity, and socioeconomic status intersect to impact risk behaviors and HIV prevention among young women in Kibra. This study specifically addressed the following research questions:

1) What are the daily lived experiences of young women in Kibra Kenya?

2) How do young women in Kibra experience HIV risk?

3) How do age, gender, ethnicity, religion, and poverty affect HIV risk and prevention needs? and

4) What are the HIV prevention needs for young women in the broader socio-economic, cultural, geographic, and historical context of Kenya?

**Research Approach**

After approval by the Institutional Review Boards of the University of Wisconsin-Milwaukee, Kenyatta National Hospital, and the University of Nairobi, this study sought to understand the HIV risk and prevention needs of young women in Kibra aged 15-24 using a narrative inquiry qualitative study design. The study utilized a conceptual framework guided by the theory of gender and power and the postcolonial theory. These theories were chosen because they support a structurally and societally centered approach in the understanding of HIV risk. especially among vulnerable populations. There have been calls from both policymakers and researchers to understand why young women in SSA continue to be disproportionately affected by HIV despite sweeping behavioral and treatment interventions that have produced better results in other population groups; the solution has been to explore how structural factors such as gender inequality and poverty are contributing to risk behaviors (Casale et al., 2011; Celum et al., 2015; United Nations Population Fund [UNFPA], 2020).

In this study, the theory of gender and power informed proximal factors that affect young women's daily lives concerning HIV. The postcolonial theory on the other hand helped to explore how the system of colonialism reinforces young women's marginalized status within Kenyan society and how class, gender, and ethnicity intersect to exacerbate the HIV risk and

prevention needs of young women. Another important reason why the two theories were chosen to guide this research is that they aligned well with the postcolonial feminist epistemology to which I ascribe. Although this study adopted the term *postcolonial feminism*, I was aware that some feminists also used *transnational feminism*. Postcolonial feminism was adopted because it allowed me to situate myself and the research participants within the colonial histories of Kenya (Morgan, 2009).

**Study Significance**

Since the first case of HIV was reported over four decades ago, its impact has devastated communities and countries with some communities being more affected than others. Today, approximately 36 million people are living with HIV globally while more than 36 million have died from AIDS according to the World Health Organization (WHO) with 71 percent of those residing in SSA. Although HIV is no longer considered a death sentence but rather a chronic disease, it is still one of the leading causes of death in countries located in SSA including Kenya (Mokdad et al., 2016; Piot, Bartos, Ghys, Walker, & Schwartländer, 2001). From a health standpoint, living with HIV not only impacts the quality of life but also day to day experiences of populations with issues such as discrimination and stigma (Gnauck et al., 2013; Kako & Dubrosky, 2013). Economically, both the HIV epidemic continues to require enormous resources be they financial or in terms of manpower from individuals, communities, and nations. It is unfortunate that in 2020, we have not yet found a cure to HIV but even more disheartening is that young women in Kenya continue to be at a heightened risk of the disease compared to young men. This study hopes to provide an avenue for targeted interventions for this vulnerable population and as a result, impact the greater society.

**Assumptions**

Based on my experiences, background, and postcolonial feminist epistemology, the three main assumptions related to this study are discussed below.

The first assumption was that young women would truthfully share their experiences about HIV risk and prevention. Because of my positionality including similarities and differences with the participants, one of the main assumptions was that young women would be willing to share their experiences as experts in order to inform the study's purpose. The study engaged young women in focus groups and in-depth individual interviews during data collection. Focus group and individual interviews were done in both Kiswahili and English based on participants' preferences.

A second assumption was that women would voluntarily participate in this study. Given that this study involved a marginalized population group, there were some ethical concerns regarding coerced participation or whether participants understood consent forms. Consent forms utilized were in both English and Kiswahili languages based on participants' preference. Additionally, before beginning data collection, time was spent with each participant explaining the consent form and study in more details. To further ensure that participants understood their rights, participants were reminded of their rights to decline to answer a particular question id uncomfortable or to decline to participate all together without consequences.

Last was the assumption that structural factors such as gender inequality and ethnic disparities play a role in exacerbating HIV risk especially for young women in Kenya. Kenyan society upholds and values traditional practices that inadvertently marginalize women and young people. Practices embedded in everyday life tend to put weight on the opinions of older men and

dismiss those of young women. Although these are valuable societal norms to instill respect for one's elders, this method of decision-making marginalizes young women's ability to contribute to policy decisions; thus, young women's voices are sometimes missing in policy interventions. For this study, it was assumed that young women would be able to share what works for them in terms of HIV prevention and thus inform policy and practice.

**List and Definition/Operationalization of Significant Terms**

Gender: Rejecting the notion of gender as a binary category or gender as interchangeable with sex (Hawkesworth, 2013), in this paper, gender was conceptualized as an analytical category rooted in social interactions and exaggerated through biological differences to produce power dynamics (Ko, 2012; Scott, 2010). Gender is not a fixed variable but rather a fluid category performed through embodiment (Fausto-Sterling, Birke, & Bedelow, 2003), and as such, all persons who identified as young women were included in this study.

Peri-urban and slum: For this dissertation study, the terms peri-urban and slum were combined to denote a specific geographic location inhabited by study participants. Meriam Webster defines peri-urban as an area immediately outside of a developed city and a slum as a densely populated area with informal settlements. For this paper then, peri-urban slum refers to a densely populated area with informal settlements located immediately outside of a major city. Slum is a word that has been utilized widely in the literature to define the dwelling of Kibra residents and although problematic, it was used in this study. Other popular terms that have been used in the literature and elsewhere to describe peri-urban slum include informal settlements or slums. The term peri-urban slum was adopted to denote a special location inhabited by residents in this study because it allowed for a nuanced understanding of the challenges and advantages that participants in this study shared. This study took place in Kibra, formerly called Kibera,

shown in Figures 1-4, the largest peri-urban slum in Kenya located within Nairobi, the capital city of Kenya.

HIV: The human immunodeficiency virus (HIV) is a virus that infects the immune system and depletes it of the ability to fight infections. Individuals with HIV are more prone to infections because of a weakened immune system (WHO, 2017).

AIDS: Acquired immunodeficiency syndrome (AIDS) refers to the most advanced stage of HIV (WHO, 2017).

Young women: In Kenya, youth or a young person is defined as anyone between 15-30 years of age according to the Ministry of Home Affairs, Heritage, and Sports. In population statistics and reports of national surveys on and in Kenya, the following age groups are used: 1-14, 15-24, 25-54, 55-64, and 65 and over. Given these groupings, a majority of youth are represented in the 15-24 years category. For this dissertation study, the age grouping of 15-24 was chosen because this has been identified in the literature as incurring a higher prevalence of HIV compared to the rest of the population.

HIV Risk Perception: Borrowed from the health belief model (Hochbaum et al., 1952) and other behavioral theories, HIV risk perceptions refers to an individual's judgment of how likely they are to contract HIV.

Postcolonial Feminism: Postcolonial feminism is an analytical method that seeks to illuminate how the history and politics of colonialism shape knowledge creation and cultural truths in a given society and how this construction impacts health outcomes (Anderson, 2000b).

Theory of Gender and Power: Originally developed by Connell (Connell, 1987) and adopted by Wingood and DiClemente (Wingood & DiClemente, 2000), the theory of gender and

power refers to how three main structures namely the sexual division of labor, the sexual division of power, and the structure of cathexis impact gendered relationships between men and women. For this study, the theory was used to explore how the three main structures impact the HIV risk and prevention needs of women.

**Summary**

In summation, the goal of this introductory chapter was to present the topic of this dissertation study, provide an overview of the context, significance, and the research approach. This study's purpose was to explore HIV risk and prevention needs among young women who reside in Kibra, Kenya using a qualitative methodology approach. This study hopes to contribute to a scarce but growing body of literature related to the peri-urban slum population as well as impact policy and practice in regards to HIV risk and prevention. In the subsequent chapters, more details on review of the literature specific to HIV risk (Chapter 2), the methodology utilized (Chapter 3), study findings (Chapter 4), and the discussion (Chapter 5) will be presented.

## Chapter 2: Conceptual Framework and the Literature Review

### Conceptual Framework

Traditional methods of exploring HIV risk continue to miss the needs of the most marginalized populations. Most studies either narrowly focus on risk perceptions or are guided by health belief models and biomedical models that call for individual interventions and downplay the role of structural factors (Springer, Hankivsky, & Bates, 2012). For example, in 2016, the United Nation's aim of reducing inequalities especially for young women and girls suggested the following actions; "All people, especially young people, reduce HIV-related risk behavior and access HIV combination prevention services, including primary prevention and sexual and reproductive health services" and "Young people meaningfully engag[e] in the response to ensure effectiveness and sustainability" (p.10). These actions can be considered as a good starting point in terms of meaningfully engaging young people in HIV prevention but a structural theoretical framework that seeks to elevate the voices of participants is needed to accomplish the task of meaningfully engaging young people.

This study utilized postcolonial feminist epistemology and a conceptual framework guided by the theory of gender and power and the postcolonial theory. The two theories provided a structural and societally centered framework of understanding of HIV risk, especially among key populations most at r risk. There have been calls from both policymakers and researchers to understand why young women in SSA continue to be disproportionately impacted by HIV despite sweeping behavioral and treatment interventions that have produced better results in other population groups (Casale et al., 2011; Celum et al., 2015). Some organizations such as the UNDFA have suggested a human rights and social justice approach to help close the gap on new HIV infections. Approaches that take into account how structural factors impact behaviors could

help guide interventions when it comes to HIV risk factors and behaviors. This dissertation study was guided by two theories that provide a framework for understanding young women's HIV risk and prevention from a structural perspective.

The theory of gender and power informed how issues of gender inequality manifest in the society and impact young women's daily lives in relation to HIV, while the postcolonial theory named other intersecting structural factors and provided a framework of understanding how the colonial history in Kenya reinforce young women's marginalized status within society. Another important reason for the two theories was that they align well with the postcolonial feminist epistemology to which I ascribe in that the theories allowed the research to situate participants within the context of colonial histories.

**Postcolonial Feminist Epistemology**

Postcolonial feminism has been used in studies as both a guiding framework (Mkandawire-Valhmu, Kako, Kibicho, & Stevens, 2013) as well as an epistemology in that it explains a theory of knowledge (Anderson, 2004; Staller, 2013). One study explained that postcolonial feminism can be used as both theory and/or a process whose main goal is to decolonize the research process (Racine & Petrucka, 2011). In this study, postcolonial feminism was adopted as both a way of knowing and the postcolonial theory as a way of knowledge creation.

Coupled with the theory of gender and power, I was able to not only engage in reflexivity but also situate the study questions and study participants within the historical, geographical and social contexts of gender, ethnicity, socioeconomic factors as well as culture. Additionally, adopting a postcolonial feminist framework allowed for young women in Kibra to be regarded as

experts of their own lives capable of both guiding interventions as well as resisting oppressive forces created by structural factors (Krog, 2011; Mkandawire-Valhmu et al., 2013; Mohanty, 1988).

Postcolonial epistemology in this dissertation study meant that the study explored both issues of oppression and resistance in the lives of young women in Kibra Kenya. In *Under Western Eyes: Feminist Scholarship and Colonial Discourses,* Mohanty offered a criticism of the power dynamics in knowledge creation by Western feminists about Third World feminists. She explained that women's resistance is far from monolithic and when Western feminist scholarship fails to be reflexive of its role in the global economic arena when constructing the 'sisterhood' narrative, then it is failing Third World women (Mohanty, 1988). Eurocentric assumptions of Third World women in western feminist scholarship present women as under evolved, reactionary to power, and without agency. This homogenization of all women erases those at the margins thus suppressing their voice within the feminist arena (Anderson, 2002). Mohanty contends that scholarship on women's resistance needs to be contextualized politically, ethnically, economically, and socially instead of being generalized.

For this dissertation study, postcolonial feminist epistemology guided the processes of data collection and data analysis by centering young women's voices and stories both in the process of oppression and resistance. The epistemology also informed interactions with participants during data collection. Additionally, informed by postcolonial feminist epistemology, women in this study were understood to be complex and heterogeneous, and as such, a methodology to reflect that reality was adopted.

**Reflexivity**

Before proceeding to explain the theories utilized in the conceptual framework, I would like to begin by engaging in reflexivity as necessitated by a feminist approach. Reflexivity has been identified as a crucial process in qualitative research that allows the researcher to consider one's own biases related to their positionality, worldview, and assumptions about the study participants and the study process as a whole (Hall & Stevens, 1991; Hunt, 2010; Vanner, 2015). Reflexivity is especially important in deconstructing how power and privilege affect the research question and process when engaging in communities where power dynamics may exist between the researcher and participants (Alkon, 2011). Even though I engaged in self-reflexivity as a continual process during this research study, I would like to acknowledge the role that my experiences and opinions played throughout this study.

The research process typically begins with the identification of interest from which a research question arises (Ritchie, Lewis, Nicholls, & Ormston, 2013). Like many researchers, my research interest was influenced not only by my life experiences but also those of my community over time. I am a young Kenyan woman who grew up in Kibra, Kenya. I grew up in a polygamous family structure where my father had another wife and children besides my mother. I grew up in a stable home where my mother worked hard to provide despite the limited resources. Compared to my population of interest, areas of similarity lay in the issue of gender as well as having grown up in Kibra.

My educational background is one of privilege compared to that of my population of interest. Unlike most of the young women with whom I engaged in this study, I graduated from a

high school in my community and moved on to attend university in the United States. I am also currently enrolled in a doctoral program at a research-intensive university where I have an opportunity to be equipped with skills in knowledge creation, albeit Western knowledge. In this regard, I was aware that since my social location was different from those of my research participants, it could affect the research dynamic and interaction, especially during data collection. Related to education, my socioeconomic status also differed from those of my participants because I am not only a registered nurse but I am also comfortably employed in the United States with the ability to fly back and forth between the United States and Kenya. My educational background and socioeconomic status both played a role in the power dynamics when interacting with study participants and were manifested in the way I spoke (with an American accent) as well as how I dressed. These were some practical issues I explored in preparing for data collection and helped to guide my data collection strategies. I was able to adjust my mannerisms and dress codes to minimize the power dynamics between myself and the study participants.

**The Theory of Gender and Power**

The theory of gender and power guided how the process of gendering was explored in this study. The theory of gender and power is a social structural theory that was developed by Connell to explain the structures that produce power imbalances between men and women in the society (Connell, 2014; Wingood & DiClemente, 2000). Connell described three gendered structures namely the sexual division of labor, the sexual division of power, and the structures of cathexis which favor men over women thus producing gender inequalities.

The sexual division of labor refers to the assignment of women and men to certain specific jobs and occupations (Wingood & DiClemente, 2000). The sexual division of labor is

the reason women are assigned to nurturing occupations such as staying at home to care for children while men are assigned income-generating jobs. Jobs assigned to women are likely to be unpaid or low waged and are presumed to require no education (Wingood & DiClemente, 2000). After independence, Kenya maintained the colonialist policies with traditional practices that favored men within society. For example, since men were designated as chiefs and landowners, they were also privileged in the area of education making them knowledgeable to compete in job markets and the changing economy. As a result, men would leave to go to work while women stayed home to care for children. In the rural areas, this meant than men could leave for the city for days and even months at a time leaving women at home to provide for children.

This resulted in a lack of motivation to educate young women. Education not only refers to HIV knowledge in which young women can understand mechanisms through which HIV is transmitted, but also refers to the means of achieving improved literacy, employment opportunities as well as improved standards of living (Cooper, Risley, Drake, & Bundy, 2007). Although in Kenya today there are similar numbers of boys and girls enrolled in primary education according to the United Nations Educational, Scientific and Cultural Organization (UNESCO), young girls are more likely to report disrupted education, drop out of school and perform more poorly than boys of the same age (Kimosop et al., 2015). The sexual division of labor thus leaves women with no means of supporting themselves economically, thereby forcing them into sexual relationships that may promise financial stability or even forcing them to engage in sex work, both situations of which are HIV risk factors (UNAIDS,2014).

The second structure, sexual division of power, refers to the unequal distribution of power between men and women. The distribution of power along gender lines in Kenya can be traced back to colonialism, which produced oppressive social structures within the society

(Negin, Aspin, Gadsden, & Reading, 2015). Before the colonization period, men and women in Kenya played an equally important role when it came to providing for their families and the society as a whole both economically and in passing on traditional values (Kako, 2008). This system was distorted during colonization to favor men via actions such as choosing men to be community leaders and assigning women the traditional role of staying at home to care for the children (Terborg-Penn & Rushing, 1996). In addition to gender hierarchy, colonialism also introduced ethnic hierarchy in which some ethnic groups were considered superior to others. After independence, little has been done to change the social and ethnic hierarchies in the society which is why the sexual division of power still exists today (Kako, 2008). Given only 20.8 percent of women in Kenya hold parliamentary seats and that the ratio of unemployment of women to men is 1:4, sexual division of power clearly plays a role in current policies (UNDP, 2014).

The last structure in the theory of gender and power, the structure of cathexis, refers to social norms that are upheld in society that favor men over women. An example of a structure of cathexis in Kenya is the practice of wife as inheritance and the acceptability of polygamy for men. The practice of wife as inheritance stipulates that if a heterosexual man's wife dies, the man is entitled to inherit the wife's relative, often a sister (Agot et al., 2010; Ligomeka, 2003). Although this practice is more common in rural Kenya, it also happens in Kibra where young women are expected to still comply with cultural norms.

Since the majority of HIV cases in Kenya are transmitted through heterosexual sex (Kharsany & Karim, 2016) and persistent stigmatization is still attached to the disease, it is still common for individuals to refrain from disclosing their HIV status (Kako & Dubrosky, 2013; Mugoya & Ernst, 2014) which then exposes young women involved in the inheritance to

acquiring HIV infection. Polygamy is another social norm that encourages multiple sexual partners for men, a practice that is considered an HIV risk factor (Centers for Disease Control and Prevention [CDC], 2017).

**Postcolonial Theory**

While the theory of gender and power helped to elucidate how gender inequality is manifested in the daily lives of women in Kenya, the postcolonial theory provided a framework for exploring how gender intersects with other factors within the colonial history of Kenya to exacerbate disparities in the lives of young women. While there is not one unifying postcolonial theory (Kirkham & Anderson, 2002; Racine, 2009), postcolonial theories are unified under the goal of seeking to understand the aftermath of colonialism (Kirkham & Anderson, 2002; Kirkham & Anderson, 2010; Parsons & Harding, 2011; Sochan, 2011). Beginning with Edward Said in his book entitled *Orientalism,* the author used postcolonial methods to describe how the production of knowledge by the West ( who were the colonizers) about the East (the colonized) portrayed those of Arab descent as having a different and exotic way of life compared to that the Europeans (Kirkham & Anderson, 2002; Said, 1979). The construction of an "other" category was also explored by Homa Bhaba. Bhaba extended the notion of the creation of the "other" within a postcolonial society by describing how culture was adopted and used in India during and after colonization (Bhaba, 1994)**.** Other researchers such as Stuart Hall, Gayatri Chakravorty Spivak, and Chandra Mohanty have described postcolonial ways of knowing and practice that encompass methodologies that seek to understand the impact of colonialism on the lives of those colonized both in practice and knowledge creation (Dirks, Eley, & Ortner, 1994; Mohanty, 1988; Mohanty, Russo, & Torres, 1991; Spivak, Lyons, & Franklin, 2004).

The postcolonial theory was chosen to guide this study because it provides a framework for exploring the history of colonialism. Due to the diverse number of postcolonial theories available, this study adopted the tenets of the postcolonial theory described by Kirkman and Anderson (2002). In their paper *Postcolonial Nursing Scholarship: From Epistemology to Method,* the authors offered that nursing research guided by postcolonial theory needs encompass the following five characteristics (Kirkham & Anderson, 2002). First, research needs to be framed in a political lens where issues of domination and resistance are explored on an individual, institutional, and societal levels. Second, nursing scholarship grounded in postcolonial theory needs to situate human experiences in a broader social, political, historical, and economic contexts. Third, studies guided by postcolonial theory need to center the voices and worldviews of those marginalized and decenter dominant cultures. Fourth, research needs to explore the intersectionality of race, class, and gender on health. Lastly, studies need to strive toward praxis by seeking a just society (Anderson, 2000b; Kirkham & Anderson, 2002).

In this study, postcolonial theory helped to name colonialism as a basis of understanding the lives of young women within a political lens. Coupled with the postcolonial feminist epistemology, the theory provided a basis for exploring power dynamics for young women in a dominant patriarchal society and how this group creates resistance. Secondly, since the postcolonial theory also stipulates adopting an intersectional approach that allows researchers to explore the intersection of gender, race, and class and the way these factors impact health (Anderson, 2000a; Anderson & McCann, 2002), the theory helped to name how gender, poverty, ethnicity, and age intersected within the colonial history of Kenya to affect health outcomes in the area of HIV. Together with the theory of gender and power, the postcolonial theory provided

a structural framework of understanding HIV risk factors and the prevention needs of young women in Kenya.

**Colonial History in Kenya**

Kibra, which was once a barracks headquarters for the British in 1904, was first called home by Nubis who came to Kenya from Somalia and Sudan as soldiers. Land in Kibra was originally fertile primed for crops and livestock which is why the word Kibra translates to a forested, bushy, or swampy land (Muchomba, 2014; Parsons, 1997).In the 1920s, the British government regarded Nubis as better than the "native Africans" due to their involvement in the war for the British armies. The reward for Nubis was better jobs after leaving the military. As Kibra continued to thrive (given that it was right outside a thriving Nairobi trade center), the colonial government decided it would be more ideal for whites. To drive Nubis out of Kibra, the colonial government first withdrew land settlement passes from Nubis and relocated the military barracks to Meru, a rural part of Kenya.

Despite these efforts, Nubis fought against being relocated outside of Kibra and eventually won. With the relocation of the military barracks out of Kibra however, civil administration took control of Kibra that made it easier for non-Nubis to come to Kibra (Muchomba, 2014; Parsons, 1997). By the 1930s, non-Nubis had outnumbered Nubis by a ratio of 1 Nubis to 2 non-Nubis. Today, Kibra is an ethnically diverse location with residents who still do not own any land (Morris, Britain, & Commission, 1934). This historical context was important in situating policies and practices in Kenya in relation to HIV risk. As such, the postcolonial theory was operationalized in data analysis to explore how colonialist policies still manifest in processes of gendering and patriarchy as well as systems of poverty within Kenya.

Combined, the theory of gender and power helped to name and explain structural factors that affect young women who reside in Sub-Saharan Africa such as poverty, underemployment among women, and marginalizing social norms while the postcolonial theory situated these factors within the broader context of colonialism and patriarchy. Bennett defines patriarchy as a system, be it political, social familial, or ideological that promotes male domination and privilege (Bennett, 2006). A patriarchal society is one which supports the subordination and oppression of women in a broader sense. Patriarchy in Kenya manifests itself in national governance, societal and cultural norms as well as paid work.

**Conceptual Framework: Components**

Based on the two theories, a conceptual framework was created to guide the study (See Figure 5).

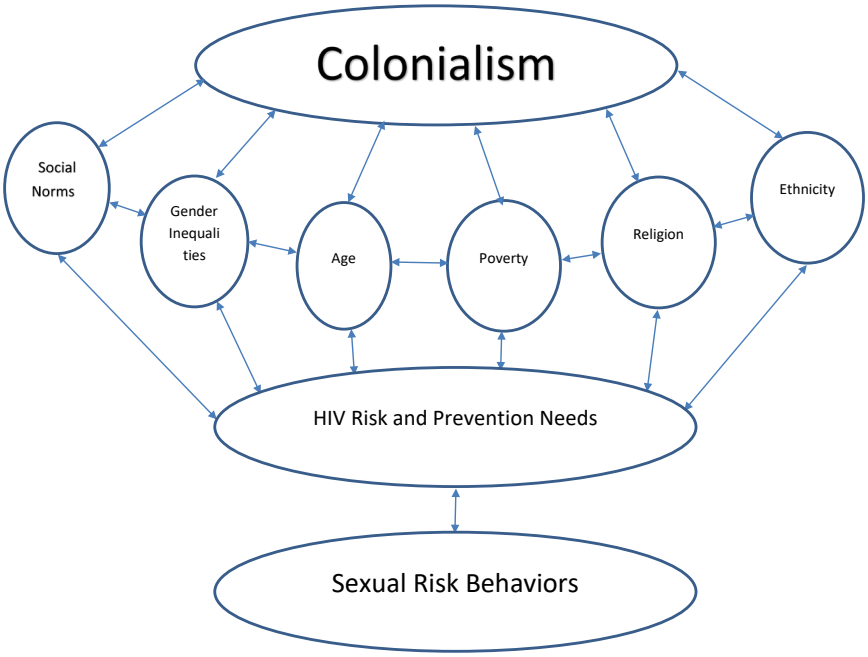



Figure 5: Conceptual framework guided by the theory of gender and power and postcolonial theory.

The components of the conceptual framework are colonialism, social norms, poverty, religion, ethnicity, gender inequality, and age. The factors intersect to impact HIV risk and prevention needs of women in Kibra. The use of the theory of gender and power and postcolonial theory allowed for a more complex and nuanced exploration of HIV risk in this population group while interrogating both the role of the society and institutions in exacerbating or protecting young women when it comes to HIV.

Thus far, there has been a scarcity of research in Kenya that has adopted postcolonial theory to understand HIV risk, especially in the Nursing field. Several nursing scholars including Louse Racine, Joan Anderson, Lucy Mkandawire-Valhmu and Sheryl Reimer Kirkham, to only name a few, have called for nursing science to shift knowledge creation by decentering the dominant discourse and work alongside the marginalized in the society for the purpose of social justice (Kirkham & Anderson, 2010; Racine & Petrucka, 2011; Scheer, Stevens, & Mkandawire-Valhmu, 2016). While there have been studies being done in nursing that have adopted a critical view in health especially in Canada and Australia, more is still needed particularly among those in peri-urban slums. This study hopes to add to nursing literature on how to engage in decolonization in a quest for interventions that embody the holistic aspects of nursing in the area of HIV prevention.

## Literature Review

### Introduction

This section of the chapter explored literature surrounding HIV risk and prevention needs among young women globally, in Africa and Kenya as well as the concept of risk perception and its relevance to HIV prevention.

HIV among young people, especially those who reside in SSA, continues to be a key public health concern. A recent report by UNAIDS in 2019 indicated that despite great strides achieved in response to HIV, countries in SSA continue to be disproportionately burdened with the disease both in incidence of new HIV infections and the number of People Living With HIV/AIDS (PLWH). As of 2019 SSA was home to over 800,000 new infections, 54 percent of PLWH, and 40 percent of AIDS-related deaths worldwide (UNAIDS, 2019). Of special interest to the HIV epidemic are the high rates of infections among young people residing in SSA who account for 42 percent of all infections (UNAIDS, 2019), with young women being twice as likely to be infected compared to their men counterparts (UNAIDS, 2014). In Kenya the same trend persists as HIV prevalence among young people increased from 29 percent of the general population in 2013 to 51 percent in 2015, with young women being twice as likely to be infected compared to their young men counterparts (NACC, 2018).

Since heterosexual sex is the dominant mode of HIV transmission among young people in SSA as well as in Kenya (NACC, 2016), increased rates of new HIV infections among young people are associated with engaging in sexual risk behaviors such as having sex without a condom, not knowing one's HIV status, and having multiple sexual partners (Centers for Disease Control and Prevention [CDC], 2015). To reduce engagement in sexual risk behaviors among a given population group, strong evidence suggests looking at how the population perceives their HIV risk. The concept of risk perception is rooted in theories such as the Health Belief Model (Hochbaum et al., 1952), Theory of Planned Behavior (Ajzen, 1985) and The Protection Motivation Theory (Buzi et al., 2013; Rogers, 1975) which suggest that for one to engage in health-promoting action (such as condom use) they would have to view the disease (in this case HIV) as a threat and probable to occur to them. The concept of risk perception, therefore, has

been applied to behavior change related to HIV prevention and has informed practice and policy among young people in Kenya and SSA. Unfortunately, even though risk perception has been widely studied in relation to HIV risk behaviors, the way it has been conceptualized and measured in different studies has led to gaps in attempting to predict HIV risk behaviors (Tsui, Lau, Xiang, Gu, & Wang, 2012).

Most studies of HIV risk perceptions continue to draw on behavioral theories, which although useful, fail to explore the role of structural factors in exacerbating or buffering one's increased risk to the disease. Focusing on HIV risk perception as a precursor to HIV risk behaviors draws focus to interventions that promote individual change and miss a host of other potential factors that impact risk behaviors. For example, a study exploring HIV risk perceptions among young women in rural Cameroon using the Health Belief Model reported that risk perceptions impacted risky sexual behaviors but the authors did not explore what factors impact risk perceptions (Tarkang, 2014). Although traditional bio-behavioral interventions such as condom use, HIV testing, medication adherence, and abstinence have been linked to better outcomes regarding HIV, there is also evidence that structural factors such as gender inequality, poverty, and sexual violence also impact young women's risk to HIV risk and need to be explored in detail (Aho et al., 2014; Tarkang, 2015; Wamoyi et al., 2014). The focus of this literature review was on understand how HIV risk, including the concept of risk perception, has been studied. Additionally, studies that focused on the impact of structural factors on HIV risk and prevention, particularly among young women in SSA were reviewed to identify gaps in the literature.

Before presenting the literature review, it would be beneficial to first provide an overview of HIV and AIDS beginning with a global view to situate the state of the disease in Kenya.

## Global Overview of HIV and AIDS

Compared to twenty years ago, urgency in response to HIV has been declining (Wang et al., 2016). This is not entirely a bad thing since tremendous strides have been achieved across the HIV care continuum and AIDS treatment. Since the year 2000 when the UN declaration included reversing the AIDS epidemic in the millennium development goals, most countries joined together to support HIV prevention and treatment of AIDS through encouraging scientific research and policy implementation. Results for these efforts have been a 33 percent decline in the number new HIV infections, a drop in the number of AIDS-related deaths from approximately 2.3 million in 2005 to approximately 1.1 million in 2015 and subsequently a global increase in the number PLWH from approximately 29 million in 2001 to over 36 million in 2015 according to statistics by UNAIDS (2018) and the WHO (2018). Although these improvements have been reported globally, breakdown by subpopulations and regions tells a different story about the gains achieved towards eradicating HIV.

Globally the main mode of HIV transmission is heterosexual encounters, which accounted for 56 percent of all infections. In SSA, 75 percent of all infections were through heterosexual encounters (UNAIDS, 2017). Women account for over half of all adults living with HIV, with over 80 percent of the transmission being sexual and a substantial portion being through vertical transmission (Karim, Sibeko, & Baxter, 2010). Although there was a significant decline in the number of AIDS-related deaths among women compared to men globally, HIV continues to be the leading cause of death among women of reproductive age particularly in Africa (Makofane, Spire, & Mtetwa, 2018). Compared to men, women are more likely to be infected with HIV over 5 years earlier (Karim et al., 2010). Women are therefore a key population group at higher risk of the disease. The vulnerability of women to HIV is complex

and can be attributed to biological differences, behavioral factors, as well as structural factors (Davis & Tucker-Brown, 2013).

**Regional Overview of HIV and AIDS**

SSA is a region on Africa defined as countries that lie south of the Sahara desert according to the Library of Congress. In SSA, although rates of new HIV infections have been declining from approximately 3.3 million in 2005 to approximately 1.5 million in 2015, this region bears a greater burden given that it is home to 54 percent of all new HIV infections even though only 12 percent of the global population resides in the region (Kharsany & Karim, 2016). Despite the reported overall decline in rates of new infections in SSA, variations have been reported by country, gender, and age group.

Differences by country have shown an increase in the number of new infections in countries such as Kenya, South Africa, Uganda, Mozambique, and Nigeria, a decline in Zambia, Namibia, and Botswana, and a plateau on infection rates in Lesotho, Swaziland, and Mozambique (UNAIDS, 2014). With the introduction of scaled-up Antiretroviral Therapy (ART), all countries in Africa have reported an increase in the number of PLWH, with the following ten countries accounting for 80 percent of all PLWH: Ethiopia, Kenya, Malawi, South Africa, Tanzania, Uganda, Mozambique, Nigeria, Zimbabwe, and Zambia (UNAIDS, 2019).

By gender, HIV in SSA has been reported to affect women disproportionately compared to men. Women accounted for 56 percent of all new infections (UNAIDS 2019). Among young people aged 15-24, young women accounted for 25 percent of new HIV infections compared to 12 percent in young men of the same age group, meaning that in SSA, the rate of infections among young women aged 15-24 is twice that of their young men counterparts (UNAIDS, 2019).

**Kenya, a General Profile**

The Republic of Kenya is located in the eastern part of SSA. The country is bordered by Ethiopia to the north, South Sudan to the northwest, Somalia to the northeast, Uganda to the west, Tanzania to the south, and the Indian Ocean to the east with the equator passing through as illustrated the map in Figure 1 (Central Intelligence Agency [CIA], 2017). With an approximated total area of 580,367 square kilometers, five times the size of Ohio, Kenya has a population of 47,615,739 with the highest concentration of people residing in the capital city of Nairobi, the coastal region of Mombasa that borders the Indian Ocean and the western region of Nyanza which borders Lake Victoria. Ethnic groups in Kenya include Kikuyu (22 % of the population), Luhya (14 %), Luo (13%), Kalenjin (12%), Kamba (11%), Kisii (6%), Meru (6%), other African (15%) and non-African (1%), (CIA, 2017).

Within the several ethnic groups found in Kenya, most speak different languages. For example, the Kikuyu ethnic group generally speaks Kikuyu, a language vastly different from what the Luhya ethnic group speaks, which is Luhya. Additionally, within each ethnic group, there are variations in dialects. As a result, there are approximately 67 languages spoken in Kenya; the national languages are English and Kiswahili. Religions practiced in Kenya are mainly Christianity, which is practiced by 83% of the population, Islam practiced by 11%, and lastly, the African religion practiced by almost 2 percent of the population. Kenya's climate varies from being arid in the interior provinces and tropical along the coast.

Pre-colonial Kenya depended on pastoralism and agriculture (Jedwab, Kerby, & Moradi, 2017; Waller, 2012). The pastoralist kept cattle such as sheep, cows, and goats and those in agriculture farmed the land for produce. There was an exchange of goods and services among community members based on need (Waller, 2012). Landowners had access to food for herds

while pastoralists provided such things as milk and hyde. The exchange created mutual communities among tribes and also introduced accumulation of wealth particularly for those who owned cattle (Waller, 2012). Land for grazing and natural resources such as water were the fabric of communities in Kenya. When White settlers began to occupy parts of Africa including Kenya, they occupied the most fertile lands such as the "white highlands" in northern Kenya (Jedwab et al., 2017; Waller, 2012). Lack of access to land for cattle to graze led to overcrowding in some areas that made way for soil erosion and overstocking, both practices that further depleted available resources for Kenyans (Waller, 2012).

The British colonizers who had settled in Kenya benefited from the most fertile land and since they also wanted to control more of Africa, they introduced trade not just within Kenya but across Africa (Jedwab et al., 2017; Waller, 2012). As a result, the Uganda Railway was constructed not only to facilitate trade and transport troops but also served as a barrier from other competing European powers (Jedwab et al., 2017). As the railway was being built, the British landowners with the most fertile soil employed Africans from Kenya, Somalia, and Uganda to grow crops such as tea, maize, wheat, coffee, and flower for trade (Jedwab et al., 2017). Africans became the laborers while European settlers were considered skilled workers both in the booming capital city of Nairobi and in agricultural cities (Jedwab et al., 2017). Land ownership became the sign of wealth in Kenya as well as the basis for cities and provinces. Cities, where the British owned land and trade took place, had the most inhabitants, and became administrative units (Jedwab et al., 2017).

To share labor and increase production, the British colonizers allowed for movement across lands and tribes among Africans (Jedwab et al., 2017; Parsons, 2011). As more tribes engaged, the tribal division began to break down. The British realized that inter-tribal

collaboration and overcrowding had the potential to impact their political power and as a result resorted to confinement of tribes in specific natural reserves based on ethnicity (Parsons, 2011). Geographic division acted as a strategy to divide and conquer and emphasized the land ties each group had to the natural reserves (Parsons, 2011; Shutzer, 2012). The British observed that in each tribe, members practiced similar customary practices, spoke the same language, and had a community responsibility rather than an individual one (Parsons, 2011). Therefore to govern and ensure that their policies were adopted, the British designated the tribes with lower social status and political order (Parsons, 2011). Using tribes as administrative units, the British colonizers ensured that those loyal followers enjoyed the benefits of missionary based education, land ownership, and were in leadership positions including chiefs (Jedwab et al., 2017; Parsons, 2011).

Governance in Kenya has transformed over the past several years. Before its independence from Britain in 1963, Kenya had a decentralized government system in which local governments were autonomous in practice and revenue generation (Hope.Sr, 2014; Kibua & Mwabu, 2007). After 1963, Kenyan political leaders assumed power and began to consolidate local governments ridding these local leaders of the authorities they had with those they governed. This process led to a centralized government that was shared between the local government and national leaders giving way to provincial administration (Hope.Sr, 2014). During this reorganization period, the national government opted to maintain the pre-independence local government structure while simultaneously transferring the responsibilities of providing primary education, health care, roads, and powers of the local government to the national government. The national government also then took over the local government's revenue areas to fund this new found responsibilities. The national government in an effort to

oversee all local areas in Kenya developed provincial administration that governed the 8 provinces in Kenya. These 8 included Central, Coast, Eastern, Western, Nairobi, Nyanza, North Eastern, and Rift Valley provinces and were headed by the provincial commissioner. This established the centralized governance in Kenya which was in place until Kenyan voted in a referendum to decentralize the government in 2010 (Hope.Sr, 2014).

In the 2010 constitution, the Kenya government dissolved the 8 provinces shown in Figure 1 and created 47 counties shown in Figure 2 as a means to not only transfer power and responsibilities to the local governments but also a means to increase access to resources for its citizens. As explained by Hope Sr., the decentralization of the government to increase the autonomy and resources of the local government allows for more accountability of the governments to its citizens and access to goods and services (2014). These benefits are yet to be reported in Kenya as the change is in its early years. Nairobi is still considered the capital city of Kenya and within Nairobi lies one of the largest peri-urban slums of Kenya called Kibra shown in Figures 3 and 4.

Agriculture and tourism are considered the main backbone of the Kenyan economy. Despite being seen as the logistic and communication hub within East Africa and a lower-middle-income country by the world bank, the unemployment rate in Kenya was 2.8% (Central Intelligence Agency [CIA], 2018). The population group most impacted by high levels of unemployment are those under the age of 35 who have been reported to bear 80% of the unemployment burden, with the rate among young people aged 15-24 reported at having 18.34% (United Nations Development Programme [UNDP], 2016). Unemployment is also reported to be higher in Nairobi county and those arid and semi-arid counties where agricultural activities are limited. Since Nairobi is the capital city, it continues to attract young people from rural areas in

search of better jobs and educational opportunities. As a result, Nairobi county has the highest rate of unemployment at 14.7% especially among young people, with women having higher rates than men KNBS (2109). Inhabitants of Nairobi, unlike those in rural Kenya, rely on manufacturing, trade, self-employment, and the cash economy (Sunday, 2017). Over 36.1% of the population in Kenya lives below the poverty line defined as living on less than $1.90 per day (Central Intelligence Agency [CIA], 2018).

In addition to high unemployment rates, Kenya like many African countries is plagued by diseases exacerbated by poverty, poor infrastructure, and lack of sanitation. HIV related diseases, diarrheal diseases, and lower respiratory diseases continue to be among the top ten leading causes of death in Kenya (WHO, 2016). In Nairobi where the rate of the urban population since 2010 has been growing at the rate of 4.3 percent, eradication of communicable diseases continues to be a challenge for the government of Kenya as the infrastructure is unable to accommodate such rapid growth. As individuals leave the rural areas to settle in the city, most are coming to the peri-urban slums, commonly referred to in the literature as slums or informal settlements which house 60% to 70% of the population in Nairobi despite only occupying 6 percent of all the land (Parks, 2013). Overcrowding, poor sanitation, poor infrastructure, and poverty are some of the driving forces of high rates of communicable diseases in Kenya and specifically among residents of Kibra peri-urban slum (Eisenstein, 2016; Parks, 2013).

In Kenya and especially within Kibra where different ethnic groups coexist, culture plays a significant role in shaping social behavior and community cohesiveness. Different ethnic groups have different cultural practices and speak different languages. In Nairobi and specifically in Kibra, studies have shown that diversity of languages and ethnicities is more likely to increase shared norms and values but could also lead to lack of safety, both important

concepts in exploring community cohesion (Bertotti, Adams-Eaton, Sheridan, & Renton, 2012; Parks, 2013). This concept of community cohesiveness plays a big role in the way community members and especially youth experience HIV risk and prevention (Kalolo, Mazalale, Anja Krumeich, & Chenault, 2019).

**Context of HIV in Kenya**

HIV trends in Kenya have followed global trends. the number of new HIV infections in the adult population declined by 15 percent from approximately 116,000 in 2009 to approximately 100,000 in 2013 (UNAIDS 2015). Among young people aged 15-24, HIV prevalence decreased from 5.9 percent to 3.0 percent among young women between 2003 and 2012. Among young men, HIV prevalence stayed between 1.1 percent and 1.5 percent in the same time frame. The latest statistics show that the HIV prevalence among young people in Kenya was 2.1 percent and young women have approximately two times the HIV infection rates compared to their young men counterparts (National AIDS and STI Control Programme (NASCOP, 2014). Despite the general decline in HIV infections and the subsequent increase in the number of PLWH, HIV is still the leading cause of AIDS-related illness, disability, and death for all population groups in Kenya, especially young women who continue to bear a disproportionate burden of the disease (Mokdad et al., 2016; Patton et al., 2016).

**Context of Health Systems in Kenya Related to HIV and AIDS**

Recent statistics by the Kenyan Ministry of Health (MOH) reported that as of 2019, AIDS-related illnesses accounted for approximately 29 percent of all mortality and 24 percent of all disability. Among youth aged 15-24, the latest statistics show that AIDS was also the leading cause of death as well as disability-adjusted life years (DALY) (Mokdad et al., 2016). Unlike within other populations where HIV prevalence has either decreased or been contained, the

incidence of new HIV infections among youth aged 15-24 has been on the rise from 29 percent in 2013 to 51 percent in 2015 according to the NACC (NACC, 2016). There is a need for targeted interventions to address the rise of HIV infections among young people in Kenya.

The Kenyan government has been working on improving its social justice healthcare system since 1963 after independence from Great Britain. The government through the MOH is responsible for providing health care to all its citizens (Oyaya & Rifkin, 2003). Kenya is home to approximately forty-three million people with over half of them living in rural areas. According to the World Health Organization, the life expectancy in Kenya is 58 for men and 61 for women. The healthcare system in Kenya has been going through restructuring to combat diseases such as HIV related diseases, malaria, and communicable diseases.

After independence, the government proposed providing healthcare for all (Center for Strategic and International Studies, 2014). Universal access was well established in 1965 when the government abolished health care costs in public healthcare facilities. Health care for all was meant to encourage the productivity of the country through a healthy population. Twenty years later though, the economy could not fund the public facilities, and fees were reintroduced. With this action, the government decided to restructure its healthcare system by coming up with the Health Sector and Strategic Investment Plan.

In addition to the strategic plan, the government of Kenya published a health policy framework in 1994 which aimed to provide quality health care that is acceptable, affordable, and accessible to all as well as report healthcare goals for 1994-2010. With this framework, the Kenyan government decentralized health care and created a healthcare delivery system guided by the hierarchy pyramid. The health policy framework continues to be the current healthcare model

and has five main levels of care delivery (Muga, Kizito, Mbayah, & Gakuruh, 2005). At the bottom of the pyramid are the village dispensaries. After the dispensaries are clinics, district hospitals, provincial hospitals, and then the national hospital at the top of the pyramid. The Government runs 41% of the healthcare facilities, non-governmental organizations (NGOs) run at least 15%, and the private sector 43%. The government operates most hospitals, health centers, and dispensaries, while the private sector operates nursing homes and maternity facilities catering to higher-income clientele.

Dispensaries are small outpatient healthcare facilities usually managed by a registered nurse. In dispensaries, you can also find a nurse-midwife. This is where immunization, family planning, wound care, and other basic healthcare needs of the population are met. After the dispensaries are clinics that would include a pharmacist on site. Higher on the pyramid, there are district hospitals, provincial hospitals, and the national hospital on top of the pyramid. Due to the introduction of the pyramid and the hierarchy utilization of health, services such as HIV education, contraceptives, immunizations, and TB tests can be implemented at different levels with the potential to be targeted (Muga et al., 2005).

The health policy framework document that was introduced in 1994 has since been incorporated into the 2010 constitution as the Kenya Health Policy, which affirms every individual's right to the highest standards of health (Government of Kenya, 2014). The policy is operationalized through various departments within the MOH that are run by the permanent secretary. Two main departments, the planning and policy department and the director of medical services, fall under a permanent secretary. The director of medical services oversees four main departments: preventative and promotive department, curative and rehabilitative department, Standards and Regulatory Services Department, and lastly Provincial Health

Services. All health-related services are represented within the four different departments. For example, HIV related programs and task force such as NASCOP and NACC operate under the preventative and promotive department. Although the government is still committed to providing healthcare to its citizens, the new Kenya Health policy has delegated a great deal of the curative departments to the private sector comprised of for-profit organizations, faith-based organizations as well as non-governmental organizations (Oyaya & Rifkin, 2003).

The two main organizations in Kenya responsible for monitoring efforts towards HIV are the NACC and NASCOP. NASCOP was first established in 1987 under the MOH as a national program responsible for coordinating HIV care across the continuum. As the HIV needs of the citizens have evolved in Kenya, so has the organization's goals through documents such as the Kenya AIDS Strategic Framework. Goals for NASCOP align closely with the goals of global organizations such as the World Health Organization, Global Fund, and the United Nations which are also financial partners with the Kenyan MOH (n.d, 2017) and deal with the transmission, increasing HIV counseling, HIV education, and testing. These three policies among others have been successful in reducing HIV prevalence within the population through knowing one's status, expelling myths about HIV, and ensuring that all pregnant women not only receive HIV counseling and testing, but that children born to mothers with HIV receive appropriate interventions.

In the area of HIV counseling and testing, for example, studies have shown this as an important first step in HIV prevention and access to care (Onsomu, Moore, Abuya, Valentine, & Duren-Winfield, 2013; Sisay, Erku, Medhin, & Woldeyohannes, 2014). Those who visit Voluntary Counselling and testing Centers (VCT) for testing not only get tested but receive pre and post counseling as well. However, despite the emphasis by NASCOP and the MOH on HIV

testing, uptake remains low among young people, particularly young women. Proposed reasons for low rates of HIV testing among young people include gender inequality, low HIV risk perception, low socioeconomic status, media influence, and lack of education (Achia & Obayo, 2013; Onsomu et al., 2013; Tenkorang & Maticka-Tyndale, 2013). These reasons represent a major critique of the HIV testing policy by the Kenyan government in adopting a psychosocial approach in response to HIV.

Although voluntary testing is effective in HIV prevention, encouraging young people alone is an ineffective method of ensuring young people's participation. As such, this dissertation study aims to contribute to this policy by exploring what young people living in peri-urban slums view as barriers to actions such as voluntary testing and as a result inform future directions of engaging this important population group. Since young people in Kibra Kenya face competing structural limitations enhanced by poverty, gender-based violence, and limited healthcare facilities, they create a great opportunity to explore what interventions they have engaged in to combat HIV and its effects.

NACC, on the other hand, was developed in 1999 specifically to address HIV/AIDS. The organization, unlike NASCOP, has a decentralized system with offices in different levels of Kenya's health care delivery system. The goal of NACC is to achieve an environment in Kenya free of HIV and AIDS-related stigma and death. To achieve this goal, the organization has partnered with private sectors including faith-based organizations and non-governmental organizations for policy implementation (NACC, 2017). Both NACC and NASCOP engage in monitoring and surveillance. In developing goals towards its vision, NACC implemented a policy related to youth communication whose goal is to assess utilization of care, knowledge, skills, and self-efficacy among youth (NACC, 2017). Although this policy aims at targeting

young people in response to HIV, it fails to encompass structural and environmental factors in addition to individual factors such as knowledge assessment and self-efficacy. A recent report by the UNAIDS and the LANCET journal identified that HIV prevention needs to emphasize both individual and structural determinants of health which involves not only educating individuals on HIV prevention but also changing policies within the greater society that continue to marginalize certain populations (Piot, 2015).

Despite NACC's efforts to engage youth in HIV prevention, I posit that without the deliberate inclusion of both young women and men from all economic and ethnic backgrounds, this effort will yield minimal benefits for some youth and particularly young women in the 15-24 age category. For my dissertation study, I engaged young women from this age group to explore their risk and prevention needs; this work has the potential to inform the council on how to engage the most at risk in decision-making conversations pertaining to HIV prevention. The needs of young women can only be met if they are given a voice and a platform to explicate them. For this to happen, there needs to be a shift in the way policy is formulated in Kenya to take seriously the voices and concerns of young people, and especially, young women. The good news is that NACC realizes that youth communication is key; however, such communication goes beyond peer to peer communication to include the notion that youth can provide vital information to policymakers. The use of the feminist methodology in this dissertation could guide policymakers on how to not only include youth but also harness their knowledge for policy purposes.

**HIV Among Young People**

In Kenya, youth or a young person is defined as anyone between 15-30 years of age according to the Ministry of Home Affairs, Heritage and Sports. In population statistics and

national surveys, most reports on and in Kenya are published in increments of the following age groups: 1-14, 15-24, 25-54, 55-64, and 65 and over. Given these groupings, a majority of youth are represented in the 15-24 years category. For this dissertation study, I chose to focus on women aged 15-24 because these have been identified in the literature as incurring a higher prevalence of HIV compared to the rest of the population. As of 2016, youth 15-24 of age represented approximately 19 percent of the population in Kenya, with young women comprising 4,411,586 and young men 4,398,554 (Central Intelligence Agency [CIA], 2018). In Nairobi county, young people comprised 18 percent of the population and 14 percent of all PLWH within the county (NACC, 2016).

Studies have reported on disparities in HIV prevalence between urban and rural residents ( Kabiru, Beguy, Crichton, & Zulu, 2011). In Kenya, HIV prevalence among urban residents was 7.2% compared to 6% among rural residents. Within the urban population, the prevalence among slum dwellers was 12% compared to the prevalence in Nairobi which is 7% (KNBS, 2010). Given that youth aged 15-24 have the highest rates of new HIV infections and that young women are at higher risk than young men, young women residing in Kibra Kenya are at an even heightened risk and represent the most marginalized group when it comes to HIV. Understanding HIV risk and prevention needs in this population group will allow us to explore how factors related to gender, area of residence, and poverty impact young women's behaviors.

Studies have reported on the importance of risk perception as it relates to behavioral change especially in infectious diseases such as HIV ( Barden-O'Fallon et al., 2004; Negeri, 2014; Nel, Yi, Sandfort, & Rich, 2013; Woodward et al., 2014). However, focusing on risk perception as a predictor of behavior although informative, can yield a narrow focus on how to intervene to elicit behavioral change (Tsui et al., 2012). This is because focusing on risk

perceptions provides a framework for understanding behavior from an individual perspective. In this literature review, the aim was to explore how not only risk perception but also HIV risk and prevention have been explored in the literature particularly among youth in SSA. Widening the focus from risk perception allows for opportunities to understand how structural factors impact HIV risk behaviors as well as perceptions among young people.

For young people, age 15-24 marks a period of transition and risk-taking. This is when young people are more likely to experiment with alcohol and drugs, as well as engage in initial sexual encounters. For many young people in Kenya, the age of sexual debut is 15 years old making this age group an important target for HIV prevention (Tenkorang & Maticka-Tyndale, 2013). Recommendations by the CDC on combating HIV infections follow the ABC model which advocates for using condoms correctly and consistently, limiting the number of sexual partners, as well as abstaining from needle sharing (2015). This model has been criticized for its simplistic view of HIV risk behaviors by ignoring the role of structural factors such as social norms and sexual violence in exacerbating HIV risk especially among young women in Africa (Kvasny & Chong, 2008). Like most countries, HIV prevention efforts in Kenya have focused on encouraging condom use, abstinence, and knowing one's HIV status (NASCOP, 2014) following the same guidelines as those of the CDC. The outcome from these efforts has led to an effect 18% decline in infection rates among adults between 2000-2013 as well as the decline in the number of people who die from AIDS by over 100,000 between 2003 to 2013 (NASCOP, 2014).

Even with the decline in the number of deaths from AIDS and the number of new HIV infections, gender inequalities persist. Young women continue to be disproportionately affected by HIV infection (Celum et al., 2015). There have been calls by UNAIDS and others (Saul et al., 2018) to consider how structural factors such as poverty and sexual violence exacerbate HIV risk

among young people. In the review of literature, the aim was to understand how not only risk perception but also HIV risk factors, and risk behaviors have been explored in the literature paying special attention to the role of structural factors particularly among youth in SSA.

**Literature Review Strategy**

The review of the literature was conducted using the search terms that included: 'Risk perceptions', 'structural factors', 'HIV', 'AIDS', 'Youth', 'Young People', 'Young Women' 'Sub-Saharan Africa', 'HIV prevention' and 'Perception of Risk' in the title and abstract fields. Books, research articles, dissertations, and periodicals were accessed through such databases as PubMed Central, JSTOR Archival Journals, ERIC (U.S. Dept. of Education), Public Library of Science (CrossRef), International Index to Black Periodicals (ProQuest), Social Sciences Citation Index (Web of Science), Health Reference Center Academic (Gale), Directory of Open Access Journals, Medline, SciVerse ScienceDirect (Elsevier) and BioMed Central. Additionally, websites including Research Blogging.org, psychology today, and Harvard Business review were searched. These databases and websites revealed studies across various disciplines including psychology, medicine, nursing, public health, epidemiology, sociology women's health as well as public health. References were managed in Endnote software.

**Inclusion and Exclusion Criteria**

As diagrammatically represented using the PRISMA diagram in Figure 6, a total of twenty-three studies were included in this review of the literature. Only studies published in English, in peer-reviewed journals, and whose full text was available via the library were reviewed. Additionally, studies were only included if they took place in SSA between 2015 and 2020 and if they involved youth. Countries included in this study were based on the United Nation's definition of countries in SSA region. These countries comprise Angola, Benin,

Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe, Niger, Namibia, Mozambique, Mauritius, Mauritania, Republic of Congo, Cote d'Ivoire, Equatorial Guinea, Eritrea and Ethiopia (United Nations, 2016). Regarding age, studies were included if they labeled study participants as youth, adolescents, or young people, including studies whose participants were university students The review focused on youth rather than age because even though the United Nations (n.d.) defines youth as anyone between the ages of 15-24, several studies did not follow this guideline. Studies were included regardless of methodology.

**Data Extraction**

A systemic method was developed a priori to ensure that articles included in the study explored HIV risk, and factors affecting HIV prevention among young people in SSA. Information extracted was recorded under the following headings: author/year, research problem/purpose, sample size, country, methodology, conceptual framework, key findings, and conclusion/recommendations. These headings were chosen because they guide the greater purpose of this review, which is to not only learn what has been done when it comes to HIV risk and prevention among young people but also demonstrate the need for more research specifically among young women who reside in Kibra**.** Table 1 documents the studies that were included in this review of the literature.

## Summary of Studies Included in the Review

Of 23 studies included in this review of literature, eight were conducted in South Africa, two in Tanzania, two in Uganda, three in Ghana, one in Zimbabwe, one in Zambia, one in Botswana, one in Cameroon and one in Ethiopia. One study included participants from both Tanzania and South Africa. Two studies were systematic reviews of literature encompassed studies from SSA. Seven of the studies were qualitative, one utilized mixed methodologies while the rest were quantitative. Only 10 of the studies reported using a theory or framework.

## Literature Review Results

When exploring literature related to HIV risk, risk perceptions, and prevention among youth in SSA, several factors were discussed to impact not only HIV risk and risk perceptions but as simultaneously impacting sexual risk behaviors and HIV prevention. The risk behaviors identified in the literature included early sexual debut, HIV testing, transactional sex, number of lifetime partners, condom use, abstinence, substance use, having casual partners, and using pre-exposure prophylaxis (PrEP). Factors identified that impact risk behaviors, risk perception, or HIV prevention included parental and peer influence, economic factors, social norms, gender inequalities, and gender norms, and alcohol use are explored in more detail below.

## Factors that Impact HIV Risk, Risk Perceptions and Behaviors

### *Parental and Peer Influence*

Parental influence was explored in the literature in terms of household arrangements (Tenkorang & Adjei, 2015) and communication between parents and youth (Goodrum, Armistead, Tully, Cook, & Skinner, 2017). The studies reported that youth who lived alone or with other family members rather than biological parents lacked closer parental monitoring or opportunities for open communications related to sexual health and thus were more likely to

engage in early sex. Goodrum and colleagues (2017) reported that social support, particularly from parents, predicted lower risk behaviors among youth. In a systemic review of literature focusing on behavioral change interventions among youth in SSA, the authors reported that of all the psychosocial behaviors reviewed, peer education was the only effective intervention in reducing HIV risk among youth in SSA (Mwale & Muula, 2017).

### *Economic Factors*

Poverty and wealth were also shown to impact HIV risk, risk perception and ability to impact vulnerability to HIV. A study among Ghanaian youth that explored whether household wealth impacted youth's age at first sexual activity reported that among young women, household wealth had a negative association which could be related to poverty (Tenkorang & Adjei, 2015). In another study, the researcher reported that among youth residing in rural Cameroon, poverty and HIV risk perception were among the factors that increased the likelihood of young women being forced into first sex by their partners (Tarkang, 2015). The study, however, looked at HIV risk perception and poverty as separate factors. In another study that was based in South Africa, researchers discussed that in a context where poverty is part of young people's lives, risk behaviors needed to be understood in the context of the sexual economy, money, and economic vulnerabilities (Bhana, 2015). Another study reported that when the government of South Africa provided cash to young people, this offered a type of social protection that mitigated the effect of poverty on HIV risk in the same population (Cluver, Orkin, Meinck, Boyes, & Sherr, 2016).

Other studies using education as a measure of economic status also reported an association between education and HIV risk perception. One study reported that women in Kenya, Lesotho, and Zimbabwe with high levels of education had lower levels of HIV

prevalence compared to those with a low level of education (Hargreaves, Davey, Fearon, Hensen, & Krishnaratne, 2015). Another study done in Zambia reported that young people in school were at lower HIV risk compared to unemployed young people and out of school youth (Chanda-Kapata, Klinkenberg, Maddox, Ngosa, & Kapata, 2016). Given the link between socioeconomic status and HIV risk and lack of studies on young women in peri-urban slum Kenya, this dissertation study hopes to add to the literature.

### *Social Norms*

Social norms refer to unspoken acceptable practices within a given society and have been shown to impact sexual risk behaviors (Latkin et al., 2013). Social norms operate hand in hand with structural factors to influence behavior (Challa et al., 2017). For example, among Ghanaian youth, norms such as unacceptability of adolescent sex were rooted in the religious structure, thus deterring young people from reporting incidents of sexual violence (Challa et al., 2017). Among South African high school students, a study reported that social norms predicted participant's intention to abstain from sex in the next six months (Eggers et al., 2017).

Social norms are present in every society. In Kenya, examples of social norms include practices such as disco funerals. Disco funerals are a popular activity when a community member dies in which young women are expected to attend night dances to fundraise for the grieving family (Zolnikov, 2013). This practice is tied to the communal nature of the Kenyan people and can be traced back to the pre-colonial era in which communities are supposed to bear each other's burdens. This practice, however, also disproportionately favors older men who often have money. During the disco funeral, the person with the money offers up a certain amount to dance with another person. Typically, an older man with money will offer to dance with a younger woman and if the young woman has money to counteract, then she can say no and

contribute the same amount. However, if the young woman has no money, then they would be expected to dance with the man. In this sense, the older man ends up controlling the involvement of young women (Njue, Voeten, & Remes, 2011; Zolnikov, 2013).

Another example of social norms in Kenya is practices of widow cleansing and wife inheritance which have been linked to higher HIV prevalence (Perry et al., 2014). Widow cleansing refers to a practice where a wife is required to engage in unprotected sex to undo the impurity caused by the dead husband. These practices are more common among the Luo and are practiced more in rural areas than in urban Kenya (Perry et al., 2014).

Kvansy and Chong explained that in African communities' female sexuality, socially acceptable behaviors such as wives' submission in marriage and abstaining from sex until marriage take root in patriarchal power (2008). Young women in African societies, where patriarchal powers manifest through societal norms and in some instances law, face challenges regarding negotiating for sex especially within monogamous relationships (Bhana, 2015; Ganle, 2015; Kvasny & Chong, 2008). Social norms are therefore a factor that could impact young women's HIV risk and prevention need.

### *Gender Inequalities and Gender Norms*

Using the ecological framework and gender theory, a study among young men in Tanzania reported that regardless of whether the men were in rural or urban Tanzania, masculine norms contributed to unsafe sexual practices such as having sex without a condom (Sommer, Likindikoki, & Kaaya, 2015). In the study, the authors found that gender norms that emphasize masculinity and femininity coupled with peer pressure inhibited young men's ability to engage in safe sexual practices regardless of whether they had education on what these practices were.

Gender inequalities and discrimination negatively impact young girls and increase their HIV risk (UNAIDS, 2019). A recent study reported that gender inequalities led to differential effects of risk factors on sexual debut between men and women with the highest effects being felt among women (Sia, Onadja, Nandi, Foro, & Brewer, 2014). Although this study was not specific to Kenya or young people, it provides evidence that gender inequalities could lead to differential risk factors among young people.

Some studies have examined how gender norms affect sexual behaviors. In a qualitative meta-synthesis on sexual learning among adolescents in East Africa, researchers reported that gender norms shaped how participants were primed for sex (Knopf et al., 2017). In the study, researchers found that the gendered societies in Kenya, Uganda, and Tanzania impacted young women's access to education, access to social networks, and the age of marriage. The researchers reported that because of gender norms, young adolescent women were more likely to report being pressured to abstain from sex or risk rejection, unlike their men counterparts who were encouraged to go to school. In the same study, the researchers found that gender norms made it normal for young adolescent women to bear domestic responsibilities causing most to head households whenever needed, unlike their men counterparts who were given uninterrupted education opportunities as well as encouraged to form social networks outside the home.

### *Alcohol Use*

Alcohol use was cited in the literature as impacting risky sexual behaviors. Among youth residing in Ethiopia, alcohol use was associated with early sexual initiation, having multiple sexual partners, inconsistent condom use, and having sex with high-risk partners (Kassa et al., 2016). Among youth in South Africa, a different study found that despite the youth's intention to use condoms, those who used marijuana and alcohol reported a lack of condom use during the

sexual encounter (Manyaapelo et al., 2017). Another study among youth in Tanzania concluded that youth who lived near where alcohol was sold were more likely to use alcohol and in turn forego condom use when practicing sex (Sommer, Parker, Msacky, Kajula, & Kaaya, 2019). In the study, the researchers offered that it would be more beneficial for condoms to be sold at places where alcohol is consumed to encourage safer sex practices.

Alcohol abuse is emerging as a public health threat especially among youth in Kenya. In 2010, among those aged 15 and above, the prevalence of alcohol use disorder and alcohol dependence was 3.2% (5.8 among men and 0.8 among women) and 1.4% (2.4 among men and 0.4 among women) respectively (WHO, 2014). These estimates are substantially understated due to a high number of unrecorded alcohol intake and the lack of a national surveillance tracking system for alcohol consumption (Jenkins et al., 2015). Types of alcohol consumed in Kenya include beer which accounts for 56%, spirits (22%), and traditionally brewed and distilled alcohol from grains and seeds (20%). Traditionally brewed alcohol is common in rural parts of Kenya and is mostly measured by the amount of money spent on it rather than the ethanol content. Traditional alcohol dominated social and communal activities in Kenya historically but this has changed dramatically with the introduction of commercial distillers and regulation on alcohol production (Willis, 2006). With the current evidence linking alcohol use to 13% of new HIV infections in Kenya (Braithwaite et al., 2014), this study explored the role of alcohol on HIV risk among young women.

**Present Study**

As a country, Kenya has come a long way in response to HIV. Compared to when the disease was first discovered in the country, the government has worked hard to improve surveillance and increase its effort to lower HIV rates as well as deaths from AIDS. Beginning

with policies that mandated HIV testing for each pregnant woman and increased ART access to HIV pregnant women, progress can be seen in the 49% reduction of vertical transmission from mother to child between 2013 and 2015. Other important interventions that have yielded great results have been increasing condom access to the population, increasing ART to people living with HIV, and most importantly investing in research and monitoring HIV and AIDS progress (NACC, 2016).

Based on the results of the literature review, it would be beneficial to explore how structural factors such as poverty, gender inequalities, social norms, alcohol use, and parental and peer influence impact the HIV risk and prevention needs of young women in Kenya. In the literature review, although structural factors were shown to impact HIV risk and prevention, few studies were reported on young women in peri-urban Kenya. Although tremendous progress in response to HIV and AIDS has been achieved in Kenya, more still needs to be done especially among young women in peri-urban Kenya. This study utilized the theory of gender and power and postcolonial theory to explore HIV risk and prevention needs among young women in a peri-urban slum in Kenya. This study will add to a much-needed area of research regarding young women in Kibra, Nairobi Kenya.

**Summary**

The chapter started by describing the study's conceptual framework then went on to describe the state of the science of HIV risk and prevention needs of youth in SSA. Since the conceptual framework also guided the literature review, it was important to describe it before discussing the literature review. After discussing the conceptual framework, a global account of HIV and AIDS as well as the state of the disease in Kenya and Nairobi was explained. The chapter concluded by presenting what has been studied when it comes to HIV risk, risk

perception, and risk behaviors among youth in SSA. Young women residing in Kibra Nairobi Kenya represent a group with the highest prevalence of HIV. They are the key population group at higher risk because of geography, poverty, gender inequality, social and gender norms. There have been few studies exploring HIV risk factors among young women in Kenya and even fewer that have utilized structural theories. The review of the literature identified an important knowledge gap that this dissertation study hopes to fill. Guided by the theory of gender and power and postcolonial theory and postcolonial feminist epistemology, this study seeks to understand young women's HIV risk and prevention needs using a structural lens. In chapter 3, detail on the methods that were used to conduct the study will be presented.

## Chapter 3: Methods

This chapter covers the methodology used in the study. Guided by postcolonial feminist epistemology and a framework developed from the theory of gender and power and postcolonial theory, the purpose of this qualitative narrative inquiry was to explore HIV risk and prevention needs among young women who reside in a peri-urban slum in Kenya. Specifically, this study sought to answer the following research questions; 1) What are the daily lived experiences of young women in Kibra, Kenya? 2) How do young women in Kibra experience HIV risk? 3) How do age, gender, ethnicity, religion, and poverty affect HIV risk behaviors and prevention needs? and 4) What are the HIV prevention needs for young women in the broader socio-economic, cultural, geographic, and historical context of Kenya?

The chapter will be divided into eight sections following suggestions by Bloomberg and Volpe (2008) as follows; a) Qualitative Research Approach, b) Study Design, c) Institutional Review Board (IRB) Approval d) Recruitment, e) Research Sample, f) Data Collection Tools and procedure, g) Data Management and Analysis, h) Ethical considerations, and i) Scientific Rigor.

### Qualitative Research Approach

When exploring the literature on HIV risk factors, the concept of risk perceptions has been studied more frequently. The majority of studies on HIV risk perception in SSA have utilized a quantitative approach to quantify the relationship between risk perceptions and HIV risk behaviors. For example, Zungu et al (2016) reported on differences in risk perception on behavior by circumcision type between men who underwent voluntary or traditional circumcision; they found that those who underwent traditional circumcision were less likely to be low-risk alcohol users. Individual HIV testing was explored by Nel and colleagues who

reported an association between fear of being tested and victimization based on sexual orientation and race which impacted risk perception among men who have sex with men (Nel, Yi, Sandfort, & Rich, 2013). In a different quantitative study, researchers reported a disconnect between risk perception and sexual risk behaviors (Nkomazana & Maharaj, 2014) while another found that strong peer pressure and social norms as having effects on risk perceptions (Sommer, Likindikoki, & Kaaya, 2015). Beyond individual risk, some other quantitative studies have also explored HIV risk perceptions in relation to social issues such as social inequalities like the one by Wabiri and Taffa (2013). In the study, the researchers found that women in the poor socioeconomic strata reported higher HIV risk perceptions and that as one's socioeconomic status improved, their risk perception decreased. Although these studies have been informative, qualitative studies are needed to gain an in-depth understanding of the context of risk perception and other factors that impact the HIV risk of population groups.

There have been some qualitative studies done on HIV risk perceptions but none has been in Kenya or with young women. An example is a study by Munyewende and her colleagues in which they utilized qualitative methodology to explore HIV risk perceptions of migrant women from Zimbabwe residing in South Africa; they found that these women perceived themselves to have low HIV risk because of barriers to accessing care and having poor experiences with health workers (Munyewende, Rispel, Harris, & Chersich, 2011). Going beyond the concept of risk perception, this study focuses on HIV risk and prevention among young women in Kenya. Few studies have explored HIV risk factors among young women in Kenya using a qualitative research design.

Although quantitative methods have been useful in generalizing findings and applying them to multiple populations, this study aims to center the voices of young women who reside in

Kibra and to gain an in-depth understanding of how issues of social class, gender inequalities, and cultural norms interact to either exacerbate or buffer HIV risk. Through an in-depth analysis, qualitative methods can help to answer the questions of how, why, and what within social and cultural contexts of the research participants (Ormston, Spencer, Bernard, & Snapp, 2013). The qualitative design allowed for a holistic understanding of young women's HIV risk, risk perceptions, and prevention needs taking into account historical, cultural, economic, and local contexts which will not only contribute to research but also shed light on the complexities and diversity of women (Bloomberg & Volpe, 2015; Mohanty, 1988; Ormston et al., 2013).

The qualitative design also aligned well with the postcolonial feminist epistemology to which I ascribe. One's ways of knowing are supposed to influence methodology through guiding participant-researcher relationship, preservation of data quality as well as affect data analysis (Carter & Little, 2007). Postcolonial feminist epistemology stipulates that researchers engage with participants in such a way that they uphold and promote decolonization of both knowledge created and daily interactions. This approach includes engaging in self-reflexivity and deliberately deconstructing power relations between researchers and participants (Racine & Petrucka, 2011). Postcolonial feminist epistemology guided the process of sampling, data collection, and analysis within a qualitative method design.

**Study Design**

Narrative inquiry is distinct from other qualitative research designs in that it allows for meaning-making in people's lived experiences by emphasizing storytelling and thus uncovering the complexities of how day to day practices impact a given phenomenon (Bloomberg & Volpe, 2015). This design lent itself better to this study because it allowed women to share their lived experiences and in so doing, provided space for meaning-making. Stories people tell about their

lives are indeed shaped by the historical, social, cultural, and political contexts. As stipulated by the study design, the study took place in Kibra, within participants' familiar environment (Chase, 2011).

Narrative inquiry design also provided a framework for analysis. As explained by Susan Chase (2011) in her chapter on narrative inquiry, this study design has been used in the past to illuminate ways in which marginalized groups in society resist dominant discourses through storytelling. This approach of narrative inquiry aligned well with postcolonial feminist epistemology and the theory of gender and power both of which guided the study, making narrative inquiry suitable for data collection and analysis.

Before settling on narrative inquiry design, other qualitative approaches such as grounded theory, phenomenology, and case studies were considered. Grounded theory methodology refers to a structured qualitative design whose goal is to achieve data saturation and contribute to theory formation (Spencer, Ritchie, Ormston, O'Connor, & Barnard, 2013; Strauss & Corbin, 1998; Wilson, Hutchinson, & Holzemer, 2002). This dissertation aimed to describe and understand young women's HIV risk and prevention needs which did not align with the goal of grounded theory. Although grounded theory design as a whole was not chosen for this study, some tenets of the design such as theoretical coding during analysis to enhance scientific rigor was adopted. Phenomenology, on the other hand, was not chosen as a study design because unlike narrative inquiry which emphasizes stories participants tell, phenomenology focuses on participant experiences in relation to psychological concepts (Spencer et al., 2013) which can limit the broader structural view that this study hopes to explore. Lastly, even though case studies allow for an in-depth understanding of a particular phenomenon using one's story, it typically isolates research participants by focusing on one story at a time (Spencer et al., 2013;

Stevens & Hall, 1996). This study aimed to tell stories of multiple participants especially focusing on the similarity of experiences, the main reason why case studies design was not adopted.

**IRB Approval**

Before data collection, and after research proposal approval by the dissertation committee, IRB approval in Kenya and the United States was sought. Approval to both conduct the study and waive parental consent for young women aged 15-17 was obtained. The only exception was for participants in high school who resided with a parent/guardian, explained more in the recruitment section.

**Recruitment**

Recruitment for this study was done through gatekeepers. Although I grew up in Kibra, I have also spent the last ten years in the United States and a lot has happened in those ten years including civil conflict post-elections between December 2007 and February 2008, which led to internal migration and displacement. Given this reality, recruitment took place at three specific locations: a local high school, a women's support group, and from the community all located in Kibra. Throughout graduate school studies and during the IRB process, time was spent in Kenya in an effort of build rapport with both gatekeepers and potential study participants.

At the school and support group sites, purposive sampling was utilized while in the community site, the snowballing sampling method was used. At the high school and support group sites, the recommendation of gatekeepers was used to identify young women who 1) were aged 15-24, 2) could speak and understand English or Kiswahili, and 3) were willing to participate in the study either via individual interviews and/or focus group interviews. Although

restricting participants to those who only spoke English and Kiswahili could be seen as a limitation, almost all residents in Kibra speak one of these languages. Since using gatekeepers had the potential to exclude young women who were not a part of the support group or high school (Ritchie, Lewis, Nicholls, & Ormston, 2013), snowball sampling was adopted where young women from high school and support group were asked to recommend other young women who may be eligible and willing to participate in the study that were in the community. These women made up the community group sample. The decision to recruit from the community was to get a more diverse perspective and include more voices. The three sites were located in different wards within Kibra constituency allowing for triangulation.

After being introduced to study participants by gatekeepers in the support group and high school sites potential participants were approached and the study explained in more depth. The in-depth explanation of the study included informing participants of all that is included in the informed consent shown in Appendix 2. Those participants willing to be a part of the study after listening to the in-depth explanation of the study were asked to remain back. Among those willing to participate, a screening questionnaire in Appendix 1 was used to identify those participants aged 15-24, who could speak and understand English or Kiswahili, those who were available in the next two days, and those considered mature minors. Mature minors referred to those participants who were either; 1) living separately from parent/guardian, 2) financially independent 3) head of household 4) married/have been married, 5) pregnant/had been pregnant or 6) a mother. Only participants aged 15-17 who were considered mature minors in addition to those aged 18-24 were allowed to participate in the study as they met the criteria for waived parental consent at all study sites except for participants in high-school. All eligible participants were asked to remain back while the rest were asked to leave.

Those participants who met the eligibility criteria were given a chance to sign up for the best day and time to come back for the actual study. Potential eligible participants were also given my local cell phone number which they could use to contact me. Based on the date, time, preferred language, and age group of potential participants, participants were divided into either focus groups or individual interviews and ended up with two focus groups (with 6-8 participants) and an average of 7-10 individual interviews at the high school and support group sites. Participants at these two sites were asked to recommend other young women that were not a part of either the high school or community site that would like to a part of the study. Based on the recommendations of participants in high school and support groups, 25 more participants from the community were recruited using snowball sampling. I met with these participants at a central location in the community where they were divided into either individual or focus groups based on age and availability.

For those potential eligible participants in the high school who resided with a parent/guardian, each received a self-explanatory consent form for parents included in Appendix 3 to read and sign. This approach was based on feedback from the in-country supervisor who reported that students attending high school did not qualify for waived parental consent. The students were required to bring back the parental consent form before data collection. If a parent declined to sign the consent form, then the student did not have to come for data collection. None of the parents declined to sign the consent. In addition to the signed parental consent, I called the parent/guardian to verify the consent before data collection. Students aged 15-17 who lived independently were excluded from the study as these would require consent from the headmaster/principal.

**Research Sample**

The purpose of this study was to understand the HIV risk and prevention needs of young women aged 15-24 who reside in a peri-urban slum Kenya. This age group was particularly important because it not only represents the backbone of the youth population in Kenya according to the KNBS but is also the group most burdened with new rates of HIV infections (National AIDS Control Council (NACC), 2018). Although the Kenyan Ministry of Health defines youth as those between ages 15-30 (2006), the decision to limit the study population to 24 years of age was based on the literature that this is the group most impacted by new HIV infections (NACC, 2018). Additionally, limiting the age group allowed for precise data collection that is rich.

In qualitative research, sample size depends on the scope of the research question and the qualitative methods being employed (Morse, 2000). In her editorial on determining the sample size, Janice Morse (2000) suggests for example that when using semi-structured interviews, the richness of data can be achieved because each interview is more likely to provide a small amount of data. For this study, both semi-structured individual interviews and focus groups were used to collect data.

A total of 73 participants were recruited of whom 27 participated in individual interviews (10 from high-school and support group site and seven from community site) and 46 participated in focus group interviews. In the community site, there were two focus groups-focus group one with 8 participants and focus group two with 7 participants; while in the high school site, there were 8 participants in each focus group. Lastly, at the support group site, there were 7 participants in focus group one and 8 participants in focus group two.

**Data Collection Tools and Procedure**

Based on their availability, participants were divided into focus groups and individual interviews. All interviews were done in the participants' environment. Data collection involving high-school participants took place at the high school on the weekend when no other students were on campus. Support group interviews, on the other hand, took place in one of the rooms at the support group site while data collection in the community took place at a home close to most participants. Meeting with the participants at a location close to them took the burden off the participants and allowed them to be more comfortable sharing their experiences.

Before beginning focus groups or in-depth individual interviews, each participant met with me individually for approximately five minutes. During this time, the consent form was explained in-depth, and participants had time to ask questions about the study. Each participant was given a copy of the consent form as shown in Appendix 2 but they were not required to sign it to maintain confidentiality. During this one on one time, demographic data were also collected using the demographic sheet in Appendix 6. These sensitive data were based on the literature review and allowed for the contextualization of findings from the study. One of the questions asked of participants included HIV status. Participants were reminded that they had a choice to opt-out of disclosing their HIV status and that information disclosed in the demographic data would be de-identified. Participants provided answers to the demographic data orally while I filled out the demographic data form. This was to minimize the identification of participants based on handwriting.

In the focus group interview setting, participants were asked to arrive within five-minute intervals. This was to accommodate the one on one time to explain the study, go over consent, and collect demographic data. This time was also used for participants to socialize, providing

space for the initial steps of focus group interactions to take place. After finishing the demographic data collection, individual or focus group interviews commenced. The semi-structured interview guide in Appendix 4 was used for individual interviews and the focus group interview guide in Appendix 5 was used for the focus group interviews. In the individual interviews, the focus was for young women to tell their individual stories while in the focus group interviews, the discussion was around experiences of young women as a group. In the individual interviews, these questions served as a loose guide leaving room for probing whenever necessary. The order of questions in the focus group interview guide was based on Tuckman and Jenson's model of group phases namely forming, storming, norming, performing, and adjourning (Finch, Lewis, & Turley, 2013). In the forming stage, participants met in the focus group for the first time and so the beginning questions were general and aimed at introducing participants and laying the groundwork. The guide then built up to ask more probing questions as participants continued to learn more about each other and felt comfortable to not only agree with one another but to also disagree. Participants were asked to choose pseudonyms with which to identify during focus group interviews and individual interviews. The pseudonyms were related to the color of clothing participants were wearing on the day of data collection. If two participants were wearing the same color, we looked for the one with multi-colored clothing and had them choose a different color from that.

Focus groups and individual interviews were recorded using a digital recorder. All participants agreed to be audio recorded. Individual interviews lasted approximately 30 minutes each while focus group interviews lasted approximately 60-120 minutes. Both interviews were conducted mostly in Kiswahili. Participants responded in English and Kiswahili.

**Data Management and Analysis**

Digital recordings were transferred to a password-protected thumb drive via a password-protected computer at the end of each day. During the time of transferring the data, I listened to interviews paying special attention to questions that needed more probing and which ones needed clarification. This knowledge was then applied to the next set of interviews. This was the aspect of the theoretical coding approach borrowed from the grounded theory methodology utilized in the field. Listening to completed transcripts helped to inform upcoming focus groups or individual interviews (Charmaz, 2011; Wilson et al., 2002). Each interview was transcribed verbatim in Kiswahili. After transcriptions, the interviews were back-translated from Kiswahili to English. Due to the volume of the data collected, a local assistant in Kenya was hired to help with transcription and translation. The assistant was educated on the importance of confidentiality before beginning.

The assistant only had access to one transcript at a time. No participant identifiers were in the transcripts. Using an assistant who was local helped to ensure authenticity and preservation of the language. The assistant first listened and transcribed the transcripts verbatim and then sent the finished transcripts to me. I then also listened to transcripts and transcribed them with a copy of the assistant's transcript next to me. This process helped to ensure that the context and culture were preserved through language. After transcribing, we started translating. The assistant received one transcript at a time with the audio and the goal was to translate the interview line by line in parenthesis next to the original Kiswahili transcript. After the assistant was done, I also followed the same procedure. The process of transcribing and translating ensured emersion in data. Having a local assistant also helped to ensure that even while translating, the English language spoken in Kenyan was preserved. There were instances when our translations would be

different in terms of how a word was translated. In these cases, field notes were used to ensure that participants' authenticity was maintained.

The purpose of field notes is to document what is observed by the researcher during data collection as well as provide an outlet for the researcher to be reflexive on their positionality at any given stage of the research process (Mulhall, 2003). Coming from the United States, taking field notes was especially important as it provided an opportunity to document the surroundings, experiences, and behaviors during data collection. Field notes were instrumental in clarifying specific terminologies.

Transcripts were transcribed and translated in Microsoft Word. Translated data were then imported into MAXQDA, a data analysis software, for coding and in-depth analysis (Denzin & Lincoln, 2011). Thematic analysis method within the narrative analysis was used to analyze transcripts. Individual interviews were analyzed first followed by focus group interviews. For each interview, a within-case analysis was completed and then an across-case analysis with emphasis on how participants were contributing to the research questions as well as the conceptual framework. Each interview was read and re-read and codes developed. Codes were then analyzed across interviews to see if the meaning of codes applied to other transcripts. Codes that kept repeating within and across interviews were then grouped into themes presented in the findings section. The emphasis during analysis was on collective stories of participants within the context of Kibra and Kenya, from which conceptual groupings of recurring themes were identified. The thematic analysis emphasized story contents and allowed for both across and within story analysis with a special focus on common themes (Riessman, 2008). In the process of translating, transcribing, and analyzing, field notes obtained during data collection were

instrumental in contextualizing and clarifying texts. After themes were identified, the major professor read them to ensure that the meaning of codes was in line with identified themes.

## Ethical Considerations

### *Informed Consent*

Approval from the University of Wisconsin Milwaukee (UWM), Kenyatta National Hospital, and University of Nairobi Institutional Review Boards (IRB) was first sought before participant recruitment and data collection. The required more time as this study dealt with minors aged 15-17 years old. Before data collection, a few concerns related to the IRB process were raised by my committee. The first concern related to the issue of informed consent. Per the IRB protocol, two informed consents were required for participants to sign, one for the study itself and another for audio recording. Based on discussions with faculty members, it was realized that the act of signing consent may have implications for power dynamics between the research participants and the investigator. Additionally, since this study was related to HIV, a topic that still encounters a great deal of stigma, it was considered more prudent to apply for a waiver so that participants did not have to sign anything but instead provide verbal consent. Both the IRB at the University of Milwaukee-Wisconsin as well from the University of Nairobi and Kenyatta National Hospital approved the request for participants to provide verbal consent.

### *Parental Consent*

Another concern had to do with parental consent for the participants aged 15-17. An explanation was provided to the IRBs that requiring legal guardians of participants to permit their participation in the study posed several risks including that of stigma and discrimination. Since this study looked to explore HIV risk factors and behaviors, the information was expected

to be sensitive and requiring confidentiality. Given this reality, the waiver for parental consent for study participants from IRBs in UWM and Kenya for participants aged 15-17 was granted and all the participants received a general study consent in Appendix 2 which was read to each participant and discussed before data collection.

The only exception was for high school students who resided with a parent or guardian. Based on feedback from the in-country supervisor, this group of participants needed to be protected. For these students, a self-explanatory consent form shown in Appendix 3 was given to them to take home for parents to read and sign. If the parent was unable to read the consent, the student was instructed to read for the parent and guardian. The students were also given a local phone number to contact in case of any questions. For participants who lived independently and thus had the high school paying for room and board, they still received parental consent that the principal was in charge of signing. None of the students living independently participated in the study.

***Possible Coerced Participation***

Another ethical consideration was related to the possible coercion of participants. To thank participants for taking the time to be a part of the study, each participant received 200 Kenyan shillings, approximately $2.00. Originally, the plan was going to give each participant 2 kilograms of flour (approximately 120 Kenyan shillings) and 0.5 ml of cooking oil (approximately 70 Kenyan shillings) for an estimated total of 190 Kenyan shillings; however, this was changed because carrying these items to each study site was not feasible and could also possibly impact participants' decision to participate for the gift due to the visibility of the items.

This thank you gift was given to each research participant after individual or focus group discussions were completed. During the first five minutes when the consent and study details were explained to participants, each participant was informed that in case they chose to leave the study early, they would still receive the token of appreciation. There was a possibility that some participants could potentially choose to participate in the study because of the incentive. As such, I ensured that participants understood their right to leave the study at any time and still receive the incentive. Participants were also continually reminded both during the focus group interviews and individual interviews of the right to leave the study early or the right to not answer a given question if uncomfortable. None of the participants interviewed left the study early.

***Confidentiality***

Another potential ethical concern was the issue of confidentiality, especially within focus group interviews. Since this study was related to HIV, there was the possibility of participants sharing sensitive information related to HIV diagnosis within the focus group setting that other participants could potentially end up sharing with non-research participants. To minimize potential disclosure, participants were reminded at the beginning of the study to refrain from sharing any information from the focus groups with other members that were not in the study. Furthermore, to protect participants' privacy, personal identifiers were not collected. Instead, participants chose a pseudonym both for the focus group and individual interviews. The pseudonym was a color. In the focus group interviews, participants identified each other by the pseudonym.

To further maintain confidentiality, participants were not be asked to sign consent forms as this could be linked back to individuals. Additionally, I filled out all the demographic data based on participants' responses ensuring that confidentiality was maintained and thus, names

were not be collected on the demographic surveys or used in the discussions. For the case of high school students, the consent signed by parents was locked up together with the demographic data in a safe and later transported back to the US in a carryon bag.

Research participants were asked to disclose their HIV status as this information was important in understanding HIV risk factors and behaviors. This disclosure was obtained in private during the one on one demographic data collection time. Participants were reminded that they could opt-out of disclosing if uncomfortable. Additionally, in the focus group, discussion questions were more general to avoid potential disclosure of personal information.

### *Emotional Stress*

Lastly, because of the nature of the study, there was potential for emotional stress to participants when talking about personal experiences (for example if participants were at risk for HIV, were living with HIV or knew someone living with HIV). If participants experienced emotional distress, a planned debriefing opportunity was available to all participants after focus group interviews or in individual interviews were completed. Additionally, participants were given a list of community resources included in Appendix 7 that they could easily access for both psychological and physiological distress.

## Scientific Rigor

Scientific rigor in qualitative research is employed by paying attention to the study's credibility, dependability, confirmability, and transferability (Bloomberg & Volpe, 2015). Credibility refers to how well participants' voices were captured and interpreted by the researcher (Ritchie et al., 2013). Lewis and her colleagues (2013) suggest the use of multiple data collection sites, employing different theories as well as using more than one data source to

enhance credibility. To enhance triangulation, this study had three different recruitment sites-the the high school, support group, and the community. Additionally, individual and focus group interviews in addition to fieldnotes were incorporated.

Dependability refers to whether the results of the study are consistent with data collected and is ensured through meticulous documentation of rationales and steps as to why and how decisions were made during the research process (Lincoln & Guba, 1985). For this study, a detailed decision log in addition to field notes was kept during data collection to enhance the study's dependability.

Confirmability refers to how well the researcher's biases are minimized to center the voice of participants. Lincoln and Guba (1985) in defining confirmability suggested that researchers keep a decision trail, engage in reflexivity as well as triangulate findings. I engaged in constant reflexivity throughout this study from data collection to data analysis. Additionally, having an assistant who resides in Kenya helping with transcribing and translation ensured that the voice of participants was prioritized, and the context preserved.

Lastly, in achieving scientific rigor in this study, qualitative researchers maintain the need for transferability of findings. Transferability is defined as the ability of the study to be applied to other settings (Lincoln & Guba, 1985). Transferability can be achieved through a rich description of both the theoretical and inferential as well as ensuring that the interpretations of finding are well supported by the data (Lincoln & Guba, 1985; Ritchie et al., 2013). In this study, a rich description of both the theoretical, representational, and inferential contexts has been provided allowing for transparency on how transferability can occur. This study can be translated to other urban informal settings that experience similar socioeconomic challenges.

## Summary

The purpose of this chapter was to detail the methodology that was implemented to understand HIV risk and prevention needs for young women age 15 to 24 who reside in Kibra, Nairobi, Kenya. Given the scarcity of qualitative data on HIV risk and prevention needs among young women in Kenya and the nature of the research purpose, this study, being guided by a conceptual framework developed from the theory of gender and power and postcolonial theory, utilized qualitative and feminist research methodology to provide an in-depth understanding of this population group. Narrative inquiry research design was employed since it provides room for storytelling within participants' natural surroundings and allows for across and within case thematic analysis of narratives. Data collected from both the focus group and individual interviews were imported into MAXQDA for data management and analysis. This chapter concluded by outlining how ethical concerns were addressed as well as actions taken to achieve scientific rigor. In the next chapter, the findings of this study will be presented.

# Chapter 4: Findings

The purpose of this chapter is to present findings on HIV risk and the prevention needs of young women who reside in Kibra, Nairobi, Kenya. The chapter begins with a presentation of the demographic data followed by themes from both the individual and focus group interviews.

## Demographic Data

A total of 73 young women aged 15-24 took part in this study: 27 in individual interviews and 46 in focus group interviews. The demographic data collection sheet was divided into three categories; personal information, socioeconomic status, and health. Table 2 in the table of contents entails a summary of the demographic data.

### Personal Information

The average age of participants in this study was 18 years old with a range of 15-24 years old. All participants self-identified as female. Most of the participants (n=71) reported that they had siblings. The average number of siblings was three. In terms of relationship status, the largest number of participants (n=44) were single and only around sixteen percent (n=11) had ever been married. Only 21.9 percent (n=16) of the participants had children. Participants were mainly from four different wards in Kibra constituency, namely Sarang'ombe, Makina, Laini Saba, and Lindi. The length of residence in Kibra ranged from birth to as recent as three weeks. Ninety-three percent (n=68) of participants denied being heads of household and only one resident reported living alone. Ninety-seven percent (n=70 ) of participants either lived with a parent, husband, or relative.

### Socioeconomic Status

Most participants in this study (n=55) had either completed or were currently in secondary school also known as high school. While only 17.8 percent (n=13) of all participants

reported having some type of formal employment, the majority (n=43) of participants in this study were students. Of those participants that were employed, sixty-two percent (n= 8) reported a lack of stability in employment status.

Fifty-six percent (n=42) of participants lived in houses made from mud, twenty-two percent (n=16) in cement houses, and sixteen percent (n=12) in iron sheet houses. Almost all participants (n=70) lived in houses with iron sheet roofing and almost all participants (n=70) had electricity. Participants reported an average of five residents per household. Thirty-three percent (n=49) of participants reported owing money to friends, neighbors, or a lending agency.

**Health Information**

Only forty-five percent (n= 33) of the participants reported being sexually active. Of those sexually active, most (n=32) reported having men as sexual partners. Among those sexually active, twenty-seven percent (n=9) always used condoms, thirty-three percent (n=11) never used condoms and thirty-nine percent (n=13) sometimes used condoms. When asked about the last sexual encounter among those sexually active, sixty-seven percent (n=22) said they did not use a condom, 30 percent (n= 11) said they used a condom and one participant declined to answer.

Ninety percent (n=67) of participants reported that they had been tested for HIV with the majority (n=61) reporting the reason for getting testing being that they wanted to know their status. Ninety-two percent (n=67) of participants knew their HIV status at the time of the study and of those who knew their status, ninety-two percent (n=66) reported being HIV negative and one participant declined to answer.

## Presentation of Themes

In this section, the study findings will be presented based on the research questions following the organization of findings in Appendix 8. To understand the HIV risk and prevention needs of young women, the current study sought to answer four main questions: 1) what are the daily lived experiences of young women in Kibra? 2) How do young women in Kibra experience HIV risk? 3) How do age, gender, ethnicity, religion, and poverty affect HIV risk behaviors and prevention needs? and 4) What are the HIV prevention needs for young women in the broader socio-economic, cultural, geographic, and historical context of Kibra and Kenya? Findings were obtained from individual interviews and focus group discussions.

### Research Question 1: Daily Lived Experiences

To better understand the HIV risk and prevention needs of young women who reside in peri-urban Kenya, it was important to obtain information on the contexts which shape the daily lives of young women in Kibra. Through individual and focus group interviews, young women described what it was like living in Kibra. Major themes describing young women's daily lived experiences included home life expectations, housing conditions, neighborhood environment, and Kibra is home.

### Home Life Expectations

Young women in Kibra shared that regardless of whether they were attending school, working outside the home, or actively looking for employment, they all had responsibilities in the home that they were expected to fulfill. Home life expectations were described in terms of *house chores*. Young women were expected to perform *house chores* as part of their daily lives. *House chores* were described as performing housework for one's self and most importantly for

the rest of the household. These chores included but were not limited to hand-washing utensils, hand-washing laundry, sweeping and mopping the floors, and cooking. This was a universal expectation for all young women regardless of whether they had other responsibilities such as running a business or doing school work. Young women that were attending school described that since school started very early around five o'clock in the morning, they would wait until after school was completed in the evening to perform *house chores*. The theme of home life expectations to perform *house chores* was described by participants as "When I wake up, I wash utensils, do other house chores, and sometimes when we are home for holidays, I go to help my mom with her job. I do that to help my sister too" (Highschool Individual Interview).

Similarly, another woman from the support group explained that part of doing *house chores* was to make sure the house was clean. " When I wake up in the morning. …I do chores around the house…I make sure the house is clean, maybe I leave when I have somewhere to go, or if I don't have to, I just stay indoors" (Support Group Individual Interview).

Several young women who attended school reported that part of their home life expectations after school involved hand washing the dishes, cooking, and handwashing clothes before completing any school work.

> When I arrive home, if I find that the utensils are still dirty, I wash them, wash my uniform if they are not clean, then sit to start doing my homework. If I don't have lots of homework, I cook, revise[1] a little bit then go to bed (High School Focus Group).

For some in this study who were not attending school, home life expectations also entailed *house chores* as their responsibility. Some young women who worked outside the home described

[1] Revise -Refers reviewing school work or studying for an upcoming test.

*house chore* routines that also included caring for a child before going out to take care of the business.

> You must do the house chores first then you think of going to the…for me I have a business so I have to do my work in the house, take my kid to school then I go to my business (Community Individual Interview).

Likewise, another young woman from the support group described performing household chores before going on to business as she described, "We do sell coffee so when I wake up, I do the house chores that I can, then I go find my products to sell" (Support Group Individual Interview).

For some women in this study who were neither in school nor employed, they also described home life expectations in terms of *house chores*. Young women described that household chores took up most of their day when they did not have to attend school or to work as explained by the narrative.

> When I wake up in the morning, it's house chores…then I do cleaning. After that, I come here for studies and from here I prepare for my parent anything that she intends to eat and that's how my day ends (Support Group Individual Interview).

Several young women discussed that *house chores* as part of home life were an expectation only for young women but not young men.

> I can say when a girl comes back from school, she has to do everything. And you don't tell a boy to go and fetch water, go to the roadside and shop for a meal; you know most of the people say that it's not a must for the girl to go to school. But nowadays girls are the best (Support Group Focus Group).

With the expectation being for young women to perform *house chores*, those young women attending school reported lacking time to attend to school-work responsibilities such as studying or doing homework. This lack of study time was a problem that young men did not experience as discussed in the high school focus group: “At home sometimes, you are the only girl and you have less than enough time to study because you have to attend to the house chores (High School Focus Group).

**Housing Conditions**

Housing conditions were another theme that described young women’s experiences of living in Kibra. Almost all women described living in houses that were built from mud and iron sheet roofs. The houses were close to each other, wall to wall, with a community shared bathroom and toilet. Residents in Kibra also shared water and electricity. Young women shared that due to the way houses were built close together, most had no privacy or the ability to control what they could hear as explained:

> The walls are so close so when the neighbor is there and she/he has raised the volume of the radio or the volume of the TV someone that is studying cannot study and also the houses that we are living in are single room so you see this is where you are cooking, this is where you are sleeping this is where you are eating so there is no space for studying. And another one is that the environment is dirty, so for health matter, someone can easily contract diseases that is like cholera the sewage is passing all over, those are challenges (High School Individual Interview).

Lack of privacy was also described by the participant below:

> Challenges are still there in the houses being so close to each other …when the neighbors are fighting, and you were studying, you have to stop and come out to support….yes, or they hear when you are being disciplined … and it's so embarrassing, there is no privacy (High School Focus Group).

Housing conditions in Kibra also involved living in houses with minimal space as well as sharing space among family members and across needs. It has been documented that the average size of a house in Kibra is approximately twenty-four square feet (Mukeku, 2018) and accommodates the kitchen, office, and bedrooms for all occupants. Young women described that in Kibra, houses only had one room which played the role of a bedroom, kitchen, and living room. Additionally, most participants shared this space with siblings, parents, and relatives. "Another one lack of enough space because in Kibra maybe where we are living we are five but the room is not big we share that one room kitchen everything so is not enough" (High School Individual Interview).Some young women reported that they would have to sleep at a relative's house due to lack of space in their homes as explained below:

> Let's say when I wake up at 9 or 10 am ... I go to our house, wash utensils, take tea, and finish by noon. I start cooking lunch then take[2] to my mom, thereafter I just sit or go to pay my friend a visit. Then I will come back to sleep ... at my grandmother's house…because… our house is small…there is no space in our house (Support Group individual Interview).

[2] *Take*-meaning bring to

## Neighborhood Environment

Other than the conditions in the houses that women lived in, the neighborhood environment was another theme related to young women's experiences of living in Kibra. Within this theme of neighborhood environment, young women described the following subtheme: physical environment, navigating corridors, and Kibra is home.

### *Physical Environment*

In describing how it was like to live in Kibra women described the physical environment which made up the neighborhoods in which they lived. Although young women from this study inhabited different neighborhoods in Kibra, they described similarities in the physical environment of these neighborhoods. Most women described challenges related to poor sanitation, lack of toilets, lack of clean water, air, and noise pollution which all contributed to health issues among residents of Kibra.

> ... the houses we are living in are problematic. We just live in them because there is no otherwise. But the houses we live in here are not better than the rural ones. …And when it rains, the drainage carries garbage and sewage across the doors and diseases… the pipes have broken, the dirty water getting in the pipes and that's what we fetch…and another problem is the toilets … and when you find it [the toilet], you are charged. You must have money to use a latrine (Support Group Focus Group).

The sewage infrastructure was missing in Kibra as explained, "another one is that the environment is dirty, so for health matter, someone can easily contract diseases that is like cholera the sewage are passing all over …" (High School Individual Interview). Some women

described the physical environment of the neighborhoods as lacking proper water systems which contributed to frequent water shortages.

> …and water shortage, when there is no water, we have to fetch for it from far, because the water pipes are not legal connections, they disconnect them forcing us to search for water from other areas (High School Individual Interview).

Besides water systems, the electrical system in Kibra was described as inadequate which also led to frequent electrical blackouts as explained: " Frequent electric blackouts and theft. People are attacked, you find a neighbor door has been broken into" (Support Group Focus Group).

***Navigation Corridors***

Navigation *corridors* were another subtheme that young women described related to the neighborhood environment in Kibra. With the houses being close to each other, young women described the neighborhood as being made of *corridors*. In Kibra, houses are everywhere and to efficiently get from one place to another, participants described using *corridors*. Meaning that participants knew a lot of short routes to get from one point to another in the least amount of time by foot, the most common mode of transportation in Kibra. The downside to these short routes was that these *corridors* were not well lit and thus most participants felt insecure walking as soon as darkness fell. Young women described the *corridors* as *dangerous* places to walk through particularly at night because they were poorly lit. "[The neighborhood] is dangerous sometimes because there is no police station near our place which makes the security issue stressful. We have to go through several corridors to reach home which makes it more dangerous sometimes " (High School Individual Interview).

When asked about what made the *corridors* dangerous, some young women reported that in these corridors and short routes, it was easy to run into men who were violent. Since *corridors* were away from the main roads (which were well lit and had more people), they were the best locations for behaviors such as using drugs or sexual intercourse would take place.

> … and also these boys called shutter. Do you know the shutter? ... shutter are the boys from the neighborhood … So they bother girls in these corridors even when we are coming from school late. Let's say there is a funeral somewhere you pass by, there are boys that stand around there that could grab you forcefully and take you in a corridor. The challenges like rape and being disturbed in the corridors, you can't focus. (High School Focus Group)

As a result of feeling insecure, young women said that they tried to be inside the home by night time.

> We arrive at school before 6.30, if you live far, you have to wake up very early and it's dark so you are scared because you meet weird drunk bad people. Sometimes you have to pass through the corridors where you can get burgled…boys are disturbing girls and it's risky walking at night … it's risky to walk at night … [because of] bad people, thieves. ( High School Focus Group).

***Kibra is Home***

Lastly, when young women described the neighborhood environment in Kibra, most expressed the feeling that Kibra was home for them. Most described that they loved living in Kibra because being in Kibra represented home. Under the subtheme of *Kibra is home*, women

described it was because of *feeling supported* and *being able to navigate life with limited resources*.

**Feeling Supported.** Most women in this study described that the social environment in Kibra was both supportive and motivational. Most described a sense of collective responsibility that made Kibra unlike any other place in Kenya. For young women, living in Kibra allowed them an opportunity to mutually interact and help each other.

> There is no competition in life as in when you look at your neighbor, there is no way to compete with them. It's not the same as someone who lives the estate life. You can look at someone, their dressing code, the food, even the house arrangements, you are all the same…Yes, you help each other (Community Individual Interview).

The feeling of social support was also described by participants in focus groups who shared "In Kibra, people love each other, there is mutual support without caring if one has money or not so Kibera is better" (High School Focus Group).

Young women also explained that living in Kibra motivated them to work harder to achieve better. Most young women reflected on their lives during our discussions and were motivated to engage in careers such as nursing and engineering with the goal of giving. The young women acknowledged that they saw people suffering daily and it motivated them to want to be better especially financially.

> mmm… living in Kibera, You get to see people struggle and you wanna[3] come out of that. You wanna become better. You don't wanna be like what you saw your neighbor

[3] *Wanna*-A common way young people in Kenya say "want to"

become. You wanna be better, you wanna say that [I] am from Kibera but now [I] am doing this. You can change, these people we can change this place." (Support Group Individual Interview).

**Ability to Navigate Life with Limited Resources.** Kibra is a place of scarcity especially when it comes to employment but it was also the right place to be when one did not have money. Since most young women did not have a lot of money, living in Kibra was one of the creative ways they were able to get by. Unlike other parts of Kenya, life in Kibra was described as considerably cheaper. Food, clothing, and housing were cheaper in Kibra than other parts of Kenya so for most young women and their families, the decision to reside in Kibra was in itself creative and necessary. One woman from high school reported, "Life is cheap because sometimes parents can come home without money but with just one hundred shillings, we can find cheap vegetables and water and we survive with that much" (High School Individual Interview).

Additionally, young women from the focus group shared that in Kibra, houses were cheap and people had access to free hospitals, *"*houses are not expensive. … You can find free hospitals in Kibera: you see …and they are not far, you just walk a little bit and you are there" (High School Focus Group). Another young woman explained that compared to rural Kenya, in Kibra it was easy to buy food with any amount of money. Neighbors who owned businesses found creative ways to sell items at different price points as discussed in the focus groups "…when you live in Kibera, at least you can find cooked beans for ten shillings which you can't find in the rural" (Support Group Focus Group).

Lastly, as part of navigating life with limited resources in Kibra, young women described **taking advantage of opportunities**. Young women acknowledged that there were opportunities in Kibra that would otherwise not be found in rural Kenya. Kibra is recognized globally as one of the largest slums and with such a designation, there have been numerous humanitarian and philanthropic efforts by different global organizations to improve people's lives. Young women reported that living in Kibra allowed them opportunities such as receiving scholarships to attend school: "The advantages you can find when living in Kibera are, many children get sponsorship opportunities and scholarships and education gets supported by different projects. That is the advantage I see here" (Community Focus Group).

For other young women, living in Kibra allowed for an opportunity to attend schools that were opened by humanitarian and non-governmental organizations.

> Yes, opportunities they are here because when I, if I would have stayed in upcountry [rural Kenya][4] I would not have gotten the opportunity of coming to this school- there are a lot of opportunities here because there are many NGOs that do sponsor especially us… many NGOs do sponsor us so there are a lot of opportunities in Kibra (High School Individual Interview).

Another woman shared about being able to access basic necessities such as pads and get involved in support groups because she lived in Kibra: "There are some girl groups which kind of help us with things like pads, some people teach us about self-awareness such kind of stuff" (High School Individual Interview). Young women reported that although temporary, these

[4] [ ]-Used to offer another definition or clarify

opportunities helped to improve the livelihoods of young women in Kibra daily and was one of the reasons they continue to live in Kibra.

Overall regarding the first research question, young women described that although life was challenging due to the housing conditions and neighborhood environment, Kibra also felt like home due to the social support and opportunities available. In the next research question, young women described how the circumstances in Kibra impacted their HIV risk.

## Research Question 2: How Young Women Experience HIV Risk

Having painted a picture of the lived experiences of young women in Kibra, the second research question explored HIV risk as experienced by young women. To better understand young women's prevention needs, it was important to first explore how this population group experienced HIV risk. Two themes were identified from participants' responses during individual and focus group discussions, namely HIV knowledge and experiencing HIV risk.

### HIV Knowledge

The first main theme identified when exploring how young women experienced HIV risk was related to HIV knowledge. Before learning about risk factors, perception, and risk behavior of the women in this study, the first question was to assess their HIV knowledge. Sub-themes related to HIV knowledge were general HIV knowledge, knowledge on HIV transmission, knowledge on challenges related to living with HIV, and the source of knowledge.

#### *General HIV Knowledge*

Most young women were aware that HIV is a sexually transmitted disease, that it causes AIDS, and that it has no cure. One participant from high school shared, "HIV is a very dangerous

disease. It is transmitted. …I know it can be transmitted through various ways like through deep kissing, through sex, blood transfusion, vaginal secretion. The ones who survive it do so by taking drugs" (Highschool Individual Interview). One more young woman from high school during individual interviews also described that HIV affects young people.

> Me… I know it's a disease that causes AIDS. It mostly affects the youth because it's the youth who tend to engage in early sexual intercourse and don't know my partner's status. I end up getting HIV when [I] am still young ( High School Individual Interview).

Young women were also aware that while HIV has no cure, there are ways to prolong and maintain the quality of life of those with the disease. Young women in this study understood that people with HIV can end up dying from AIDS. The narrative below further exemplified general HIV knowledge.

> This disease was a sickness that people feared so much and even today I know people that are afraid of it. It is a disease that someone can get through anyway maybe sex, maybe kissing, using sharp objects[5] and sharing them with someone and all those other ways and nowadays I know there is the medicine that you can take and live. I know that a long time ago people believed that once you have HIV after some period you will die. Unlike cancer someone will be ready that they will die but these days… these days even people with HIV are healthy you find someone lives for long, so nowadays people do not take it as a big deal. But what I can say is even though you are not infected do not do things that maybe will get you infected (High School Individual Interview).

[5] Sharp object includes knives,broken glass and needles

### *Knowledge on HIV Transmission*

Young women were also knowledgeable on both horizontal and vertical transmission methods of HIV and that HIV could infect anyone regardless of gender, age, socioeconomic status, and educational status.

> HIV is a disease that does not choose. …A child can get it, a woman can get it a man can get it. And mostly it is contacted through sharing sharp objects. If you sleep with someone without using…and he has HIV and you have not used protection. Like a child can contact it if the mother had HIV then it can contact it through breastfeeding…Or during delivery" (Support Group Individual Interview).

Some women shared that no one is too young to get HIV including those in the age group of 15-24 years old. One shared a story about a young nine-year-old girl that had been reported to have the disease: "Now I think it's ... Thirteen … thirteen is older, nine … Even ten, by the way, it's nowadays. I saw it on the television, it starts from nine onwards" (Community Focus Group).

### *Knowledge on Challenges of Living with HIV*

Understanding that anyone could be infected with HIV at any time, young women in this study also discussed their understanding of challenges related to living with a diagnosis of HIV. Young women described challenges under two main sub-themes, fear of stigma and fear of chronically taking HIV medications.

**Fear of Stigma**. Fear of being stigmatized was one of the main challenges some women described when asked to discuss why HIV might be a problem. Although HIV was understood in this population group to be a chronic disease, young women shared that having the disease was a reason for shame and avoidance. For young women in this study, most would be afraid of being

talked about or be left out of community events because of HIV. Young women, therefore, explained that they would keep a diagnosis of HIV a secret out of fear of being stigmatized against as shown by the following narrative from the focus group discussion.

> It will be a shame, and I can't tell this one not knowing that she parrots[6], she can tell another parrot and another then people will signal each other, "don't play with that girl, stay away" that's why you should not tell people… Interviewee 4: Yeah you are afraid because people will talk…Interviewee 5: yes, you start to fear…Interviewee 3: You will tell this one, that one will tell people "don't tell anyone" and another one…Interviewee 1: So because we are afraid of each other, if I had HIV, I wouldn't tell (Community Focus Group).

Young women also explained the negative mental health associated with stigma after sharing their diagnosis of HIV with others. Some explained that being stigmatized against could cause one to isolate from other people, leading to feelings of guilt: " it's because you will get that stigma as some people will not want to come close to you just because you have HIV, that's what will happen until you isolate yourself from people, feeling guilty" (Community Focus Group). While some described low self-esteem as another negative mental health outcome related to stigma as explained by young women from the high school focus group: "you are not treated like others, for example, when people are eating from a bowl, they say that they don't want to eat with you because you have HIV so it lowers your self-esteem" (High School Focus Group).

**Fear of Taking HIV Medication**. Fear of chronically taking HIV medications was described by some young women as another challenge related to living with HIV. Some women

[6] Parrot- Someone who never shuts up. Constantly gossips.

reported chronically taking HIV medications as tedious and never-ending. Women explained that the challenge was not affording medications as these were available at little to no cost for most Kenyans, the problem was rather the idea of chronically taking the medications knowing that failure to take the medications could lead to death.

> The disease becomes a problem because you are on drugs on a daily basis. You stop taking drugs, you are dead. You sit down, to think, and say "I am the one to take all these drugs every day," that can even make you take away your life. You kill yourself after thinking that your friends are not taking drugs, it's you and it's a problem if you don't (Community Focus Group).

***Sources of Knowledge about HIV***

In addition to discussing HIV knowledge, young women also shared sources of knowledge. When asked about where they learned about HIV, young women shared that formal HIV knowledge was acquired from school and community organizations while informal knowledge was learned from living or knowing someone who was HIV positive. For those who first learned about HIV in primary school, most reported that it was in sixth grade when they learned about the disease **"**Mhh… HIV, I first learned it when I was in primary school that is when, I was in class six when I got to know it {HIV}[7]. Also in high school" (High School Individual Interview). For some who did not remember learning about HIV in school, they reported that a community organization was the source of education about the disease "We are taught here in Kibra, we have a lot of programs that teach us and in school" (Support Group Individual Interview).

[7] { } - Used to specify what "it" means.

With formal knowledge of the disease through school and community organization, some young women reported learning about HIV from having a relative or friend who was HIV positive. For these women, It was important to address issues of stigma and isolation among those diagnosed with the disease. These women explained that besides knowing disease transmission, they learned about the impact the disease had on one's mental health. Most reported that It was important to be inclusive and not to discriminate against those with HIV as explained by one participant:

> "I have just learned that HIV is a disease that you can contract it then you just live and you should not discriminate them, the people who are living with HIV we should be friendly to them we just do things as normal because we cannot be transmitted through talking that is greeting people so just live with them as normal people " (High School Individual Interview).

**Experiencing HIV Risk**

The second main theme related to the second research question was how young women in Kibra experienced HIV risk. Having demonstrated that they had some knowledge of HIV transmission and that they were aware HIV could infect anyone, young women in this study discussed how they experienced HIV risk. The themes identified from focus group and individual interviews on how young women experienced HIV risk were: financial insecurity, alcohol and drugs, sexual violence, peer pressure and fear of condom use

***Financial Insecurity***

The first theme related to how young women experienced HIV in Kibra was related to financial insecurity. Young women described financial insecurity as being related to poverty,

lack of money, unemployment, and lack of jobs. Many young women discussed that lack of jobs or a steady means to earn money caused young women to explore other ways to earn a living such as participating in transactional sexual relationships. Young women explained two main types of transactional sexual relationships- having an older boyfriend and having a "sponsor". The narrative below describes the role of financial insecurity in HIV risk for young women.

> The kind of life people live, this hard life forces people to steal, this hard life can lead people to drop out of school. This life can make one start doing drugs to stop thinking of their problems and the hard life makes girls run away and go get married. Just that, if people's lives can be changed, it will be better… And if you have a job, you have money so no one can lure you with money because if they try, you tell them I have my own money so I don't have to sleep with you for money. But if you didn't go to school or don't have a job, someone can force you and offer you money and it would be easy to say yes (Community Focus Group).

**Older boyfriend**. In terms of transactional sexual relationships, some women in this study described having older boyfriends. Although the most common type of sexual relationship for young women in this study was the same age heterosexual relationship, some young women explained that financial instability caused some to consider having an older boyfriend. The older boyfriend relationship was defined as a romantic relationship involving a younger woman and an older man. Older men in these relationships were viewed as attractive because they were perceived as mature, good fathers, and offered some hope of financial stability compared to a man the same age.

> I can say girls in Kibera prefer older boyfriends because they need money. … Yes, because some say " what can this student give me! I am broke as well and I need cash and other needs" … I would rather look for a working class[8]… someone working, who can support you ( Community Focus Group).

**Sponsor Relationship**. Another common transactional sexual relationship type that was described by young women in this study was the *sponsor* relationship. A *sponsor* was defined by young women as an older man who sought young women to be in a relationship for the purpose of exchanging sex for money. This was the most common type of transactional sexual relationship described by women in Kibra.

> A sponsor is that older person who is maybe working and your job is maybe to have sex with him for money. … It's common nowadays. That's what is used to get in. A sponsor can be that person with money, you have sex with and he gives you [the money] ( High School Focus Group).

*Sponsors* typically came in the neighborhood where young women resided via a car or motorcycle in hopes of showing that he has money. For an older man to be considered a sponsor, he needed to present himself in such a way that everyone knew he had money. Participants from the community focus group described that a *sponsor* typically would drive by in a car or motorcycle where young women were most likely to be, such as in shops where water or food was sold, and signal that they were rich and were looking to get into a relationship with a younger woman.

[8] Working class refers to someone with a steady job or a source of income.

> Ee, sponsors (laughs) … Sponsors… they are very common nowadays. You find them just here in the neighborhood. …you know these older men. …even on the road when you are sent to the shop you can meet one. (everyone agrees) … at the tap when you go to fetch water … they are usually here on the road driving cars …and motorcycle …even the ones with the motorcycle will tell you come, baby … even taxi driver (Community Focus Group).

Young women explained that the lack of money to meet basic needs was one of the reasons for participating in transactional romantic relationships that involved an older man or a *sponsor*. Young women described situations such as not having the means to afford sanitary pads as a reason to participate in transactional sex. "… It is difficult because maybe let's say for example you wanted money for sanitary towels, so you will have to do it {have sex} for you to get them ... " (High School Focus Group). Another group of young women described transactional relationships as the source of income for some families who were unable to afford food:

> … Something else that can make them acquire HIV is that some of the parents send their daughters to go have sex for money then bring to them the money for food in the house … there are also some whose homes are small so they look for sleeping spaces from the neighbors (Community Focus Group).

The behavior of engaging in transactional sex was explained as one that young women resorted to when they did not have other ways to provide for family members as explained:" or mostly, people were pushed by their problems until they resolved to say "let me just do it {have sex} to meet my financial needs" (Community Individual Interview). Young women

acknowledged that in cases where sexual activity was transactional, negotiating condom use was a challenge.

> They just go have sex with somebody and you cannot tell the person please use condoms… And if he says no you want the money after all. So, like you won't insist. So, if they have a job it will reduce … if they have education about it can reduce it (Support Group Individual Interview).

***Sexual Violence***

A second theme related to how young women in Kibra experienced HIV risk was related to sexual violence. The physical environment in Kibra associated with lack of security was one of the main ways young women were at risk for sexual violence. Most women explained that due to poor lighting in some corridors and the unpredictability of electricity, they were afraid to walk alone at night for fear of being raped as discussed in the excerpt below:

> Like for example, you are not supposed to walk alone past 8 pm. You should be in the house by then and it's not advised to walk alone …because you can meet people who can rape you, most of the people are smoking bhang[9] or abusing drugs and you can meet with them and they do bad deeds…( Highschool individual Interview).

Some young women described specific locations in Kibra where rape frequently occurred. "Yeah, when you walk around those places, rape case is easy. Yeah, you can be raped. You can be forced" (Community Individual Interview). In these locations where rape cases were more frequent, young women shared that it was best to stay away especially at night. "…and

[9] Bhang is a type of drug derived from the leaves of the cannabis plant and has been reported to cause hallucination, grandiosity, excitement, and disorientation (Balhara & Mathur, 2014).

rape? Yes. by the way, there are spots where rape is common, you walk at night and be rapped." (Support Group Individual Interview). To improve security, young women suggested installing light: "you can provide security, setting up the light, to eliminate darkness for girls to be able to walk around" (High School Focus Group).

In addition to the outside environment, sometimes the environment inside the house was also a factor to consider. Some women explained that as a result of small houses, some were asked to spend the night at a neighbor's house which in itself could be a risk as shared by those from the community focus group: " …there are also some whose homes are small so the look for sleeping spaces from the neighbors" (Community Focus Group).

Unfortunately, young women reported that law enforcement was not very helpful when it came to reporting instances of rape. This is because the locations where rape cases were more common were also the furthest from the police station as one explained: " It's dangerous sometimes because there is no police station near our place which makes security issue stressful. We have to go through several corridors to reach home which makes it more dangerous sometimes" (High School Individual Interview). In other cases, young women shared that the police in Kibra were not well equipped to deal with cases of rape. Young women did explain that one could go to the hospitals if they needed help after experiencing rape "I don't think, the police might help you [if you are raped]. … They only tell you to go to the nearest hospital to seek assistance (Support Group Individual Interview).

### *Alcohol and Drugs*

The third theme related to how young women in Kibra experienced HIV risk was alcohol and drugs. Most women explained that alcohol and drug use among all youth – both men and

women – in Kibra was an HIV risk factor for young women. Discussion of how alcohol and drugs increased young women's risk was related to two subthemes, availability of alcohol and alcohol and drug use among youth.

**Availability of Alcohol**. To use alcohol, one needs access. Walking around in Kibra, it was common to see bars next to homes where local alcohol was brewed and sold. Several young women shared that they lived next to bars and shops where drugs were sold and for them, it was challenging. It was a challenge not only because of the noise but also because of being around people using alcohol and drugs:

> Living near a bar is very bad. First of all, inside the bar there are men and when they see ladies you know how they behave most of the time. Therefore if you are not a lady who is assertive and who knows what you want it can be easy to fall for their trap. Sometimes you maybe want to study at night, but you can't because of the loud music being played (High School Individual Interview).

Young women also shared that alcohol and drugs were available at house parties and clubs, places frequented by young people. At these parties, drugs or alcohol were added to beverages such as sodas making it harder for those at the party to avoid using:

> Another thing during party pub parties or what there is some they can put some drugs in alcohol, in soda or soft drinks that can make someone to just get drunk after that you don't know yourself after that someone can just take you and have sex with you without protection then you can contract HIV ( High School Individual Interview).

**Alcohol and Drug use Among Youth.** The second sub-theme related to alcohol and drugs was the use of alcohol and drugs among youth. Regardless of where young people

accessed drugs, alcohol, or both, young women in this study perceived that both alcohol and drugs significantly increased one's HIV risk. Bhang was described as the most common drug of choice among youth in Kibra because it was cheap and more accessible.

Most women explained that when one uses alcohol, bhang, or both, their inhibition was lowered, increasing their chances of agreeing to engage in unprotected sex or sex with multiple partners, both HIV risk behaviors.

> Yeah, it [alcohol and drugs] does [affect young women] very much. Because you find that these women and men, most of them… they do use these drugs, most of them alcohol… actually drugs… are what escalates all these things because they get drunk. For example, when they throw house parties they say; when we party in the house, I don't mind it. So even though we just met, alcohol lies to me to think that I know you and then the man can then take advantage of me. I don't know you, I don't know your status, but due to our high and because we are both high, you even find that me as a woman, I get excited and just like that, I accept {sexual advances} (Support Group Individual Interview).

Another young woman shared that using drugs caused one's mental state to be compromised leaving them vulnerable to poor decision making; "because when you are high, with drugs somehow you don't know what you are doing, or if you know…you are not sure of your decisions. Like you cannot make a sober decision when you are high" (Support Group Individual Interview). Some women described that alcohol and drug use among young women led to instances of sexual violence where the young woman could get kidnapped and raped by an

unknown man. These cases were mostly reported in college and university campuses as well as at house parties.

> What they do is drugs especially girls, when they smoke bhang, they go crazy, and you will hear that they were kidnapped by a man into a house. At that moment she doesn't know the HIV status of the man who ends up having unprotected sex with her. Later on, when she finds out that she is infected, she won't know who infected her, she might double it with pregnancy. … (Community Focus Group).

In other instances, some young women explained that the combination of drinking alcohol and the way young women were dressed also was a risk factor for rape.

> You know their dress code…and again those places that girls go dancing. Those places, when someone finds them {young women} at night may be drunk with the revealing outfits, the man has to rape her. So things like that (Support Group Focus Group).

***Role of Peer Pressure in HIV Risk***

The fourth theme on how young women in Kibra experienced HIV risk was related to peer pressure. In describing peer pressure, some women used words such as peer influence, others referred to it as bad company while others described it as temptation. In general, peer pressure was described as the strong influence by others in the same group to partake in given behavior to fit in: "I would say according to this environment of ours it just peer pressure. …That when you are not doing it, you are not there, you are not trending, you need to do it to appear cool" (Community Individual Interview).

Most young women explained that in Kibra, peer pressure was a challenge as it led young people to engage in negative behaviors such as using alcohol and drugs, early sexual activity,

and even dropping out of school. Young women in the community explained that school drop-out for young women was partly because of bad company.

> …the disadvantage we have here is bad company. Girls have gotten into bad company which is bad…for example, you see well dressed in latest clothes, you want to start doing the same but you are too young…the challenges here are school dropouts, which I think is everywhere but ours here is due to peer pressure…, and that bad company… Just like Blue said, you want to fit into a group that you can't keep up with (Community Focus Group Interview).

Some women described peer pressure in terms of bad company and not wanting to lose friends as one of the reasons young women used alcohol and drugs. Some young women experimented with drugs and alcohol because they did not want to lose friends. “Bad company is when you have a friend who tells you this thing is really good so let’s go drink and they can tell you that if you refuse to go with them, then you have to leave their company” (High School Individual Interview). In other cases, some women explained that due to peer influence some women engaged in early sexual debut to fit in as one from high school said, “Like peer pressure. A friend will tell you a lie, or even a truth that, she has had sex so you will go and have sex to fit in thinking that doing it will increase boost your worth” (High School Focus Group).

Some young women explained that the reason peer pressure was a major problem for young people was because of age. Being at a puberty stage, young women acknowledged that it was easy to be swayed in different directions as explained using the quote below.

> … it’s very easy for girls to get the disease because there is peer pressure. When they reach the puberty stage, they get excited and want to taste that thing, and that’s when they

> get it because after engaging in sexual intercourse, you will want to do it again and again not knowing whom you are engaging with and the boys won't accept to go for test. Testing, they will say "no, you don't trust me? " let's just do it, and maybe you don't know, maybe later in life they will let you know that you are infected. so that's what brings the disease to girls (Support Group Focus Group).

### *Fear of Condom Use*

The last theme related to how young women experienced HIV risk was fear of condom use. Even though all young women in this study agreed that using condoms helped to protect against HIV, during the demographic survey, most who were sexually active reported that during their last sexual encounter, they did not use a condom. Young women cited fear as the reason for not using condoms.

Most young women shared that they would be or were afraid to ask for condom use during a sexual encounter due to possible sexual and/or domestic violence. Some women described that during a sexual encounter, requesting to use a condom could be (mis)interpreted as a gesture of mistrust by the male sexual partner causing them to be angry and possibly become physically violent. One woman in the community explained:

> Yeah, you see, if you tell your lover that I don't want you to … I don't want us to have sex without a condom so it will make him violent because he will ask you, who do you want to go and have sex with without a condom if I am not the one, he will take it as if you are cheating on him so he will get violent (Community Individual Interview).

This situation was more exacerbated by the type of relationship that the young women were in. For some young women who were in monogamous relationships or in marriages, where

the assumption was that each spouse was faithful, asking to use a condom could be seen as a gesture associated with cheating on the spouse. As shared by young women from the support group focus group, being reluctant to negotiate condom use under such circumstances was to save the marriage or relationship:

> … you know some women when they are married, or some girls when they are in a relationship, and you insist on condoms, the boy will suspect you of cheating on him…. it's like you don't trust him that's why you are asking for you to use a condom … "you don't love me now", and things like … so they do so to save their relationships while they are the ones hurting (Support Group Focus Group).

Overall in research question 2, young women in this study discussed two main themes; HIV knowledge and how young women experienced risk. Young women in this study were knowledgeable about HIV transmission and experienced HIV risk through financial insecurity, sexual violence, alcohol and drugs, peer pressure, and fear of condom use. In the next research question, young women described how structural factors including gender, ethnicity, and poverty intersect to exacerbate HIV risk.

### Research Question 3: How Structural Factors Intersect to Exacerbate HIV Risk.

Having explained how young women experienced HIV risk in Kibra, the focus of this research question was to understand how structural factors intersect to exacerbate young women's risk of HIV. Based on the conceptual framework that guided this study, a nuanced view was warranted to understand young women's risk factors and prevention needs. I identified five main themes as impacting young women's risk for HIV, namely traditional practices, gender norms, gendered opportunities, religion, and poverty.

## Traditional Practices

The first theme that young women discussed as impacting young women's HIV risk at a structural level was traditional practices. In Kenya, besides language, different ethnicities also practice specific traditional beliefs. Young women in this study were asked to share traditional practices that exacerbated HIV risk among young women. Young women described two traditional practices; *Disco Matanga*, and wife inheritance.

### *Disco Matanga*

The first traditional practice that was described as increasing young women's HIV risk was *Disco Matanga*. A direct translation of *Disco Matanga* is a funeral disco. This is a fundraising practice in Kenya after someone dies where members of the community come together, mostly at night, to play music and fundraise money for the funeral cost. During the *Disco Matanga*, a man pays a certain amount of money to request a dance with a woman of their choice. The woman is then obligated to dance with them unless they have money to counter the request. Young women reported that sometimes during *Disco Matanga* cases of sexual violence such a rape occurred as one woman described:

> If someone went maybe to a disco matanga, then you know this dancing of girls that… then a boy who is excited something like that, he can grab you even maybe without knowing, and you know there are no lights at the discos so the boys can grab you, take you somewhere and do anything to you (High School Focus Group).

Young women also explained that since *disco matanga* took place at night, the areas surrounding the location of *disco matanga* are typically dark and thus could be the prime location for sexual abuse as explained, "let's say there is a funeral somewhere you pass by, there

are boys that stand around there that could grab you forcefully and take you in a corridor (Community Focus Group).

### *Wife Inheritance*

Wife inheritance was the last traditional practice described as increasing young women's HIV risk. Wife inheritance was explained as a practice within some tribes in Kenya where if a husband died, then it would be customary for brothers or cousins of that man to inherit the widow without the widow's consent.

> … like that wife inheritance, because there are some who are still practicing and we can't say that all the tribes are civilized or have been sensitized … let's say when someone's husband dies, another man in that clan inherits the wife … or a brother to the husband so if the brother had HIV the inheriting person will as well be infected. Even if it's the one inheriting, he will infect the wife. And those who like inheriting, it's not that they are only inheriting you, they have that habit of inheriting many wives. And not everyone is safe, so you end up infected (Support Group Focus Group).

Some women explained that the practice of wife inheritance put women, especially younger women, at high risk for contracting HIV infection because the practice was carried out regardless of the HIV status of those involved.

> Yes, the [traditional belief] I remember when I used to live in the rural is this wife inheritance. That when you are married somewhere and your husband dies, his brothers take you in as an inherited wife … it's with the Luos, your husband's brother … and maybe you don't know the status of the brother in law, and because you don't think of that issue of being abused that's how the spread of HIV starts (Community Focus Group).

## Gender Norms

A second main theme that impacted young women's HIV risk on a structural level was gender norms. Young women discussed four main subthemes associated with gender norms: gender norms in housework, gender norms in education, gender norms in employment, and gender norms in condom use.

### *Gender Norms in Housework*

The first subtheme under gender norms was on gender norms in housework. Young women in this study explained that while young women were expected to perform house chores, this expectation was not extended to young men. Young women were required to go home after school and perform all house chores while their young men counterparts only had to take care of themselves.

> Ohh you know most of the time, boys do not have that much work to do at home so they come home from school. Change from their uniform then maybe he goes to study or can go out to play. For us though, when you come from school, there are house chores you are supposed to do (High School Focus Group).

Gender norms were also described in marital practices where society still expected men to work outside of the home to provide for the whole family and women to stay at home. Women were also expected to take care of children as well as housework. With men being providers, women were expected to be submissive and dependent on the men, making it hard for women to negotiate things such as condom use. This disproportionately impacted young women's HIV risk as explained.

> You see, most men in Kibera are the providers and most women are housewives. So you see, when a man provides, he expects you to do everything. … So you see the wives are idle people, so you see when they (the husband) come home am tired but I just have to do it {sex}. Now it becomes… it turns into a fight (Community Individual Interview).

***Gender Norms in Education***

The second subtheme related to gender norms was in education. Young women described different social norms on education for men and women. Since in Kenyan society children are typically expected to succeed better than their parents and then improve the lives of the whole family, the expectation for young men was to help the family by performing well in school to get a career while the expectation for young women was to marry someone who could pay enough dowry to help the wife's family.

Some women reported that this idea that men would help the rest of the family by working hard while women would help the rest of the family by being married off had been internalized and subsequently led to the difference in school performance between young men and women. Young women's education was perceived as less important because they were to marry a man who had a good job and more money. On the other hand, young men's education was perceived as important as it was a ticket to getting a better life in the future, as a woman from high school individual interview explained, "Yes that is because of the society because they value male children rather than girls, that is they have that mentality that the ladies are just there to get married, that is a male-dominated society."

Some young women described that social norms on the role of education for young women were negative to a point that if one completed high school, it was such a surprise to

some. This was because early marriage and early pregnancy was the most common trend in Kibra.

> As in someone looks at you and despises you … it's like you are nobody …. As in there is a way girls are looked at. … They usually are … let's say when you finish form four [graduated high school] it's a big deal. Many people know that you are likely to get pregnant (Support Group Individual Interview).

Another young woman from the community described that one of the challenging aspects of living in Kibra was the environment that expected young women to get pregnant or get married early instead of completing primary and secondary education.

> mmhh the challenges are like, you find some time, … I will say mostly it's just the environment. …You know you are in the environment which if you get pregnant early it is not a problem. … If you go and get married early it is not a problem ... to some people of course (Community Individual Interview).

***Gender Norms in Employment***

Gender norms in employment was the third subtheme. Young women discussed that it was more difficult for them, compared with men, to get employment in several different sectors. Most young people in Kibra have come to depend on construction jobs which are typically short term but pay a lot of money at the end of each workday. Some women in this study explained that young women were not considered masculine enough to work in the construction industry and as a result, these jobs were mostly given to young men. A woman from the high school individual interviews stated, "Boys kind of have an advantage because they are masculine, and

they can get maybe construction works. Girls, it's a bit challenging because girls are not masculine to do some kind of jobs that are available."

Some women described differences in other types of job opportunities provided to young women as opposed to young men. While most opportunities and programs targeting young women in Kibra were related to empowerment, opportunities for young men were more for income generation. For example, young women explained that the current trend in Kibra was the introduction of motorbikes loaned mostly to young men as a means of income generation. Young men received a motorbike, used it as a means of providing transportation which they charged a fee for the service, and then paid back the bike loan over a specified amount of time. Motorbike rides were faster and typically more expensive than taxis or public transportation. Young women shared that such opportunities were not offered to young women.

> Mmmhh I think boys because you will find things like maybe eehh motorbikes and everything boys are given because boys get the chance. That's why you find if that guy is riding that motorcycle, and the girl has gotten may be pregnant because of that guy, you see now, the girl is forced to again to remain at home because now the girl doesn't have anything else to do (Community Individual Interview).

For young women in this study, employment programs targeting young boys encouraged boys to be more financially independent, while those programs geared towards women although excellent at empowerment needed to be improved by including a financial independence aspect.

### *Gender Norms in Condom Use*

The last subtheme under gender norms was regarding condom use. Some women in this study described that while it was socially acceptable for men to buy condoms, this was not the

case for women. Women reported that they would be ashamed to even go to the shop to buy condoms. Some young women shared that if they were seen in the store buying condoms, the community would perceive them as promiscuous. Because of shame and fear, some young women reported that they wouldn't go to a store to buy condoms; however, they would be open to going to the hospital where condoms were free and privacy promised.

> I can't buy but I can come to a place like this and get it for free … because here, I can be discreet and make sure the person giving out condoms does not know me … meaning the thing that prevents girls from buying condoms is … shame, fear of people saying "that's the girl who comes for a whole box of condoms, That one? She comes for a box! (Support Group Focus Group).

While sharing suggestions about which hospitals distributed condoms for free, some young women expressed that it was not acceptable in society for women to carry condoms in purses. If a teacher or parent accidentally discovered that a young woman had condoms in their purse, it would be embarrassing. Additionally, young women shared that the idea of women being prepared by carrying condoms sends a message the woman may have multiple sexual partners.

> If he doesn't have protection {condom} and you unveil yours … that can also destroy your relationship. They will be surprised how is it possible, this girl is walking around with a condom? … or he can say that you are from seeing another man with the condom. You know it's not all men that are understanding. And also, if your teacher finds a condom in your bag. It can be a problem (Support Group Focus Group).

## Gendered Opportunities

Gendered opportunities was the third theme that was described by young women as a structural factor impacting HIV risk. Young women described a nuanced view of being a young woman in Kibra related to the subthemes of prioritizing girls and gendered barriers to employment. Young women described that while there were programs and opportunities in Kibra that prioritized girls' empowerment and education, there were also challenges related to available jobs for those who qualified.

### *Prioritizing Girls*

Most women described that in Kibra there were several programs with "girl child mentality," which carried a positive connotation meaning that these programs and opportunities encouraged a culture of prioritizing women. Young women described prioritization in terms of the number of community organizations with programs geared towards putting young women first.

> Here, they value girls for sure, they take girls and they give girls first priorities. You will find many saying that the boychild has been neglected, …. So if you find a chance of changing one of [girl], that one [girl] will change another (Support Group Individual Interview).

Examples of such opportunities included organizations that gave girls priority for admission into schools as exemplified by participants for the high school individual interviews.

> Girls have more opportunities than boys for example, and just like I have told you about Binti Pamoja organization [translated to daughters together], I have never heard of such for boys. Girls also perform better than boys sometimes. During selections here, girls

qualify with 280 marks while boys need to have 300 marks a show that girls have more opportunities than boys (High School Individual Interview).

Young women from the support group described prioritization of opportunities for young women regarding the availability of empowerment programs targeting young women.

> … It is young girls because, you find like so many organizations they just deal with ladies, empowering women… it's mostly girls who have like the opportunity than boys but boys as well do get because there are these people who have decided to like come up with a football team to support the boys (Support Group Individual Interview).

***Gendered Barriers to Employment***

Despite the opportunities described that prioritized girls in Kibra, young women in this study also acknowledged that the living environment in Kibra made it challenging for young women to accept jobs. For example, young women shared that during times when they were qualified for jobs, a requirement to stay or work late was a deterrent due to fear of being outside the home after dark. For most young women, lack of security in Kibra was a barrier to jobs such as catering and working in hotels

> As in,I took a course in catering, so you find most of those with a high probability of finding a job are boys mostly. Cuz they [employers] want those people that are energetic enough. For example, there is energetic and then there is working late hours. So, for girls if you show up to such place and find those are the conditions, they are looking for, you look elsewhere … So it's easy for boys to get the chance (Community Individual Interview).

**Religion**

Religion was the fourth theme described by young women as a structural factor related to HIV. Except for one young woman who attended religious services in a mosque, most women in this study discussed religion in terms of the role of the church. The church was important for educating young women about HIV risk factors and prevention. Young women in this study explained that the church was an avenue to be educated about behaviors to avoid that may cause one to get HIV.

> The church helps women in youth services. Or even teenagers, you are taught not to do bad things. First of all, when that teacher notices that you haven't been attending the services, when you appear, they have a chat with you after which you will find yourself maintaining presence. They tell you the right things to do not to go astray (Community Focus Group).

Some women explained that through church events such as youth services, they would meet other role models that they could interact with and talk to about issues of peer pressure and abstinence.

> Religion, religion has created awareness they do offer the sacred education to different groups, people who have HIV, and also recruiting people who have HIV to go and facilitating somewhere that is to create awareness that HIV is there or some do visit children home where the parents died and they were born with HIV" (High School Individual Interview).

Other young women expressed how sometimes teachings from the church were contradictory to what they had learned in school or a support group about HIV prevention. This

was particularly evident on advice about condom use which was encouraged as a means of HIV protection in the community but prohibited in church teachings. Young women acknowledged that in church teachings, people were encouraged to abstain and be faithful within relationships. In relationships, young women shared that the church emphasized being faithful and discouraged condom use. One woman explained, "Religion like let's say the catholic church they don't believe in using a condom so when you engage in sex without {a condom}with a person who has AIDS you will contract the disease" (High School Individual Interview).

**Navigating Poverty**

The last theme related to HIV risk factors for young women in Kibra on a structural level was navigating poverty. Young women in this study described that poverty played a role in increasing young women's HIV risk. Kibra was described as being poor based not only on the physical environment but also lack of resources, both factors that increased young women's HIV risk. Living in Kibra, young women explained that they lacked resources to pay for basic needs such as sanitary pads and food.

> Struggles are with things like sanitary pads if you are in Kibra and your menses start while you don't even have money to buy them {pads}. Before they get how to help you, you will have suffered, or you ask from the neighbor which is embarrassing (High School Focus Group).

Young women also explained that life in Kibra involved lack of food and clothes due to poverty: "Living as a young woman in Kibra sometimes you lack food sometimes you lack good things that other people have good clothes, its hard" (High School Individual Interview). Navigating poverty for young women entailed both depending on relatives and parents as well as

*hustling*. Some young women described that they depended on parents and relatives to provide for them. Parents and relatives worked hard to provide for necessary supplies such as textbooks and food.

> It also depends on the understanding of the person you are living with, if he is understanding, he will know that you are in school and you need money … so he can sort you out or maybe that's if he knows you are totally broke, he can figure out a way of helping you out, not just to leave you there (Support Group Focus Group).

Other young women explained that "*hustling*" was the way they navigated poverty. In some cases, parents and relatives also did not have a job to provide for basic needs. *Hustling* was defined as the practice of waking up in the morning and leaving home in search of short term work such as doing laundry or braiding hair for cash. *Hustling* for young women meant the idea that even though one could wake up in the morning with no job, Kibra made it a possibility for them to leave the house, walk around and potentially find limited work opportunities such braiding one's hair or washing laundry for a neighbor and be paid for the day.

This way of thinking seemed to allow participants to live one day a time. Young women described that *hustling* allowed them to navigate life in Kibra where resources were scarce. Young women noted that despite the increased unemployment rate among young people, the social environment in Kibra made it easier to *hustle* because people would help each other and use each other's creative talents. A young woman who could braid hair said;

> When I wake up in the morning, it's time to hustle …… mmhhh maybe I look for someone whose hair I can braid. And you know that braiding is not like regular. You can find a customer, or you cannot. Or sometimes I go to the market for my aunt to buy

things to sell out here. And that is how we pay for rent. (Community Individual Interview).

Similarly, young women from the focus groups also described hustling as finding a need and meeting it by washing someone else's dishes or fetching their water.

> Maybe you can hustle if you know how to braid hair, you do it and get paid. If you can wash for a neighbor's clothes, do it for pay. You fetch water or wash utensils, such hustling jobs … Interviewee 2: if she doesn't have money to spend, she can hustle, nowadays, hustling is the way to go here in Kibera. (High School Focus Group)

For some young women, if empowerment programs and seminars included a financial element to it, it was also considered *hustling* as reported: "there are like forums where we are invited and paid sitting allowances" (Support Group Focus Group).

Some women described that poverty caused young women to consider transactional relationships with either older men or "s*ponsors*" to meet one's basic needs and those of family members. Young women shared that if they had money or a steady source of income, they would be more likely to abstain or avoid transactional sexual relationships.

> Money, that is poverty. … Poverty can lead someone because you want money and your boyfriend tells you that if you want money you come and that is tit for tat is a fair game "you come and I have sex with you and I give you the money" so automatically you will not abstain (High School Individual Interview).

To summarize research question three, young women described structural factors related to HIV risk for young women living in Kibra. Traditional practices, gender norms and navigating poverty all intersected to exacerbate HIV risk. Gender norms such as valuing education of men

over women and lack of means to meet basic needs due to poverty were described as some of the reasons for risk behaviors such as transactional sex, sex without condoms, and incidences of sexual violence among young women. In the next research question, young women described the prevention needs of young women in Kibra.

## Research Question 4: HIV Prevention Needs

For research question four, the aim was to explore the prevention needs of young women in Kibra. Having described HIV risk factors, young women shared that to mitigate risk behaviors and achieve HIV prevention, the interventions needed to not only address the everyday needs of women but also change the structural factors in society. Young women described their HIV prevention needs related to the following three themes: help girls go to school, create jobs, and ensure all young people are not idle.

### Help Girls Go to School

The first main theme related to the prevention needs of young women was to help girls go to school. To improve the lives of young women in Kibra, some women in this study shared that young girls needed to be afforded opportunities to go to school. These could be through paying school-fees for those young women who could not afford to pay for school themselves or intervening on behalf of some when parents were the reason young women were not in school. In Kenya, both private and public schools require tuition, from kindergarten to university. Young women shared that the school needed to be made possible for all young women, not only primary and secondary but also college and university.

> I think, first of all, they just make sure that these children at least finish school …. To those who are able to be taken to school, to those who are unable to go to high school, and most of these students pass. (Support Group Individual Interview)

Some young women shared that in addition to paying for young women's school, it was important to protect young women from being married off early in place of going to school. Societal norms are such that the value of a woman was to improve the socioeconomic status of the family through marriage. When a young woman is married off, the family gets wealth in the form of a dowry. The dowry could be money, cattle, or land. This dowry then could make it more lucrative for heads of households to choose to have a young woman get married instead of sending her to school. Young women in this study suggested that there should be protection against such practices.

> If there are any girls who aren't going to school like maybe their parents can't take them to school. Let them just help the girls to go to school coz [because] that is what is going to really help us (Community Individual Interview).

**Create Jobs**

The second main theme that was discussed related to the HIV prevention needs of young women in Kibra was job creation. Other than education, young women in this study explained that another way to promote HIV prevention would be to create jobs and provide employment opportunities for both young men and young women. Young women described that after completing high school, most had no way of continuing to college and thus would like job opportunities that did not necessarily require a college or university education: "It's just what this one has said, creating of job opportunities. … They should create organizations as well,

when we close school, we be thought of with those things … yes organizations for those who are not going to school" (Community Focus Group). Similarly, young women from the support group explained,

> This issue of unemployment. Many people, I mean girls are not employed. You finish form four … then you look for jobs in vain so organizations should be brought to take in girls so as to address this issue. They should be given job opportunities and their lives will be good (Support Group Focus Group).

Young women acknowledged that there needed to be some creativity in thinking about jobs for young people in Kibra. Some suggested projects that incorporated talents into income-earning as shared during high school individual interviews:

> …form projects to help the women, you see like my friend who has HIV she doesn't go to work but she is talented kind of she has this talent Uhuru [President of Kenya] can maybe form projects in the community, fund them (Highschool Individual Interview).

Others suggested providing resources that encouraged entrepreneurship and self-employment as shared during community individual interviews:

> and some of us who maybe who need money to start up things like daycare we should be given the opportunity, something like that. For us to give the parents the chance of giving us their children to look after so that they {parents} can go to work or they go to look for jobs (Community Individual Interview).

## Ensure Young People are Not Idle

The last main theme discussed related to HIV prevention among young women in Kibra was to ensure young people were not idle. Young women described two main subthemes: jobs and mentorship programs.

### *Jobs*

In addition to improving the livelihood of young women, jobs were also described as an opportunity to keep young people busy. Some young women shared that being idle increased the chances of using alcohol and drugs, engaging in sexual activities, or even giving into peer pressure.

> …the first challenge is you are idle, you can have many different but bad thoughts, that's when you can think of going to visit a boyfriend because you are seeking for someone to keep you busy (laughter). That's the truth … at least you want someone to keep you busy but when you are busy, you don't get those thoughts. (Community Focus Group)

Other young women in this study also explained that keeping young men busy through job opportunities could decrease the number of boys idle in the neighborhoods and lower incidents of sexual violence against young women: "Maybe they can give those boys that loiter around jobs to keep them busy so that time they think about raping a girl or doing something else that is insensible they focus on those jobs that they are given" (High School Focus Group).

### *Mentorship Programs*

Besides jobs that kept young people busy, some young women in this study described that mentorship programs could also help with keeping young people busy as well as help to

change the social norms. For young people attending school in Kenya, school is typically intensive such that students are unable to both attend school and have a job in the summer like in the United States. Therefore, during school breaks in Kenya, some women described that it would be beneficial to create mentorship programs where young women could identify role models and learn new beneficial skills. The mentorship programs could also be beneficial for young men not only to keep them busy but also as an avenue to change social norms.

> First of all like I have said, here . …I can tell you as advice these things like mentorship, by the way, this is the first school I have seen mentorship being introduced. Something like mentorship they have a belief it can change someone's life. But as it is they should not provide only for girls but also for boys so it can be an equal opportunity for gender equality (High School Individual Interview).

In research question four, young women in Kibra shared their own HIV prevention needs, which included prioritizing girls' education, creating job opportunities for young women that did not require a college degree, and ensuring young people were not idle by also incorporating mentoring programs for both young men and women. The interventions shared could not only meet the day to day needs of young women but also impact the structural factors in the long term.

**Summary**

In this chapter, study findings were presented organized by the research questions. Findings in this study presented a nuanced picture of what a young woman's life in Kibra entails and how this population group is impacted by both individual factors such as one's level of education as well as societal factors such as gender norms, poverty, and geography. The findings

in this current study align with the guiding conceptual framework. In the next chapter, a revised conceptual framework based on the study findings will be presented as well as a discussion on how these findings align with the literature.

# Chapter 5: Discussion and Implications

The purpose of this study was to explore HIV risk factors and prevention needs among young women aged 15-24 who reside in a peri-urban slum in Kenya. The study was guided by postcolonial feminist epistemology and a conceptual framework developed from the theory of gender and power and postcolonial theory. Data were collected using focus groups and individual interviews as well as field notes. I interviewed and conducted focus groups of 73 participants in environments familiar to them to ensure ease and comfortability. Four main research questions were asked: 1) What are the daily lived experiences of young women in Kibra Kenya? 2) How do young women in Kibra experience HIV risk? 3) How do age, gender, ethnicity, religion, and poverty affect HIV risk behaviors and prevention needs? and 4)What are the HIV prevention needs for young women in a broader socio-economic, cultural, geographic, and historical context of Kenya? In this chapter, the aim is to interpret the findings and connect them back to the conceptual framework that guided this study and the broader literature. Implications and limitations will also be discussed.

## Discussion

The study findings contribute to the literature on young women in Kibra as well as to the theory of gender and power and postcolonial theory. Young women in Kibra are affected by numerous intersecting structural issues such as gender, ethnicity, education, employment, and poverty, and they make decisions each day based on this reality.

### Conceptual Framework Revisited

The findings of this study contribute to both postcolonial theory and the theory of gender and power. While colonialism was not directly studied as a research question, using tenets of the

postcolonial theory put forth by Kirkhman and Anderson (2002) allowed this study to be situated within the histories of colonialism. The theory of gender and power provided a basis for understanding how gender differences exacerbated HIV risk. The two theories, coupled with the postcolonial feminist epistemology made it possible to not only explore gender but also how gender intersects with other factors including poverty and ethnicity, and how the intersection affected the HIV risk and prevention needs of young women. Through individual and focus group interviews the study found that the dominant culture persistent in the society that was established due to colonialism continues to affect young women in Kibra when it comes to HIV risk. The study also found that the geographical and socioeconomic contexts of living in Kibra intersect to create unique challenges of young women in Kibra. Based on current study findings, colonialism is manifested in the society through gender norms which then influenced other factors namely age, ethnicity, poverty, and religion. The conceptual framework in Figure 7 illustrates the updated conceptual framework based on study findings.

**Gender Norms**

Current findings indicate that gender norms mediated how other factors influenced HIV risk factors and the prevention needs of young women. Gender norms manifested in the society both through everyday practices of women as well as in the educational and employment systems.

Gender norms in the everyday lives of young women manifested through gender roles. The study found that that part of being a young woman in Kenya was the expectation to perform household chores in addition to other personal responsibilities such as attending school. While young women were expected to attend to household chores, young men were beneficiaries of the chores. Gender roles affected young women's education through school performance and

enrollment. For those in school, this study found a perceived unfairness between men and women in terms of time allocated for school work which then led to poor performance for women compared to men. Additionally, gender norms manifested in the way society valued education. One of the challenges young women in Kibra reported experiencing was the perception that young women were more likely to drop out of school due to pregnancy or be held back from school by the family which was not the case for young men. Young women in Kibra perceived an unfair treatment during pregnancy in which the young woman was blamed for being pregnant and the young man encouraged to go back to school. Education, in terms of improving school attendance and achievement, has been cited as an important structural approach when it comes to HIV prevention (Wamoyi, Mshana, Mongi, Neke, Kapiga, & John, 2014) and for young women in this study, changing social norms around girls education especially for those residing in Kibra could serve as an avenue to HIV prevention. Other studies have reported on the relationship between HIV prevention and education. A study in South Africa found that among men, education confounded the relationship between gender norms condom use (Fladseth, Gafos, Newell, & McGrath, 2015). Although the study was among HIV positive men and women, the researcher specifically examined the role of gender norms on sexual risk behaviors.

Additionally, findings from this study showed that gender norms affected condom use among young women. Young women reported that even though they were aware that condoms helped to prevent HIV, societal gender norms around who should buy condoms and initiate condom use affected whether they used condoms during a sexual encounter. Fear of being labeled as promiscuous caused young women to refrain from buying condoms. A study by Ragnarsson among adults in Kibra reported that compared to men, women reported more

inconsistent condom use (Ragnarsson, Ekström, et al., 2011). In the quantitative study, researchers speculated that inconsistent condom use among may have been due to the reproductive role of women or the idea that condom use is for those who are dirty (Ragnarsson, Ekström, et al., 2011; Ragnarsson, Thorson, et al., 2011). In another study among women in middle eastern region, researchers also found that male control over condom use was a result of perceived gender norms and impacted sexual risk behaviors for women (Lotfi, Ramezani, Khoei, Yaghmaei,& Dworkin, 2013). Although the study was in a different region, the results are similar to those of this current study which found that inconsistent condom use among women in Kibra was related to the dominant societal norms where buying condoms is a man's responsibility and that women who buy condoms planned to be promiscuous.

**Sexual Violence**

Findings in this study also showed that fear of sexual violence was another reason why young women reported not using condoms. Young women were afraid that suggesting condom use especially in monogamous relationships could be (mis)interpreted as a gesture of mistrust by the male partner and thus cause them to be angry leading to either physical violence or relationship break up. A study by Madiba and Ngwenya among married and cohabitating in South Africa reported similar findings that women feared suggesting condom use with their partners (Madiba & Ngwenya, 2017). Researchers explained that the patriarchal nature of South African society played a role in reinforcing young women's lower social position within relationships (Madiba & Ngwenya, 2017). While the study was among adult married or cohabitating South African women, Kenya is also a patriarchal society and cultural norms play a similar role in reinforcing young women's ability to negotiate condom use. While there has been some literature on married women and sexual violence due to fear of condom negotiation, this

study shows that young women may also face the same challenges and more studies need to be done particularly among those in Kibra.

The patriarchal nature of Kenyan society means the masculinity and femininity are reinforced through gender (Kimuna, Tenkorang, & Djamba, 2018). As such, while men are empowered to form social and sexual networks outside the house which then (Kihato, 2015; Madiba & Ngwenya, 2017; Rakgoasi & Odimegwu, 2013), young women are encouraged to embrace caring and subordination (Swart, 2013). In doing so, young women can have internalized dangerous messaged that prevent young women from reporting sexual violence (Bhana, 2018). In this dissertation study, when discussing sexual violence, some women reported that the way a woman dressed can attract rape. Such messages need to be countered on a societal level because rape is not a woman's fault.

This study found that the neighborhood environment in Kibra contributed to the risk of sexual violence for young women in Kibra. This study found that as a result of small houses, sometimes solutions such as sleeping at a neighbor's house could increase a woman's vulnerability to sexual violence. Additionally, due to poorly lit areas present in Kibra neighborhoods known as corridors, young women were easily exposed to the risk of rape that occurred in corridors. While a lot has been documented in the literature regarding poor sanitation and its effect on general health in Kibra (Moszynski, 2010), this study shows that young women in Kibra face unique challenges related to the environment that increase vulnerability to HIV risks.

**Age**

Age is another factor reported in this study to intersect with gender to affect young women in Kibra Kenya. Participants reported being affected by practices of early marriage, early sexual debut, and experiencing sexual violence in part because they were young. For young women in this study, most were at an impressionable age where they were willing to experiment with several things including alcohol, drugs, and sexual relationships especially if peers also endorsed such behaviors. Peer influence was discussed as influencing alcohol and drug use, school dropout, and early sexual debut, all high-risk behaviors when it comes to HIV.

Other studies have documented the challenges associated with being an adolescent. Due to the neural development during this transitional phase from childhood to adulthood, adolescents are more likely to be impulsive, risk-takers, and highly emotional as they navigate the feeling of independence and social values (Ernst, 2014). This developmental period is characterized by a shift of social reorientation to value peer status and respect as well as the likelihood to engage in high-risk behaviors (Bryan et al., 2016; Ernst, 2014). In a study of adolescent behaviors, Ernest (2014) reported that during neural brain development for adolescents, behavioral patterns are influenced by both how specific neural regions develop, as well as external factors including context (at home), gender, mental state of the individual and past experiences. While thinking about young women in Kibra, in addition to the neural developments, this population is being influenced by messages rooted in gender norms and also learning to survive in Kibra. All these can shape behavior especially when it comes to HIV. It is therefore important to adopt interventions with combined targets such as those that not only improve the lives of women but also change norms and encourage empowerment (Wamoyi, Mshana, Mongi, Neke, Kapiga, & John, 2014).

**Traditional Practices**

While young women in this study described the traditional practices of disco Matanga and wife inheritance, most agreed that traditional practices are minimal in Kibra. Unlike in rural Kenya where traditional practices are more prevalent, these practices are less prevalent in Kibra. The reason could be because of the heterogeneity of ethnicities and the interactions of these ethnicities. It could also be that Kibra has its own culture which protects young women from practices that may be harmful to individual women. In this study, participants reported that traditional practices were not as prominent in Kibra as in other parts of Kenya. Most participants when asked if there were any ethnic differences that they had experienced, replied no. However, since traditional practices are deeply embedded in Kenyan society, some participants reported two main traditional practices that affected young women, disco matanga, and wife inheritance.

The protective nature of Kibra against traditional practices that impact young women is a topic that requires more research. Nonetheless, it is also important to note young women in this study reported sexual violence as a major issue affecting young women's HIV risk. Social norms have been cited in the studies as a factor contributing to the acceptance of gender-based violence and intimate partner violence in Kibra (Kimuna et al., 2018; Swart, 2013). As such, in trying to understand increased HIV rates among young women in Kibra, ethnicity and traditional practices should be considered not as individual factors, but on how they intersect with poverty to increase young women's vulnerability to factors such as sexual violence and early marriage.

## Poverty

In this study, participants reported that part of the experience of living in Kibra was to live in poverty. Poverty was explained through the themes of the physical environment, financial instability, and navigating life in Kibra.

### Physical Environment

The physical environment in Kibra was described by participants as unsanitary, crowded, and unsafe. Participants in this study described a lack of space within households where some participants were forced to sleep at a neighbor's house. Participants also described the presence of garbage in the community and lack of public sanitation services to take care of things such as sewage and toilets.

One of the main environmental challenges that young women reported was living close to local bars. This was described as a challenge because it increased access to alcohol as well as sexual violence related to alcohol consumption. For young women in this study, the physical environment in Kibra made it easy for both young men and women to have easy access to alcohol, a factor that has been linked to HIV risk behaviors, especially for young women. Roth, Jansson, and Hallsgrimdottir (2017) found that public drinking venues in Kibra were associated with commercial sex and interpersonal violence. In the study, the researchers recommended educating the public on social norms related to alcohol consumption (Roth, Benoit, Jansson, & Hallsgrimdottir, 2017) but did not explore how young women were specifically impacted by such establishments, particularly if the bar is next door.

Findings from this study also showed that lack of security was another issue affecting young women in Kibra related to the physical environment. Young women were forced to

decline jobs based on hours of closing because they did not want to be out of the house when darkness fell. Participants were afraid because of cases of rape that were prevalent in certain places in Kibra, particularly those poorly lit areas. One of the challenges that the Kenyan government continues to face is having the capacity to provide electricity in Kibra.

The history of Kibra has much to do with the electricity typologies of the modern era. During the colonial era, even though colonizers resided in Nairobi where electrical infrastructure was better than that in rural Kenya, the indigenous settlers who resided in Kibra were not afforded the electricity privilege. This group was expected to depend on charcoal and wood as sources of light and energy (de Bercegol & Monstadt, 2018). Today, only 59.6% of residents in Kibra have access to electricity compared to 88% of residents in wealthier parts of Nairobi (de Bercegol & Monstadt, 2018). Poorly lit areas were reported by participants in this study as hubs where alcohol and drug use in addition to sexual activities took place. Therefore, the physical environment in Kibra played a role in increasing young women's vulnerability to HIV and can be an area of intervention by both governmental and non-governmental organizations. Such interventions could include adding light in those poorly lit corridors.

**Financial Instability and Navigating Life with Limited Resources**

Related to financial instability, young women in this study reported that the reality of living in Kibra included a lack of jobs. Most participants in this study were unemployed and reported how limited resources were in Kibra. In 2019, unemployment rates in Kenya among those aged 15-24 were 18.34% (Central Intelligence Agency [CIA], 2018). The number is considered to be even higher among youth residing in Kibra. For most youth, traditional career paths such as those to become a doctor, pilot, or accountant are not readily available due to low economic growth and the low number of enrollment in tertiary education (Sambo, 2016). With

this reality, participants in this study shared ways in which they were navigating life with limited resources.

For young women in this study, financial instability increased HIV risk. Most explained that having financial independence would allow them to walk away from unsafe sexual practices such as transactional sex and having multiple sexual partners. Studies in other parts of Africa have documented an increased risk of HIV acquisition among young women who have sexual relationships with older men (Mabaso et al., 2018; Maxmen, 2016; Schaefer et al., 2017). For participants in this study, transactional sex reduced the likelihood to negotiate condom use and increased chances of sexual violence and HIV. To effectively lower HIV rates among young women, poverty needs to be addressed because it impacts individual risk behaviors such as transactional sex.

**Religion**

There were two main ways religion affected HIV risk factors in this study. For most participants, churches and areas of worship were resources to those who were HIV positive as well as those without the disease. Among those infected, places of worship were a safe place to obtain food and medicine. For those who were HIV negative, places of worship served as a source of positive role models and a place to be educated about HIV. Studies among HIV positive youth and adolescents reported a protective benefit of attending religious services (Kimmel, Cheng, Wang, & Lyon, 2015; Lyon, Kimmel, Cheng, & Wang, 2016). Among those who were HIV negative, being affiliated with a religion encouraged youth to engage in safer sexual practices such as abstaining and monogamy (Kheswa & van Eeden, 2018), a finding that was also present in the present study. Religion by way of involving places of worship could be instrumental in helping to reduce HIV risk among young women.

Conversely, when considering the positive impact of religion, another perspective was offered by participants in this study that should not be ignored. Participants who attended Catholic churches reported being counseled to avoid condoms during sexual intercourse at all costs as it was contrary to religious teachings. Most reported that this teaching discouraged male sexual partners from adapting the practice thus increasing chances of getting infected with HIV. This finding adds to the importance of taking a multidimensional approach in HIV education for youth and providing an area where religious organizations can collaborate with both governmental and non-governmental organizations to educate youth effectively.

## Implications

### Nursing Practice Implications

Findings from this study have several implications for nursing practice. The first implication is the need to treat young women as a whole. Findings in this study indicate that young women living in Kibra are faced with multidimensional intersecting issues related to age, gender, poverty, religion, and ethnicity. When discussing prevention needs or behaviors, nurses and other health care workers should use assessment skills rooted in structural theories to explore how these factors intersect to exacerbate HIV risk. Nurses should seek to be partners with young women to foster empowerment and co-creation of interventions as necessitated by feminist epistemology (Anderson, 2000).

Nurses also need to be compassionate when working with young women from Kibra. Being compassionate is part of what makes nursing an exceptional profession (Straughair, 2019). In the area of HIV, stigma and discrimination are still very prominent. Therefore, nurses need to not only be professional but also maintain confidentiality with young women to ensure that this population can continually come back for education and testing.

Lastly, nurses who live in Kenya and abroad that work with youth from Kibra need to examine their own biases and engage in reflexivity before and during the process (Morgan, 2009). Residing in Kibra is perceived negatively both in the global south and elsewhere in the world. Young women were very aware of the negative perceptions associated with the geographic residence. It can be difficult for an outsider to understand how one manages to not only survive in Kibra, but also love living there. For this reason, nurses need to not only understand what biases they may have related to Kibra, but also what informed the biases. The purpose of this would be to ensure that the nursing profession is not another source of stress for this population group. The process of reflectivity allows nurses to examine their judgments, biases, and positionality in relation to the population being served.

## Policy Implications

This study also has several policy implications that can be implemented by both governmental and non-governmental organizations. As part of the study questions, participants were asked what changes they would like policymakers to do. Participants had several recommendations;

### *Provide Jobs*

One of the biggest issues plaguing youth in Kenya today is the lack of jobs. Young people are struggling to find jobs after completing secondary education. There is a need to shift the focus from traditional job recommendations to equipping youth with skills for innovation and entrepreneurship. Additionally, policymakers need to create policies that decrease gender gaps in both secondary and tertiary level education enrollments. An example of a current program in Kenya that has adopted a multidimensional approach in reducing HIV infections among adolescent girls and young women is the DREAMS project. DREAMS project, which stands for

Determined, Resilient, Empowered, AIDS-free, Mentored and Safe lives, aims to reduce HIV incidence by using evidence-based interventions at the individual, community, and societal levels (Birdthistle, et al., 2018). The program is implementing interventions that target socioeconomic factors (giving cash transfers and education subsidies), young women empowerment and school-based violence prevention (Birdthistle, et al., 2018). Such a program could help to inform policy changes at all levels in the country.

### *Ensure Young Women Are Not Idle*

Another recommendation by participants was that they needed something to do. Participants reported that most of the time when they were idle, they were more likely to engage in HIV risk behaviors such as alcohol use and early sexual debut. This is an opportunity for both governmental and non-governmental organizations to collaborate. Schools, religious organizations, and community organizations can partner to create mentorship programs that advocate peer counseling and accountability. These programs would ensure that young women have role models and something to keep them busy.

### *Help The Young Men*

Lastly, part of helping young women is also helping young men. Participants in this study described instances when behaviors of young men impacted young women's lives particularly in the area of alcohol use and sexual violence. There needs to be a policy shift in the way men, in general, are groomed to interact with women from an early age to change gender norms that disproportionately and negatively impact young women. These policies can be learned through education as well as community programs that advocate mutual respect of women by men.

**Research Implications**

This study adds to the literature on HIV risk factors among young women in Kibra Nairobi Kenya. It adds to the limited but growing body of literature that seeks to take a multidimensional and structural approach in understanding HIV risk factors and prevention needs among young women in Kibra Kenya.

Starting with the conceptual framework, this study adds to the literature on using the theory of gender and power and postcolonial theory in understanding HIV risk behaviors among young women in Kibra Nairobi Kenya. Although several studies have been done using the theory of gender and power and postcolonial theory and HIV, few have been in young women in Kibra and Kenya. This is only the beginning though, more studies are needed.

The qualitative nature of this study allowed for a detailed understanding of young women's nuanced lives in the age of HIV. Individual and focus group interviews provided an opportunity to dig deeper into how different factors intersected to exacerbate young women's risk. The study provided details that could be useful in future studies and interventions. For example, in the area of condom use, the study findings showed that condom use among young women is low because of gender roles and gendered perceptions. Gender norms around who should purchase condoms within the relationship were a hindrance to condom use. With this revelation, interventions could be more effective if the advertisement on condom use in Kenya is changed from portraying those who seek to buy condoms as promiscuous to portraying these women as empowered. More research is needed to understand specific areas where gender norms can change without changing the fabric of the Kenyan society.

**Limitations**

This study findings need to be interpreted in light of limitations related to demographics, study sample, my personal experiences, the cross-sectional design, and inclusion/exclusion criteria.

First, only young women who were able to speak and understand English or Kiswahili were included in this study. Even though this criterion potentially excluded some population groups in Kibra that are highly affected by HIV, the national language in Kenya is Kiswahili.

Another limitation was related to the study sample. This study recruited from a high school and support group. Both locations could be considered protective against HIV and thus participants who were affiliated with these two locations may have already been engaged in HIV prevention practices. I also recruited from the community which reported similar findings to those of participants in the high school and support group. Although this study was not necessarily looking to recruit HIV positive participants, future studies can engage with HIV positive young women.

This study is of a cross-sectional design meaning that it captured participant's views at one moment in time which potentially limited understanding of the temporal effects of different factors. Despite this limitation, having participants from the three groups who were located in different areas in Kibra allowed for triangulation of findings. Additionally, the use of the theory of gender and power and postcolonial theory as well as postcolonial feminist epistemology allowed participants to author their own stories.

Another limitation of this study is my personal experiences as a researcher. I acknowledge that although I was born and raised in Kibra, I was allowed to go to the United

States and attend higher education. It is possible that some participants may have participated in the study thinking that I could somehow help them to either come to the United States or help them financially. To the best of my knowledge, no participant approached me with this in mind. Most participants were willing to be in the study because of the relationships I had built with the community and gatekeepers. Being born in Kibra also added authenticity to the study.

**Conclusion**

Young women in Kibra Nairobi Kenya are an understudied group, including their HIV risk and prevention needs. Much has been published about HIV risk behaviors among young women, yet little is known about why young women in Kibra continue to be disproportionately impacted by HIV. While there is a growing call for HIV interventions that adopt a structural approach, most are still guided by frameworks and theories that emphasize individual behaviors. The complexity of intersecting historical and current factors that impact young women in Kibra requires interventions that promote equality, human dignity, and respect from healthcare providers, policymakers, and society at large to effectively reduce HIV rates.

## References


Achia, T. N., & Obayo, E. (2013). Trends and correlates of HIV testing amongst women: lessons learnt from Kenya: original research. African Journal of Primary Health Care and Family Medicine, 5(1), 1-10.

Adimora, A. A., & Auerbach, J. D. (2010). Structural interventions for HIV prevention in the United States. *Journal of acquired immune deficiency syndromes (1999), 55*(0 2), S132.

Agot, K. E., Stoep, A. V., Tracy, M., Obare, B. A., Bukusi, E. A., Ndinya-Achola, J. O., . . . Weiss, N. S. (2010). Widow inheritance and HIV prevalence in Bondo District, Kenya: baseline results from a prospective cohort study. *PLoS ONE, 5*(11), e14028.

Aho, J., Hakim, A., Vuylsteke, B., Semde, G., Gbais, H. G., Diarrassouba, M., . . . Laga, M. (2014). Exploring Risk Behaviors and Vulnerability for HIV among Men Who Have Sex with Men in Abidjan, Cote d′Ivoire: Poor Knowledge, Homophobia, and Sexual Violence. *PLoS ONE, 9*(6), e99591. DOI:10.1371/journal.pone.0099591

Ajzen, I. (1985). *From intentions to actions: A theory of planned behavior*: Springer.

Akwara, P. A., Madise, N. J., & Hinde, A. (2003). Perception of risk of HIV/AIDS and sexual behaviour in Kenya. Journal of biosocial science, 35(03), 385-411.

Alkon, A. H. (2011). Reflexivity and environmental justice scholarship: A role for feminist methodologies. *Organization & Environment, 24*(2), 130-149.

Alsallaq, R. A., Buttolph, J., Cleland, C. M., Hallett, T., Inwani, I., Agot, K., & Kurth, A. E. (2017). The potential impact and cost of focusing HIV prevention on young women and men: A modeling analysis in western Kenya. *PLoS ONE, 12*, e0175447.

Anderson, J. M. (2000a). Gender, 'race', poverty, health, and discourses of health reform in the context of globalization: A postcolonial feminist perspective in policy research. *Nursing Inquiry, 7*(4), 220-229.

Anderson, J. M. (2000b). Writing in subjugated knowledges: towards a transformative agenda in nursing research and practice. *Nursing Inquiry, 7*(3), 145-145.

Anderson, J. M. (2004). Lessons from a postcolonial-feminist perspective: Suffering and a path to healing. Nursing Inquiry, 11(4), 238-246. DOI:10.1111/j.1440-1800.2004.00231.x

Anderson, J. M., & McCann, E. K. (2002). Toward a post-colonial feminist methodology in nursing research: Exploring the convergence of post-colonial and black feminist scholarship. *Nurse researcher, 9*(3), 7-27.

Anderson, K. G., Beutel, A. M., & Maughan-Brown, B. (2007). HIV risk perceptions and first sexual intercourse among youth in Cape Town, South Africa. *International Family Planning Perspectives, 33*(3), 98-105.

Angrist, N., Matshaba, M., Gabaitiri, L., & Anabwani, G. (2019). Revealing a safer sex option to reduce HIV risk: a cluster-randomized trial in Botswana. BMC Public Health, 19(1), 610. DOI:10.1186/s12889-019-6844-8Barden-O'Fallon, J. L., deGraft-Johnson, J., Thomas, B., Sulzbach, S., Benson, A., & Tsui, A. O. (2004). Factors associated with HIV/AIDS knowledge and risk perception in rural Malawi. *AIDS and Behavior, 8*(2), 131-140.

Barden-O'Fallon, J. L., deGraft-Johnson, J., Thomas Bisika, Sulzbach, S., Benson, A., & Tsui, A. O. (2004). Factors associated with HIV/AIDS knowledge and risk perception in rural Malawi. *AIDS and Behavior, 8*(2), 131-140.

Bekalu, M. A., Eggermont, S., & Viswanath, K. V. (2017). HIV/AIDS Communication Inequalities and Associated Cognitive and Affective Outcomes: A Call for a

Socioecological Approach to AIDS Communication in Sub-Saharan Africa. *Health Communication, 32*(6), 685-694. DOI:10.1080/10410236.2016.1167999

Bennett, J. M. (2006). *History matters: patriarchy and the challenge of feminism*: University of Pennsylvania Press.

Benoit, C., Roth, E., Hallgrimsdottir, H., Jansson, M., Ngugi, E., & Sharpe, K. (2013). Benefits and constraints of intimate partnerships for HIV positive sex workers in Kibera, Kenya. *International Journal for Equity in Health, 12*(1), 76-87. DOI:10.1186/1475-9276-12-76

Bertotti, M., Adams-Eaton, F., Sheridan, K., & Renton, A. (2012). Key barriers to community cohesion: views from residents of 20 London deprived neighborhoods. *GeoJournal, 77*(2), 223-234. DOI:10.1007/s10708-009-9326-1

Bhaba, H. (1994). TheLocationofCulture. LondonandNewYork: Routledge.

Bhana, D. (2015). Sex, gender, and money in African teenage conceptions of love in HIV contexts. *Journal of Youth Studies, 18*(1), 1-15. DOI:10.1080/13676261.2014.933195

Bhana, D. (2018). Girls negotiating sexuality and violence in the primary school. British Educational Research Journal, 44(1), 80-93.

Birdthistle, I., Schaffnit, S. B., Kwaro, D., Shahmanesh, M., Ziraba, A., Kabiru, C. W., … Floyd, S. (2018). Evaluating the impact of the DREAMS partnership to reduce HIV incidence among adolescent girls and young women in four settings: a study protocol. *BMC Public Health*, *18*(1). DOI: 10.1186/s12889-018-5789-7

Braithwaite, R. S., Nucifora, K. A., Kessler, J., Toohey, C., Mentor, S. M., Uhler, L. M., . . . Bryant, K. (2014). Impact of Interventions Targeting Unhealthy Alcohol Use in Kenya on HIV Transmission and AIDS-Related Deaths. *Alcoholism: Clinical and Experimental Research, 38*(4), 1059-1067. DOI:10.1111/acer.12332

Bryan, C. J., Yeager, D. S., Hinojosa, C. P., Chabot, A., Bergen, H., Kawamura, M., & Steubing, F. (2016). Harnessing adolescent values to motivate healthier eating. Proceedings of the National Academy of Sciences, 113(39), 10830. DOI:10.1073/pnas.1604586113

Buldeo, P., & Gilbert, L. (2015). Exploring the Health Belief Model and first-year students' responses to HIV/AIDS and VCT at a South African university. *African Journal of AIDS Research (AJAR), 14*(3), 209-218. DOI:10.2989/16085906.2015.1052527

Burgoyne, A. D., & Drummond, P. D. (2008). Knowledge of HIV and AIDS in women in sub-Saharan Africa. *African Journal of Reproductive Health, 12*(2), 14-31.

Buzi, R. S., Smith, P. B., Weinman, M. L., & Novello, G. (2013). HIV risk perceptions among adolescents attending family planning clinics: An integrated perspective. *AIDS care, 25*(1), 20-27. DOI:10.1080/09540121.2012.674097

Bryan, C. J., Yeager, D. S., Hinojosa, C. P., Chabot, A., Bergen, H., Kawamura, M., & Steubing, F. (2016). Harnessing adolescent values to motivate healthier eating. Proceedings of the National Academy of Sciences, 113(39), 10830. DOI:10.1073/pnas.1604586113

Casale, M., Rogan, M., Hynie, M., Flicker, S., Nixon, S., & Rubincam, C. (2011). Gendered perceptions of HIV risk among young women and men in a high-HIV-prevalence setting. African Journal of AIDS Research (AJAR), 10, 301-310. DOI:10.2989/16085906.2011.637728

Cederbaum, J. A., Gilreath, T. D., & Barman-Adhikari, A. (2014). Perceived Risk and Condom Use among Adolescents in Sub-Saharan Africa: A Latent Class Analysis. *African Journal of Reproductive Health, 18*(4), 26-33. DOI:10.1023/A:1021841312539.

Celum, C. L., Delany-Moretlwe, S., McConnell, M., Rooyen, H. v., Bekker, L.-G., Kurth, A., . . . Baeten, J. M. (2015). Rethinking HIV prevention to prepare for oral PrEP

implementation for young African women. *Journal of the International AIDS Society, 18*(4 Suppl 3), 202-227. DOI:10.7448/IAS.18.4.20227

Challa, S., Manu, A., Morhe, E., Dalton, V. K., Loll, D., Dozier, J., . . . Hall, K. S. (2017). Multiple levels of social influence on adolescent sexual and reproductive health decision-making and behaviors in Ghana. *Women & Health*, 1-17. DOI:10.1080/03630242.2017.1306607

Chanda-Kapata, P., Klinkenberg, E., Maddox, N., Ngosa, W., & Kapata, N. (2016). The prevalence and socio-economic determinants of HIV among teenagers aged 15–18 years who were participating in a mobile testing population based survey in 2013–2014 in Zambia. *BMC Public Health, 16*(1), 789. DOI:10.1186/s12889-016-3449-3

Cluver, L. D., Orkin, F. M., Meinck, F., Boyes, M. E., & Sherr, L. (2016). Structural drivers and social protection: mechanisms of HIV risk and HIV prevention for South African adolescents. *Journal of the International AIDS Society, 19*(1), 20646-20646. DOI:10.7448/IAS.19.1.20646

Connell, R. (2014). Rethinking gender from the South. *Feminist Studies, 40*(3), 518-539.

Connell, R. W. (1987). Gender and power Cambridge. Polity, 10, 183-185.

Cooper, E. S., Risley, C. L., Drake, L. J., & Bundy, D. A. P. (2007). HIV as part of the life of children and youth, as life expectancy increases: Implications for Education. *Journal of international cooperation in education, 10*(1), 101-113.

Darteh, E. K. M., Kumi-Kyereme, A., & Awusabo-Asare, K. (2016). Perception of risk of HIV among adolescents' living in an urban slum in Ghana. African Journal of Reproductive Health, 20, 62+.

Davis, S. K., & Tucker-Brown, A. (2013). The Effects of Social Determinants on Black Women's HIV Risk: HIV Is Bigger Than Biology. Journal of Black Studies, 44(3), 273-289. DOI:10.1177/0021934713481805

de Bercegol, R., & Monstadt, J. (2018). The Kenya Slum Electrification Program. Local politics of electricity networks in Kibera. Energy Research & Social Science, 41, 249-258. doi:https://doi.org/10.1016/j.erss.2018.04.007

Dirks, N. B., Eley, G., & Ortner, S. B. (1994). Culture/power/history: A reader in contemporary social theory: Princeton University Press.

Do, M., & Meekers, D. (2009). Multiple sex partners and perceived risk of HIV infection in Zambia: attitudinal determinants and gender differences. *AIDS care, 21*(10), 1211-1221. DOI:10.1080/09540120902730047

Dworkin, S. L., Grabe, S., Lu, T., Hatcher, A., Kwena, Z., Bukusi, E., & Mwaura-Muiru, E. (2013). Property Rights Violations as a Structural Driver of Women's HIV Risks: A Qualitative Study in Nyanza and Western Provinces, Kenya. *Archives of Sexual Behavior, 42*(5), 703-713. DOI:10.1007/s10508-012-0024-6

Eggers, S. M., Aarø, L. E., Bos, A. E. R., Mathews, C., Kaaya, S. F., Onya, H., & de Vries, H. (2016). Sociocognitive Predictors of Condom Use and Intentions Among Adolescents in Three Sub-Saharan Sites. Archives of Sexual Behavior, 45(2), 353-365. DOI:10.1007/s10508-015-0525-1

Eggers, S. M., Mathews, C., Aarø, L. E., McClinton-Appollis, T., Bos, A. E. R., & Vries, H. d. (2017). Predicting Primary and Secondary Abstinence Among Adolescent Boys and Girls in the Western Cape, South Africa. *AIDS and Behavior, 21*(5), 1417-1428. DOI:10.1007/s10461-016-1438-2

Eisenstein, M. (2016). Poverty and pathogens. *Nature, 531*(7594), S61-S63.

Eriksson, E., Lindmark, G., Haddad, B., & Axemo, P. (2014). Young People, Sexuality, and HIV Prevention Within Christian Faith Communities in South Africa: A Cross-Sectional Survey. *Journal of Religion and Health, 53*(6), 1662-1675. DOI:10.1007/s10943-013-9753-7

Ernst, M. (2014). The triadic model perspective for the study of adolescent motivated behavior. *Brain and Cognition, 89*, 104-111. doi:https://doi.org/10.1016/j.bandc.2014.01.006

Ezeh, A., Oyebode, O., Satterthwaite, D., Chen, Y.-F., Ndugwa, R., Sartori, J., . . . Lilford, R. J. (2017). The history, geography, and sociology of slums and the health problems of people who live in slums. *The Lancet, 389*(10068), 547-558. doi:https://doi.org/10.1016/S0140-6736(16)31650-6

Fausto-Sterling, A., William, S., L Birke, & GA Bedelow. (2003). The problem with sex/gender and nature/nurture. *Debating Biology: Sociological Reflections on Health, Medicine, and Society*, 123-132.

Fetene, N., & Mekonnen, W. (2018). The prevalence of risky sexual behaviors among youth center reproductive health clinic users and non-users in Addis Ababa, Ethiopia: A comparative cross-sectional study. PLoS ONE, 13(6), 1-15. DOI:10.1371/journal.pone.0198657

Fladseth, K., Gafos, M., Newell, M. L., & McGrath, N. (2015). The Impact of Gender Norms on Condom Use among HIV-Positive Adults in KwaZulu-Natal, South Africa. PLOS ONE, 10.

Gallaher, C. M., Kerr, J. M., Njenga, M., Karanja, N. K., & WinklerPrins, A. M. G. A. (2013). Urban agriculture, social capital, and food security in the Kibera slums of Nairobi,

Kenya. *Agriculture and Human Values, 30*(3), 389-404. DOI:10.1007/s10460-013-9425-y

Ganle, J. K. (2015). Hegemonic Masculinity, HIV/AIDS Risk Perception, and Sexual Behavior Change Among Young People in Ghana. *Qualitative Health Research, 26*(6), 763-781. DOI:10.1177/1049732315573204.

Gnauck, K., Ruiz, J., Kellett, N., Sussman, A., Sullivan, M. A., Montoya, M., . . . Mwanthi, M. A. (2013). Economic empowerment and AIDS-related stigma in rural Kenya: a double-edged sword? *Culture, Health & Sexuality, 15*(7), 851-865. DOI:10.1080/13691058.2013.789127

Goodrum, N. M., Armistead, L. P., Tully, E. C., Cook, S. L., & Skinner, D. (2017). Parenting and youth sexual risk in context: The role of community factors. *Journal of Adolescence, 57*, 1-12. doi:https://doi.org/10.1016/j.adolescence.2017.02.013

Government of Kenya in collaboration with the IMF and the World Bank, (1996). *Kenya economic reforms for 1996-1998: The policy framework paper*. https://www.imf.org/external/np/pfp/kenya/kenya.pdf

Government of Kenya, (2014). *Kenya Health Policy 2014-2030*. Nairobi

Joint United Nations Programme on HIV/AIDS (UNAIDS). (2013). *Global report: UNAIDS report on global aids epidemic 2013 WHO Library Cataloguing*.

Joint United Nations Programme on HIV/AIDS (UNAIDS). (2019). *UNAIDS DATA 2019*. https://www.unaids.org/sites/default/files/media_asset/2019-UNAIDS-data_en.pdf

Hall, J. M., & Stevens, P. E. (1991). Rigor in feminist research. *Advances in Nursing Science, 13*(3), 16-29.

Hargreaves, J. R., Davey, C., Fearon, E., Hensen, B., & Krishnaratne, S. (2015). Trends in Socioeconomic Inequalities in HIV Prevalence among Young People in Seven Countries in Eastern and Southern Africa. *PLoS ONE, 10*(3), e0121775. DOI:10.1371/journal.pone.0121775

Hawkesworth, M. (2013). Sex, gender, and sexuality: From naturalized presumption to analytical categories. In G. Waylen, K. Celis, J. Kantola, & S. L. Weldon (Eds.), *The Oxford Handbook of Gender and Politics* (pp. 31-56). Oxford: Oxford University Press.

Hochbaum, G., Rosenstock, I., & Kegels, S. (1952). Health belief model. *United States Public Health Service*.

Hope.Sr, K. R. (2014). Devolved Government and Local Governance in Kenya. *African & Asian Studies, 13*(3), 338-358.

Hunt, M. R. (2010). "Active waiting": Habits and the practice of conducting qualitative research. *International Journal of Qualitative Methods, 9*(1), 69-76.

Jedwab, R., Kerby, E., & Moradi, A. (2017). History, Path Dependence, and Development: Evidence from Colonial Railways, Settlers, and Cities in Kenya. *Economic Journal, 127*(603), 1467-1494. DOI:10.1111/ecoj.12347

Jenkins, R., Othieno, C., Ongeri, L., Kiima, D., Sifuna, P., Kingora, J., . . . Ogutu, B. (2015). Alcohol consumption and hazardous drinking in western Kenya--a household survey in a health and demographic surveillance site. *BMC Psychiatry, 15*(1), 10-10. DOI:10.1186/s12888-015-0603-x

Kabiru, C. W., Beguy, D., Crichton, J., & Zulu, E. M. (2011). HIV/AIDS among youth in urban informal (slum) settlements in Kenya: What are the correlates of and motivations for HIV testing? *BMC Public Health, 11*(1), 685-696. DOI:10.1186/1471-2458-11-685

Kabiru, C. W., & Orpinas, P. (2009). Correlates of Condom Use Among Male High School Students in Nairobi, Kenya. *Journal of School Health, 79*(9), 425-432.

Kako, P. M. (2008). *Health needs of HIV-infected women in Kenya*: ProQuest.

Kako, P. M., & Dubrosky, R. (2013). "You comfort yourself and believe in yourself": Exploring lived experiences of stigma in HIV-positive Kenyan women. *Issues in mental health nursing, 34*(3), 150-157.

Kako, P. M., Stevens, P. E., Karani, A. K., Mkandawire-Valhmu, L., & Banda, A. (2012). Grappling With HIV Transmission Risks: Narratives of Rural Women in Eastern Kenya Living With HIV. *Journal of the Association of Nurses in AIDS Care, 23*(5), 442-453. doi:http://doi.org/10.1016/j.jana.2011.09.006

Kalolo, A., Mazalale, J., Anja Krumeich, & Chenault, M. (2019). Social cohesion, social trust, social participation, and sexual behaviors of adolescents in rural Tanzania. BMC Public Health, 19, NA.

Karim, Q. A., Sibeko, S., & Baxter, C. (2010). Preventing HIV Infection in Women: A Global Health Imperative. *Clinical Infectious Diseases, 50*(Supplement_3), S122-S129. DOI:10.1086/651483

Kassa, G. M., Degu, G., Yitayew, M., Misganaw, W., Muche, M., Demelash, T., . . . Ayehu, M. (2016). Risky Sexual Behaviors and Associated Factors among Jiga High School and Preparatory School Students, Amhara Region, Ethiopia. *International Scholarly Research Notices, 2016*, 4315729. DOI:10.1155/2016/4315729

Kenya National Bureau of Statistics (KNBS). (2010). *ICF Macro: Kenya Demographic and Health Survey 2008-09 Calverton*. https://dhsprogram.com/pubs/pdf/fr229/fr229.pdf

Kenya National Bureau of Statistics (KNBS). (2014). *Kenya Fact and Figures 2014*. http://www.knbs.or.ke/index.php?option=com_phocadownload&view=category&id=20&Itemid=595

Kenya National Bureau of Statistics (KNBS). (2019). *2019 Kenya population and housing census volume 1*. https://www.knbs.or.ke/?wpdmpro=2019-kenya-population-and-housing-census-volume-i-population-by-county-and-sub-county

Kenya Ministry of Medical Services and Ministry of Public Health & Sanitation, (1994). *Health sector strategic and investment plan (khssp) July 2013-June 2017*. http://publications.universalhealth2030.org/ref/f80da7c0096095c3b80512bcd83f93ec

Kharsany, A. B. M., & Karim, Q. A. (2016). HIV Infection and AIDS in Sub-Saharan Africa: Current Status, Challenges, and Opportunities. *The Open AIDS Journal, 10*, 34-48. DOI:10.2174/1874613601610010034

Kheswa, J. G., & van Eeden, C. (2018). Contextual factors promoting psychosocial well-being and safe sexual behaviour in African male youth: A literature review. Td - The Journal for Transdisciplinary Research in Southern Africa, 14.

Kibua, T. N., & Mwabu, G. (2007). Decentralization and Devolution in Kenya: New Approaches. Nairobi, KENYA: University of Nairobi Press.

Kihato, C. W. (2015). “Go back and tell them who the real men are!” Gendering our understanding of Kibera’s post-election violence. International Journal of Conflict and Violence (IJCV), 9, 12-24.

Kimmel, A., Cheng, Y. I., Wang, J., & Lyon, M. (2015). 217. Quality of Life in Adolescents Living With HIV: Do Religion and Spirituality Matter? Journal of Adolescent Health, 56(2, Supplement 1), S111. doi:https://doi.org/10.1016/j.jadohealth.2014.10.222

Kimosop, P. K., Otiso, K. M., & Ye, X. (2015). Spatial and gender inequality in the Kenya certificate of primary education examination results. Applied Geography, 62, 44-61. doi:http://dx.doi.org/10.1016/j.apgeog.2015.04.006

Kimuna, S., Tenkorang, E. Y., & Djamba, Y. (2018). Ethnicity and Intimate Partner Violence in Kenya. Journal of Family Issues, 39(11), 2958-2981. DOI:10.1177/0192513X18766192

Kirkham, S. R., & Anderson, J. M. (2010). The advocate-analyst dialectic in critical and postcolonial feminist research: reconciling tensions around scientific integrity. Advances in Nursing Science, 33(3), 196-205.

Knopf, A. S., McNealy, K. R., Al-Khattab, H., Carter-Harris, L., Oruche, U. M., Naanyu, V., & Draucker, C. B. (2017). Sexual learning among East African adolescents in the context of generalized HIV epidemics: A systematic qualitative meta-synthesis. PLoS ONE, 12(3), e0173225. DOI:10.1371/journal.pone.0173225Kibua, T. N., & Mwabu, G. (2007). *Decentralization and Devolution in Kenya: New Approaches*. Nairobi, KENYA: University of Nairobi Press.

Kimosop, P. K., Otiso, K. M., & Ye, X. (2015). Spatial and gender inequality in the Kenya certificate of primary education examination results. *Applied Geography, 62*, 44-61. doi:http://dx.doi.org/10.1016/j.apgeog.2015.04.006

Knopf, A. S., McNealy, K. R., Al-Khattab, H., Carter-Harris, L., Oruche, U. M., Naanyu, V., & Draucker, C. B. (2017). Sexual learning among East African adolescents in the context of

generalized HIV epidemics: A systematic qualitative meta-synthesis. *PLoS ONE, 12*(3), e0173225. DOI:10.1371/journal.pone.0173225

Ko, D. (2012). Gender In U. Rublack (Ed.), *A Concise Companion to History* (pp. 203-415). Oxford: Oxford University Press.

Kreniske, P., Grilo, S., Nakyanjo, N., Nalugoda, F., Wolfe, J., & Santelli, J. S. (2019). Narrating the Transition to Adulthood for Youth in Uganda: Leaving School, Mobility, Risky Occupations, and HIV. Health Education & Behavior, 46(4), 550-558. DOI:10.1177/1090198119829197

Krishnan, S., Dunbar, M. S., Minnis, A. M., Medlin, C. A., Gerdts, C. E., & Padian, N. S. (2008). Poverty, gender inequities, and women's risk of human immunodeficiency virus/AIDS. *Ann N Y Acad Sci, 1136*. DOI:10.1196/annals.1425.013

Krog, A. (2011). In the Name of Human Rights. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research* (4 ed., pp. 380-385). Thousand Oaks, California: Sage Publications.

Kvasny, L., & Chong, J. (2008). The ABC Approach and the Feminization of HIV/AIDS in the Sub-Saharan Africa. In *Encyclopedia of healthcare information systems* (pp. 10-15): IGI Global.

Laquinta, D. L., & Drescher, A. W. (2000). Defining Periurban: Understanding Rural-urban Linkages and Their Connection to Institutional Contexts Tenth World Congress. *International Rural Sociology Association, Rio de Janeiro*.

Latkin, C., Donnell, D., Liu, T.-Y., Davey-Rothwell, M., Celentano, D., & Metzger, D. (2013). The dynamic relationship between social norms and behaviors: the results of an HIV

prevention network intervention for injection drug users. *Addiction, 108*(5), 934-943. DOI:10.1111/add.12095

Ligomeka, B. (2003). Malawi fights 'wife inheritance'. *Sister Namibia, 15*, 38.

Lotfi, R., Ramezani, F. T., Khoei, E. M., Yaghmaei, F., & Dworkin, S. L. (2013). How Do Women at Risk of HIV/AIDS in Iran Perceive Gender Norms and Gendered Power Relations in the Context of Safe Sex Negotiations? Archives of Sexual Behavior, 42(5), 873-881. doi:10.1007/s10508-012-0040-6

Lyon, M. E., Kimmel, A. L., Cheng, Y. I., & Wang, J. (2016). The Role of Religiousness/Spirituality in Health-Related Quality of Life Among Adolescents with HIV: A Latent Profile Analysis. Journal of Religion and Health, 55(5), 1688-1699. DOI:10.1007/s10943-016-0238-3

Mabaso, M., Sokhela, Z., Mohlabane, N., Chibi, B., Zuma, K., & Simbayi, L. (2018). Determinants of HIV infection among adolescent girls and young women aged 15-24 years in South Africa: a 2012 population-based national household survey. BMC Public Health, 18.

Macintyre, K., Rutenberg, N., Brown, L., & Karim, A. (2004). Understanding Perceptions of HIV Risk Among Adolescents in KwaZulu-Natal. *AIDS and Behavior, 8*(3), 237-250. DOI:10.1023/B:AIBE.0000044072.71361.b3

MacPhail, C. L., Sayles, J. N., Cunningham, W., & Newman, P. A. (2012). Perceptions of Sexual Risk Compensation Following Posttrial HIV Vaccine Uptake Among Young South Africans. *Qualitative Health Research, 22*(5), 668-678. DOI:10.1177/1049732311431944

Madiba, S., & Ngwenya, N. (2017). Cultural practices, gender inequality, and inconsistent condom use increase vulnerability to HIV infection: narratives from married and

cohabiting women in rural communities in Mpumalanga province, South Africa. Global Health Action, 10(sup2), 1341597. DOI:10.1080/16549716.2017.1341597

Makofane, K., Spire, B., & Mtetwa, P. (2018). Tackling global health inequities in the HIV response. *The Lancet, 392*(10144), 263-264. doi:https://doi.org/10.1016/S0140-6736(18)31441-7

Mampane, J. (2016). Factors Influencing the Vulnerability of Women to the Risk of HIV-Infection in Rural Villages in North West Province, South Africa. Gender & Behaviour, 14(2), 7336-7344.

Manyaapelo, T., Nyembezi, A., Ruiter, R. A. C., Borne, B. v. d., Sifunda, S., & Reddy, P. (2017). Understanding the Psychosocial Correlates of the Intention to Use Condoms among Young Men in KwaZulu-Natal, South Africa. *International Journal of Environmental Research and Public Health, 14*(4), 339. DOI:10.3390/ijerph14040339

Marx, B., Stoker, T., & Suri, T. (2013). The Economics of Slums in the Developing World. *The Journal of Economic Perspectives, 27*(4), 187-210.

Maswanya, E. S., Moji, K., Horiguchi, I., Nagata, K., Aoyagi, K., Honda, S., & Takemoto, T. (1999). Knowledge, risk perception of AIDS, and reported sexual behaviour among students in secondary schools and colleges in Tanzania. *Health Education Research, 14*(2), 185-196. DOI:10.1093/her/14.2.185

Maughan-Brown, B., & Venkataramani, A. S. (2018). Accuracy and determinants of perceived HIV risk among young women in South Africa. *BMC Public Health, 18*, 42. DOI:10.1186/s12889-017-4593-0

Maxmen, A. (2016). Social cycle aids HIV spread. Nature, 535(7612), 335.

Mbunda, T., Tarimo, E. A. M., Chalamilla, G., Bakari, M., Sandstrom, E., & Kulane, A. (2016). The Influence of Community Members on Participation by Youth in an HIV Vaccine Trial in Tanzania. PLoS ONE, 11, e0168660.

Meinck, F., Orkin, F. M., & Cluver, L. (2019). Does free schooling affect pathways from adverse childhood experiences via mental health distress to HIV risk among adolescent girls in South Africa: a longitudinal moderated pathway model. Journal of the International AIDS Society, 22(3), e25262-e25262. DOI:10.1002/jia2.25262

Mkandawire-Valhmu, L., Kako, P., Kibicho, J., & Stevens, P. E. (2013). The Innovative and Collective Capacity of Low-Income East African Women in the Era of HIV/AIDS: Contesting Western Notions of African Women. *Health care for women international, 34*(3-4), 332-350.

Mohanty, C. T. (1988). Under Western eyes: Feminist scholarship and colonial discourses. *Feminist review*(30), 61-88.

Mohanty, C. T., Russo, A., & Torres, L. (1991). Third world women and the politics of feminism (Vol. 632): Indiana University Press.

Mokdad, A. H., Forouzanfar, M. H., Daoud, F., Mokdad, A. A., Bcheraoui, C. E., Moradi-Lakeh, M., . . . Murray, C. J. L. (2016). Global burden of diseases, injuries, and risk factors for young people's health during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet, 387*(10036), 2383-2401. doi:http://doi.org/10.1016/S0140-6736(16)00648-6

Morgan, S. (2009). Theorising Feminist History: a Thirty-Year Retrospective. *Women's History Review, 18*(3), 381-407.

Morris, C. S. W., Britain, G., & Commission, K. L. (1934). *Report of the Kenya Land Commission, September, 1933;[And Evidence and Memoranda]*: HM Stationery Office.

Moszynski, P. (2010). Inadequate sanitation in Kenyan slums threatens women's health and security. BMJ: British Medical Journal (Online), 341.

Muchiri, E., Odimegwu, C., & De Wet, N. (2017). HIV risk perception and consistency in condom use among adolescents and young adults in urban Cape Town, South Africa: a cumulative risk analysis. Southern African Journal of Infectious Diseases, 32(3), 105-110. DOI:10.1080/23120053.2017.1332800

Muchomba, F. M. (2014). Colonial Policies and the Rise of Transactional Sex in Kenya. *Journal of International Women's Studies, 15*(2), 80-93.

Muga, R., Kizito, P., Mbayah, M., & Gakuruh, T. (2005). *Overview of the Health System in Kenya*. Retrieved from

Mugoya, G. C. T., & Ernst, K. (2014). Gender differences in HIV-related stigma in Kenya. *AIDS care, 26*(2), 206-213. DOI:10.1080/09540121.2013.808733

Mukeku, J. (2018). Urban Slum Morphology and Socio-economic Analogies: A Case Study of Kibera Slum, Nairobi, Kenya. Urbanisation, 3(1), 17-32. DOI:10.1177/2455747118790581

Muzyamba, C., Broaddus, E., & Campbell, C. (2015). "You cannot eat rights": a qualitative study of views by Zambian HIV-vulnerable women, youth, and MSM on human rights as public health tools. *BMC International Health and Human Rights, 15*.

Mwale, M., & Muula, A. S. (2017). Systematic review: a review of adolescent behavior change interventions [BCI] and their effectiveness in HIV and AIDS prevention in sub-Saharan Africa. *BMC Public Health, 17*(1), 718. DOI:10.1186/s12889-017-4729-2

Naidoo, P., Chirinda, W., McHunu, G., Swartz, S., & Anderson, J. (2015). Social and structural factors associated with vulnerability to HIV infection among young adults in South Africa. Psychology, Health & Medicine, 20(3), 369-379. DOI:10.1080/13548506.2014.936883

National AIDS Control Council (NACC). (2016). *Kenya Aids Strategic Framework: 2014/2015 – 2018/2019*. http://nacc.or.ke/wp-content/uploads/2015/09/KASF_Final.pdf

National AIDS Control Council (NACC). (2017). *NACC Overview*. *http://nacc.or.ke/nacc-overview/*

National AIDS and STI Control Programme (NASCOP). (2014). *Kenya AIDS Indicator Survey 2012*. http://www.nacc.or.ke/index.php/about-nacc/403-kais-2012-final-report.

Negeri, E. L. (2014). Assessment of risky sexual behaviors and risk perception among youths in Western Ethiopia: the influences of family and peers: a comparative cross-sectional study. *BMC Public Health, 14*, 301-301. DOI:10.1186/1471-2458-14-301

Negin, J., Aspin, C., Gadsden, T., & Reading, C. (2015). HIV Among Indigenous peoples: A Review of the Literature on HIV-Related Behaviour Since the Beginning of the Epidemic. *AIDS and Behavior, 19*(9), 1720-1734. DOI:10.1007/s10461-015-1023-0

Nel, J. A., Yi, H., Sandfort, T. G. M., & Rich, E. (2013). HIV-Untested Men Who Have Sex with Men in South Africa: The Perception of Not Being at Risk and Fear of Being Tested. *AIDS and Behavior, 17*(1), 51-59. DOI:10.1007/s10461-012-0329-4

Ng'eno, B. N., Kellogg, T. A., Kim, A. A., Mwangi, A., Mwangi, M., Wamicwe, J., & Rutherford, G. W. (2018). Modes of HIV transmission among adolescents and young

adults aged 10-24 years in Kenya. *International Journal of STD & AIDS, 29*(8), 800-805. DOI:10.1177/0956462418758115

Njue, C., Voeten, H., & Remes, P. (2011). Porn video shows, local brew, and transactional sex: HIV risk among youth in Kisumu, Kenya. *BMC Public Health, 11*(1), 635.

Nkomazana, N., & Maharaj, P. (2014). Perception of risk of HIV infections and sexual behaviour of the sexually active university students in Zimbabwe. *SAHARA-J: Journal of Social Aspects of HIV/AIDS, 11*(1), 42-50. DOI:10.1080/17290376.2014.886082

Nyarwath, O. (2012). The Luo care for widows (Lako) and contemporary challenges. Thought and Practice, 4(1), 91-110.

Nyaura, J. E. (2018). Devolved Ethnicity in Kenya: Social, Economic, and Political Perspective. *11*(16), 17. doi:https://doi.org/10.1515/eras-2018-0002

Oluoch, E. A., & Nyongesa, W. J. (2013). Perception of the Rural Luo community on widow inheritance and HIV/AIDs in Kenya: Towards developing risk communication messages. International Journal of Business and Social Science, 4(1)

Onsomu, E. O., Moore, D., Abuya, B. A., Valentine, P., & Duren-Winfield, V. (2013). Importance of the Media in Scaling-Up HIV Testing in Kenya. *SAGE Open, 3*(3), 2158244013497721. DOI:10.1177/2158244013497721

Organization for Economic Cooperation and Development,(2007). *Immigrant health workers in OECD countries in the broader context of highly skilled migration**. (2007 ed., pp. 161-228). OECD Publishing.

Oyaya, C. O., & Rifkin, S. B. (2003). Health sector reforms in Kenya: an examination of district-level planning. *Health Policy, 64*(1), 113-127.

Park, J. M., T.Scott, J., Adams, S. H., Brindis, C. D., & Jr, C. E. I. (2014). Adolescent and Young Adult Health in the United States in the Past Decade: Little Improvement and Young Adults Remain Worse Off Than Adolescents. *Journal of Adolescent Health, 55*(1), 3-16. doi:https://doi.org/10.1016/j.jadohealth.2014.04.003

Parks, M. J. (2013). Urban Poverty Traps: Neighbourhoods and Violent Victimisation and Offending in Nairobi, Kenya. *Urban Studies, 51*(9), 1812-1832.

Parsons, J. B., & Harding, K. J. (2011). Post-Colonial Theory and Action Research. Online Submission, 2(2), 1-6.

Parsons, T. (1997). " Kibra Is Our Blood": The Sudanese Military Legacy in Nairobi's Kibera Location, 1902-1968. *The International Journal of African Historical Studies, 30*(1), 87-122.

Parsons, T. (2011). Local Responses to the Ethnic Geography of Colonialism in the Gusii Highlands of British-ruled Kenya. *Ethnohistory, 58*(3), 491-523. DOI:10.1215/00141801-1263866

Patton, G. C., Sawyer, S. M., Santelli, J. S., Ross, D. A., Afifi, R., Allen, N. B., . . . Viner, R. M. (2016). Our future: a Lancet commission on adolescent health and wellbeing. *The Lancet, 387*(10036), 2423-2478. doi:http://doi.org/10.1016/S0140-6736(16)00579-1

Peri Urban (n.d.) in Merriam-Webster's Online Dictionary ( 11th ed .).Retrieved March 25, 2020, https://www.merriamwebster.com/dictionary/peri%20urban?utm_campaign=sd&utm_medium=serp&utm_source=jsonld

Perry, B., Oluoch, L., Agot, K., Taylor, J., Onyango, J., Ouma, L., . . . Corneli, A. (2014). Widow cleansing and inheritance among the Luo in Kenya: the need for additional

women-centered HIV prevention options. *Journal of the International AIDS Society, 17*(1), 190-210. DOI:10.7448/IAS.17.1.19010

Piot, P., Abdool Karim, S. S., Hecht, R., Legido-Quigley, H., Buse, K., Stover, J., . . . Dybul, M. (2015). Defeating AIDS—advancing global health. *Lancet, 386*. DOI:10.1016/s0140-6736(15)60658-4

Piot, P., Bartos, M., Ghys, P. D., Walker, N., & Schwartländer, B. (2001). The global impact of HIV/AIDS. *Nature, 410*(6831), 968-973.

Protogerou, C., Flisher, A. J., Aarø, L. E., & Mathews, C. (2012). The theory of planned behaviour as a framework for predicting sexual risk behaviour in sub-Saharan African youth: A critical review. *Journal of Child & Adolescent Mental Health, 24*(1), 15-35. DOI:10.2989/17280583.2011.621067

Racine, L. (2009). Examining the conflation of multiculturalism, sexism, and religious fundamentalism through Taylor and Bakhtin: expanding post-colonial feminist epistemology. Nursing Philosophy, 10(1), 14-25. DOI:10.1111/j.1466-769X.2008.00378.x

Racine, L., & Petrucka, P. (2011). Enhancing decolonization and knowledge transfer in nursing research with non-western populations: examining the congruence between primary healthcare and postcolonial feminist approaches. *Nursing Inquiry, 18*(1), 12-20.

Ragnarsson, A., Ekström, A. M., Carter, J., Ilako, F., Lukhwaro, A., Marrone, G., & Thorson, A. (2011). Sexual risk taking among patients on antiretroviral therapy in an urban informal settlement in Kenya: a cross-sectional survey. Journal of the International AIDS Society, 14, 20-20. DOI:10.1186/1758-2652-14-20

Ragnarsson, A., Thorson, A., Dover, P., Carter, J., Ilako, F., Indalo, D., & Ekström, A. M. (2011). Sexual risk-reduction strategies among HIV-infected men receiving ART in Kibera, Nairobi. AIDS care, 23(3), 315-321.

Rakgoasi, S. D., & Odimegwu, C. (2013). " Women Get Infected but Men Die…!" Narratives on Men, Masculinities, and HIV/AIDS in Botswana. International Journal of Men's Health, 12(2).

Rakoczy, H., & Schmidt, M. F. H. (2013). The Early Ontogeny of Social Norms. Child Development Perspectives, 7(1), 17-21. DOI:10.1111/cdep.12010Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). *Qualitative research practice: A guide for social science students and researchers*: Sage.

Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). Qualitative research practice: A guide for social science students and researchers: Sage.

Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change1. *The journal of psychology, 91*(1), 93-114.

Roth, E. A., Benoit, C., Jansson, M., & Hallsgrimdottir, H. (2017). Public Drinking Venues as Risk Environments: Commercial Sex, Alcohol, and Violence in a Large Informal Settlement in Nairobi, Kenya. Human Ecology, 45(2), 277-283. DOI:10.1007/s10745-017-9897-2

Said, E. W. (1979). Orientalism: Vintage.

Sambo, W. (2016). Factors affecting youth entrepreneurship development in Kibera district, Kenya. Problems and Perspectives in Management, 14(3), 154.

Saul, J., Bachman, G., Allen, S., Toiv, N. F., Cooney, C., Beamon, T., . . . Adhmeeka. (2018). The DREAMS core package of interventions: A comprehensive approach to preventing HIV among adolescent girls and young women. *PLoS ONE, 13*, e0208167.

Schaefer, W. R., Gregson, W. S., Eaton, W. J., Mugurungi, W. O., Rhead, W. R., Takaruza, W. A., . . . Nyamukapa, W. C. (2017). Age-disparate relationships and HIV incidence in adolescent girls and young women: evidence from Zimbabwe. *AIDS, 31*(10), 1461-1470.

Scheer, V. L., Stevens, P. E., & Mkandawire-Valhmu, L. (2016). Raising Questions About Capitalist Globalization and Universalizing Views on Women: A Transnational Feminist Critique of the World Development Report: Gender Equality and Development. *Advances in Nursing Science, 39*(2), 96-107.

Scott, J. W. (2010). Gender: Still a useful category of analysis? *Diogenes, 57*(1), 7-14.

Shutzer, M. A. (2012). The Politics of Home: Displacement and Resettlement in Postcolonial Kenya. *African Studies, 71*(3), 346-360. DOI:10.1080/00020184.2012.740879

Sia, D., Onadja, Y., Nandi, A., Foro, A., & Brewer, T. (2014). What lies behind gender inequalities in HIV/AIDS in sub-Saharan African countries: evidence from Kenya, Lesotho, and Tanzania. *Health Policy and Planning, 29*(7), 938-949. DOI:10.1093/heapol/czt075

Sisay, S., Erku, W., Medhin, G., & Woldeyohannes, D. (2014). Perception of High School Students on risk for acquiring HIV and utilization of Voluntary Counseling and Testing (VCT) service for HIV in Debre-Berhan Town, Ethiopia: a quantitative cross-sectional study. *BMC Research Notes, 7*, 518. DOI:10.1186/1756-0500-7-518

Sommer, M., Likindikoki, S., & Kaaya, S. (2015). “Bend a Fish When the Fish Is Not Yet Dry”: Adolescent Boys’ Perceptions of Sexual Risk in Tanzania. *Archives of Sexual Behavior, 44*(3), 583-595. DOI:10.1007/s10508-014-0406-z

Sommer, M., Parker, R., Msacky, G., Kajula, L., & Kaaya, S. (2019). How Alcohol, Space, and Time Influence Young People’s Sexual Encounters in Tanzania: A Qualitative Analysis. *Archives of Sexual Behavior, 48*(6), 1847-1857. DOI:10.1007/s10508-018-1311-7

Spivak, G. C., Lyons, L. E., & Franklin, C. (2004). " On the Cusp of the Personal and the Impersonal": An Interview with Gayatri Chakravorty Spivak. Biography, 203-221.

Springer, K. W., Hankivsky, O., & Bates, L. M. (2012). Gender and health: Relational, intersectional, and biosocial approaches. *Social Science & Medicine, 74*(11), 1661-1666. doi:http://dx.doi.org/10.1016/j.socscimed.2012.03.001

Staller, K. M. (2013). Epistemological boot camp: The politics of science and what every qualitative researcher needs to know to survive in the academy. *Qualitative Social Work, 12*(4), 395-413.

Straughair, C. (2019). Reflections on developing a conceptual framework to support a constructivist grounded theory study on compassion in nursing. *Nurse researcher*, *27*(1), 22-26.

Sunday, F. (2017, February 26). Kenya’s economy groans under weight of its jobless youth. *Standard Newspaper Digital*. https://www.standardmedia.co.ke/business/article/2001230740/kenya-s-economy-groans-under-weight-of-its-jobless-youth.

Sutton, S. (2008). How does the health action process approach (HAPA) bridge the intention–behavior gap? An examination of the model's causal structure. *Applied Psychology, 57*(1), 66-74.

Swahn, M. H., Culbreth, R., Salazar, L. F., Tumwesigye, N. M., & Kasirye, R. (2019). Psychosocial correlates of self-reported HIV among youth in the slums of Kampala. BMC Public Health, 19(1), 1176. DOI:10.1186/s12889-019-7480-z

Swart, E. (2013). Doing Survival: Strategies for Coping With Gender-Based Violence in Kenya's Kibera Slum. *Affilia, 28*(1), 40-50. DOI:10.1177/0886109912470111

Tarkang, E. E. (2014). Factors associated with perception of risk of contracting HIV among secondary school female learners in Mbonge subdivision of rural Cameroon. *The Pan African Medical Journal, 17*, 259. DOI:10.11604/pamj.2014.17.259.2772

Tarkang, E. E. (2015). Sexual risk behaviours of high school female learners in Mbonge subdivision of rural Cameroon. *The Pan African Medical Journal, 20*, 49. DOI:10.11604/pamj.2015.20.49.2938

Teng, Y., & Mak, W. W. S. (2011). The role of planning and self-efficacy in condom use among men who have sex with men: An application of the Health Action Process Approach model. *Health Psychology, 30*(1), 119-128. DOI:10.1037/a0022023

Tenkorang, E. Y., & Adjei, J. K. (2015). Household living arrangements and transition to sexual debut among young people in Ghana. *Sex Education, 15*(1), 1-18. DOI:10.1080/14681811.2014.927356

Tenkorang, E. Y., & Maticka-Tyndale, E. (2013). Individual- and School-Level Correlates of HIV Testing among Secondary School Students in Kenya. *Studies in Family Planning, 44*(2), 169-187. DOI:10.1111/j.1728-4465.2013.00351.x

Tenkorang, E. Y., & Maticka-Tyndale, E. (2014). Assessing young people's perceptions of HIV risks in Nyanza, Kenya: Are school and community level factors relevant? *Social Science & Medicine, 116*, 93-101. doi:https://doi.org/10.1016/j.socscimed.2014.06.041

Terborg-Penn, R., & Rushing, A. B. (1996). *Women in Africa and the African Diaspora: A reader*: Howard University Press.

The World Factbook: Kenya. (2018, February 1). Retrieved May 19, 2020, from https://www.cia.gov/library/publications/the-world-factbook/geos/ke.html

Toska, E., Pantelic, M., Meinck, F., Keck, K., Haghighat, R., & Cluver, L. (2017). Sex in the shadow of HIV: A systematic review of prevalence, risk factors, and interventions to reduce sexual risk-taking among HIV-positive adolescents and youth in sub-Saharan Africa. PLoS ONE, 12(6), 1-30. DOI:10.1371/journal.pone.0178106

Tsui, H., Lau, J. T. F., Xiang, W., Gu, J., & Wang, Z. (2012). Should Associations between HIV-Related Risk Perceptions and Behaviors or Intentions Be Positive or Negative? *PLoS ONE, 7*, e52124.

United Nations Population Fund (UNPFA). (2020). *UNFPA strategic plan 2018–2021.* https://www.unfpa.org/sites/default/files/pub-pdf/18-044_UNFPA-SP2018-EN_2018-03-12-1244.pdf

United Nations Children's Fund (UNICEF). (2013). *Kenya: Statistics*. https://www.unicef.org/infobycountry/kenya_statistics.html

United Nations Development Programme (UNDP). (2016). *Human Development Report 2016: Human Development For Everyone*. http://hdr.undp.org/en/2014-report

United Nations Human Settlements Programme (UN-HABITAT). (2010). *The 2010/11 State of the World's Cities Report, "Bridging the Urban Divide*. http:/sustainabledevelopment.un.org/content/documents/11143016_alt.pdf

Vanner, C. (2015). Positionality at the center: Constructing an epistemological and methodological approach for a western feminist doctoral candidate conducting research in the postcolonial. *International Journal of Qualitative Methods, 14*(4), 1609406915618094.

Vantyler, S. (2012). Women Living in Kibera, Kenya: Stories of being HIV+. In L. Sheilds & R. Dalton (Eds.): ProQuest Dissertations Publishing.

VanTyler, S., & Sheilds, L. (2015). Stories of African HIV+ Women Living in Poverty. *Health Care for Women International, 36*(8), 902-916. DOI:10.1080/07399332.2013.862797

Waller, R. (2012). Pastoral Production in Colonial Kenya: Lessons from the Past? *African Studies Review, 55*(2), 1-27.

Wamoyi, J., Mshana, G., Mongi, A., Neke, N., Kapiga, S., & John Changalucha. (2014). A review of interventions addressing structural drivers of adolescents' sexual and reproductive health vulnerability in sub-Saharan Africa: implications for sexual health programming. *Reproductive Health, 11*(1), 88. DOI:10.1186/1742-4755-11-88

Wang, H., Wolock, T. M., Carter, A., Nguyen, G., Kyu, H. H., Gakidou, E., . . . Cárdenas, R. (2016). Estimates of global, regional, and national incidence, prevalence, and mortality of HIV, 1980-2015: the Global Burden of Disease Study 2015. *The lancet. HIV, 3*(8), e361-e387. DOI:10.1016/S2352-3018(16)30087-X

Webster, M., Elizabeth, R., Ibou, T., Natalie, K.-L., Owen, M., Getrude, N., & Suzanne, L.-M. (2018). Sexual behavior experiences and characteristics of male-female partnerships

among HIV positive adolescent girls and young women: Qualitative findings from Zimbabwe. PLoS ONE, 13(3), e0194732. DOI:10.1371/journal.pone.0194732

Willis, J. (2006). Drinking crisis: Change and continuity in cultures of drinking in sub-Saharan Africa. *African Journal of Drug and Alcohol Studies, 5*(1), 2-15.

Wilson, W. J. (2009). More than Just Race: Being Black and Poor in the Inner City (Issues of Our Time): WW Norton & Company.

Wingood, G. M., & DiClemente, R. J. (2000). Application of the Theory of Gender and Power to Examine HIV-Related Exposures, Risk Factors, and Effective Interventions for Women. *Health Education & Behavior, 27*(5), 539-565. DOI:10.1177/109019810002700502

Woodward, A., Howard, N., Kollie, S., Souare, Y., Roenne, A. v., & Borchert, M. (2014). HIV knowledge, risk perception, and avoidant behaviour change among Sierra Leonean refugees in Guinea. *International Journal of STD & AIDS, 25*(11), 817-826. DOI:10.1177/0956462414521163

World Health Organization. (n.d.). *Kenya*. http://www.who.int/countries/ken/en/

Yared, A., Sahile, Z., & Mekuria, M. (2017). Sexual and reproductive health experience, knowledge, and problems among university students in Ambo, central Ethiopia. *Reproductive Health, 14*, 1-7. DOI:10.1186/s12978-017-0302-9

Ziraba, A., Orindi, B., Muuo, S., Floyd, S., Birdthistle, I. J., Mumah, J., . . . Kabiru, C. W. (2018). Understanding HIV risks among adolescent girls and young women in informal settlements of Nairobi, Kenya: Lessons for DREAMS. PLoS ONE, 13, e0197479.

Zolnikov, T. R. (2013). Let's talk about culture! Experiencing a disco funeral in Western Kenya. Journal of Public Health, fdt102.

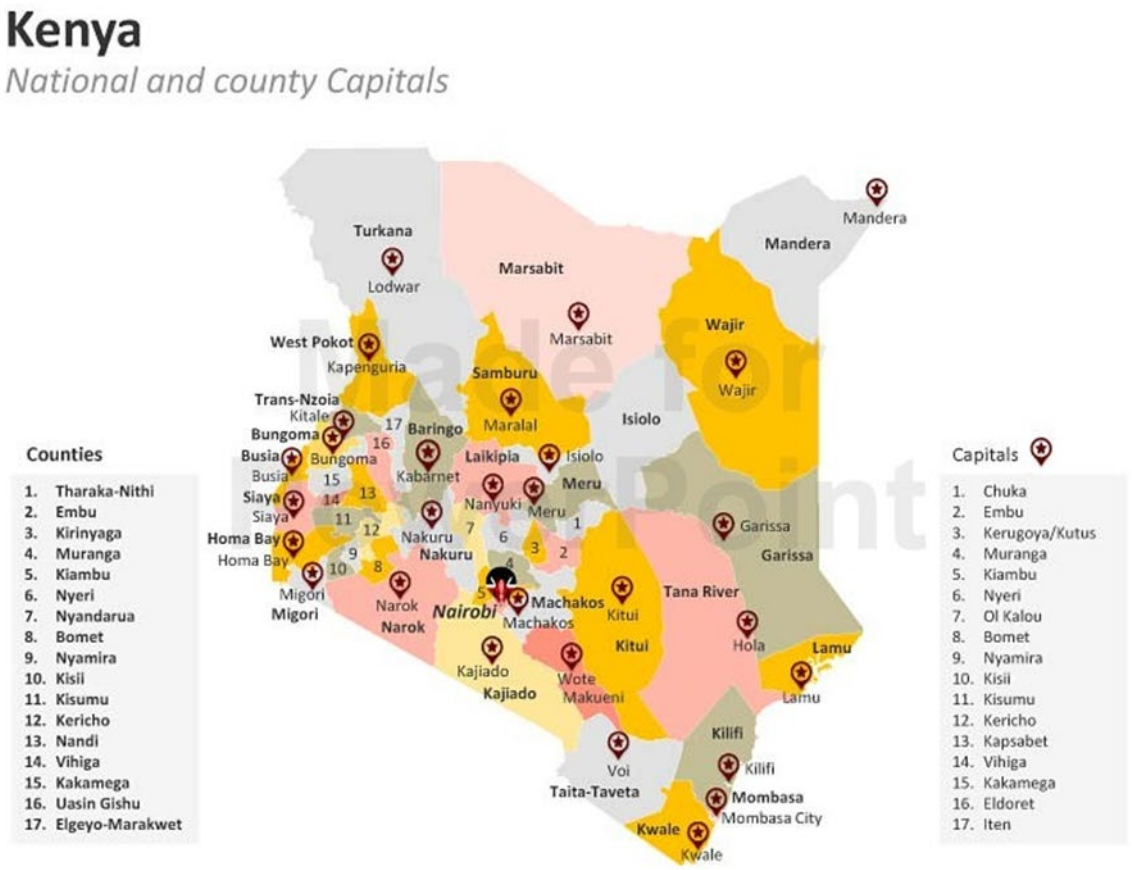
Zolnikov, T. R. (2013). Let's talk about culture! Experiencing a disco funeral in Western Kenya. *Journal of Public Health*, fdt102

## Appendices

**Figure 1: Map of Kenya**

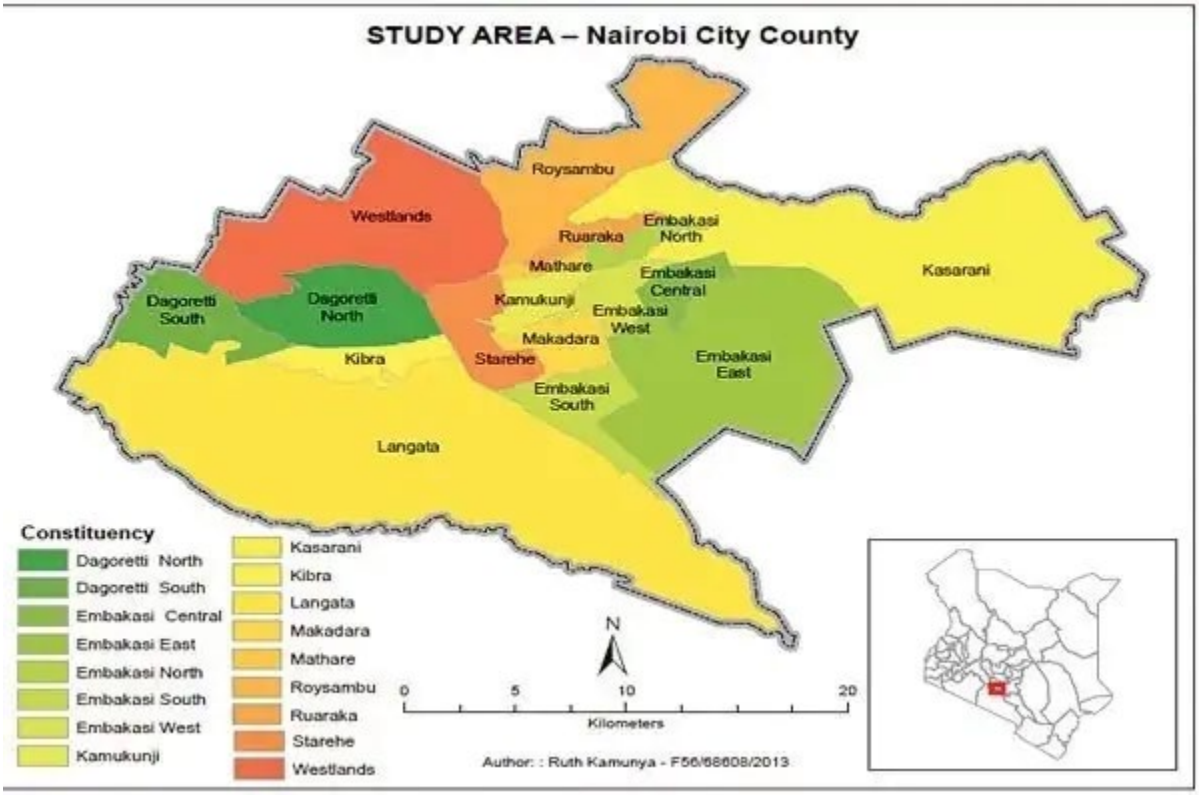
Map of the world. Retrieved from https://www.mapsofworld.com/kenya/kenya-political-map.html

**Figure 2: Map of Kenya with 47 Districts**



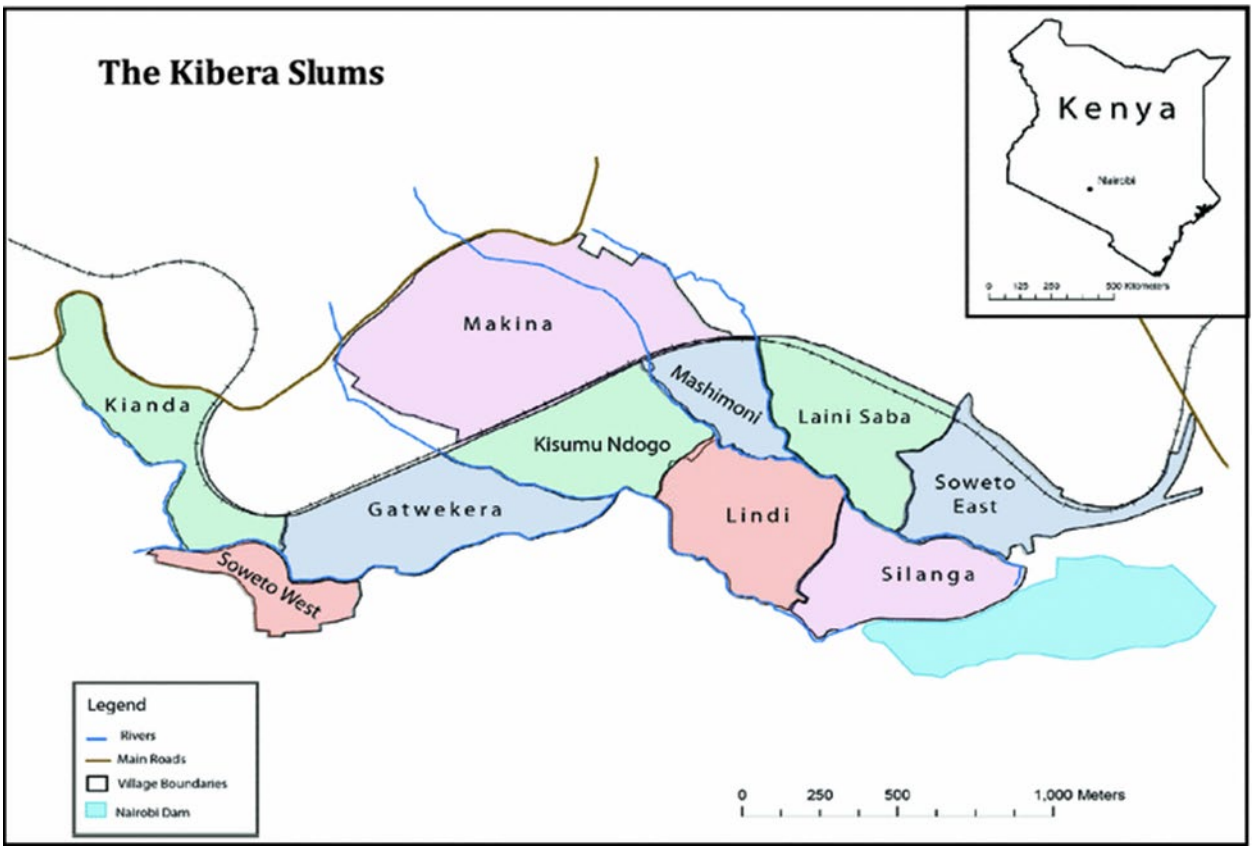

Research Gate. Retrieved from https://www.researchgate.net/figure/Map-of-Kenya-showing-8-provinces-colored-and-the-47-sub-national-units-counties-as_fig1_330853768

**Figure 3: Map of Kibra**




Julie Kwach. (2017) *Constituencies of Nairobi*. https://www.tuko.co.ke/261934-constituencies-nairobi-county-their-mps.html.

**Figure 4: Kibra, a Closer Look**




Research Gate. Retrieved from https://www.researchgate.net/figure/A-map-of-villages-in-Kibera-informal-settlements_fig5_50392060

**Figure 5 : Conceptual Framework**

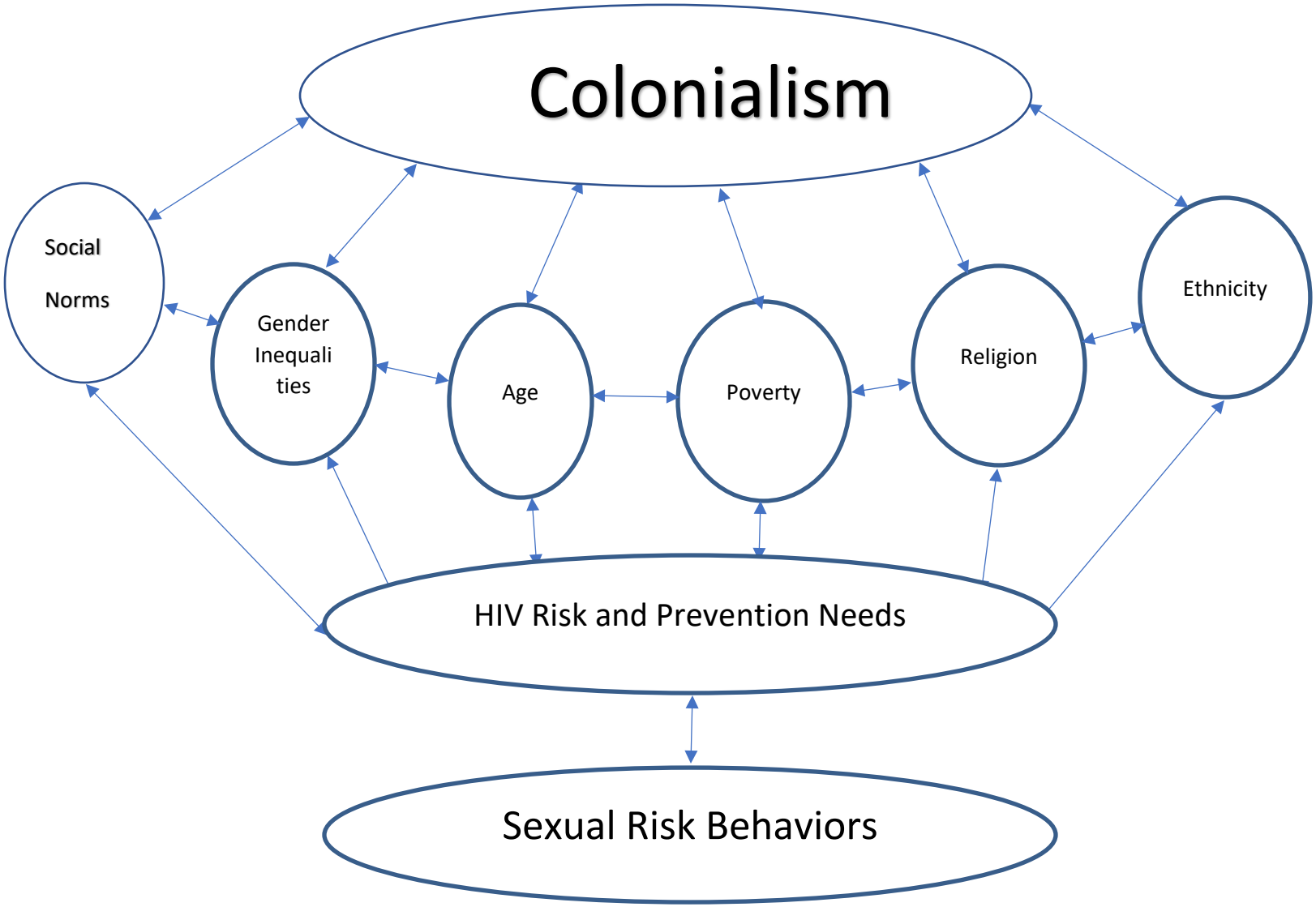


**Figure 6: Prisma Diagram**

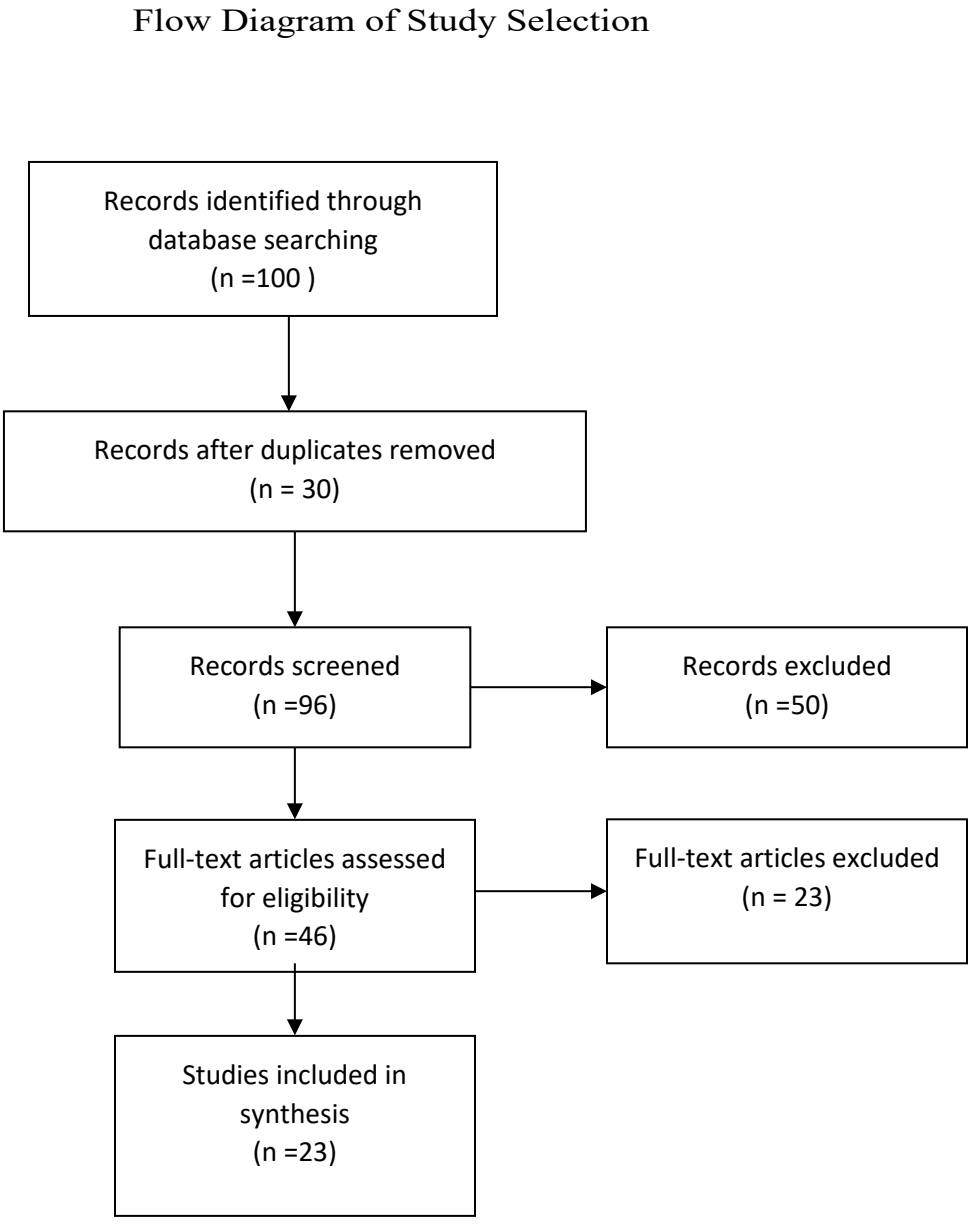


**Table 1: Literature Review Table**

| Author, Year | Research Problem/Aim/Purpose | Sample Size, Study Location | Country | Methodology | Conceptual Framework | Findings | Conclusion and recommendations |
|---|---|---|---|---|---|---|---|
| **(Naidoo, Chirinda, McHunu, Swartz, & Anderson, 2015)** | This study investigated the social and structural factors that shape the context of vulnerability to increased risk of exposure to HIV infection. | 3021 participants young adults in the age group 18–24 | South Africa | A mixed-methods approach including qualitative and quantitative design components was employed. | n/a | The household-based survey results showed that the strongest predictors of self-reported HIV infection (using adjusted odds ratios (aOR) are: being diagnosed with an STI in a lifetime (aOR 13.68 95% Confidence Interval (CI) [4.61–40.56];p < .001), inconsistent condom use (aOR 6.27 | These results show that social and structural factors serve as risk and protective factors for HIV prevention among young people. Intervention programs need to continue to focus on effective communication strategies and healthy relationships. Structural adjustments have to be made to encourage school attendance. |

| | | | |
|---|---|---|---|
| | | | 95% CI [2.08–18.84];p < .01), and difficulty in accessing condoms (aOR 2.86 95% CI [1.04–7.88];p < .05). The strongest predictors that indicated a decreased chance of being infected with the HIV virus are: talking with partner about condom use in the past 12 months (aOR .08 95% CI [.02–.36];p < .001) and having a grade 8 (aOR .04 95% CI [.01–.66];p < .05) and higher educational level (aOR |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | .04 95% CI [.01–.43]). | |
| **(Mbunda et al., 2016)** | It is vital to enroll young people in HIV vaccination trials since their risk of contracting HIV is higher due to their perception of lower risk, low condom usage and multiple sexual partners [2]. | 44 men and women age range of 18-47 years | Dar es Salaam, Tanzania | Qualitative | Social Cognitive theory | Finally, our results indicate that common structural problems such as poverty and substance abuse constitute barriers to recruitment to and retention in HIV vaccination trials. Young people living in poverty without opportunity are easy targets for the global drug trade [31]. Moreover, drug use is linked to instability, violence, difficulties working, work overload, | Moreover, any upcoming trial involving young people should provide youth-specific educational material that addresses issues such as stigma and substance abuse to help maximize retention in the trial. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | neglect and abuse [32], making it difficult for such youth to be recruited and retained in HIV vaccine trials. | |
| **(Toska et al., 2017)** | This systematic review synthesizes the extant research on prevalence, factors associated with, and interventions to reduce sexual risk-taking among HIV positive adolescents and youth in sub-Saharan Africa. | 13,536 HIV-positive Adolescents and Youth living with HIV Age range: 10–24 years old | Sub-Saharan Africa | Systematic review of Quantitative studies | n/a | Living with a partner, living alone, gender-based violence, food insecurity, and employment were correlated with increased sexual risk-taking, while knowledge of own HIV-positive status and accessing HIV support groups were associated with reduced sexual risk-taking. | Sexual risk-taking among HIV-positive adolescents and youth is high, with inconclusive evidence on potential determinants. Few known studies test secondary HIV-prevention interventions for HIV-positive youth. Effective and feasible low-cost interventions to reduce risk are urgently needed for this group. |
| **(Bhana, 2015)** | The study aims to explore the ways in which teenage | Teenagers between | schools in KwaZulu- | Qualitative | n/a | Teenagers account of | Intervention programmes that |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | South Africans give meaning to gender and sexuality against the backdrop of HIV | the ages of 16 and 17 | Natal, South Africa | | | love highlights changing discourses and include relationships based on care, negotiation and agency showing potential for equality. Such constructions however sit in tension with teenage women's vulnerability in relation to the sexual economy and money, masculine power and gender hierarchies. | address teenage sexuality must pay careful attention to how love matters in their conceptualization of relationships and requires consideration of the social and economic context within which they are located. The challenge is to build on equality, address gender hierarchies and ideologies within relationships which create vulnerability. |
| **(Goodrum, Armistead, Tully, Cook, & Skinner, 2017)** | We examined the relation between parenting and youth sexual risk within the context of community-level processes, including neighborhood quality and maternal social support. | convenience sample of Black South African caregivers and their 10-14-year- | South Africa | Quantitative | ecological systems theory, and selection of constructs guided by an understanding of the broader | Results revealed that better neighborhood quality and more social support predicted positive | Results highlight the importance of the community context in parenting and youth sexual risk in this understudied sample. HIV prevention- |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | old youth ( | | | sociocultural context | parenting, which in turn predicted less youth sexual risk. There was a significant indirect effect from neighborhood quality to youth sexual risk via parenting. | interventions should be informed by these contextual factors. |
| **(Sommer, Parker, Msacky, Kajula, & Kaaya, 2019)** | The aim of this study was to explore the structural and environmental factors influencing young people's access to and use of alcohol, and subsequent engagement in safe or unsafe sexual behaviors in such contexts, from the perspective of young people themselves. | 177 adolescent girls and boys in and out of school | Dar es Salaam,Tanzania | Qualitative | n/a | Findings suggest that alcohol use intersects with a spatial dimension in relation to where youths are consuming alcohol and subsequently engaging in sex. This in turn influences young people's likelihood of using condoms and | Interventions are needed that both address the gendered and social sanctioning of youth carrying condoms in Tanzania and that increase the availability of condoms where alcohol is sold and consumed. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | practicing safer sex. The spatial dimension was found to be influenced by time, gender, age, economics, and social norms around the carrying of and use of condoms. | |
| **(Kreniske et al., 2019)** | Narrating the Transition to Adulthood for Youth in Uganda: Leaving School, Mobility, Risky Occupations, and HIV | 60 HIV-positive HIV-negative youth (aged 15-24 years), | Uganda | Qualitative | Life history narratives coupled with the ethnographic case control (ECC) design | Study, this article shows the complex connection between leaving school, mobility, and occupation with implications for HIV risk. We identified a pattern of risk factors that was present in many more HIV-positive than HIV-negative | To mitigate the risk for HIV infection, future research and practice-based initiatives must focus on understanding these risks during transitional moments and designing health, education, and economic interventions to support youth in their transition to adulthood. One successful approach for orphaned youth in Uganda involved |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | youth life stories. These HIV-positive youth shared a similar pathway during their transition to adulthood: After leaving school, they moved in search of occupations; they then engaged in risky occupations before eventually returning to their home village. | financial literacy training, mentorship, and cash transfers, which resulted in lower dropout rates and higher HIV knowledge scores |
| **(Cluver, Orkin, Meinck, Boyes, & Sherr, 2016)** | This study examines the impacts of social protection delivered by governments, NGOs and family, in real-world low-resource conditions in South Africa. It tests 1) the potential pathways from structural disadvantage to adolescent HIV risks and 2) the nature and 3) the | 3515 10-to-17-year-olds | South Africa | Quantitative prospective observational study | n/a | Structural drivers were associated with increased onset of adolescent HIV risk behaviour ($p<0.001$, $B=0.06$, $SE=0.01$), fully mediated | Adolescents with the greatest structural deprivation are at higher risk of HIV, but social protection has the greatest prevention effects for the most vulnerable. Social protection comprising |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | extent of the effects of cash and care types of social protection on adolescent HIV risk pathways. | | | | | by increased psychosocial problems. Both cash and care aspects of social protection were associated with reductions in HIV risk behaviour and psychosocial deprivations. In addition, cash social protection moderated risk pathways: for adolescent girls and boys experiencing more acute structural deprivation, social protection had the greatest associations with HIV risk prevention | unconditional cash plus care was associated with reduced risk pathways through moderation and main effects, respectively. |
| **(Eggers et al., 2017)** | This study identified socio-cognitive determinants of | 1670 students (age 12– | South Africa | Quantitative (Longitudinal design) | I-Change Model | Results showed that among | We conclude that addressing socio-cognitive factors in |

| | | | | | |
|---|---|---|---|---|---|
| | primary and secondary abstinence intentions and of early sexual activity. This study also assessed whether these factors had a direct or indirect association with intentions to abstain from sex | 16) of non-private high schools | | sexually inactive students, social norms predicted the intention to abstain from sex in the next 6 months. Among sexually active students, reporting less disadvantages of abstinence predicted the intention to abstain. Sexual activity at followup was predicted by attitudes and intention among sexually inactive girls, and by knowledge among sexually inactive boys. No predictors were found | order to motivate adolescents to delay sex is more likely to be successful before they experience sexual debut. In addition, this study shows that the effect of increasing risk perceptions, a strategy often applied by parents and HIV prevention programmes, is to a large extent mediated by more proximal cognitive factors such as attitude. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | for sexually active adolescents. Structural equation modelling further showed that risk perception was indirectly related to intentions to abstain from sexual intercourse. | |
| **(Meinck, Orkin, & Cluver, 2019)** | This study aimed to develop an empirically based theoretical model between Adverse Childhood Experiences (ACEs) such as abuse, poverty and family HIV, mental health distress and HIV risk behaviour among adolescent girls in South Africa and to investigate the potential moderating effects of free schooling provision. | 1498 adolescent girls aged 12 to 17 | South Africa | Quantitative (Longitudinal design) | n/a | Internalizing and externalizing mental health distress fully mediated the positive relationship between ACEs at baseline and HIV risk behaviour at follow-up among adolescent girls. Free schooling provision at | Reducing ACEs and adolescent mental health distress is essential for reducing HIV risk behaviour among girls in South Africa. Free schooling provision may be an important tool for reducing these problems and mitigating negative pathways to HIV risk among vulnerable adolescent girls. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | baseline and follow-up eliminated the pathway from internalizing to externalizing mental health distress by moderating the pathway between ACEs and internalizing mental health distress. It also weakened the pathway from externalizing mental health distress to HIV risk behaviour at follow-up through a direct negative effect on externalizing mental health distress. | |
| **(Eggers et al., 2016)** | This study assessed whether the predictive value of attitudes, | N = 1166 | Tanzania and | Quantitative (Longitudinal multigroup | The Theory of Planned Behavior | Condom use intentions were | Although significant differences in |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | subjective norms, self-efficacy, and intention was similar to studies in Europe and the U.S., and whether there were differences between three sub-Saharan sites. | | South Africa | structural equation modeling) | | predicted by subjective norms and self-efficacy in all three sites. Attitudes were not related to intentions in Dar es Salaam and were moderately related to intentions in Cape Town and Mankweng. The proportions of explained variance in intentions and behavior were decent (37–52 and 9–19 %, respectively). | predictive value were found between sites and in comparison to European and U.S. studies, intentions could adequately be explained by attitudes, subjective norms, and self-efficacy. However, the limited proportions of variance in behavior explained by intentions could signify the importance of contextual and environmental factors. Future studies are recommended to use an integrative approach that takes into account both individual and contextual factors, as well as social and environmental differences. |
| **(Swahn, Culbreth, Salazar, Tumwesigye** | The objective of this study was to assess the psychosocial correlates, particularly alcohol use, | (N = 1134 ) 12– | slums of Kampala, Uganda. | Quantitative | n/a | There were statistically significant differences | Youth living in the slums of Kampala, Uganda have a high prevalence of HIV. |

| | | | | |
|---|---|---|---|---|
| **, & Kasirye, 2019)** | associated with HIV among youth living in the slums of Kampala, Uganda. | 18 years of age | between HIV-positive and HIV-negative youth on ever living on the streets ($\chi 2$ =10.14, df = 1, p = 0.002), past 12-month alcohol use ($\chi 2$ =16.38, df = 1, p < .0001), ever having sexual intercourse ($\chi 2$ =14.52, df = 1, p = 0.0001), ever engaging in sex work ($\chi 2$ =13.19, df = 1, p = 0.0003), inconsistent condom use in the past 3 months ($\chi 2$ =5.03, df = 1, p = 0.03), and ever being raped ($\chi 2$ =15.29, df = 1, | These youth are in dire need of interventions which address both alcohol use behaviors and sexual risk behaviors to reduce further complications of their existing health conditions, including HIV. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | $p < 0.0001$). In the multivariable analysis, previously being raped (OR: 1.70; 95% CI: 1.02, 2.83) and alcohol use without problem drinking (OR: 2.14; 95% CI: 1.24, 3.69) was associated with HIV. | |
| **(Mampane, 2016)** | The purpose and objective of the study is to explore and describe factors influencing the vulnerability of women to HIV-infection in rural villages in North West province, South Africa. | 8 women | South Africa | Qualitative | Social identity theory and Symbolic interaction theory | This particular study found that there are a number of personal, proximal and distal factors that influence the vulnerability of women to HIV-infection in rural villages in North West | In this regard, the study propounds that the social context of rural women should be taken into account when developing and implementing HIV interventions in these impoverished and under-resourced communities. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | province,. These factors are influenced by the social context of the place or space where these women live. | |
| **(Ganle, 2015)** | Explore in this article the ways in which the social construction of masculinity influences youth's responses to behavior change HIV/AIDS prevention interventions. | 208 selected high school students | Ghana | Qualitative | Theory of hegemonic masculinity | Findings show that although awareness of the HIV/AIDS epidemic and the risks of infection is very high among the youth, a combination of hegemonic masculinity and perceptions of personal invulnerability acts to undermine the processes of young people's HIV/AIDS risk | I argue that if HIV/AIDS prevention is to be effective and sustained, school- and community-based initiatives should be developed to provide supportive social spaces in which the construction of masculinity, the identity of young men and women as gendered persons, and perceptions of their vulnerability to HIV/AIDS infection are challenged. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | construction and appropriate behavioral change. | |
| **(Webster et al., 2018)** | The qualitative study explored sexual behavior experiences and characteristics of male-female partnerships among the same participants. | N=28 16–24 years | Zimbabwe | Qualitative | N/A | Overall, respondents described two types of male partners: those older (''sugar daddies'', men 35 years old) and younger (<35 years). Respondents felt unable to suggest condom use to both older and younger partners. Evident in respondents' accounts was a general low HIV risk perception, particularly with younger men, which was largely due to poor | Discussions highlighted the nature and characteristics of relationships between AGYW and their male sexual partners. Findings could inform interventions to engender risk perception among AGYW, promote female-controlled HIV prevention efforts and, foster risk-reduction among men |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | HIV knowledge. Discussions suggested that an AGYW's relationship with either male partner was characterized by some form of violence. | |
| **(Mwale & Muula, 2017)** | A systematic review of Behavior Change Interventions [BCI] targeting adolescents in SSA was therefore conducted with the objective of delineating this intervention vis-a-vis efficacy gap. | adolescent [< 24 years] | Sub-Saharan Africa | Quantitative Systematic Review | n/a | The review yielded some 200 titles and abstracts, 20 full text articles were critically analysed and 17 articles reviewed reflecting a dearth in published studies in the area of psychosocial BCI interventions targeting adolescents in SSA. Results show that a number of | Peer education as an intervention stands out as being more effective than other psychosocial regimens, like life skills, in facilitating HIV risk reduction. There is therefore need for further research on interventions employing peer education to substantiate their potential efficacy in HIV risk reduction among adolescents. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | reviewed interventions [n = 8] registered positive outcomes in both knowledge and sexual practices. | |
| **(Darteh, Kumi-Kyereme, & Awusabo-Asare, 2016)** | The study investigated factors influencing perception of risk of HIV among adolescents living in an urban slum in Ghana | 902 adolescents, aged 10-19 years | Kwesimintsim Zongo, an urban slum in the Western region of Ghana | Quantitative | Health Belief Model, | Adolescents' perception of risk of HIV was generally low and was predicted by age, ethnicity, membership of social groups and exposure to the print media. The low risk perception might cause adolescents to engage in behaviours, which are likely to endanger their health in general, and reproductive | Considering the effects of HIV and AIDS on young people, it is imperative to put in place campaigns that would help to increase their perceived risks of HIV. Factors that affect adolescents' perception of risks should be taken into consideration in designing HIV and AIDS campaigns to ensure positive behavioural change. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | health in particular. | |
| **(Fetene & Mekonnen, 2018)** | this study was designed to assess the prevalence of risky sexual behaviors among youth center reproductive health clinic users and non-users in Addis Ababa | 524 youth | Addis Ababa, the capital city of Ethiopia | Quantitative (comparative cross-sectional study design) | n/a | A total of 524 youth with the response rate of 92% participated in the study. The overall prevalence of risky sexual behavior was 226 (43.1%) (With statistically significant difference in prevalence among users 101 (38.5%) and non-users 125 (47.7%) of youth center clinics, (pvalue = 0.04). The odds of reporting risky sexual behavior was 60% higher among volunteers who did not use the | Risky sexual behavior was statistically significantly higher among non-users of the youth center reproductive health clinic compared with the users. In addition, a substantial proportion of the youth engaged in different risky sexual behaviors that are evidenced by the existence of multiple sexual partners, sexual practice without condom and early sexual debut that might predispose youth to STIs including HIV infection and unwanted pregnancy |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | reproductive health clinic, relative to those who did (AOR = 1.60; 95%CI = 1.08, 2.37). Teenagers aged 15–19 years were (AOR = 0.08; 95%CI = 0.05, 0.15) 92% less likely to practice risky sexual behavior compared to those aged 25–29 years old. | |
| **(Muchiri, Odimegwu, & De Wet, 2017)** | Risk factors for condom use are reported, specifically examining the role of perceived risk of HIV infection on consistency in the use of condoms. In addition, other factors including the role of household and community | 14–22 year olds (n = 4 853) | urban Cape Town South Africa | Quantitative | An adapted ecological systems framework | A total of 1598 sexually active youths, of mean age 17.7 years, with 785 (49%) of males and 813 (51%) females were identified for analyses. At baseline, 87% | Perceived risk for HIV infection had no significant impact on consistency in using condoms for both males and females. Further, findings suggests that the effect of ecological risk factors was cumulative. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | level variables, including socio-economic indicators of income and parental relationship are examined | | | | | of males and 90% of females assessed themselves to be at no or low risk of HIV infection.At follow-up, 61% of males reporting low or no risk were consistently using condoms compared to 67% reporting some risk of HIV infection. In females, 47% reporting low or no risk consistently used condoms compared to 49% of those reporting to be at some risk. | Therefore, interventions aimed at the three levels ecology may be more effective in improving consistency as risk factors possess a cumulative effect. |
| **(Angrist, Matshaba, Gabaitiri, &** | Abstinence-only risk avoidance approaches have had limited impact on reducing new | n = 229 with adolescents with | Botswana | Quantitative (Cluster-Randomized control trial) | N/A | At a 12-month follow up, the intervention reduced | We provide rigorous evidence that revealing young people are a |

| | | | | |
|---|---|---|---|---|
| **Anabwani, 2019)** | infections. This cluster-randomized trial examines a risk reduction approach to curbing risky sex for school-going girls in Botswana. | mean age of 12.3 and 14.7 | pregnancy with an adjusted Relative Risk Ratio (aRRR) of .657 [95% CI .433–.997] significant at the 5% level. Effects were largest at junior school (aRRR = .575 [95% CI .394–.841]) and in rural areas (aRRR = .518 [95% CI .323–.831]), significant at the 1% level. There were no significant effects for primary school students, suggesting age of sexual debut and related mechanisms are critical factors in the | safer sex alternative to riskier older partners is a promising and cost-effective approach. The intervention has heterogeneous effects and should be adapted, contextualized and tested with this in mind. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | intervention's effectiveness. Moreover, baseline beliefs of which partner is riskiest mediate the magnitude of effects. | |
| **(Chanda-Kapata, Klinkenberg, Maddox, Ngosa, & Kapata, 2016)** | The objective of the study was to estimate the prevalence of HIV among teenagers in Zambia and determine whether age, sex, setting, educational level, marital and socioeconomic status were associated with being HIV positive. | 3,819 teenagers aged 15–18 years old | Zambia | Quantitative | n/a | The HIV prevalence was estimated to be 1.1 % (95 % CI 0.71-1.60); in females the HIV prevalence was 1.6 % (95 % CI 0.99-2.20) whereas in males it was 0.58 % (95 % CI 0.10-1.10). The prevalence of HIV was twice as high among the urban (1.90 %; 95 % CI 0.99-2.90) than the rural | (Chanda-Kapata, Klinkenberg, Maddox, Ngosa, & Kapata, 2016) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | teenagers (0.89 %; 95 % CI 0.46-1.30), and being divorced or widowed was associated with higher risk of HIV regardless of residence. The risk of HIV was lower among students or those who were in school compared to those who were unemployed and not in school. | |
| **(Tarkang, 2015)** | This study aimed at examining the sexual risk behaviours of high school female learners in Mbonge subdivision of rural Cameroon. | 210 female grade 10 to grade 12 learners | Cameroon | Quantitative cross sectional design | n/a | Learners who perceived themselves at high risk of contracting HIV/AIDS, 28 (47.5%), were more likely to have been forced by their partners into | (Tarkang, 2015) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | first sex than those who perceived themselves not at risk, 12 (26.1%) (p=0.016). Lack of parental control, religion, academic profile, poverty, place of residence and perception of risk of HIV infection were the main factors significantly associated with sexual risk behaviours. | |
| **(Tenkorang & Adjei, 2015)** | This study examined the effects of household living arrangements on the timing of first sexual intercourse among adolescents in Ghana. The study also explored the extent to which parental monitoring and | 12–19 year olds | Ghana | Quantitative | The social control thesis | The multivariate results revealed that young people who live alone, with grandparents or other | (Tenkorang & Adjei, 2015) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | supervision mediates the effects of household living arrangements on age at first sex. | | | | | families have a higher risk of first sex compared with those who live with biological parents. The results from the best fit model suggest however that much of this advantage can be attributed to parental monitoring and household wealth. We found that matrilineal Akan young men were less likely while young women were more likely to have premarital sex compared with non Akans. | |
| **(Chanda-Kapata, Klinkenberg, Maddox,** | The objective of the study was to estimate the prevalence of HIV among teenagers in Zambia and | 3,819 teenagers aged 15– | Zambia | Quantitative | n/a | The HIV prevalence was estimated to be 1.1 % | (Chanda-Kapata, Klinkenberg, Maddox, Ngosa, & Kapata, 2016) |

| | | | |
|---|---|---|---|
| **Ngosa, & Kapata, 2016)** | determine whether age, sex, setting, educational level, marital and socioeconomic status were associated with being HIV positive. | 18 years old | (95 % CI 0.71-1.60); in females the HIV prevalence was 1.6 % (95 % CI 0.99-2.20) whereas in males it was 0.58 % (95 % CI 0.10-1.10). The prevalence of HIV was twice as high among the urban (1.90 %; 95 % CI 0.99-2.90) than the rural teenagers (0.89 %; 95 % CI 0.46-1.30), and being divorced or widowed was associated with higher risk of HIV regardless of residence. The risk of HIV was lower among |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | students or those who were in school compared to those who were unemployed and not in school. | |
| **(Tarkang, 2015)** | This study aimed at examining the sexual risk behaviours of high school female learners in Mbonge subdivision of rural Cameroon. | 210 female grade 10 to grade 12 learners | Cameroon | Quantitative cross sectional design | n/a | Learners who perceived themselves at high risk of contracting HIV/AIDS, 28 (47.5%), were more likely to have been forced by their partners into first sex than those who perceived themselves not at risk, 12 (26.1%) (p=0.016). Lack of parental control, religion, academic profile, poverty, place | (Tarkang, 2015) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | of residence and perception of risk of HIV infection were the main factors significantly associated with sexual risk behaviours. | |
| **(Tenkorang & Adjei, 2015)** | This study examined the effects of household living arrangements on the timing of first sexual intercourse among adolescents in Ghana. The study also explored the extent to which parental monitoring and supervision mediates the effects of household living arrangements on age at first sex. | 12–19 year olds | Ghana | Quantitative | The social control thesis | The multivariate results revealed that young people who live alone, with grandparents or other families have a higher risk of first sex compared with those who live with biological parents. The results from the best fit model suggest however that much of this advantage can | (Tenkorang & Adjei, 2015) |

| | | | |
|---|---|---|---|
| | | | be attributed to parental monitoring and household wealth. We found that matrilineal Akan young men were less likely while young women were more likely to have premarital sex compared with non Akans. |

## Appendix 1: Screening Questions for Participants

1. What is your Age? : □ 15-17 or □18-24 or □ neither
2. For those aged 15-17, which one of this describes you? :□ living separate from parent/guardian or □ financially independent or □ head of household □ or □ married/have been married or □are/have been pregnant or □ are a mother □ none of these
3. What is your Gender? : □Woman or □ Man
4. What is your Availability: □Available in the next 2 days after one on one meeting □ or not available in the next 2 days?
5. What Language do you speak and understand? : □English or □ Kiswahili or □ both or □ neither

## Appendix 2: Informed Consent

## UNIVERSITY OF WISCONSIN – MILWAUKEE
## CONSENT TO PARTICIPATE IN RESEARCH

### 1. General Information

**Study title:**

**HIV prevention needs among young women In peri-urban slums Kenya**

**Person in Charge of Study (Student Principal Investigator):**

Florine Ndakuya, RN, BSN

Graduate student-University of Wisconsin Milwaukee, College of Nursing

Peninnah M. Kako, Ph.D., RN, FNP, BC, APNP (Principal Investigator)

Associate Professor-University of Wisconsin Milwaukee, College of Nursing

Prof. Charles Nzioka (In-country Supervisor)

Department of Sociology and Social Work-University of Nairobi

### 2. Study Description

You are being asked to participate in a research study. Your participation is completely voluntary. You do not have to participate if you do not want to.

**Study description:**

The purpose of this study is to learn about structural factors such as poverty and gender inequality impact HIV risks factors and Prevention needs of young women aged 15-24 who reside in peri-urban slum Kenya. The study is being done to understand the risk factors these women face, what preventative measures they take and the resources available. The goal of this study is to understand more about the barriers that exist when it comes to HIV Prevention in this population and together find a way to bridge the gap between them and the resources available. The study will be done in Kibra, Nairobi Kenya, and will include 80 women from three different sites. Women will be assigned to either focus groups or one on one interviews. Each participant will need to commit between 1-3 hours.

## 3. Study Procedures

**What will I be asked to do if I participate in the study?**

If you agree to participate you will be asked to meet at a location nearest to you. It will be an informal setting where you will be asked questions regarding HIV risk factors, behaviors, and HIV prevention resources in the community. Before data collection in one on one interviews or in discussion groups, I will collect demographic data on a one on one basis with each participant. During this one on one time of demographic data collection, you will be asked to disclose your HIV status, but this is not mandatory. Group discussion will be more general while individual interviews may be personal. Questions explored during our discussions will include questions on your experience living in Kibra, HIV testing procedures in Kenya, issues such as social norms, poverty, religion, alcohol use, substance use, and violence on young women in Kibra. Discussion groups will take 1-3 hours while interviews will take approximately 1-2 hours. There will be audio recording to accurately capture your (participants) views and for further analysis. Please be aware that during group discussions, there is potential for disclosure by other members. I urge you to speak for yourself and refrain from discussing any of the discussed information with others outside of the group.

There will be audio recording to accurately capture your (participants) views and for further analysis. Should you choose not to be audio recorded, you can still participate as long as you permit me to use your remarks in the study which I will write down throughout our discussions or one on one interview.

## 4. Risks and Minimizing Risks

**What risks will I face by participating in this study?**

This dissertation study has minimum foreseeable risks that involve possibly a lack of privacy since the participants may be asked to share personal stories if they are comfortable. This information will however be treated with respect and be shared only for the intended purpose of the study. No names or personal identifiers will be collected. During the audio-recorded sessions of this study, each participant will use a fictitious name throughout the study to maintain privacy and confidentiality.

During group discussions, some involuntary information may be shared. I will remind everyone to speak for themselves and not offer any personal information concerning them or someone else. However, this is a possible risk that you need to be aware of.

There is also a possibility for emotional effect with discussions that may occur with participation in this study. There will be a brief debriefing session at the end of the group discussion and one on one interviews for anyone that may undergo this emotional stress. Additionally, I have a list of resources where you can go to get help.

**5. Benefits**

**Will I receive any benefit from my participation in this study?**

There are no individual benefits to you other than to further research however this study hopes to provide information on what it is young women your age group need to fight HIV. The results of this study will benefit our society as a whole.

**6. Study Costs and Compensation**

**Will I be charged anything for participating in this study?**

You will not be responsible for any of the costs from taking part in this research study.

**Are subjects paid or given anything for being in the study?**

You will receive a small gift in the form of two hundred Kenyan shillings (or two US dollars) as an appreciation for you spending time on this study. This will be given to each participant at the

end of the group discussion/one on one interviews or in the event that you withdraw from the study sooner.

## 7. Confidentiality

**What happens to the information collected?**

Confidentiality will not be guaranteed because of the nature of the group discussions. In that respect, you are encouraged not to share something that you do not want others to know.

All information collected about you during the course of this study will be kept confidential to the extent permitted by law. We may decide to present what we find to others or publish our results in scientific journals or at scientific conferences. Only I-the Principal Investigator-Florine Ndakuya will have access to the information. However, the Institutional Review Board at UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. Participants' information will be recorded with their fictitious name. The information will be safeguarded in a password-protected computer and all the information will be completely destroyed after the completion of the study.

## 8. Alternatives

**Are there alternatives to participating in the study?**

An alternative to participating in the group discussions would be a one on one interview either face to face, or via the phone call.

## 9. Voluntary Participation and Withdrawal

**What happens if I decide not to be in this study?**

Your participation in this study is entirely voluntary. You may choose not to take part in this study. If you decide to take part, you can change your mind later and withdraw from the study. You are free to not answer any questions or withdraw at any time. Your decision will not change any present or future relationships with the University of Wisconsin Milwaukee.

We will destroy all information we collected about you and you will not be included in the study of you decided to withdraw from the study.

## 10. Questions

**Who do I contact for questions about this study?**

For more information about the study or the study procedures or treatments, or to withdraw from the study, contact:

**Florine Ndakuya**

University of Wisconsin Milwaukee College of Nursing

Cunningham Hall, University of Wisconsin-Milwaukee, 1921 E Hartford Ave Milwaukee, WI 53211

Local Number-0724112199

**Prof. Charles Nzioka (In-country Supervisor)**

Chairman & Professor of Sociology

Department of Sociology and Social Work

University of Nairobi

P.O Box 30197 - 00100 GPO

Nairobi, KENYA

Tel: +254(0)722706768

**Who do I contact for questions about my rights or complaints towards my treatment as a research subject?**

The Institutional Review Board may ask your name, but all complaints are kept in confidence.

*Professor Chindia-The Secretariat*
*KNH-UoN Ethics and Research Committee*
*P. O. Box 19676 Code 00202*
*Nairobi*

*Tel. (254-020) 2726300-9 Ext 44355*
*E-mail: uonknh_erc@uonbi.ac.ke*

Institutional Review Board

Human Research Protection Program

Department of University Safety and Assurances

University of Wisconsin – Milwaukee

P.O. Box 413

Milwaukee, WI 53201

(414) 229-3173

## 11. Signatures

**Research Subject's Consent to Participate in Research:**

If you meet the eligibility criteria and would like to participate in this study, consent will be indicated by participation in the focus group or interview. Remember, your participation is completely voluntary, and you're free to withdraw at any time.

## Appendix 3: Parental Consent

## UNIVERSITY OF WISCONSIN – MILWAUKEE

## CONSENT TO PARTICIPATE IN RESEARCH-PARENT

### 1. General Information

**Study title:**

**HIV prevention needs among young women In peri-urban slums Kenya**

**Person in Charge of Study (Student Principal Investigator):**

Florine Ndakuya, RN, BSN

Graduate student-University of Wisconsin Milwaukee, College of Nursing

Peninnah M. Kako, Ph.D., RN, FNP,BC, APNP (Principal Investigator)

Associate Professor-University of Wisconsin Milwaukee, College of Nursing

Prof. Charles Nzioka (In-country Supervisor)

Department of Sociology and Social Work-University of Nairobi

### 2. Study Description

Your child is being asked to participate in a research study. Your child's participation is completely voluntary. They do not have to participate if they do not want to.

**Study description:**

The purpose of this study is to learn about structural factors such as poverty and gender inequality impact HIV risks factors and the Prevention needs of young women aged 15-24 who

reside in Peri-urban slum Kenya. The study is being done to understand the risk factors these women face, what preventative measures they take and the resources available. The goal of this study is to understand more about the barriers that exist when it comes to HIV Prevention in this population and together find a way to bridge the gap between them and the resources available. The study will be done in Kibra, Nairobi Kenya, and will include 80 women from three different sites. Women will be assigned to either focus groups or one on one interviews. Each participant will need to commit between 1-3 hours.

## 3. Study Procedures

**What will I be asked to do if I participate in the study?**

If you provide permission for your child to participate, she will be asked to meet at a location at school where she will be asked questions regarding HIV risk factors, behaviors, and HIV prevention resources in the community. Before data collection in one on one interviews or in discussion groups, I will collect demographic data on a one on one basis with each woman. During this one on one time of demographic data collection, your child will be asked to disclose their HIV status, but this is not mandatory. Group discussion will be more general while individual interviews may be personal. Questions explored during our discussions will include questions on your experience living in Kibra, HIV testing procedures in Kenya, issues such as social norms, poverty, religion, alcohol use, substance use, and violence on young women in Kibra. Discussion groups will take 1-3 hours while interviews will take approximately 1-2 hours. There will be audio recording to accurately capture your child's views and for further analysis. Audio recordings will be optional.

There will be audio recording to accurately capture your child's views and for further analysis. Should this be uncomfortable, your child can still participate as long you permit me to use your remarks in the study which I will write down throughout our discussions or one on one interview.

## 4. Risks and Minimizing Risks

**What risks will I face by participating in this study?**

This dissertation study has minimum foreseeable risks that involve possibly a lack of privacy since the participants may be asked to share personal stories if they are comfortable. This information will however be treated with respect and be shared only for the intended purpose of the study. No names or personal identifiers will be collected. During the audio-recorded sessions of this study, each participant will use a fictitious name throughout the study to maintain privacy and confidentiality.

During group discussions, some involuntary information may be shared. I will remind everyone to speak for themselves and not offer any personal information concerning them or someone else. However, this is a possible risk that you and your child need to be aware of.

There is also a possibility for emotional effect with discussions that may occur with participation in this study. There will be a brief debriefing session at the end of the group discussion and one on one interviews for anyone that may undergo this emotional stress. Additionally, I have a list of resources where your child can go to get help.

## 5. Benefits

**Will I receive any benefit from my participation in this study?**

There are no individual benefits to your child other than to further research however this study hopes to provide information on what it is young need to fight HIV. The results of this study will benefit our society as a whole.

## 6. Study Costs and Compensation

**Will I be charged anything for participating in this study?**

Your child will not be responsible for any of the costs from taking part in this research study.

**Are subjects paid or given anything for being in the study?**

Your child will receive a small gift in the form of two hundred Kenyan shillings (or two US dollars) as an appreciation for you spending time on this study. This will be given to each participant at the end of the group discussion/one on one interviews or if they withdraw from the study sooner.

## 7. Confidentiality

**What happens to the information collected?**

Confidentiality will not be guaranteed because of the nature of the group discussions. In that respect, your child is encouraged not to share something that they do not want others to know.

All information collected about your child during the course of this study will be kept confidential to the extent permitted by law. We may decide to present what we find to others or publish our results in scientific journals or at scientific conferences. Only I-the Principal Investigator-Florine Ndakuya will have access to the information. However, the Institutional Review Board at UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. Participants' information will be recorded with their fictitious name. The information will be safeguarded in a password-protected computer and all the information will be completely destroyed after the completion of the study.

## 8. Alternatives

**Are there alternatives to participating in the study?**

An alternative to participating in the group discussions would be a one on one interview either face to face, or via the phone call.

## 9. Voluntary Participation and Withdrawal

**What happens if I decide not to be in this study?**

Your child's participation in this study is entirely voluntary. You may choose not to take part in this study. If you and your child agree to take part, you both can change your mind later and withdraw from the study. Your child is free to not answer any questions or withdraw at any time. Your child's decision to withdraw will not change any present or future relationships with the University of Wisconsin Milwaukee.

We will destroy all information we collected about you and you will not be included in the study of you decided to withdraw from the study.

## 10. Questions

**Who do I contact for questions about this study?**

For more information about the study or the study procedures or treatments, or to withdraw from the study, contact:

**Florine Ndakuya**

University of Wisconsin Milwaukee College of Nursing

Cunningham Hall, University of Wisconsin-Milwaukee, 1921 E Hartford Ave Milwaukee, WI 53211

Local Number-0724112199

**Prof. Charles Nzioka (In-country Supervisor)**

Chairman & Professor of Sociology

Department of Sociology and Social Work

University of Nairobi

P.O Box 30197 - 00100 GPO

Nairobi, KENYA

Tel: +254(0)722706768

**Who do I contact for questions about my rights or complaints towards my treatment as a research subject?**

The Institutional Review Board may ask your name, but all complaints are kept in confidence.

Professor Chindia-The Secretariat
KNH-UoN Ethics and Research Committee
P. O. Box 19676 Code 00202
Nairobi

Tel. (254-020) 2726300-9 Ext 44355
E-mail: uonknh_erc@uonbi.ac.ke

Institutional Review Board

Human Research Protection Program

Department of University Safety and Assurances

University of Wisconsin – Milwaukee

P.O. Box 413

Milwaukee, WI 53201

(414) 229-3173

**11. Signatures**

If you have had all your questions answered and give permission for your child to participate in this study, sign on the lines below. Remember, your child's participation is completely voluntary, and you're free to remove them from the study at any time.

_____

Initials of the child (print)

_____

Initials of Parent or Guardian (print)

_____ _____

Signature of Parent or Guardian
Date

**Research Subject's Consent to Audio/Video/Photo Recording:**

It is okay to audiotape my child while she is in this study and use audiotaped data in the research.

Please initial: ____Yes ____No

## Appendix 4: Semi-Structured Interview Guide

*Research Question 1: What are the daily lived experiences of young women in Kibra Kenya?*

1. How did you end up in Kibra?
2. Please describe what your typical day entails
3. How did you get involved with this support group/high school-For the two sites?
4. How is it like living in Kibra as a young woman?
5. What do you love about living in Kibra?
6. What are some challenges of living in Kibra?

*Research Question 2: How do young women in Kibra experience HIV risk?*

1. What do you know about HIV/AIDS?
2. How did you learn about HIV/AIDS?
3. If you have been tested for HIV, how was the experience?
4. Has anyone close to you been affected with HIV? How has this impacted your attitude towards the disease?
5. How easy would it be for a young woman to be infected with HIV/AIDS?
6. How comfortable would you be requesting a condom during a sexual encounter?
7. Do you feel it would be easy for you to say no to a man who wants to have sex?
8. What are some resources for young women when they undergo sexual violence?

*Research Question 3: How do age, gender, ethnicity, religion, and poverty affect HIV risk behaviors and prevention needs?*

1. What do you see as differences between you and boys/men your age in terms of opportunities and challenges in Kibra?
2. What role has your level of education and /or employment played when it comes to risk for HIV or prevention?
3. Tell me about traditions that make it easier for young women to get HIV compared to young men?
4. What do your friends think about having sex without a condom?
5. Alcohol and drug use have been reported as an issue among youth your age. How are alcohol and drug use seen in this community by your peers and by your parents/elders?
6. Has your religion played a role in how you approach HIV/AIDS?

*Research Question 4: What are the HIV prevention needs for young women in a broader socio-economic, cultural, geographic, and historical context of Kenya?*

1. I have been seeing signs about sexual violence on Matatus and on the radio about it. What do you know about sexual violence?
2. Can you tell me what you know about violence against young women in Kenya and Kibra?
3. Is there a place in the community that women can go to obtain help if they are undergoing violence?
4. How is your community dealing with HIV/AIDS?
5. What resources are available to help HIV/AIDS affected individuals?
6. What challenges does your community face when it comes to HIV?

7. Tell me about possible approaches that policymakers or communities can put in place to prevent HIV among young women?
8. What do you see as a barrier to HIV prevention among young women?
9. If you were to advise a young woman on how to protect herself from HIV what would you tell her?

## Appendix 5: Focus Group Interview Guide

*Research Question 1: What are the daily lived experiences of young women in Kibra Kenya?*

1. Tell me about a typical day for a young woman in Kibra.
2. What are some advantages young women enjoy by living in Kibra?
3. Talk to me about challenges or concerns of living in Kibra for young women.
4. How different are the struggles young women face compared to young men or older adults?
5. Tell me about how it is like being a young woman living in Kibra.
6. If young women could change one or two things about living in Kibra, what would they be?

*Research question 2: How do young women in Kibra experience HIV risk?*

1) Thinking about being infected with HIV, what is the average age for young women to be infected?
2) How easy or difficult would it be for young women in Kibra to get HIV?
3) What kinds of relationships do young women have with men in Kibra?
4) How common is it for young women to have sexual relationships with older men?
5) Do young women feel they can say no when a man wants to have sex with them?
6) Do young women feel that they can require men to use a condom?
7) What would make it difficult for women to require condom use?

*Research Question 3: How do age, gender, ethnicity, religion, and poverty affect HIV risk behaviors and prevention needs?*

1. Can you name any traditions that affect young women in Kenya and Kibra when it comes to HIV?

2. What is a typical source of financial support for young women in Kibra?
3. What role does education and or employment play for young women in Kibra concerning HIV?
4. Discuss with me how religion shapes the day to day experiences of young women.
5. What are some activities that young women engage in on a daily basis in Kibra that may make it easier for them to get HIV?
6. Discuss the influence of religion on young women in Kibra.

*Research Question 4: What are the HIV prevention needs for young women in a broader socio-economic, cultural, geographic, and historical context of Kenya?*

1. Talk to me about the challenges that young women face when it comes to HIV prevention
2. How might HIV be a problem for young women in Kibra?
3. If a young woman were to get HIV, what would you tell them to do?
4. What services are available in Kibra to help young women who are HIV Positive?
5. For young women who are HIV negative, what advice would you give them to not contract the disease?
6. What support do young women in Kibra receive from peers, schools, communities or families?

## Appendix 6: Demographic Data Sheet

*Demographic data Sheet (To be filled by the SPI who will ask participants questions one on one)*

A) **Personal information**

1. Age or Year of birth_____ or _____
2. Gender: _____
3. Siblings: Yes □ No □
4. Number of siblings: Total _____ Boys_____ Girls_____ Other _____
5. Relationship status: Single □ in a relationship □ married □ Divorced/separated □ other ____
6. How many times have you been married? _____
7. Ever been Pregnant: Yes □ No □
    a. Number of pregnancies _____
    b. Number of children: Total _____ Boys_____ Girls_____
8. Ethnicity or tribe: _____
9. Place/Ward of residence in Kibra: _____
10. Length of residence in Kibra: _____
11. Head of household: Yes □ No □
12. Live with: A parent □ a relative □ a friend □ other _____
    a. If you live with a parent or sibling, do you live with: Mom □ Dad□ brother□ Sister □
13. Religion: Christian □ Muslim □ None □ Other _____
14. Regularly attend religious events i.e church service, prayer meetings? Yes □ No □

B) **Socioeconomic information**

To the best of your knowledge, what is your?

1. Level of education_____
2. Employment status: student □ Unemployed □ Employed □
    a. If employed, what do you do? _____
    b. How long at current job? _____
3. What type of house do you live in Mud □ Cement □ Brick □, Other_____
4. What type of roofing does your house have? Clay tiles□, concrete tiles□, stone coated steel sheets□ mabati (galvanized iron sheets) □
5. Does your residence have electricity? Yes □ No □
6. Type of toilet and shower: Personal □ Community □ other _____
7. Do you pay rent? Yes □ No □
8. TV in the house? Yes □ No □
9. Radio in the house? Yes □ No □
10. Do you have/own a cellphone? Yes □ No □
11. Number of residents in household _____
12. Number of peope who depend on you financially _____
13. Currently owe money: Yes □ No □
    a. Who do you owe money to? _____

C) **Health status**

To the best of your knowledge and comfort level:

1. Are you sexually active Yes □ No □
    a. If yes, who have your sexual partners been? Women □ Men □ Both/either □
    b. How many sexual partners do you currently have? _____

c. Condom use: Always □ sometimes □ Never □

d. Did you use a condom in your last sexual encounter? Yes □ No□

2. Ever been tested for HIV? Yes □ No □

    a. If yes, how did you decide to get tested?

    _____

3. Know your HIV status? Yes □ No □

4. What is your HIV status? _____

5. When did you last visit a health professional? _____

6. What did you eat yesterday?

    For breakfast_____,

    Lunch _____

    supper_____

*Participants will be reminded that information shared will be de-identified and that they can choose not to answer questions especially those related to health status.*

## Appendix 7: Community Resources

List of Community Resources to be accessed by participants

**For high school participants**

St. Aloysius Gonzaga High School (School Nurse)

Otiende, Nairobi, Kenya

P.O. Box 647-00517 Nairobi

Telephone :(+254)20-2018414

Mobile Phone: (+254)715-409166 or (+254)734-374410

**Other Participants**

Shining Hope for Communities (Clinic)

Gatwakera, Kibera Nairobi Kenya

P.O. Box 8303-00200

Telephone: +254 732 058126

## Appendix 8: Organization of Findings

**Study purpose:** Explore HIV risk factors and prevention needs among young women who reside in a peri-urban slum Kenya.

**RQ1: Context**

Theme: Home Life Expectations

Sub-theme: house chores

Theme: Housing Conditions

Theme: Neighborhood Environment

Sub-theme: Physical environment

Sub-theme: Navigation *Corridors*

Sub-theme: Kibra is Home

*Sub-theme: Feeling Supported*

*Sub-theme: Navigating Life with Limited resources*

**RQ2: Risk Factors**

Theme: **HIV knowledge**

Sub-theme: General HIV Knowledge

Sub-theme: Knowledge on HIV transmission

Sub-theme: Knowledge Challenges of Living with HIV

*Sub-theme: Fear of Stigma*

*Sub-theme: Fear of taking HIV medication*

Sub-theme: Sources of knowledge about HIV

Theme: **Experiencing HIV risk**

Sub-theme: Financial insecurity: Transactional Sexual Relationships

*Sub-theme: Older Boyfriends*

*Sub-theme: Sponsor Relationships*

Sub-theme: Sexual Violence

Sub-theme: Alcohol and Drugs

*Sub-theme: Availability of alcohol*

*Sub-theme: Alcohol and Drug use among Youth*

Sub-theme: The role of Peer Pressure in HIV Risk

Sub-theme: Fear of Condom Use

**RQ3: Risk Factors-Structural**

Theme: Traditional Practices

Sub-theme: Disco Matanga

Sub-theme: Wife Inheritance

Theme: Gender Norms

Sub-theme: Gender Norms in Housework

Sub Theme: Gender Norms in Education

Sub-theme: Gender Norms in Employment

Sub-theme: Gender Norms in condom use

Theme: Gendered opportunities

Theme: Religion

Theme: Navigating Poverty

**RQ4: Prevention**

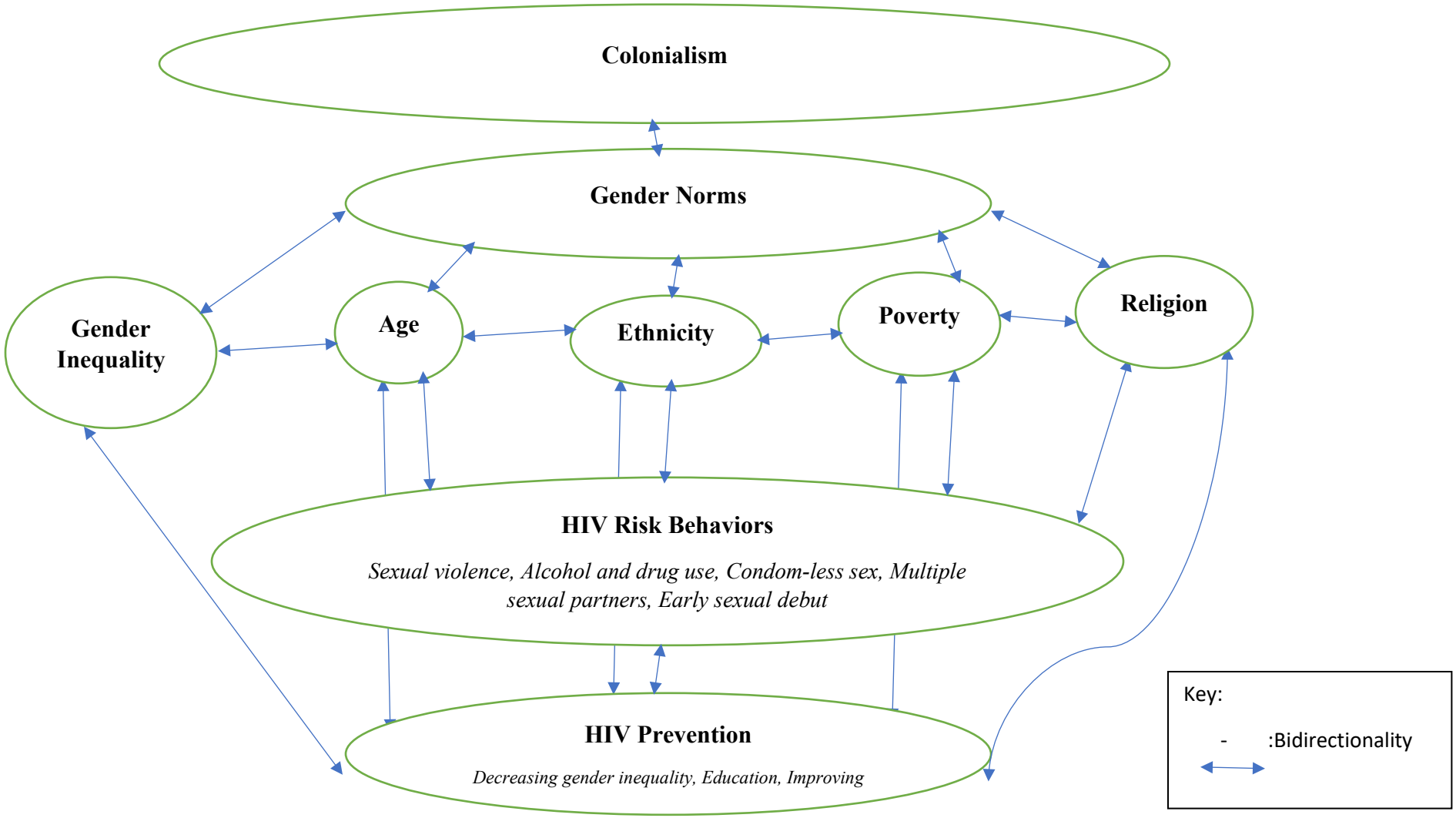
Theme: Help Girls go to School

Theme: Create Jobs

Theme: Ensure Young People are not Idle

*RQ-Research Question

**Figure 7: Conceptual Framework Revisited**



## Table 2: Descriptive Statistics

### Descriptive statistics

| | Mean/Percentage | n/Range |
|---|---|---|
| | **Location(%)** | |
| Support Group | 31.5% | 23 |
| Community | 34.2% | 25 |
| High School | 34.2% | 25 |
| | **Type of Interview** | |
| Individual | 36% | 27 |
| Focus Group | 66% | 46 |
| **Age** | 18 | 15-21 |
| | **Ethnicity or Tribe** | |
| Luhya | 30% | 22 |
| Luo | 49% | 36 |
| Kisii | 8% | 6 |
| Other(kikuyu, Kamba, Meru, Taita) | 6% | 5 |
| Mixed ethnicity | 5% | 4 |
| **Number of Siblings** | 3 | 0-8 |
| | **Regularly attends religious service** | |
| Yes | 94% | 69 |
| No | 5% | 4 |
| | **Head of Household** | |
| Yes | 7% | 5 |
| No | 93% | 68 |
| | **Length of Residence in Kibra** | |
| 0-5years | 38% | 28 |
| 6-10 years | 22% | 16 |
| 11-15 years | 13% | 9 |
| >15 years | 27% | 20 |
| | **Relationship Status** | |
| Single | 60% | 44 |
| Married | 15% | 11 |
| In a Relationship | 25% | 18 |

| | | |
|---|---|---|
| | **Ever Been Pregnant** | |
| No | 74% | 54 |
| Yes | 26% | 19 |
| | **Number of Children** | |
| **0** | 77% | 56 |
| **1-2** | 23% | 17 |
| | **Socioeconomic Status** | |
| | **Highest Level of Education** | |
| Primary school | 14% | 10 |
| Secondary School | 75% | 55 |
| Tertiary | 11% | 8 |
| | **Employment** | |
| Student | 59% | 43 |
| Employed | 18% | 13 |
| Unemployed | 21% | 15 |
| Self-Employed | 2% | 2 |
| | **Type of House** | |
| Mud | 58% | 42 |
| Iron sheets | 16% | 12 |
| Cement | 22% | 16 |
| Other | 4% | 3 |
| | **Type of Roofing** | |
| Iron sheets | 96% | 70 |
| Other | 4% | 1 |
| **Number of Residents in the House** | 5 | 2-10 |
| | **Currently Owe Money** | |
| Yes | 67% | 49 |
| No | 33% | 24 |
| | **Health Status** | |
| | **Sexually Active** | |
| No | 55% | 40 |
| Yes | 45% | 33 |
| | **If sexually active Condom use** | |
| Always | 27% | 9 |
| Sometimes | 33% | 11 |
| Never | 39% | 13 |
| N/A | | 40 |

| | | |
|---|---|---|
| | **Ever Been Tested for HIV** | |
| Yes | 90% | 66 |
| No | 10% | 7 |
| | **Know HIV Status** | |
| Yes | 92% | 67 |
| No | 8% | 6 |
| | **HIV Status** | |
| Negative | 90% | 66 |
| N/A | 8% | 6 |
| Decline to answer | 1% | 1 |

Note: N=73

# CURRICULUM VITAE

Florine Ndakuya-Fitzgerald

Place of Birth: Nairobi Kenya

## EDUCATION

University of Wisconsin, Milwaukee

PhD, Nursing
June 2020

Faculty Mentor- Peninnah M. Kako, PhD, RN, FNP, BC, APNP

Dissertation topic: HIV risk and prevention needs of young women in Kibra, Nairobi Kenya

University of Wisconsin Parkside-University of Wisconsin- Milwaukee consortia program

Bachelor of Science, Nursing May 2013

## TEACHING EXPERIENCE

Carthage College -Kenosha
Clinical Instructor-BSN Nursing students Spring 2019-Spring 2020

Bryant & Stratton-Milwaukee
Clinical Instructor-LPN Nursing students Summer 2019

University of Wisconsin-Milwaukee College of Nursing
Teaching Assistant (Mary Mazul, MSN, CNM, RN) Sept 2017-Dec 2017
Teaching Assistant (Seok Hyun Gwon, PhD, MSN) January 2017-May 2017

## RESEARCH EXPERIENCE

Joseph J. Zilber School of Public Health-University of Wisconsin-Milwaukee
Project Assistant (Lorraine Halinka Malcoe, PhD, MPH) Mar 2016-May 2017
**Project:** Racial Disparities Project (RDP) which seeks to develop a robust assessment of how racial/ethnic health inequalities are investigated in the scientific literature.

University of Wisconsin-Milwaukee College of Nursing
Research Assistant (Peninnah M. Kako, PhD, RN, FNP, BC, APNP) Sept 2016-Dec 2018
**Project**: Role of Cell phone use and Support Group Attendance for Women Living with HIV in Rural Kenya.

Research Assistant (Jennifer Kibicho PhD, CPA (K)) Jan 2013-Dec 2015
**Projects**: Exploring the Syndemic Pathways—Sexual Risky Behaviors, Alcohol Abuse, Violence and Economic Vulnerabilities—that link HIV Risk /Vulnerabilities in a rural community in Kenya **and** an R21 study that assessed the extent to which pharmacists conduct adherence promotion to antiretroviral drug therapy (ART)

Research Assistant (Sandra Underwood RN, PhD, FAAN) May 2010-May 2013
**Project**: Breast Cancer Awareness, Understanding, Screening, Survivor Support and Empowerment Community- Based Participatory Research Project: B'CAUSSSE CBRP

## PRACTICE EXPERIENCE

Ascension All Saints (Formerly Wheaton Franciscan Healthcare –All saints )-Racine WI
Charge Registered Nurse/ RN Lead August 2014-present

Aurora Healthcare-Kenosha WI
Urgent Care Registered Nurse Sept 2017-Dec 2019

## OTHER WORK EXPERIENCE

University Of Wisconsin Parkside-Kenosha WI
Resident Advisor May 2011-May 2013
Peer Health Educator Sept 2011 - May 2013

Midwest Nursing Research Symposium
Emerging Student Liaison-UW-Milwaukee July 2017-July 2018

## LICENSURE AND CERTFICATION

WI RN License # 195727 –Current

American Heart Association BLS & AED –Current-2022

Advanced Cardiovascular Life Support (ACLS)- Current-2022

National Institute of Health Stroke Scale Certification(NIHSS) -Current

Collaborative Institutional Training Initiative (CITI) Certified-Current

## SCHOLARSHIPS AND FELLOWSHIPS

Advanced Opportunity Program Fellow-Fall 2016 , Fall 2017 and Fall 2018

Harriett Werley Doctoral Student Fellowship-Fall 2016

Racine Nurses Association –May 2012/May 2015

National Black Nurses Association-June 2012

Milwaukee chapter Black Nurses Association-2011

Kenosha/Racine Black Nurses Association-2011

Bacchus Scholarship -2011

## MEMBERSHIP AND INVOLVEMENT

Sigma Theta Tau International -Current

American Nurses Association-Wisconsin Chapter

National Black Nurses Association-Milwaukee Chapter

Graduate Nursing Student Academy (GNSA)

Doctoral Nurses Student Organization, University of Wisconsin Milwaukee

Cardiac Practice Council, Ascension All Saints-Racine WI

Falls Team committee, Ascension All Saints-Racine WI

Midwest Research Nursing Society (MNRS)

## PRESENTATIONS AND PUBLICATIONS

Kibicho J, Owczarzak J, **Ndakuya F**, Dilworth (2020). Pharmacist-Initiated Adherence Promotion Activities for Persons Living with HIV in Ambulatory Care Settings: Instrument Development and Initial Psychometric Testing-Journal: Research in Social and Administrative Pharmacy

Kako P, Ngui E, Kako T, **Ndakuya-Fitzgerald F,** Mkandawire-Valhum L (in progress). Sustaining Peer Support Through Group Income Generation Activities for Women Living with HIV in Kenya-Potential journal-AIDS and Behavior

Peer-reviewed Podium Presentations

Kibicho, Jennifer, PhD, Jill Owczarzak, PhD, Thomas Dilworth, Steven D. Pinkerton, PhD, **Florine Ndakuya**, RN, BSN. Does Pharmacy Setting Influence Pharmacist Provision of Adherence Assessments, Customized Interventions and Monitoring Activities to Persons Living with HIV in Real-World Pharmacy Settings? 143rd APHA Annual Meeting and Exposition, Chicago, IL, 11/2015.

**Ndakuya, F**., Underwood, S.M, J. (2014). Breast Cancer Awareness, Understanding, Screening, Survivor Support And Empowerment Community-Based Participatory Research Project: B'CAUSSSE CBRP," -2nd Annual United States African Immigrant Health Conference, Pittsburgh Philadelphia, 09/2014

Peer-Reviewed Poster Presentation

**Ndakuya, F**., Kibicho, J. (2017). Reasons for, consequences of and interventions to excessive alcohol consumption among youth: a qualitative study-40th annual Midwest Nursing Research Symposium, Minneapolis, MN, 04/2017.-Competitve Abstract Section

Kibicho, Jennifer, PhD, Jill Owczarzak, PhD, Tom Dilworth, PharmD, Andy Petroll, MD, Steven D. Pinkerton, PhD, **Florine Ndakuya, RN, BSN**. Pharmacists Perceptions Engaging in HIV Prevention Activities with Populations at-risk for HIV Infection. 2015 World STI & HIV Congress Brisbane, Australia. 9/2015.

Kibicho, Jennifer, PhD, Steven D. Pinkerton, PhD, Jill Owczarzak, PhD, Tom Dilworth, PharmD, **Florine Ndakuya, RN,BSN** and the R21 Pharmacy Team. Do Pharmacists' Barriers—Including Non- Reimbursement For Non-Dispensing Services—Influence The Level Of Adherence Promotion Activities For Persons Living With HIV? International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 20th Annual International Meeting, Philadelphia, PA. 5/2015.

Kibicho, Jennifer, Jill Owczarzak, PhD, Tom Dilworth, PharmD, **Florine Ndakuya**, RN, BSN, Steven D. Pinkerton, PhD, and the R21 Pharmacy Team. Community-Based Pharmacists' Perceptions of Physician Collaboration and Adherence Promotion Activities Targeting Persons Living With HIV International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 21th Annual International Meeting, Philadelphia, PA. 5/2016 - Forthcoming.

**Ndakuya, F**., Underwood, S.M, J. (2013). Breast Cancer Awareness, Understanding, Screening, Survivor Support And Empowerment Community-Based Participatory Research Project: B'CAUSSSE CBRP," - Poster Presentation at 2013 National Conferences on Undergraduate Research conference, Utah.

## VOLUNTEER

UWM Undergraduate Research Symposium-Judge April 2017

UWM Undergraduate Research Symposium-Judge April 2016

Panelist member

**May 1 2017**- in Doctoral Nursing Student Organization-**Topic**-Surviving comprehensive Exams

J**uly 27th 2019**- Graduate Student Panel for UWM Graduate Diversity & Inclusion McNair Visit Day.