

2021

## HIV/AIDS and Substance Use Among Older Adults

Jamerlia E. Wyatt  
*Walden University*

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# Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Jamerlia E. Wyatt

has been found to be complete and satisfactory in all respects,  
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the review committee have been made.

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Walden University  
2021

Abstract

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by

Jamerlia E. Wyatt

MS, Walden University, 2016

BS, NYACK, 2013

AA, Nassau Community College, 2012

AAS, Nassau Community College, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human and Social Services

Walden University

May 2021

## Abstract

HIV/AIDS and substance abuse among older adults is a significant national and worldwide problem. As older HIV-positive adults continue to age, they will have problems with managing their HIV/AIDS, comorbidity disorders, and quality of life, which can lead to substance abuse. The purpose of this descriptive, phenomenological study was to explore the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city. The conceptual framework used to ground this qualitative study was Engel's biopsychosocial model. The purposeful sampling method was used to select six older adults living with HIV/AIDS and substance use in a large northeastern urban city. Data collection methods included in-depth, open-ended telephone interviews. Themes were generated using thematic examination approaches, which involve using a standard multi-step process to analyze data, create codes, and develop themes from the participants' interviews. Findings revealed the biopsychosocial factors of illness impacting older adults that stem from the syndemic associations of HIV/AIDS and substance use. Future action research is warranted to investigate the role of reducing or halting the progression of HIV/AIDS and substance use among older adults. This study promotes social changes in professional practice by providing social, behavioral, and health care providers with a more in-depth understanding of the psychological factors, social circumstances, and health consequences impacting older adults that stem from the syndemic associations of HIV/AIDS disease and substance use.

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## Dedication

I dedicate this labor of love and accomplishment first and foremost to my Heavenly Father and my Lord and Savior, Jesus Christ. For you know the plans you had to prosper me and not to harm me but to give me hope and a future (Jeremiah 29:11). Father, throughout this process, you allowed me to know that you order my steps (Psalm 37:23), and your strength is made perfect in my weakness (2 Corinthians 12:9). In so much as I now have the testimony that I cannot fail (Philippians 1:6), I am more than a conqueror through you (Romans 8:37). Because I can do all things through your son Christ Jesus who strengthens me (Philippians 4:13), as such, I will produce much fruit (John 15:5), my gifts will make room for me and will bring me before great men (Proverbs 18:16) and my household and I will eat the good of the land (Isaiah 1:19), Heavenly Father, you are my *raison d'être*, and I am eternally grateful!

I sincerely dedicate this study to my extraordinary, talented, loving, blessed, and highly favored children George, Jahtayzia, and Jakiya. Thank you for inspiring, believing in my potential, and allowing me to provide you with this remarkable documented gift of enormous achievement that you can be proud of and cherish forever! Equally, I dedicate this study to my wonderful father, Mr. Arthur Henry, my valiant late mother, Mrs. Carol Henry, and my exceptional late grandparents Mrs. Mary and Mr. William Henry Senior. Including my outstanding aunt and uncle Mrs. Hazel and Mr. Donald Dillard, my faithful, loving uncle Mr. William Henry Jr. From my youth, you all have instilled in me the principal value of learning and taught me that I could do anything if I apply myself to utilizing the gifts, talents, capabilities, strengths, and skill sets that God imparted to me. I

am truly blessed and appreciative of the love and essential life principles you all have taught me! Equally, I dedicate this study to my late cousin Joy Nicole Henry. Although you were my cousin, you were like a sister to me. You always gave me positive feedback and valuable words of encouragement while never lacking the opportunity to check in on me consistently. It would be remised not to dedicate this triumph to you. I will forever love you and cherish the memories and times we shared.

I dedicate this study to my husband, ardent supporter, and love of my life Barry. I am so grateful for your unselfish love for our family and me. You worked two jobs during this COVID-19 pandemic so that I could have the option to stay home and complete this dissertation. You insisted that I complete this extensive and arduous research project by allowing me to have adequate time and study space while consistently ensuring that we are in this together and our family will reap the rewards. Never once did you complain; thank you for everything and for being an integral part of my dissertation journey and life.

Finally, I dedicate this accomplishment to the participants who willingly took the time to share their lived experiences with HIV/AIDS and substance use. I am eternally thankful and honored that you took the time to make your voice heard in this research study. May you be encouraged to know that researchers and human scientists like myself have made a personal commitment to invest the needed time and resources to work toward reducing or halting the progression of HIV/AIDS and substance use/abuse among young, older, and general adult population groups at the state and national level.

## Acknowledgments

I want to acknowledge and express tremendous gratitude to my stellar Review Committee members Dr. Garth den Heyer, Dr. Kelly R. Chermack, and Dr. Scott L. Hershberger, who oversaw this study beginning to end. Thank you for providing me with a wealth of invaluable knowledge, unwavering encouragement, and guidance throughout my dissertation journey. Due to your professionalism, I was able to have the fortitude, strength, and endurance to be the progenitor of this well-needed research study. In this respect, I want to acknowledge Dr. Barbara Benoliel for igniting a fire in me to continue my dissertation journey when I struggled with being in the research problem pit of my prospectus. Although you did not serve as a part of my research committee, you did play a pivotal role in my success and accomplishment of this study. I recall you looking me in the face during my third residency at the Gaylord Hotel in Maryland and saying, “Jamerlia, you will finish,” and you then took the time to demonstrate the various components of writing a successful prospectus. I cannot express to you how much I appreciate you and still am in awe of that experience that changed my life forever!

Prominently, I would like to acknowledge my humblest gratitude to my spiritual family and the entire ecclesiastical body of believers in Christ Jesus that strive daily to build up the kingdom of God on this earth. Including my most loving, caring, and thoughtful spiritual mothers in Christ Jesus, Ms. Crystal Butcher, Ms. Gloria Harvest, and Mrs. Rosealine Nurse. The propitious Reverend Sheila Glenn, for her relentless obliging and uncompromising fondness toward me. The astute couple Overseer Grayling and Talisa Ferrand, for their unconditional commitment, encouragement, and amity.

Additionally, I acknowledge my beloved siblings with the utmost deep appreciation: Felicia, Consandra, Terrell, Theodore, Jacinta, Sandra, and Sean; and my loving nieces and nephews and their children; my notable aunts, uncles, and cousins. Know that I was inspired, encouraged, and determined to become the first generation of Dr.'s in our family because of you all. As well, I would like to acknowledge my extended family members, which include my mother-in-law, Mrs. Delores Ackerman, Aunt Ms. Patricia Madyun, sister-in-law Brenda Jackson, my brothers-in-law Reginald Ackerman, Rouselle Jackson, my husband's children Sharese, JaQuai, and his children, Latoya, and her husband Derrick Killingsworth and their children; my husband's niece Tymeisha and nephew Tyrone and his wife Lina Cassara, and the entire Ackerman family.

Furthermore, I would like to acknowledge the countless friends and colleagues that have supported me on this dissertation journey. A special thanks to my admirable NYACK cohort 475 family Professor Cynthia Dorsey, Ms. Lillias M. Edwards, Mr. Conrad Higgins, Ms. Lillian Sno Fowler, Mr. Guy Mondesir, Ms. Inacent Saunders, Mrs. Rebecca Archibold-Lynch, Ms. Robin Plummer. A warm thank you to the affable Mr. Eugene A. Brown, Mrs. Shebah Fardan, Mr. Wendel Murdock, Ms. Lisa Alexander, Mr. Curtis Muhammad, Mr. Cesar Sosa, Mrs. Christina Peters, Ms. Madelena Curet Lallave, Ms. Lamia Temeh, Mr. Edward Quick, Ms. Christine Ephrian, and Ms. Yolanda Felder. Know that I am truly blessed to have you all as a collected body of family, friends, and colleagues who continue to encourage me to achieve incredible feats!

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## Chapter 1: Introduction to the Study

In this chapter, I introduce the study by providing background information on the past and present research related to HIV/AIDS disease and substance use among older adults. The chapter also includes the following sections: the problem statement, the purpose of the study, the research question, the nature of the study, definitions of essential terms used in this study, assumptions, the scope and delimitations of the study, the limitations, and significance of the study. This chapter will then summarize the study's central arguments.

### **Background**

HIV/AIDS and substance use are a chronic and behavioral, linked health issue that impacts all segments of society (Rebolledo-Ponietsky et al., 2018; Schulte & Hser, 2013; Whiteford et al., 2015; yi Lin et al., 2020). HIV/AIDS places a burden on the country's public safety, health care system, mortality rate, and financial health at the national and global levels (DiClemente et al., 2018; Eisinger & Fauci, 2018). Additionally, HIV/AIDS and substance use affects the quality of life and health in older adults (Chhatre et al., 2017; Durvasula & Miller, 2014; Nehl et al., 2015; Peacock et al., 2018; World Health Organization [WHO], n.d.). To illustrate, approximately 36.9–43.9 million people globally were living with HIV in 2017, including 35.1 million adults, and approximately 9.4 million people who did not know that they were living with HIV infection (WHO, n.d.). To date, 19 million American people annually are directly impacted by sexually transmitted diseases (STDs) like HIV/AIDS (Snead et al., 2014).

Similar to HIV/AIDS, substance use and abuse continues to have behavioral health risks; financial, political, and even criminal justice interactions; and increased burdens on the health care systems within the United States (Durvasula, & Miller, 2014; Vangeest et al., 2018). A large proportion of disease burden worldwide is contributed to lifestyle behaviors such as substance use, which has synergistic effects on individual health in middle age and older adults (Ding et al., 2015). In 2014, approximately 8.9 million older adults reported using illicit substances (Center for Behavioral Health Statistics and Quality, 2015; Ompad et al., 2016). Researchers have also predicted that substance use among older adults would continue to increase, with approximately 5.7 million older adults using substances in 2020 (Han et al., 2009; Kuerbis et al., 2014).

More specifically, behavioral risk factors are associated with other social conditions significantly impacting older adults' well-being, healthcare treatment services, life roles, socio-behaviors, socio-demographics, legal, moral responsibilities, monetary, and personal obligations (Durvasula & Miller, 2014; Musumari et al., 2017; Wilson et al., 2014). For example, older adults spend a lot of their lives and time engaging in sexual risk behaviors (Pilowsky & Wu, 2015); However, health care professionals do not always address these risk behaviors such as when they do not discuss safer sex practices with older adults (Grove et al., 2014), though these providers have a responsibility for providing health education and adequate healthcare and treatment services (Brennan-Ing et al., 2014). Further, older adults who lack communication and patient education from their healthcare providers will experience a higher prevalence of substance use and will be at an even higher risk of contracting HIV/AIDS (Grove et al., 2014). Therefore, it is

necessary to investigate problematic substance abuse/use among older adults living with HIV/AIDS (Ellman et al., 2014; Pilowsky & Wu, 2015). Older adults' lives remain significantly impacted because they are a misunderstood and forgotten population (Brennan-Ing et al., 2014; Ellman et al., 2014; Pilowsky & Wu, 2015). There is also a significant need to comprehend the demographic, healthcare service delivery system, and socioeconomic composition for older adults (Bernstein et al., 2014; Wrigley & Dawson, 2016).

Much of the research regarding HIV/AIDS and substance use among older adults in America illuminates importing findings. However, I found no research that has examined the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults 50 and older living with substance use and HIV/AIDS in New York. Therefore, I conducted this study to explore and address the need to understand the socio-risk behaviors, specific treatment preferences, and daily lived experiences of older adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city.

### **Problem Statement**

Researchers have projected that the number of adults 50 and older living with HIV/AIDS will grow over the next few decades (Althoff et al., 2016). Approximately 50% of adults over 50 years old make up the world's HIV population within developed countries, and within the United States, over 50% of the 1.3 million people living with HIV are over 50 years old (Tillman & Mark, 2015). In three decades, 34.5 million people have died from AIDS-related illnesses, and approximately 1,136 northeastern American

citizens succumbed to the disease in 2015 (Centers for Disease Control and Prevention [CDC], n.d., 2016; WHO, n.d., 2018). To date approximately 1.1 million people are living with HIV and aging with the virus imposes challenges with maintaining social contacts and supports, using medical and substance use treatment services, and experiencing social stigma from peer networks, health care providers, and employers (CDC, n.d., 2017; Deren et al., 2019; Durvasula & Miller, 2014). Despite the national awareness over the past three decades and efforts toward effective treatments of HIV/AIDS, there are no approved current procedures, medications, or cures for HIV/AIDS (Erinosho et al., 2012; WHO, n.d., 2018).

A related concern is that as older adults continue to age, they will experience an increased prevalence of substance use (Pilowsky & Wu, 2015). Research has indicated that 50% of persons living with HIV/AIDS reported having current or past histories of substance use (Durvasula & Miller, 2014), and drug-induced deaths have increased by 280 % since 1999 in the United States (Bondurant et al., 2018). In addition, unhealthy behavior-risk, or lifestyles (e.g., substance use, low-condom use) contribute to 40% of untimely deaths, syndemic effects on health, persistent health disparities, and disease burden for the population universally (Ding et al., 2015; Saint Onge & Krueger, 2017). New York has the most significant population density of people infected with HIV/AIDS compared to other major cities within the United States (Radcliffe et al., 2015; Remien et al., 2015), especially in communities that have been the central location of substance use/abuse, low-employment, and high crime rates (Frumkin, 2002). Researchers have suggested that older adults who are living in underserved neighborhoods are vulnerable to

developing behavioral, psychological, biological, socio-cultural and environmental factors of illness (Adler et al., 2016; Fabbri et al., 2015; Gruneir et al., 2016; Hill et al., 2015; Lovejoy et al., 2015; McPhail, 2016; Pilowsky & Wu, 2015).

In addition, aging with HIV/AIDS presents biomedical complexities, harmful health behaviors, growing disparities in health outcomes, cognitive impairment, comorbid diseases, and societal implications among older adults living with HIV/AIDS disease (Justic & Tate, 2019). Therefore, there is a significant need to comprehend the demographic, healthcare service delivery system, and socioeconomic composition for older adults (Bernstein et al., 2014; Wrigley & Dawson, 2016) as well as the biopsychosocial factors, treatment services, long-term complications of HIV infection, and their interaction with aging among older adults (Justice & Tate, 2019; Millar et al., 2016). Although research regarding HIV/AIDS and substance use among older adults in the United States illuminates important findings, I found no research on the socio-risk behaviors, specific treatment preferences and daily, lived experiences of adults 50 and older living with HIV/AIDS and substance use in New York. Given such, further research is warranted to explore the problem of managing HIV/AIDS disease, other comorbidity disorders, and the prevalence of substance abuse associated with aging, and its impact on human services and quality of life in older HIV-infected adults (Chhatre et al., 2017; Deren et al., 2019; Han et al., 2009; Nevedal & Sankar, 2015; Pilowsky & Wu, 2015; Warren-Jeanpiere et al., 2014; Wing, 2016).

### **Purpose of the Study**

The purpose of this descriptive, phenomenological study was to explore the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of older adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city. Further research is warranted to explore the problem of managing HIV/AIDS disease, other comorbidity disorders, and the prevalence of substance abuse associated with aging, which impacts quality of life (Chhatre et al., 2017; Deren et al., 2019; Han et al., 2009; Nevedal & Sankar, 2015; Pilowsky & Wu, 2015; Warren-Jeanpiere et al., 2014; Wing, 2016). Research on HIV/AIDS and substance use in older adults has predominately focused on the challenges associated with (a) prevention outcomes, (b) the aging process, (c) geriatric syndromes, and (d) stigmas (Deren et al., 2019; Greene et al., 2015; Negrodo et al., 2017; Porter et al., 2017). Moreover, drug use remains understudied, and there is limited information on new detections of HIV/AIDS among older adults (Chhatre et al., 2017; Ellman et al., 2014). Therefore, it is crucial to explore the experiences of older adults' 50 and older living with HIV/AIDS and substance use. I sought a more in-depth understanding of these older adults' meanings from their experiences.

### **Research Question**

What are the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city?

### **Conceptual Framework for the Study**

The conceptual framework that was most appropriate to ground this qualitative inquiry is the biopsychosocial model, which was established by Engel (1977, 1981). The model is used to enhance the understanding of individualized well-being and disease through the multifaceted interconnections of health care delivery and biopsychosocial factors (Engel, 1977, 1981). The model is also used to examine an individual holistically by distinguishing that the person has their personal views, experiences, a frame of mind, and a detailed history (Engel, 1977, 1981). Furthermore, the biopsychosocial model can be useful to show the impact of the interconnectedness of physical health, socio-factors, psychosocial well-being, issues of substance use, and HIV-management (Millar et al., 2016). This conceptual lens helped me to determine the overlying factors of socio-behavior risk and syndemic biopsychosocial influences, impacts, and effects that contribute to the dual-epidemic HIV/AIDS infection and prevalence of substance use among older adults living in a large northeastern urban city. The biopsychological model and its relation to the study will be discussed more in detailed analysis in Chapter 2.

### **Nature of the Study**

In this study, I sought to learn more about the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of older adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city. Therefore, the nature of this descriptive phenomenological inquiry involved procedures that consisted of using qualitative narrative interviews with adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city. Next, purposeful

sampling strategies were used to select six older adults 50 and older who met the inclusion criterion for participating in the study. Purposeful sampling is practiced most often in qualitative research for rich information (Kim & Wang, 2018). Finally, I was the researcher and primary data collection instrument in gathering information for this qualitative study (Nowell et al., 2017; Peredaryenko & Krauss, 2013).

### **Definitions**

*AIDS*: Considered to be the last stage of HIV, and individuals who are at this stage have impaired immune systems that place them at risk for death and other opportunistic infections (Fauci, 2016).

*Centers for Disease Control and Prevention (CDC)*: One of the leading national municipal organizations in the United States that works as an extension under the Department of Human and Social Services. Their main purpose is to use preventive measures to control disease, injury, and disability while protecting the communal wellbeing of the American citizens and 61 other countries (CDC, 2015).

*Comorbidity*: A specific entity that develops during the clinical course of a patient with a specific disease being studied (Valderas et al., 2009).

*HIV*: Known as the virus that leads to a person acquiring AIDS (CDC, 2017).

*Older adult*: A person who is 50 years and older, and an individual who is characterized by their functional abilities, chronological age, social roles within a society or country (Kowal & Peachy, 2001; WHO, 2010).

*Socioeconomic status:* A complex and multi-dimensional concept of factors (i.e., economic resources, authority and/or status) that can influence health at different times in the life span, at various levels and pathways (Williams et al., 2016).

*Syndemic effects:* The complex exchanges of multiple diseases that contributes to the surplus burden of disease in a population that can be either social or environmental factors (Smith et al., 2019).

*World Health Organization (WHO):* A global health organization that came into fruition on April 7, 1948, after members from the U.S. Congress congregated to set up a global health association. Their focus is to address the global health concerns in 61 countries (WHO, n.d.)

### **Assumptions**

For this study, I made several assumptions. The first assumption was that the older adult participants would be interested in sharing their lived experiences with HIV/AIDS, history of substance use, socio-behavioral risk, and specific treatment preferences. Second, I assumed that the older adult participants would provide a truthful explanation of their lived experiences during their interviews. Third, I assumed that the older adult participants would be forthcoming with answering the narrative interview questions from their experiences, including current or past diagnosis with HIV/AIDS disease, substance use disorders, and substance abuse. Fourth, I assumed that the purposeful sample was a good representative of the target population of adults 50 and older. Fifth, I assumed that the research instruments used were the most appropriate to collect the data, analyze the data, and to understand the first research question. I also

assumed that the results will support future research on the daily lived experiences, socio-risk behaviors, health, and specific treatment services for older adults.

### **Scope and Delimitations**

There is an extensive amount of studies focusing on HIV/AIDS and prevalence of substance use in the younger generation of young adults (Degenhardt et al., 2016; Gamarel et al., 2016; Inelmen et al., 2014; Pilowsky & Wu, 2015). But there is a lack of studies that have focused on the prevalence of HIV/AIDS disease and substance use among adults aged 50 years and older (Mahy et al., 2014; Ompad et al., 2016). Thus, participation in this study was limited to older adults 50 years and above who were residing in a large northeastern urban city during the time of the study. This city has the most significant population density of people infected with HIV/AIDS compared to other major cities within the United States (Radcliffe et al., 2015; Remien et al., 2015). In addition, a qualitative phenomenological framework was used to assist with addressing and to comprehend the research question: What are the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city?

### **Limitations**

The study was restricted to a qualitative phenomenological method. Second, the study could be limited based on my level of competency and how I conducted the in-depth, narrative interviews. The study was also limited to the self-reporting of the lived experiences as described by the older adult participants. Additionally, the study was limited to the interview questioning process that lasted between 45 minutes to 1 hour.

Using narrative interviews as a central data collection method and the self-report of the older adults could have impacted and influenced the legitimacy of the results of the study without my knowledge. Further, the study was limited to purposeful and snowball sampling to recruit participants; however, a possible limitation with these sampling strategies is that it might not have led to a sample large enough for saturation or replication, which could have impacted the study results. Another possible limitation was participants not fully sharing their experiences. Therefore, each participant was informed that their identity would be kept anonymous, and their information would not be used outside of this study's purpose.

### **Significance of the Study**

New York City has the highest burden of HIV/AIDS, with 54% of new incidences of HIV/AIDS infections in older adults 50 and above in 2017 (CDC, n.d.). Although drug deaths are continuing to increase in America, the prevalence of substance use is often undetected and unnoticed among older adults (Katz, 2017; Kuerbis et al., 2014). Older adults are disproportionately affected by comorbid health-related conditions like HIV/AIDS and substance abuse (Dawson-Rose et al., 2017; Oursler & Sorkin, 2016), which will lead to more impoverished health care experiences, disparities, and treatment services (Deren et al., 2019; Edelman et al., 2014). But addressing the health care needs of older adults with HIV/AIDS and substance use will continue to be difficult (Edelman et al., 2014).

There is a growing need for the development of age-appropriate, safe, and effective treatment intervention methods for older adults living with HIV/AIDS and

substance use (Deren et al., 2019). Therefore, this qualitative study filled the knowledge gap by making an original contribution in understanding the lived experiences, socio-risk behaviors, and specific treatment preferences among older adults living with HIV/AIDS and substance use. This study will support the professional practice by providing social, behavioral, and health care providers with a more in-depth understanding about the psychological factors, social circumstances, and health consequences impacting older adults that stems from the syndemic associations of HIV/AIDS and substance use. Likewise, the study has professional application that can allow interprofessional teamwork between social, behavioral, and health care providers to provide safe, high-quality patient care, patient services, and patient education to adults 50 and older (Reeves et al., 2017). Furthermore, the study's findings could help these providers to foster social changes at the state or local level. The beneficiaries of the study will be the adults 50 and older, primary care physicians, social workers, and behavioral health clinicians, as they will have a more thorough academic knowledge base and in-depth understanding about the causality of HIV/AIDS, substance use/abuse, social-risk behaviors, and available treatments for older adults derived from the results and findings of this study.

### **Summary**

Researchers have argued that HIV/AIDS and substance use are a chronic and behavioral, linked health issue that impacts all segments of a society (Rebolledo-Ponietsky et al., 2018; Schulte & Hser, 2013; Whiteford et al., 2015; yi Lin et al., 2020). But there are limited amounts of information on new detections of HIV/AIDS among older adults (Ellman et al., 2014). Likewise, drug deaths are continuing to increase in

America, and the prevalence of substance use is often undetected and unnoticed among older adults (Katz, 2017; Kuerbis et al., 2014). Although much of the research regarding HIV/AIDS and substance use among older adults in America illuminates importing findings, I found no research that has explored the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city.

In this chapter, I introduced the study by providing background literature on HIV/AIDS and substance use among older adults, the problem statement, and purpose of the study. Chapter 1 also included a research question, the conceptual framework, the nature of the study, and definitions of relevant terms. Additionally, Chapter 1 integrated my preliminary assumptions; the scope of research, including its delimitations and limitations; and the significance of the study. Chapter 2 will include an in-depth presentation of the literature review of previous studies conducted on HIV/AIDS and substance abuse among older adults. Additionally, Chapter 2 will include a literature an in-depth synopsis of the conceptual framework used to ground the study.

## Chapter 2: Literature Review

### **Introduction**

The purpose of this descriptive, phenomenological study was to explore the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city. This allowed me to garner an in-depth understanding of the issues related to aging, having HIV/AIDS, and substance use. The discoveries from this inquiry will provide data that can improve human services, the quality of life, and personal satisfaction for older adults living with HIV/AIDS and substance use.

Researchers have reported that older HIV-infected adults represent a rapidly growing society that will increase significantly by the year 2030 (Negredo et al., 2017). Due to the advances in research and treatments, older adults living with HIV/AIDS disease are expected to have longer life expectancies (Chhatre et al., 2017; Durvasula & Miller, 2014; Nehl et al., 2015; Peacock et al., 2018; WHO, n.d., 2018). However, although advanced treatments such as the combination of antiviral therapy have been useful for the suppression of HIV infection and have extended the life expectancy in older adults, it has not been able to give them a return to optimal health (Althoff et al., 2016).

Researchers have also reported that older adults living with HIV/AIDS are more likely to engage in risky sexual behaviors, experience healthcare disparities in care, and have higher prevalence of substance use (Deren et al., 2019; Mauro et al., 2015; National Institutes of Health, 2016; Pilowsky & Wu, 2015; Wing, 2016). Therefore, older HIV-

infected adults may continue to encounter new challenges with managing HIV/AIDS disease, other comorbidity disorders, and the prevalence of substance use associated with aging and its impact on human services and quality of life (Chhatre et al., 2017; Deren et al., 2019; Ding et al., 2015; Han et al., 2009; Nevedal & Sankar, 2015; Pilowsky & Wu, 2015; Warren-Jeanpiere et al., 2014; Wing, 2016). To illustrate, some of the reported complexities for older adults living with HIV/AIDS include adjustments to lifestyle changes such as social isolation or job loss and changes across multiple health domains (i.e., cognitive, physical, and emotional; Negredo et al., 2017). This population also experiences difficulties maintaining social contacts and supports and social stigma, which leads to underuse of health care services (CDC, n.d., 2017; Chambers et al., 2014; Deren et al., 2019; Durvasula & Miller, 2014; Katz, 2017). Older adults will have poorer health and treatment outcomes, including lack of trust and satisfaction in patient–physician relationships (Murray & McCrone, 2014; Petrovic & Blank, 2015; Samra et al., 2015). Therefore, future investigation is warranted to explore the lived experiences, socio-risk behaviors, healthcare, and treatment services toward meeting the needs of older adults living with HIV/AIDS (Musumari et al., 2017; Nock et al., 2014).

In this literature review, I preview and report strengths and weaknesses, theories, trends, concepts, and points of agreement and differences among recognized experts in the field of HIV/AIDS and substance use. Engel’s biopsychosocial model was used as the conceptual framework to ground the study, as discussed in Chapter 1. Chapter 2 also includes a literature search strategy and presents the following significant themes: (a) the American health care delivery system and the Affordable Care Act (ACA), (b)

prevalence of substance use, (c) healthcare treatment approaches and biopsychosocial factors of illness, (d) syndemic effects of HIV/AIDS and substance use on health and community, (e) trust in the patient and primary care provider relationship, and (f) patient satisfaction and healthcare quality. The last section in Chapter 2 serves as the conclusion and summary of the literature review.

### **Literature Search Strategy**

To adequately provide an exhaustive search of reliable and current literature relevant to the topic of HIV/AIDS and substance use among older adults, I used Walden University Library electronic database MEDLINE and CINAHL. To further review existing up-to-date literature on the topic, I used multidisciplinary and subject electronic databases PsycArticles, Ebscohost, ProQuest, PubMed, Science Direct, Academic Search Complete, and Google Scholar to access major scholarly academic books and peer-reviewed journal articles. The literature was limited to 2014 to 2020, and I searched the following keywords: HIV, AIDS, older adults, substance use, syndemic effects, biopsychosocial factors, and health services. I also searched for specific combination key words relevant to each theme to obtain different outcomes: acquired human immunodeficiency syndrome or human immunodeficiency virus, older adults or old population, elderly or aged, older or elder, geriatric or elderly people, old people or senior, substance use or substance abuse, drug use or drug abuse, and drug dependence or addiction, health care professionals or doctor, nurse or general practitioner or health worker, and syndemic effects or syndemic theory.

The literature on Engel's biopsychosocial model had a range that was between 1977 to 2019. After reviewing the literature, it was then determined that the seminal works of Engel's biopsychosocial model would be used as a conceptual framework to ground the study since it provides insight into the overlying factors of syndemic effects on health, individualized wellbeing, socio-behavior risk, and biopsychosocial factors of illness among older adults. The model also directly aligned with the research question "What are the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city?"

### **Conceptual Framework**

The conceptual framework for this study is Engel's (1977, 1981) biopsychosocial model, which seeks to explain the function of a person's development in physical health and illness through analyzing their biological, psychological, environmental, and social processes. Engel developed the biopsychosocial model for health care physicians and psychiatrists during the 1970s (Engel, 1977, 1981). As a practicing psychiatrist, Engel understood that patients were frequently treated based on their physicians' and psychiatrist's conceptual or theoretical knowledge of their presenting problems through the lens of traditional reductionistic biomedical models (Carpenter, 2017; Engel, 1977, 1981). Therefore, Engel sought to develop a new model that would be an extension of these models to take into account the missing components when addressing the patient as a human being, their distinctive attributes, and social nature (Carpenter, 2017; Elizabeth, n.d.; Engel, 1977, 1981). This new model was designed to show that there are social,

environmental, cultural, and psychological aspects of physical illness that go further than medical symptom manifestations (Carpenter, 2017; Elizabeth, n.d.; Engel, 1977, 1981). Given this design, the central proposition of the biopsychosocial model uses a systems approach that focuses on the interaction between an individual's biological, psychological, social/environmental systems and processes (Babalola et al., 2017; Becoña, 2018; Carpenter, 2017; Elizabeth, n.d.; Engel, 1977, 1981).

Engel's biopsychosocial model has become the outline for scientific health research in conjunction with being used as a leading scientific framework as an alternative to the reductionistic biomedical model in the health psychology and scientific field over the past three decades (Becoña, 2018; Lehman et al., 2017). Additionally, the model continues to be accepted as a significant trademark and conceptual framework for scientific study among behavioral health, health psychologists, policymakers, and social and medical practitioners.

### **Previous Studies Using the Biopsychosocial Model**

Experts within the social, behavioral, and medical sciences and human services sector have used the biopsychosocial model as a theoretical and conceptual framework in previous investigations to increase their knowledge of the multifaceted complexity of the socio-cultural, biomedical, behavioral, mental, and environmental indicators of the HIV/AIDS and substance use among older adults (DeLamater & Koepsel, 2014; Kobayashi et al., 2017; Millar et al., 2016; Yu & Woo, 2016). The biopsychosocial model seeks to explain a person's development in physical health and illness through their biological, psychological, environmental, and social processes ((Engel, 1977, 1981); thus,

researchers recommend helping professionals, clinicians, and specialists use Engel's biopsychosocial model for a couple reasons (Fava & Sonino, 2017; Papadimitriou, 2017). First, the model helps to further explore ways to promote greater patient autonomy, participation in care, and increased access to information while avoiding overlaps and omissions in their patient's healthcare and healthcare services (Jaini & Lee, 2015; Jull, 2017). Second, the model can help gain an in-depth understanding of the correlations among biological, psychological, social, and macro cultural variables (Suls & Rothman, 2004), because the model adheres to the premise that psychological, biological, and social processes are integrally and interactively involved in illness and physical health (Suls & Rothman, 2004).

### **Biopsychosocial Model: Aging with Chronic and Physical Diseases**

Studies have widely used the biopsychosocial model to explore aging and its impact on older adults who have chronic and physical diseases. Researchers have reported that older adults are an ever-growing population that will be in need of care providers due to aging and experiencing complications with managing chronic and physical diseases like HIV/AIDS (Colvin & Bullock, 2016; Vance et al., 2019). There is a substantial amount of evidence that suggests that older adults will experience sickness, discomfort, disability, and dependency, particularly at the end of life (Friedman et al., 2018). Further, the onset of previous chronic disease is more than likely to affect future older adult generations' health and life expectancy (Friedman et al., 2018). For example, older adults in the future will be a population living with HIV/AIDS (Vance et al., 2019), with a prediction that by the year 2030, 73% of older people will have HIV/AIDS (Smit

et al., 2015). Due to the changing demographics of people with HIV, there will come a new set of difficulties for analysts and specialists in distinguishing, addressing, and dealing with the perplexing interaction of treating HIV contamination and aging-associated factors (Sundermann et al., 2019).

To combat the difficulties associated with aging and chronic diseases, medical experts have focused their attention on healthy aging in older adults by exploring ways to reduce morbidity and fragility (Friedman et al., 2018), which has involved examining factors associated with the biopsychosocial model. For example, in Hong Kong, China, researchers Yu and Woo (2016) emphasized that one way to provide an understanding of factors contributing to aging well is by reviewing the most available literature in comparative studies and formulating an analysis based on what other experts have examined using the biopsychosocial factors in populations of disparate cultures and ethnicities among older adults. In a similar vein, Molton et al. (2014) attempted to establish the connection between the biopsychosocial model and subsequent health maladies (i.e., spinal cord injury, neuromuscular disease, multiple sclerosis, or post-polio syndrome) in persons aging with long-term physical disabilities. They uncovered that increasing age is associated with a more reduced function and higher rates of physical and medical complications. Their data analysis also showed curvilinear connections with discomfort and psychosocial complications among persons aging with long-term physical disabilities.

On the other hand, other professionals are concerned with the psychoneuroimmunology of aging and psychoneuroimmunology of chronic illness in

persons living with HIV (Pandey, 2016; Yan, 2016). They claim that aging and chronic illness are associated with biopsychosocial factors that induce psychological stress, social changes, and depression (Pandey, 2016; Yan, 2016). Chronic stress is closely associated with immune dysfunction and premature aging (Yan, 2016). Additionally, social support, hardiness, and self-perception positively correlated with CD4+ count in HIV positive people (Pandey, 2016). These findings suggest that for HIV positive people to have better functioning with their immune system, they should have a positive regard for themselves. When HIV positive people do not have a good acceptance or positive regard for themselves or lack emotional, social, and informational support, their immune system becomes adversely impacted (Pandey, 2016). Therefore, it is evident from the literature that people who are aging with chronic and physical diseases will experience biopsychosocial factors that will impact or improve their overall health.

### **Biopsychosocial Model: Substance Use Disorders and Addiction Treatment**

Several researchers have used the biopsychosocial model to garner a better understanding of substance use disorders and addiction treatment among general adult and older adult populations (Grant & Chamberlain, 2020; Lamb & Baron, 2017; Marel et al., 2019). Researchers have reported that severe substance use disorders within the context of behavioral and addiction science remain recognized as a persistent condition and disability (Goodwin & Sias, 2014). As such, that researchers have found that adult and older adults who misuse substances are prone to experiencing mental health disabilities, developing substance use disorders, indulging in gambling behaviors, experience physical violence, and are prone to developing chronic comorbidities that

adversely impact their substance use treatment, health, and overall quality of life (Bergman et al., 2016; Grant & Chamberlain, 2020; Miller et al., 2018; Rao et al., 2019; Yuodelis-Flores & Ries, 2015). For example, mental health, gender-related, demographic, and socio-structural risk factors have been associated with substance use and substance use disorder treatment among transgender adults (Keuroghlian et al., 2015). Therefore, researchers have suggested that when examining substance use disorders and substance use treatment for adults helping professionals will need to further assess their patient's biopsychosocial factors, complex and multiple healthcare needs, by using the biopsychosocial model (Farre & Rapley, 2017; Rao et al., 2019).

Along these lines, self-destructive conduct, such as suicidal behavior, is a critical issue for individuals with co-occurring disorders seeking addiction treatment (Yuodelis-Flores & Ries, 2015). Though risk factors for suicide have been studied among people with mental illnesses, relatively little is understood about the risk factors in individuals with substance use disorders and co-occurring disorders (Yuodelis-Flores & Ries, 2015). Further, most suicide intervention strategies have conventionally not explored the modification of psychosocial factors despite there being a substantial amount of evidence showing that low socioeconomic position is correlated with an increased risk of suicide in adults (Batty et al., 2018). Therefore, to successfully comprehend suicide behavior, there needs to be a more extensive comprehensive knowledge of the biological, psychodynamic, and motivations for this behavior (Nock et al., 2014), especially for older adult substance abusers who have co-occurring disorders (Rao et al., 2019). With this better comprehension, older adults are more likely to acquire significant emergency

medicine, primary care, trauma, addiction, old age psychiatric, and general medicine services (Rao et al., 2019).

### **Biopsychosocial Model: Perceived Life Expectancy and The Quality of Life**

Several studies have examined the biopsychosocial model on perceived life expectancy and the quality of life among older adults and patients living with chronic morbidities like HIV/AIDS and substance use disorders (Griffin et al., 2013; Mayo et al., 2019; Muller, 2014; Wang et al., 2019). Researchers have reported that perceived life expectancy is predictive of mortality risk and sociodemographic, biomedical, behavioral, and psychological factors in older adults and people living with chronic comorbidities, substance use disorders, and HIV/AIDS (Muller, 2014; Soares et al., 2015). To illustrate, Millar et al. (2016) found that the quality of life in older HIV-infected adults is greatly affected by biopsychosocial health factors such as physical and mental well-being, substance use, and personal satisfaction. Further, perceived life expectancy may impact psychological factors for older adults' sense of mortality risk, longevity expectations, consequences for health-related outcomes, behaviors, and ways they will invest in their future health (Kobayashi et al., 2017). Additionally, the cross-sectional indicators of perceived life expectancy predictors such as moderate-to-superb physical activity, self-evaluated well-being, chronological age, age of parents currently or at death, sexual orientation, smoking status, and the presence of chronic health conditions are predictive and consistent risk components for mortality among older adults (Kobayashi et al., 2016).

### **Biopsychosocial Model: Sexual Behaviors and Sexual Expression in Later Life**

Over the past decade, researchers have devoted an enormous amount of interest toward understanding sexual behaviors and sexual expression in later life among older adults (DeLamater et al., 2017). Given that researchers have noted that the sexual expression of older adults is influenced by different psychosocial and biologic determinants, including ageist views (Srinivasan et al., 2019). However, despite ageist stereotypes suggesting sexual expression ends at midlife, researchers further argue that sexual wellness is integral to the quality of life across the life span of older adults (Syme et al., 2018). In so much that, DeLamater and Koepsel (2014) investigated the relationship and sexual expression in later life among adults 50 years and beyond using the biopsychosocial model as a conceptual framework. By reviewing the most available literature on the effects of disease on sexual functioning for older adults, lesbian, and gay sexuality. Notwithstanding, discoveries from the investigation outlined the distinctions in sexual articulations that originate from the fluctuations of the older adults' wellbeing and partner relationship factors, for example, the passing of an accomplice, living with HIV disease, and sexual brokenness (DeLamater & Koepsel, 2014). Therefore, based on these findings in the literature the scholars conclude that the biopsychosocial model revealed a correlation between the sexual expressions in later life produced negative attitudes for older adults.

Relevantly, DeLamater and Koepsel's (2014) findings are congruent with the work of Penhollow et al. (2017), which suggest that sexual satisfaction among older adults was determined based on the cultural shifts, cultural norms, and socio-factors

associated with aging. Including sexuality, social, and psychological considerations. Nonetheless, researchers DeLamater et al. (2017) and Kolodziejczak et al. (2019) stressed that sexual behavior declines with age and fewer thoughts among older adults. Due to the older adults' decline in sexual frequency and the fact that they might not have a marital partner or steady companion (Twenge et al., 2017). While other researchers report that biopsychosocial factors such as poorer health associated with lower levels of sexual behavior and higher prevalence of issues with sexual functioning in older adult men contribute to declined sexual activities (Lee et al., 2015). Likewise, sexual activity declined in older adult women due to their sexual concerns with disagreements with a partner about initiating and feeling obliged to have sex (Lee et al., 2015). As well, researchers have further implied that cognitive impairment affects frequency and satisfaction with sexual activity, including the older adults' capacity to consent (Srinivasan et al., 2019).

Therefore, the research outcomes from the literature illuminate essential findings for future use of professional practice among experts using the biopsychosocial model for older adults living with acute and chronic health conditions to determine better their health-related decision-making, planning, and behaviors (Kobayashi et al., 2017). As well, healthcare providers should use a whole-person approach informed by the biopsychosocial model to address the interconnected nature of health challenges for older adults living with HIV disease (Millar et al., 2016). Given that, what remains to be investigated among older adults living with HIV/AIDS, substance abuse, and comorbidities sexual health is how they will be able to improve and manage to sustain

their safer sex practices and lives including maintaining and supporting their biopsychosocial health and functional wellness (Brown & Perkins, 2019; Gillespie, 2016; Taylor et al., 2017).

### **The Benefits of Using the Biopsychosocial Model**

Several studies in the United States have suggested that the uses of stringent reductionistic biomedical theories, concepts, and viewpoints stemming from the 17th century are not the set medicalized method in the 21st century but the biopsychosocial model is used widely across the continuum of the health psychology, behavioral health, and scientific medical field (Babalola et al., 2017; Engel, 1977, 1981; Lehman et al., 2017). The relevance of the biopsychosocial model is imperative and beneficial for this study for several reasons. The first is that the model will be used as a conceptual framework to show the biopsychosocial factors of illness such as biological, psychological, and social processes/dynamics and how they work in conjunction to affect the physical health outcomes of older adults living with HIV/AIDS and substance use (Babalola et al., 2017; Suls & Rothman, 2004). Second, the biopsychosocial model will help to provide insightful knowledge of the health care services, healthcare quality, healthcare treatment needs, and the syndemic effects of HIV/AIDS and substance use on the health and community of adults aged 50 years and older. Also, the model will provide insights regarding the prevalence of substance use, determinants of health, and health disparities within the healthcare delivery system.

Likewise, the model will help to support professional practice for behavioral health, health psychologist, policymakers, social/medical healthcare practitioners by

allowing them the opportunity to position themselves at the forefront of efforts to build a multisystem approach to human functioning (Becoña, 2018; Engel, 1977, 1981; Lehman et al., 2017). Given that, the model has been an appropriate conceptual framework used widely within the scientific field among researchers (Becoña, 2018; Carpenter, 2017; Elizabeth, n.d.; Engel, 1977, 1981). For example, researchers used the model for teaching, analyzing the correlation that exists between pathology, resiliency factors and cultural concepts that are significant to understanding multiple illnesses like HIV/AIDS, substance use, diabetes, chronic fatigue syndrome, chronic pelvic pain, and lower back pain (Becoña, 2018; Carpenter, 2017; Elizabeth, n.d.; Engel, 1977, 1981).

### **Literature Review Related to Key Concepts**

#### **Theme 1: The American Healthcare Delivery System and the Affordable Care Act**

Researchers have widely investigated the role of the American healthcare delivery system and the ACA in recent years (Buchmueller et al., 2016; Gruneir et al., 2016; Fullerton & McCullough, 2014; Obama, 2016). Since much of the debates in America concerning affordable health care for older adults who have long-term disabilities, preexisting chronic health conditions, debilitating diseases, chronic medical diseases, and conditions such as HIV/AIDS and substance use have revolved around the ACA and the American healthcare delivery system. That said, in America, the historical transformations of nation-wide health insurance coverage date to the late 18th century during the time of the Progressive Era when American campaigners had an interest in establishing an illness and disease insurance program (Berkowitz, 2008). States such as New York and California supported the reformers' notion and reported effort to have a

program targeted towards ill health for American adults with disabilities and sicknesses (Berkowitz, 2008). These states gave great attention to helping to establish healthcare programs for their adult population groups (Berkowitz, 2008). However, moving forward to the transformation years in America, specifically on July 30, 1965, former President Lyndon B. Johnson endorsed Medicaid and Medicare as an amendment to the Social Security law (Berkowitz, 2008). Medicare and Medicaid then became two of the most established essential social health programs for adults during 20th century America (Berkowitz, 2008).

Interestingly, Medicaid and Medicare, where how the American Federal government became interested and concerned with creating national health care finance programs (Berkowitz, 2008). At last, 25 years later, a new system established on March 23, 2010, entitled the ACA, has emerged as a new medical insurance coverage inclusion to uninsured low- and middle-income families, groups of people, and households (Alcalá et al., 2017; Buchmueller et al., 2016; Cunningham, 2015; Xu et al., 2019). Moreover, the purpose of the ACA was to provide provisions to expand both Medicaid and private insurance for uninsured adults and non-elderly adults, excluding non-documented immigrants (Buchmueller et al., 2016). Second, the ACA goal is to improve the equality, quality, and affordability of health insurance coverage while reducing uneconomical spending and making the healthcare system more accountable to a diverse patient population such as low-income older adults (Obama, 2016).

Notably, during his presidency, former President of the United States, Barack Obama endorsed the ACA and the possible impact it could have on improving the long-

standing challenges facing the American health care delivery system related to access, affordability, and quality of care for adult populaces (Obama, 2016). For a reason, Obama (2016) reports that in America, before the ACA, adults in America often did not have affordable health insurance coverage, they had more significant healthcare expenditures, and their wellbeing remained affected within the health care environment. Second, Obama (2016) reports that the American healthcare delivery system failed the American citizens by falling short of its potential to ensure they received quality of care, were provided better health outcomes, and timely access to a physician when seeking medical attention for their medical needs. As well, Obama (2016) states that the American healthcare delivery system impacted the U.S economy significantly, and its effect is like the Great Recession.

Furthermore, researchers Fullerton and McCullough (2014) also argued in favor of the ACA and insisted that the new changes within the American health care delivery system will permit healthcare coverage for older adults who face out-of-pocket healthcare expenditures. By allowing the adult recipients to have more exceptional alternative options to bypass the commonly known American third-party payer insurance companies (Aetna, Blue Cross, and Blue Shield) when addressing their healthcare needs (Fullerton & McCullough, 2014). Some substitute choice coverages for adults Fullerton and McCullough (2014) point out are Health Maintenance Organizations (HMO), Preferred Provider Organizations (PPOs), and Point of Service Plans (POS).

Expressively, Fullerton and McCullough (2014) and Obama (2016) advise that these healthcare changes would assist American adults in becoming more engaging and

proactive in addressing their healthcare needs. Given that researchers have discovered that around 92% of American older adults have at any rate one ceaseless malady or ailment and roughly 77% of low-income older adults will experience a higher increased burden with having at least two comorbidities (Akinyemiju et al., 2016). Additionally, Fullerton and McCullough (2014) and Obama (2016) propose that these healthcare changes would be beneficial in promoting healthy behaviors and qualities for responsible healthcare practitioners providing health care services within the American health care delivery system. Considering, adult patients who were receiving medical treatments under the old system of the reductionist biomedical model did not have health care options regarding their health care needs (Engel, 1977, 1981).

Contrary, Fullerton and McCullough's (2014) and Obama's (2016) account of the evolutionary advancements within the American healthcare delivery system is not without controversy. Seeing as, to date, the ACA has become one of the most contested healthcare reform laws amongst researchers, policymakers, and the American adult population groups (Fullerton & McCullough, 2014; Obama, 2016). Although, according to Fullerton and McCullough (2014), the American healthcare delivery system has undergone drastic changes over the past 25 years. Such as improved treatments, more accurate diagnosis, and better-quality pharmaceutical medications that will assist in treating a host of long-term diseases and conditions like HIV/AIDS and substance use (Fullerton & McCullough, 2014). To illustrate, according to researchers' Fisher et al. (2016), even though the American healthcare delivery system is in an unprecedented transition, it is vital to understand that "not every change is an improvement. (P.1)"

Since, to date, little is known regarding the impact of the ACA Medicaid expansions on access to care, utilization, and health for low-income adults (Wherry & Miller, 2016). Likewise, researchers have reported that the ACA exigently affects older adults and other low-income adult American populations. Second, the researchers suggest that the ACA affects older adults' ability to receive adequate medical care, although they may pay out of pocket costs (Obamacare Attacks American Seniors, 2014). As well, another analyst report that the ACA drives up costs puts the American government in charge of adult decisions and threatens American adults' constitutional rights (Grace-Marie Turner et al., 2011). Therefore, scholars have suggested that there is a need for future investigation to understanding the American healthcare service delivery system, the demographic, and socioeconomic composition for older adults in America (Bernstein et al., 2014; Wrigley & Dawson, 2016).

### ***Access to Affordable Healthcare Services***

Researchers have argued that uninsured American adults who have inadequate access to affordable healthcare and medical insurance coverage will experience multiple determinants with their healthcare services (Zhang et al., 2017). For example, some healthcare determinates for American adults are poorer health outcomes, financial hardships, access disparities, and a wide range of social challenges (Osborn et al., 2016). As such, that these health determinants are more significant for American adults than in other adults in countries such as Australia, Canada, Norway, Sweden, France, Germany, New Zealand, the United Kingdom, and the Netherlands (Osborn et al., 2016). Therefore, researchers have argued the need for American adults to have adequate access to

healthcare services and affordable medical coverage, whether under an openly subsidized program like Medicare/Medicaid or purchased private insurance plans (Shartzter et al., 2016; Sommers et al., 2015). Considering that, American adults who have adequate access to affordable healthcare and medical coverage, are more likely to receive medical detections earlier, reduce access disparities, lessen financial and health disparities, have a source of regular care, and experience more exceptional healthcare outcomes (Shartzter et al., 2016; Sommers et al., 2015).

Given that, for most American adults, having access to affordable medical insurance coverage and access to affordable healthcare services is significant (Bernstein et al., 2014; Fullerton & McCullough, 2014; Kobayashi et al., 2019; Obama, 2016; Wrigley & Dawson, 2016). In so much as, statistical evidence showed that since the first start of 2016, 20 million uninsured American adults had acquired medical coverage inclusion because of the ACA (Health insurance coverage and the ACA, 2010-2016 - Digital Collections - National Library of Medicine, n.d.). In support of this assertion, Kobayashi et al. (2019) emphasized that legislative and social assistance benefits presented by the ACA Medicaid expansion could improve the subjective well-being of population adult members outside of the qualified policy-eligible adult population. Given that they took into consideration the purpose of the ACA, Medicaid expansion was to increase access to health care for adults, which may reduce the vulnerability to health and money-related vulnerabilities for adults with remarkable medical problems (Kobayashi et al., 2019). Therefore, the experts have advanced the hypothesis that the ACA Medicaid

expansion would be associated with improving the well-being of policy qualified low-salary American adults and other adult populaces (Kobayashi et al., 2019).

In contrast, Wen et al. (2015) openly questioned whether Medicaid extension advancements might influence as well as impact social insurance inclusion and access to care among low-income adults with behavioral health conditions (Wen et al., 2015). Since they claimed that the issues with access to care for adults were because the affordable care act (ACA) did not come into effect until January 2014 (Wen et al., 2015). As a result, the time lag thwarted an immediate assessment of the Medicaid extensions regarding the accessibility of data (Wen et al., 2015). Another reason was that Medicare and Medicaid beneficiaries support themselves on fixed incomes and frequently do not receive adequate healthcare services due to their income status (Mir et al., 2013). Therefore, because of the adverse impact of deficient Medicaid insurance inclusion and having inadequate access to healthcare among low-income adults with behavioral health conditions researchers have emphasized that older adults will continue to deal with unforeseen spending burdens (Hatfield et al., 2016; Maclean et al., 2017). Such as having to pay out-of-pocket expenditures to cover their healthcare needs and treatment services (Friedman et al., 2018; Hatfield et al., 2016).

Therefore, a limitation with these studies' explanation is that the effects of the American Medicaid expansion healthcare policies from the 2014 ACA illustrated no improvements in newly adult populations' wellbeing such as the quality of life, self-related health, and life satisfaction (Kobayashi et al., 2019; Wen et al., 2015). Another limitation of Kobayashi et al. (2019) and Wen et al. (2015) studies was that adult and

older adult population challenges with access to affordable healthcare and adequate access to physicians are due to national and state insurance regulations within the American health care delivery system (Bradbury, 2015; Khatutsky et al., 2018). Since the central role of the ACA, Medicaid expansion aims to address the healthcare needs of low-income families in America (Wen et al., 2015).

With that said, a noted strength of these approaches' explanation was that continual execution of Medicaid expansions does have the possibility to improve health insurance coverage and access to healthcare for low-income adults and general adult populations with behavioral health conditions (Kobayashi et al., 2019; Wen et al., 2015). Due to the continuing implementation of the ACA and the developments through Medicaid, low-salary adults with behavioral health conditions will have better-quality health treatment services and coverage. Furthermore, these statements from the researchers are compatible and contribute to the literature by implying, since the expansion in 2014, approximately 9.6 million low-income American families and adults have become eligible for government-funded welfare Medicaid (Kobayashi et al., 2019).

Nevertheless, Kobayashi et al. (2019) and Wen et al. (2015) research remain contested amongst numerous research critics within the psychology, behavioral, and medical health fields. For example, Hu et al. (2018) further advocated that American adult's would have better access to credit markets, more financial savings, increase utilization of different commodities, and enterprises. Additionally, Hu et al. (2018) support the notion that having access to medicinal services, healthcare coverage, and a decrease in clinical costs can improve access and financial well-being for American

adults. Seeing as, while evaluating the ACA Medicaid expansion for low-income adults aged 19-64 years economic well-being, they found evidence that Medicaid expansion developments that started in 2014 fundamentally decreased the number of unpaid bills (Hu et al., 2018). Concurrently, the researchers discovered that the measure of financial obligation sent to outsider collection organizations such as third-party agencies among individuals living in postal divisions remains possibly influenced by the Medicaid extensions (Hu et al., 2018).

Analogous, Brevoort et al. (2017) asserted that Medicaid augmentation advancements ultimately eliminated clinical burdens for the individuals who procured Medicaid. Given that they found that beyond healthcare purposes, the ACA Medicaid expansions had a significant financial impact on adults (Brevoort et al., 2017).

Interestingly, Kobayashi et al. (2019) also discovered that access to healthcare expanded, and difficulty affording health care declined for policy-eligible low-income adults and general adult populations following the Medicaid expansion. Reckoning, the researchers found that the expansion of Medicaid was not related to differences to emotional states or life attainment over the study period in the low-income adults who newly received health insurance or in other adult populations as a surplus impact of the policy revision (Kobayashi et al., 2019).

On the other hand, Khatutsky et al. (2018) have further taken issues with problematic access to healthcare and its impact on the quality of life for eligible low-income older and younger adults with disabilities. Since, they have accentuated that Medicare is an all-inclusive qualification program covering medical care, but not long-

term care for older adults and some adults with disabilities (Khatutsky et al., 2018).

Unlike Medicaid expansions that helped to narrow the insurance, treatment, and behavioral health gaps because healthcare coverage availability had become extended to low-income adults who had incomes up to 138% of the federal poverty level (Kobayashi et al., 2019; Wen et al., 2015). To illustrate, they found evidence that the Financial Alignment Initiative state demonstrations in America place a tremendous exertion in improving integrative consideration, healthcare quality, and expenses for low-paying older and younger adults with disabilities. Given that, Medicaid was the central funding provider source for long-term care for older adults (Khatutsky et al., 2018). Therefore, they emphasized that because of these health coverage disunions, low-paying older and younger adults with disabilities will receive poorer health outcomes and disintegrated healthcare services. As well, they further claim that these insurance divisions will lead to additional misaligned inducements for payers and benefactors, bringing about unnecessary expenditures, cost-shifting, and inefficient healthcare planning.

### ***Access to Healthcare Providers and Economic Disparities***

Researchers have reported that access to healthcare providers is a pressing issue currently occurring in all countries, even those with across-the-board therapeutic social insurance administration systems (Loignon et al., 2015). Researchers have further reported that access to healthcare services at reasonable costs has been a societal and economic problem in America (Yamada et al., 2015). For example, Bradbury (2015) specifically noted that the challenge for older adults in America is having access to their healthcare providers as Medicaid recipients. In such a way, studies have shown that in the

United States, older adults are a population that will continue to face access disparities, health inequality, and healthcare cost burdens (Yamada et al., 2015). Given that, the older adults' access is dependent on their physician's acceptance of new Medicaid patients (Bradbury, 2015). As a result of inadequate access to healthcare providers, Medicaid expansion-eligible people who have clinically diagnosed behavioral health disorders would remain uninsured due to some states being undecided or unwilling to accept Medicaid expansion (Mir et al., 2013). For these reasons, experts have emphasized the importance of ensuring that denied and disadvantaged patients and people living in poverty have adequate access to healthcare providers, beneficial and reasonable primary healthcare (Loignon et al., 2015).

Arguably, researchers have reported that healthcare providers have responded to public health insurance changes by signifying that providing coverage is not equivalent to providing access to services (Buchmueller et al., 2016). Meaning that although expanding public health insurance coverage, such as Medicaid, increases the utilization of health services, it does not ensure that provider capacity will increase access or that the healthcare demands of newly insured Medicaid patients will be met (Buchmueller et al., 2016). Contrary, the researchers also argued that already insured patients would face challenges of access to healthcare providers due to increased wait times, thus reducing their access to care (Buchmueller et al., 2016). For example, in a 2015 qualitative study, Lafortune et al. (2015) found that older adults experienced access to service barriers and poor system integration in Ontario, Canada. However, in 2017 a recent qualitative study by Vermeir et al. (2018) found barriers to primary and emergency healthcare for trans

adults in Nova Scotia, Canada. These barriers included having feelings of discrimination from their healthcare providers and social care environments (Vermeir et al., 2018).

Concerning these arguments, Knaak et al. (2017) offered a related idea that might clarify healthcare providers' views regarding access disparities for older adults. They explained that even though healthcare providers are knowledgeable of older adults' access disparities within the healthcare system, the healthcare providers view access to healthcare and the quality of health services as a crucial concern for themselves as well (Knaak et al., 2017). This concept coincides with a new line of research that further highlighted the problems within the American healthcare delivery system: the lack of physicians having access to information and their ability to execute their professional responsibilities within their role of coordinating patient care and services (Doty et al., 2020). For example, Doty et al. (2020) established an association that illustrates compared to medical physicians in eleven other nations, substantial extents of American medical physicians did not routinely get an available warning, or the data required for regulating the continuous management of care from experts, after-hours care centers, crisis divisions, or medical clinics. In this context, Loignon et al. (2015) further explained that the lack of specialized training among healthcare providers often impacts their ability to provide timely access to healthcare services for their patients.

Following these assertions, Bradbury (2015) proposes that these disparities are due to American physicians experiencing prolonged apprehensions and a standardized fee scheduled that is established legislatively for Medicaid beneficiaries. Given that, these standardized fee payments place physicians in vicarious positions with their former and

new patients. Since patients have differentiation in terms of paying for comparable services, physicians will not be able to set their set service fees for the services (Bradbury, 2015). Therefore, Bradbury's dissent builds on other researchers' arguments that older adults will experience higher healthcare spending expenditures and lack long-term services and support, which will ultimately impact their quality of life (Friedman et al., 2018; Hatfield et al., 2016). These determinants are also consistent with Khatutsky et al. (2018) findings regarding healthcare costs for adult populations who are Medicaid-Medicare beneficiaries. Given that, Khatutsky et al. (2018) found that out-of-pocket spending creates barriers to receiving effective treatment services for older adults.

Consequently, Friedman et al. (2018), expect this burden of out-of-pocket expense for older adults to increase in the upcoming decades. Other researchers recommend that older adults' quality of healthcare and personal satisfaction regarding the quality of life will become impacted (Friedman et al., 2018; Khatutsky et al., 2018). Due to them having low-income and overlying gaps within their health insurance coverages (Bradbury, 2015; Friedman et al., 2018; Mir et al., 2013). More significant, the researchers report that older adults will have to succumb to an understanding that they are now in a position to experience access determinants with their healthcare providers' willingness to not accept them as Medicaid beneficiaries (Bradbury, 2015; Friedman et al., 2018; Khatutsky et al., 2018).

Consistent with these claims of Bradbury (2015); Friedman et al. (2018); Khatutsky et al. (2018); and Mir et al. (2013) regarding out-of-pocket expenditures and overlying gaps within health insurance coverages for low-income older adults and

general adults. Licata (2014) additionally argued that healthcare disparities regarding access to healthcare services and providers, including economic disparities, should not exist within the healthcare system. Given that, they emphasized one central purpose of the ACA is to provide protections for low-income individuals from receiving large and unexpected out-of-pocket health care services and expenses (Licata, 2014). Therefore, it is evident from these arguments that inadequate access to healthcare providers present significant health consequences overall to the quality of care, quality of life, financial health and stability, and healthcare services for Medicaid eligible and uninsured adults and older adults (Bradbury, 2015; Friedman et al., 2018; Khatutsky et al., 2018; Lafortune et al., 2015; Mir et al., 2013).

### ***Medicaid Managed Long-Term Support Services and Medicaid Waivers***

Numerous researchers have attempted to evaluate the effectiveness of Medicaid managed long-term support services (LTSS) and Medicaid waivers in recent years (Lipson et al., n.d.; Saucier & Burwell, 2015; Williamson et al., 2017). Given that the researchers wanted to comprehend how these services and waivers could improve the healthcare quality for individuals who use these services (Lipson et al., n.d.; Saucier & Burwell, 2015; Williamson et al., 2017). Interestingly, 30 years have passed since the first Medicaid home, and network-based waiver programs were endorsed (Reinhard et al., 2011). More fascinating is when Medicaid was introduced and embraced in 1965, the fundamentally required amalgamation of notable supports and long-standing organizations were provided in dexterous nursing environments and workplaces (Reinhard et al., 2011). Moving forward to the 21st century, current literature showed

that in America, most LTSS remained administered by unpaid parental figures – family members and companions – in-home and network-based settings, permitting numerous adults with LTSS needs to age in place (Reaves & Musumeci, 2015).

However, even though older adults have Medicaid and LTSS as they age in place. Researchers have explicitly emphasized that older adults will continue to develop chronic comorbid health conditions and will lack the support and help of family caregivers (Friedman et al., 2018). Thus, resorting in older adults to be reliant on nursing care facilities with running the risk of paying out-of-pocket expenses for LTSS. For these reasons, Friedman et al. (2018) recognized the importance of exploring LTSS for older adults. Therefore, Friedman et al. (2018) examined Medicaid home and network-community based administrations' 1915(c) waivers (n=61 waivers) for adults who were 60 years and older to categorize and compare service priorities. Including examining the associations with long-term services and supports (LTSS) among aging adults. They found that while Medicaid is the primary funding source for older adults LTSS, the patients were often encouraged to deny themselves of the supports (Friedman et al., 2018). These findings are alarming, seeing as Medicaid waivers for older adults were initially created to focus on helping people in their private quarters to age in place (Friedman et al., 2018).

More compelling, from their exploration, Friedman et al. (2018), identified another issue that gives off an impression of being a pertinent trend regarding Medicaid programs. For instance, the researchers found that institutional bias was prevalent within the Medicaid programs that exist among beneficiaries like older adults and persons with

disabilities who rely on home-and-community-based original Medicaid services (Friedman et al., 2018). Correspondingly, McCrea (2016) also found that Policymakers showed an inclination toward institutional LTSS in the past and further concluded that to date, Policymakers are concentrating on growing home and network-community based administrations.

However, to address the problem of Medicaid managed LTSS and Medicaid waivers. McCrea (2016) highlighted several issues of importance regarding LTSS. The first, she estimated that LTSS would dramatically increase in the coming decades to a great extent because of the aging process regarding the older adult population (McCrea, 2016). Remarkably similar, Friedman et al. (2018) also projected that by the year 2050, approximately 12 to 27 million American adults would need long-term services and support. Second, McCrea (2016) anticipates that the all-encompassing prerequisite for LTSS will increase publicly subsidized LTSS spending since Medicaid is the essential payer for these projects. Third, McCrea (2016) suggested that publicly funded LTSS spending could get unreasonable when combined with other anticipated increases in medicinal and therapeutic service spending. That means paying for LTSS will become more challenging for American families and the nation (Friedman et al., 2018). For example, the researchers found that nursing home services are mandatory for older aging adults and covered by Medicaid, but LTSS is only optionally covered by individual states (Friedman et al., 2018). Despite an astonishing statistic showing that in 2015 the median yearly expense for nursing facility care was \$91,250 (Reaves & Musumeci, 2015).

Another example is shown in a ruling made by the Supreme Court regarding the ACA that constitutionally allowed states to choose whether to implement Medicaid expansions (Musumeci & Rudowitz, 2015). However, to-date a limited number of states have obtained or are sought approval under Section 1115 waivers under Medicaid expansions (Musumeci & Rudowitz, 2015). As a result, older adults who age in place will risk paying out-of-pocket for long-term services and support. Therefore, these contentions are congruent with the work of (Khatutsky et al., 2018). They argue in favor that out-of-pocket health care spending places older adults at risk for financial difficulties, socioeconomic disparities, and poorer health outcomes (Khatutsky et al., 2018).

Nevertheless, despite differences in opinions regarding the ACA and the American healthcare delivery system, there are areas of agreement amongst researchers. To illustrate, researchers have recognized the importance of recommending the need for healthcare transformations within the American healthcare delivery system to address the quandary regarding the ACA impact on older adults with disabilities and long-term illness like HIV/AIDS disease and substance use (Deren et al., 2019; Fullerton, & McCullough, 2014; Obama, 2016; Schroeder & Peterson, 2018). By proposing future research focusing on the determinants of physician decisions to improve public policy solutions and patient access (Bradbury, 2015). Next, offering for policymakers to further expand upon the ACA by improving the American healthcare delivery system (Obama, 2016). By implementing affordable health insurance through the American government

ACA marketplace and proposing increased federal financial assistance for eligible marketplace Medicare and Medicaid beneficiaries (Obama, 2016).

Furthermore, the literature review findings are essential for this study for several reasons when exploring the American healthcare delivery system for older adults receiving government-funded welfare and universal entitlement programs such as Medicaid-Medicare through the ACA Medicaid expansion. Given that, researchers have varying opinions and responses regarding the ACA and its effect on access to healthcare providers and healthcare benefits for adult populations. Second, research critics have advised that older adults who continue to age with long-term comorbid-health related conditions like HIV/AIDS disease and problematic substance use will face a myriad of healthcare difficulties (Dawson-Rose et al., 2017; Deren et al., 2019; Edelman et al., 2014; Oursler & Sorkin, 2016). These healthcare difficulties include experiencing a lack of access to their primary healthcare providers, higher healthcare spending expenditures, and lack of long-term services and support, which will ultimately impact their quality of life (Bradbury, 2015; Friedman et al., 2018; Hatfield et al., 2016; McCrea, 2016; Mir et al., 2013). Moreover, the literature review findings will assist in providing comprehensive healthcare changes within the American healthcare delivery system and the ACA. That is essential in understanding determinates to healthcare delivery, out-of-pocket healthcare expenditures, and treatment services for low-income older adults (Bradbury, 2015; Friedman et al., 2018; Khatutsky et al., 2018; Kobayashi et al., 2019; Obama, 2016). It also contributes much-needed insights into the well-being, long-term, and supportive services for low-income older adults receiving Medicare-Medicaid

(Bradbury, 2015; Friedman et al., 2018; Khatutsky et al., 2018; Kobayashi et al., 2019; Obama, 2016). Including providing much-needed information on low-income adults living with behavioral conditions like substance use and HIV/AIDS disease in urban communities (Akinyemiju et al., 2016; Khatutsky et al., 2018; Kobayashi et al., 2019). Since reputedly, the argument remains contested among researchers regarding the American healthcare delivery system and the ACA.

### ***Theme 2: Prevalence of Substance Abuse***

In recent years medical, behavioral, and human service researchers have devoted a considerable amount of attention to understanding the prevalence of substance use among older adults for several reasons (Chhatre et al., 2017; Jafari et al., 2015; Li & Caltabiano, 2017; & Lim et al., 2017). The first, is because experts have reported that substance use is often undetected and unnoticed among older adults (Katz, 2017; Kuerbis et al., 2014). Due to changes within the older adults' demographic compositions and their previous histories with using harmful mood-altering substances like alcohol at a younger age (Chhatre et al., 2017; Schonfeld et al., 2015). Therefore, researchers have argued that the prevalence of substance use among older adults will be on the rise (Bitar et al., 2014; Han et al., 2017; Pilowsky & Wu, 2015; Schonfeld et al., 2015). Secondly, researchers further advise that older adults who have life-threatening diseases such as HIV/AIDS are susceptible to having problematic substance use (Ding et al., 2015; Pilowsky & Wu, 2015). As a consequence of their problematic substance abuse, older adults will be more prone to indulge in multiple high-risk behaviors and undesirable ways of life like unprotected sex or low- condom use (Ding et al., 2015; Pilowsky & Wu, 2015).

Therefore, further exploration is needed to understand the breadth and prevalence of substance use among older adults.

### ***Prevalence of Substance Abuse and Trends***

In recent times behavioral health scientist have drawn parallels between the prevalence of substance abuse and trends in older adults (Gruca et al., 2018; Rankin et al., 2018). Since, as previously stated, the researchers argued that the actual prevalence of substance abuse among older adults is understood, undetected, and unknown (Chhatre et al., 2017; Katz, 2017; Kuerbis et al., 2014). Empirical evidence appears to confirm the notion that the prevalence of substance abuse and substance abuse trends have led to the worldwide epidemic of HIV/AIDS and unintentional drug overdose deaths (Austin et al., 2015; Martins et al., 2015). Alike, researchers have reported that the problematic prevalence of substance abuse and substance abuse trends imposes a significant impact on governments, families, individuals, and communities (Lipari & Van Horn, 2017; Martins et al., 2015). Therefore, researchers have stressed the importance of having public policies, appropriate treatment approaches, and healthcare services to improve the overall health of substance abusing adults (Chomchai & Chomchai, 2015; Doty et al., 2020).

The investigation by Martins et al. (2015) regarding the worldwide prevalence and trends in unintentional drug overdose, uncovered that over the past decade, there had been considerable amounts of accidental drug overdose deaths, including increase prevalence of drug use in seven countries worldwide. For example, their in-depth statistical analysis revealed that lifetime prevalence of witnessed overdose among drug

users were between 50% to 96%, with a mean of 73.3%, a median of 70%, and a standard deviation of 14.1% were from drug abusers who witnessed a lifetime of drug overdose (Martins et al., 2015). Similarly, in their study Degenhardt et al. (2018) found that between 1990–2016, the global burden of disease attributable to alcohol and other drug use in 195 countries and territories. Remarkably, in their study Chhatre et al. (2017) further found evidence that supports Degenhardt et al. (2018) results. They found that alcohol seemed to be the trend and primarily abused substance among American older adults. An interesting side finding was that Grucza et al. (2018) found a trend within the past 10 to 15 years that showed an increase in alcohol bingeing among older and middle-aged adults in America. They further discovered that older and middle-aged adults who partake in binge drinking run the risk of morbidity and mortality (Grucza et al., 2018). Given that, binge drinking is a risk factor for a range of harms and health problems (Han et al., 2019).

However, these findings are less surprising if we consider that the admissions for substance abuse treatment services for older adults showed an increasing trend of cocaine/crack, marijuana/hash, heroin, nonprescription methadone, and other opiates and synthetic drug use from 2000 to 2012 in America (Chhatre et al., 2017). Taken together, the data presented here provide evidence that was compatible to a previous study conducted in 2003 by Gfroerer et al. (2003) that suggest approximately 1.7 million older adults will need substance use treatment services, and 4.4 million adults will further need substance use treatment services during the year 2020 in the United States. Fittingly,

Chhatre et al. (2017) also projected that in 2020, approximately 4.4 million older adults will have problematic substance use and will need treatment services in the United States.

In a similar vein, several reports by Huhn et al. (2018) identified an association of increased trends in older adults seeking treatment services for illicit opioid use dependency versus older adults who had prescribed opioid addictions in America. They found that during 2004-2013, there was a steady surge of 41.2% of older adults requesting opioid use disorder treatment and a 53.5% increase of older adults requesting opioid use disorder treatment during 2012-2015 (Huhn et al., 2018). Remarkably, Arndt et al. (2011) discoveries are consistent with Huhn et al. 's 2018 findings. Seeing as, they found that older adults' admissions and patterns of drug use have changed with an increase in illicit drug involvement of cocaine and heroin (Arndt et al., 2011). So much so that, the adults aged 55 and older going for substance abuse treatment for the first time has increased tremendously compared to younger adults aged 30 to 54 (Arndt et al., 2011). Compatibly, in another study, researchers Han et al. (2015) found that in 2015 approximately 11.5 million adults abused opioids, and 1.9 million adults had opioid use disorders in the United States. However, what remains unknown among long-term older adults who have chronicity of cocaine and heroin abuse is their current medical state, cognitive abilities, and psychiatric symptoms after such a long exposure time (Arndt et al., 2011).

Focusing on the trend in HIV/AIDS epidemiology in the Middle East and North Africa region researchers, Gökengin et al. (2016) found that intravenous drug injection is a persistent and increasing problem in this region. Researchers have reported that people

who inject drugs are a high-risk population in the Middle East and North Africa region (Mumtaz et al., 2015). Therefore, they predict that there will be further widespread HIV disease among people who inject drugs (Mumtaz et al., 2015). Given that intravenous drug use imposes grave health and mental health risk (i.e., psychotic illness and personality disorders in people who inject drugs (Cornford & Close, 2016). Additionally, intravenous drug use is a contributing factor to the global spread of HIV/AIDS infections, Hepatitis B, and Hepatitis C worldwide (Degenhardt et al., 2016) and a host of other physical and health care management issues (Cornford & Close, 2016).

In Israel, Steinman et al. (2017) found exceptionally high rates and patterns of benzodiazepine and benzodiazepine-receptor agonists among older adults. For example, statistical analysis showed that in 2014 adults aged 65 years and older received at least one benzodiazepine/benzodiazepine-receptor agonists, and 59% of these older adults were long-term users of the drugs (Steinman et al., 2017). Comparatively, Olfson et al. (2015) found an increasing trend of prescribed benzodiazepine misuse in women and men as they age. For example, in 2008, 75 million prescriptions of benzodiazepine were written. Therefore, scientists have advised strongly against the dangers, misuse, and abuse of benzodiazepine use among older adults (Markota et al., 2016). Given that, benzodiazepine misuse and abuse is a growing problem (Olfson et al., 2015). In so much as benzodiazepine misuse and abuse has reached epidemic levels and results in poor outcomes (Schmitz, 2016). Therefore, to address the problematic prevalence of substance abuse and substance use trends among older adults, the researchers recommend the need for physicians to change their benzodiazepine prescription patterns and explore other

appropriate healthcare management and alternative therapies for older adults (Markota et al., 2016).

In Malaysia, researchers have discovered a new trend that revealed a substantial proportion of older adults are at risk of polypharmacy and health-related complications (Lim et al., 2017). For example, the researchers found that the prevalence of polypharmacy among older adults was 45.9% (Lim et al., 2017). The researchers also found that some factors contributing to the negative behavior of polypharmacy among older adults were due to having a higher diagnosed number of comorbidities and increasing age (Lim et al., 2017). In Berlin, Germany, König et al. (2017) found that clinically relevant sarcopenia, higher rates of reduced gait speed, and exhaustion were due to polypharmacy in older adults. Clyne et al. (2017) also found that polypharmacy is common among older adults and argued that inappropriate polypharmacy places a significant burden on them, which can lead to adverse drug reactions and bad adherence and geriatric syndromes. Rankin et al. (2018) went even further to indicate that inappropriate polypharmacy in older people is of significant concern since it is associated with adverse health outcomes. For example, polypharmacy contributed to increased morbidity and death among older adult populations (Lim et al., 2017). Relatively, researchers Compton et al. (2015) and Han et al. (2015) found that between 1999 and 2015, prescription overdose deaths quadrupled within America.

What is more significant, Clyne et al. (2017) found that few studies have examined older adult patients' views about prescribed medicines and polypharmacy in primary care settings in America. Therefore, to address the problem of substance use

tends and prevalence's of substance abuse among older adults the scholars encourage further investigation into the associations of potentially inappropriate medication use and potential drug-drug interactions and increased healthcare utilization (Compton et al., 2015; Han et al., 2015; König et al., 2017; Lim et al., 2017). Since they suggest that having appropriate interventions to improve older adults' health and well-being is essential and should be a central priority to improve appropriate polypharmacy (Rankin et al., 2018). Given that, the researchers analyzed that the older adults' viewpoints on polypharmacy indicated they have great faith in medications also their attitudes towards using polypharmacy indicated to be simultaneously positive and negative (Clyne et al., 2017).

### ***Prevalence of Substance Abuse and Self-Medication***

The relationship between the prevalence of substance abuse and the associated circumstances concerning the use of drugs by self-medication in general adult and older adult populations has been extensively researched (Arrais et al., 2016; El Nimr et al., 2015; Mortazavi et al., 2017). To clarify, self-medication, as defined by Jafari et al. (2015), is the consumption of one or several medications without having a physician's prescription and medications that are not controlled and governed by a medicinal health association. Self-medication among adult and older adult populations may involve the use of analgesics, muscle relaxants, dipyron, complementary and alternative medicines, cold preparations and cough medicines, cupping, and acupuncture (Arrais et al., 2016; El Nimr et al., 2015). To date, researchers have reported that self-medication is a noteworthy problem that has led to being one of the most significant health, societal and economic

dilemmas within different societies and nations globally (Azami-Aghdash et al., 2015; Mortazavi et al., 2017). Seeing as researchers have observed that within developing countries over the recent decade, the prevalence of self-medication has increased (Bhaisare et al., 2020). In so much that, presently self-medication is being deliberated and addressed in most nations globally (Azami-Aghdash et al., 2015).

For example, in Brazil, Arrais et al. (2016) sought to gain an in-depth insight into the prevalence of self-medication among self-practitioners. They claim that self-medication in the form of non-prescription medications is a general custom in Brazil (Arrais et al., 2016). As such, they discovered that in the Northeastern region of Brazil had the highest prevalence of self-medication (Arrais et al., 2016). Subsequent, they found that other inhabitants of Brazil living in the Northeast, Midwest, and North regions self-medicated using analgesics, muscle relaxants, and dipyron as the most consumed medication (Arrais et al., 2016). These findings were indicative, seeing as in Alexandria Egypt researchers, El Nimr et al. (2015) revealed a high rate of self-medication among adults. Since they argued that age, profession, and chronic conditions were the independent factors, consequently affecting the practice of self-medication with medications. Therefore, to address the problem of self-medication and the prevalence of substance abuse in adults. They provided convincing evidence of data that showed that 86.4% of adults practiced self-medication in the form of complementary and alternative medicines. Also, that 96.7% of adults reported self-medication in the form of analgesics, which accounted for the most used drugs, 81.9% were cold preparations and cough medicines, 91.6% were complementary and alternative medicine herbs, 53.9% were

antibiotics, and 6.4% were cupping and acupuncture (El Nimr et al., 2015). The data further showed that 95.2% of adult substance abusers reported self-medication with complementary and alternative medicines for the claim that it aided in alleviating their conditions (El Nimr et al., 2015).

Fascinating, in Kermanshah-Iran, data experts uncovered an exhilarating pattern and association between the prevalence of self-medication and drug knowledge among older adults. For example, they found that the prevalence of self-medication among older adults without drug knowledge was substantially higher than in older adults who had drug intelligence (Jafari et al., 2015). The experts also found that the prevalence of self-medication was different among single and wedded older adults. To outline, single elderly adults were considerably more likely than married elderly adults to perform self-medication. Similarly, findings showed that 83 % of the older adults, practiced self-medication and that 86% of the older adults safeguarded medication at home. Second, the discoveries uncovered a distinction between self-medication in older men and women. For instance, women were almost certain than men to follow self-medication (Jafari et al., 2015).

More interesting, in Iran, Mortazavi et al. (2017) provided a more in-depth analysis that supports these findings. For example, they identified five prevalence factors associated with elderly adults who reported their self-medicating experiences. To outline, the older adult's engagement with self-medication stemmed from their (1) mentalities towards malady, treatment, and doctors, (2) living with illness, and (3) severe conditions. In addition to these five factors, the researchers also discovered that social networks,

families, healthcare systems, and caretakers contributed to the patient's self-medicated experiences (Mortazavi et al., 2017). More significant, the researchers found that older adults use non-prescribed medications to treat a host of self-recognized illnesses and symptoms (Mortazavi et al., 2017). Contrary, in Saudia Arabia, researchers Alghadeer et al., 2018 found a high prevalence of self-medication with antibiotics. Given that 36.6% of people reported that their primary source of self-medication with antibiotics was due to them being prescribed the drug by their physician and 81.3% knew that self-medication with antibiotics might be harmful to health (Alghadeer et al., 2018).

### ***Prevalence of Substance Abuse and Socioeconomic Factors and Differences***

Researchers have argued the importance of understanding the prevalence of substance abuse and socioeconomic factors and differences among older adults (Han et al., 2017). Since substance abuse among older adults often goes undiagnosed (Li & Caltabiano, 2017). Also, because substance abuse is a complex biopsychosocial problem that can lead to numerous psychological, medicinal, and societal difficulties in adults (Massah et al., 2018; Moradinazar et al., 2020; Salama et al., 2016). Given that substance abuse is personal; it differs from person to person due to biopsychosocial and socio-cultural factors and personal perspectives (Massah et al., 2018). More significant is because few studies have investigated and described the specific reasons why individuals tend to abuse harmful substances. Therefore, numerous researchers continue to investigate and offer their vast assumptions to explain the etiology of problematic substance use. (Massah et al., 2018). For example, Nagrale et al. (2018) sought to understand the prevalence of substance abuse and socioeconomic factors and differences

among patients admitted at De-addiction centers in Durg, Chhattisgarh. They argue that the main reasons for the initiation of the prevalence of substance abuse and visits to the de-addiction center for the patients were because of family issues, cravings, and peer pressure (Nagrале et al., 2018). In this study, their analysis demonstrated that alcohol was the most abused substance and that older adults have a significant prevalence of increased alcohol consumption (Nagrале et al., 2018).

In a similar vein, Grant et al. (2017) found that in America within a 12-month period, the prevalence of alcohol abuse and consumption increased from 44.0% to 65.4%. Alike, the researcher's findings showed that high-risk alcohol drinking within a 12-month period increased from 8.0% to 9.7% (Grant et al., 2017). Further, Breslow et al. (2017) found that older adults had a significant prevalence of increased alcohol consumption. Additionally, Li and Caltabiano (2017) found that around 11.8 percent of the elderly participants were inclined to utilize liquor, and additionally, other medication uses to manage their disposition. Compatibly, Holton et al. (2019) found that in a community cohort of community-dwelling older adults, approximately 57% to 63% had a momentous propensity to consume liquor with other medications. For these documented reasons, Nagrале et al. (2018) argued that approximately 15 million people who are substance abusers and chemically addicted to alcohol and other drugs would be in dire need of treatment and rehabilitation services. Seeing as, the researchers found that 88.48% of people abused multiple substances (Nagrале et al., 2018). Relatively, Chhatre et al. (2017) additionally argued that there would be an increase in admissions for substance use

treatment services among older adults who reported a problem with having more than one substance (Chhatre et al., 2017).

Since they found that the increased admission for substance use treatment services for older adults' is because of the changes in their demographic composition (Chhatre et al., 2017). Considering substance use is progressive during the life expectancy of older adults instead of the first usage of alcohol, which generally occurred before age 25 (Chhatre et al., 2017). Therefore, Breslow et al. (2017) further expanded the hypothesis that by 2050 there will be more people drinking alcohol, including older adults since the researchers predict that by the year 2050, older adults would have expanded as a population.

On the other hand, Li and Caltabiano (2017) found that socioeconomic differences regarding the prevalence of substance use were contributed to gender, education, income, retirement, living arrangements, age, and community involvement. Similar to Li and Caltabiano (2017) findings researchers Assari et al. (2017) discovered that the intersection of race and gender does alter the protective effects of social determinants on sustained health problems in five areas: depressive symptoms, insomnia, physical inactivity, body mass index, and self-rated health race and gender. Second, the researchers found that people who have higher medium incomes are particularly at risk for abusing substances (Li & Caltabiano, 2017).

Contrary, researchers Read et al. (2015) specifically found that among older adults, they had poorer subjective well-being and health due to experiencing more mediocre social-economic positions. Interestingly, Stormacq et al. (2019) had a different

perspective regarding socioeconomic differences. Stormacq et al. (2019) report that low health literacy and educational attainment are central contributors to socioeconomic statuses. Given that they found that older adults' health levels did contribute to disadvantaged social and socioeconomic circumstances (Stormacq et al., 2019).

### ***Prevalence of Substance Abuse and Sociodemographic Factors of Health Disparities***

Scientists have noted that older adults' vulnerabilities to having a prevalence of substance abuse are due to sociodemographic and biopsychosocial factors that contribute to health disparities (Guidolin et al., 2016; Kuerbis et al., 2014). For example, while investigating the impact of alcoholism and alcohol abuse among the elderly, Guidolin et al. (2016) found that 58.3% of elderly adults did not complete elementary school, 65.1% were white, and 37.6% were married. They also found that 62.2% of the elderly adults had no caregiver, 65.5% were Catholic, 68.6% practiced their religion, 67.7% were retired, and 56.1% had a personal income of up to one minimum salary (Guidolin et al., 2016). In a similar study, Hasin et al. (2015) found an increased prevalence of marijuana use disorders among marijuana users and adult demographic subgroups: income, sex, age, marital status, race/ethnicity, education, urban/rural, and region. Therefore, the researchers have addressed the problem by suggesting the need to explore further the prevalence of substance use and sociodemographic factors contributing to health disparities in adults, older adults, and demographic populations (Hasin et al., 2015). Given that the prevalence of substance abuse negatively affects the health and relationships of individuals within a society and produces an economic dilemma on governments (Chomchai & Chomchai, 2015; Haile et al., 2020; Lee et al., 2017).

Furthermore, in recent years, researchers have also become increasingly interested in the dire need to share information nationally and globally (Lee et al., 2017). For example, in Northeast Asia, Lee et al. (2017) found that there is an absolute need to share information regarding new psychoactive substances (NPSs). The purpose of sharing information regarding NPS prevalence is to ensure that the drug becomes regulated (Lee et al., 2017). Given that there is limited research investigating NPSs in many Asian and African countries. Therefore, Lee et al. (2017) sought to address the problem by providing the information they obtained between 2007-2015 on the prevalence and trend of emerging NPSs.

Compatibly, researchers have also become increasingly interested in the dire need to ensure the implementation of improving effective regulatory changes of illicit, prescribed, dietary, and over-the-counter medications both nationally and worldwide (Lee et al., 2017; Qato et al., 2016). Given that, researchers have argued that the problematic prevalence of substance abuse in the form of over-the-counter medication, prescription medications, and dietary supplements among older adults is due to the current availability and implantation of treatment guidelines (Qato et al., 2016). Thus, making drug abuse with medications such as statins, clopidogrel, and atorvastatin more accessible (Qato et al., 2016). Besides, researchers Lee et al. (2017) further noted that experts had seen a global prevalence and trend of NPS. Therefore, the researchers argue that NPS's proliferation has warranted a global concern for the regulation of NPS (Lee et al., 2017). Similarly, researchers Hasin et al. (2015) found that during 2001–2002, the prevalence of substance abuse in the form of marijuana more than doubled. Moreover, the researchers

found that between 2012–2013, there was a significant increase prevalence of marijuana use disorders. Interestingly, Hasin et al. (2015) report that laws and attitudes toward the use of marijuana are shifting in America. For a reason, Pacek et al. (2015) suggest that people who smoke marijuana do not often view marijuana as being harmful to their health.

Dejectedly, researchers have found that a significant amount of research has concentrated on the more youthful populace at the point of encouraging efforts to discontinue propensities of the prevalence of substance use (Guidolin et al., 2016). Therefore, researchers generally agreed in favor of implementing the need for provider training, public education, exemplary prevention, harm reduction, and timely treatment approaches that will aid in reducing the individual prevalence of substance use, public harms (Hasin et al., 2015; Keith et al., 2017). Seeing as, the result of the prevalence of substance use and sociodemographic factors contributes to health disparities among adult and older adult subgroup populaces (Hasin et al., 2015; Keith et al., 2017). Equally, because healthcare providers might be more disinclined to discuss the prevalence of substance abuse with their patients (Keith et al., 2017). The researchers have also reported that due to the healthcare providers' inability to have increased specialty-specific prescription patterns, there has been a significant increase in drug-related deaths (Lee et al., 2017). Therefore, prescription drug-related deaths remain a significant issue (Lee et al., 2017).

Nonetheless, a central finding that came from the literature was that older adults do not understand that their increased prevalence of substance abuse will lead to them

becoming addicted to illegal and harmful substances (Guidolin et al., 2016). As well, older adults do not perceive themselves as being at risk for developing substance use disorders (Guidolin et al., 2016). Therefore, several findings from the literature review provide convincing evidence demonstrating that there are severe alcohol and medication use issues of a reliant sort and a high predominance of substance use among older adults (Chhatre et al., 2017; Guidolin et al., 2016; Jafari et al., 2015; Li & Caltabiano, 2017). Likewise, that older and elderly adults commonly do not see their prevalence of alcohol abuse as harming their health (Guidolin et al., 2016).

The literature also showed a high prevalence of substance use in the form of self-medication and polypharmacy among older adults (Lim et al., 2017). As well, inappropriate medication use, and potential drug-drug interactions in older adults living in urban ethnic environments (Lim et al., 2017). The literature further illustrates that the problematic prevalence of substance abuse in the form of over-the-counter medication, prescription medications, and dietary supplements among older adults is due to the current availability and implantation of treatment guidelines (Qato et al., 2016). Overall, these studies provide support for the validity that drug deaths will continue to increase in America (Katz, 2017).

Therefore, this literature review's discoveries further demonstrate the need for a thorough comprehension of substance use's pervasiveness among older adults. Given that, experts have reported that substance use is often undetected and unnoticed among older adults (Katz, 2017; Kuerbis et al., 2014). Due to changes within the older adults' demographic compositions and their previous histories with using harmful mood-altering

substances like alcohol at a younger age (Chhatre et al., 2017; Schonfeld et al., 2015).

Therefore, there is a dire urgency for behavioral health, medical experts, and human service professionals to create proper treatment approaches centered towards diminishing the power of substance use, liquor reliance, improper medicine use, self-prescription, and polypharmacy among older adult populaces. Since these approaches will assist in reducing the number of accidental overdose deaths, prevalence's of substance abuse and substance use trends, and new transmissions of HIV/AIDS among older adults.

### **Theme 3: Healthcare Treatment Approaches and Biopsychosocial Factors of Illness**

The purpose of this descriptive, phenomenological study was to explore the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of adults, aged 50 years and older, living with HIV/AIDS and substance use in a large northeastern urban city. The aim was quintessential to the analysis because there was no extant research that has investigated the lived experiences, socio-risk behaviors, and specific treatment preferences among older adults aged 50 years and older living with HIV/AIDS disease in New York. Despite an abundance of published literature illustrating an association between HIV/AIDS disease and substance use among older adults.

Historically, in America, scientists working in the field of medical science traditionally have relied on the biomedical model of medicine as a means of delivering health care services (Engel, 1977, 1981). By using the biomedical healthcare treatment approaches to treat their patients within the health care delivery system (Engel, 1977, 1981). Although earlier studies suggest the importance of medical healthcare approaches in treating illness and disease in adult patients with complex care needs (Engel, 1977,

1981). Later research seems to indicate a necessity for other healthcare treatment strategies within the biomedical, behavioral health, social and psychology fields that will address the social, economic, and environmental factors that influence, improve and achieve health equity (Artiga & Hinton, 2019; Kusnanto et al., 2018; Lehman et al., 2017). For this reason, scientist argue that overall health cannot be defined singly by biological factors, but instead, wellbeing should represent investigated complex interactions between cultural and economic factors, the physical environment, social and individual behaviors ((Engel, 1977, 1981; Lehman et al., 2017; Northwood et al., 2018; Suls & Rothman, 2004).

Therefore, critics of the biomedical model argue in favor of using the biopsychosocial model as being the best healthcare treatment approach when examining biopsychosocial factors ((Engel, 1977, 1981; Lehman et al., 2017; Northwood et al., 2018; Suls & Rothman, 2004). Seeing as, other scientists have further supported the claim that healthcare treatment approaches like the biopsychosocial model help researchers to gain a better understanding of the health disparities within subgroup-populations like older adults (Hill et al., 2015). In reviewing the available literature on HIV/AIDS disease and substance use among older adults, it is imperative to reference the biopsychosocial model as an essential healthcare treatment approach. Given that numerous scholars have recognized the importance of the model as a conceptual and theoretical framework in understanding the determinants of health impacting the economic, social, emotional, and biological wellbeing of an individual (Babalola et al.,

2017; Becoña, 2018; Carpenter, 2017; Elizabeth, n.d.; (Engel, 1977, 1981; Kobayashi et al., 2017; Saint Onge & Krueger, 2017).

Comparatively, scholars have noted that health disparities are viewed and categorized as biological, behavioral, sociocultural, and environmental factors that influence group population-level health differences (Hill et al., 2015). Likewise, other researchers have made the claim that determinants of health are categorized as social and environmental factors, biological and genetics that influence health services, health care treatment approaches, health status, and individual behavior (Agyemang-Duah et al., 2019). In other words, health disparities and health determinants can be understood as fundamental causes of health afflictions known as biopsychosocial factors of illness impacting individuals and group-populations (Agyemang-Duah et al., 2019; Cockerham et al., 2017; Hill et al., 2015).

### ***Biopsychosocial Factors of Illness***

Previous studies have yielded some valuable insights into the biological and physiological markers of health, known as comorbidities and multimorbidity (Fabbri et al., 2015; Gruneir et al., 2016; McPhail, 2016). Additionally, newer studies have focused mainly on the socioeconomic complexities that exacerbate the burden and experience of disease in older adults with multimorbidity (Northwood et al., 2018). Therefore, in recent years, scientists have become remarkably interested in investigating the complex role of biopsychosocial factors of illness as determinants of health among older adults. For example, Northwood et al. (2018) zoomed into the biological factors of illness among older adults. By offering useful explanations for clarity of the key terms and definitions

of comorbidity and multimorbidity. The researchers report that definitions of comorbidity emerging from the research literature during the 1970s historically meant an individual had more than one chronic illness or disease co-occurring (Northwood et al., 2018). The researcher's further state that multimorbidity was an added term during the 1990s in research literature defined as having "coexistence, two or more, or multiple chronic conditions or diseases that are taking place at the same time" (Northwood et al., 2018). Therefore, in 2018, Northwood et al. (2018) analyzed the social determinants of health in older adults with multimorbidity. The researchers found that the most cited health determinants among older adults were the healthcare system, education, behaviors, and gender (Northwood et al., 2018). Subsequently, the researchers found that to-date conceptualizations of multimorbidity give restricted experiences concerning the mind-boggling connection of multimorbidity while examining it as an expansive social determinant of health for older adults (Northwood et al., 2018).

Concurrently, they found that because there was little consideration given towards understanding the financial status/social class, ethnicity, and physical conditions of the older adult participants, the components of the socioeconomic and political milieu were not discussed amongst the analyst (Northwood et al., 2018). Moreover, within this area of the investigation, there continues to be considerable research attention directed toward understanding the health inequalities, socioeconomic disparities, neglected needs, morbidity, and mortality in older adult populations (Artiga & Hinton, 2019; Hoebel et al., 2017; Lehman et al., 2017; Papadimitriou, 2017). Since the definitions and terms of comorbidity and multimorbidity emerging from the research literature are fundamental

when comprehending the biological impact of comorbid health-related illnesses and diseases like HIV/AIDS and substance use among older adults (Lucas & Nelson, 2014; Schulte & Hser, 2013). Given that, adequate data exists to support the standpoint that HIV/AIDS can cause a host of health issues within the infected individual (Goodman, 2016; Guaraldi, & Palella, 2017; Siegler & Brennan-Ing, 2017). For example, HIV infection can present opportunistic infections, cancers, systemic organ damage (Lucas & Nelson, 2014). Also, HIV/AIDS disease can cause damage to the brain, gut, and lung tissues through mononuclear cell infection and activation (Lucas & Nelson, 2014).

Similarly, Schulte and Hser (2013) report that an older adult who abuses substances like alcohol, heroin, and cocaine can experience cirrhosis of the liver, heart attack, stroke, insomnia, cancers, and diabetes. Researchers have also reported that the disproportionate burden of disease in America is due to the syndemic combination of substance abuse, violence, and HIV/AIDS (Sullivan et al., 2015). Therefore, scientists have generally argued in favor that substance use can cause various biopsychosocial factors of illness among older adults living with HIV/AIDS malady (CDC n.d, 2016; Lucas & Nelson, 2014; Schulte & Hser, 2013; WHO, n.d.).

### ***Behavioral and Psychological Factors of Illness***

Researchers have written extensively about the unrelenting public health problem regarding health disparities and health determinants among older adults. As such, researchers have turned their attention toward investigating the biopsychosocial factors of illness among older adults while considering the implications of individual high-risk behaviors on health status and health services. Given that, there have been extensive

research investigations that examined HIV-related sexual risk behaviors among adolescents and young adults (Barman-Adhikari et al., 2016; Brown et al., 2017; Thoma, 2017). In discussing, researchers Pilowsky and Wu (2015) further considered the implications of health determinants and health disparities regarding the sexual and HIV-risk behaviors among American adults aged 50 years and older. Seeing as, some noted examples of HIV-related sexual risk behaviors are intravenous drug use, engaging in sexual activities with multiple sex partners, and having sexual intercourse without using a condom (Mateu-Gelabert et al., 2015; Spiller et al., 2015).

In this respect, Pilowsky and Wu (2015) found that American HIV-infected older adults who often engaged in substance use and high-risk sexual behaviors have lower condom use incidences while either involved with a single partner or long-term relationship. Mateu-Gelabert et al. (2015) had a similar discovery in which they found HIV-related behaviors in individuals who did not practice safer sex practices with multiple partners. Spiller et al. (2015) indicated that people who inject drugs were likely to engage in risky sexual activity (70% having vaginal intercourse without a condom, 25% having heterosexual anal intercourse without a condom, and 5% of males engaging in same-sex sexual contact without a condom) as well as share needles. Given that, older adults newly infected with HIV are highly prone to be diagnosed with HIV-related medical conditions while aging with the disease (Pilowsky & Wu, 2015). For example, Meintjes et al. (2015) found that HIV-related medical conditions in newly infected patients were newly diagnosed cases of tuberculosis, bacterial infection, and acquired AIDS. Other researchers have found that depression, anxiety, and suicidal behaviors are

necessary for HIV-related medical conditions in newly infected people (Liu et al., 2017; Nanni et al., 2015; Tao et al., 2017). As such, they found that adults aged 65 years and older remain sexually active, and substance use increases their risk for participating in sexual risk behaviors (Pilowsky & Wu, 2015).

As discussed in the above studies, Lovejoy et al. (2015) propose that these patterns of continued risky hazardous sexual practices among older adults can complicate medical care and increase HIV transmission to their HIV-seronegative sex partners. For example, statistical analysis from the inquiry showed that approximately 30% of older adults living with HIV/AIDS disease continue to engage in unprotected sexual intercourse (Lovejoy et al., 2015). One reason that complicates medical care is that physicians are less prone to discuss safer sex practices with their older adult patients and are reluctant to test for HIV infection (Pilowsky & Wu, 2015). Given that, healthcare providers generally expect their patients to discuss their sexual concerns (Malta et al., 2020). Contrary, patients have the expectations that their physicians will be more willing and open to discussing their concerns and safer sex practices with them (Malta et al., 2020). As a result, because of their high-risk sexual behaviors and lack of patient education from healthcare providers, older adults will receive a late HIV diagnosis (Pilowsky & Wu, 2015). As well, older adults will be at risk of contracting STDs (Malta et al., 2020). Given that research has shown increased rates of sexually transmitted infections and diseases that occur in later life (Malta et al., 2020).

Perhaps the most striking findings that emerge from these analyses and findings in the literature is that America will remain to experience an increase in the number of high-

risk sexual behavior patterns among its aging older adult population (Lovejoy et al., 2015). Correspondingly, America will encounter an expansion of HIV contamination and prevalence of substance use among American adults aged 50 years and older (Lovejoy et al., 2015; Pilowsky & Wu, 2015). Therefore, sexual health discussions with older patients must become a central part of their routine care regimen with their healthcare providers, behavioral health, and human service professionals (Malta et al., 2020).

That said, findings from the review of the literature yielded some critical bits of information into the socio-conduct and mental factors of illness impacting the therapeutic services and administrations, treatment approaches, healthcare, and human service status for older adults over the most recent couple of years (Agyemang-Duah et al., 2019; Hoebel et al., 2017). Seeing as, the discoveries of the inquiry uncovered that changes in sexual conduct among HIV-positive older adults did not vary by intervention condition (Lovejoy et al., 2015). Furthermore, the researchers propose that the complex sexual and emotional problems in HIV-positive older adults may better become understood by breaking down their biopsychosocial and cultural elements (Lovejoy et al., 2015; Pilowsky & Wu, 2015). Therefore, the researcher's layout a few propositions that include future implementations for master and expert practice, such as brief intervention treatment approaches that focus on at-risk or high-risk older adults (Lovejoy et al., 2015; Pilowsky & Wu, 2015). Subsequent, the need for health care and other providers to conduct ongoing evaluations and assessments of hazardous sexual conduct in HIV-positive older adults (Lovejoy et al., 2015; Pilowsky & Wu, 2015). Likewise, the development of educational programs for health providers working with older adults

living with HIV/AIDS (Lovejoy et al., 2015; Pilowsky & Wu, 2015). Lastly, the need for secondary risk reduction trials that explicitly address HIV-constructive people that engage in sexual risk-behaviors and experience depression (Lovejoy et al., 2015).

### ***Sociocultural and Environmental Factors of Illness***

Scholars have reported that older adults will continue to face challenges such as sociocultural and environmental disparities that negatively affect their health, wellbeing, and health services (Adler et al., 2016; Hill et al., 2015). The argument lies in the fact that reducing health disparities to improve health outcomes far beyond the traditional healthcare settings is a multifaceted challenge (Brown et al., 2019). As such, researchers have proposed the need for transformational emergence of precision medication, early detection, and state-of-the-art treatment approaches geared toward disease prevention (Dankwa-Mullan et al., 2015). So much so that, researchers further propose the need for physicians to consider that their patients have individual differences in their environments, genetics, and lifestyles while they are advancing the science of medicine and individualized patient care (Dankwa-Mullan et al., 2015).

In relation to these proposals, Johnson Shen et al. (2018) took a gander at the adverse social outcomes associated with the intersectionality of stigma across four primary focus groups that consisted of older HIV- positive adult gay/bisexual men, heterosexual men, heterosexual and bisexual women, and Spanish-speaking. Since HIV stigma was confirmed and reported by researchers to be challenging to eliminate, and it remains to destabilize the health of people living with HIV (Earnshaw et al., 2015). That said, Johnson Shen et al. (2018) found that HIV-positive older adults are a populace

affected by HIV stigma, and they experience converging marks of shame. To summarize, some recognizable converging marks of shame that the HIV-positive adults faced include foreseen stigma, sexuality, perceived drug use, HIV status, and age-related stigma (Johnson Shen et al., 2018). In another study, Vincent et al. (2017) found that in older people living with HIV, there was an association between HIV-related shame and health-related quality of life. This discovery coincides with a review study by Li et al. (2020) that showed that HIV-related stigma is negatively associated with mental health status.

In expanding, Kidia et al. (2015) reported that HIV positive people living in low- and middle-income countries who suffer from common mental disorders such as mood and anxiety disorders and other comorbid and chronic illnesses have many barriers to adherence to daily self-medication management routines. A more in-depth analysis further indicated that HIV-related shame had been a barrier to discontinuing problematic substance abuse, the perceived barrier to self-care, is associated with inconsistent ART nonadherence, and associated with avoidance (Batchelder et al., 2015; Bennett et al., 2015; Turan et al., 2016). Moreover, data from the inquiry revealed that the stigma experienced by older HIV-positive adults often exacerbates the negative social consequences related to HIV-shame (Johnson Shen et al., 2018). For example, HIV-infected adults confronted discrimination concerning their sex, race/ethnicity, drug use, and sexual orientation (Johnson Shen et al., 2018). Hutchinson and Dhairyawan (2017) distinguished that shame negatively impacts the treatment sociocultural of HIV positive individuals. As such, they might be (1) reluctant to disclose their sexual history to healthcare providers and status to their sexual partners; 2) reluctant to engage or retain in

care; 3) hesitant to get tested for sexually transmitted infections, STDs, and HIV; and 4) have psychological implications. People living with HIV have long fought to self-disclose their HIV status, practices, and struggles because the outcomes can be unpredictable and brutal to deal with (Alema et al., 2017). Therefore, further research is needed to increase and promote self-disclosure among HIV positive people living in low- and middle-income countries (Kennedy et al., 2015). Another issue in the discussion of socio-cultural and environmental factors of illness is that older HIV-positive adults are less inclined to seek social support from their family members or people they love more than youthful grown-ups (Johnson Shen et al., 2018). Since social support for HIV positive adults have not always been optimistic (Atukunda et al., 2017). For example, researchers have reported that HIV positive individuals have voiced their concerns that after disclosing their HIV status among their confided social support networks, their confidentiality was often broken (Atukunda et al., 2017).

Adopting a change of perspective to the biopsychosocial factors of illness, according to Gobbens and van Assen (2018) the role of biopsychosocial factors such as physical, psychological, and social functioning has become a central component when examining environmental factors of illness and its influence on the quality of life among older adults. Seeing as, some environmental factors of illness impacting older adults' quality of life are housing, public services, neighborhood poverty, negative evaluations of people, stench/noise, and traffic (Gobbens & van Assen, 2018; Joshi et al., 2017). In fact, during the last decade, considerable research attention has been devoted to understanding the impact of neighborhoods on health for older adults (Bramanti et al., 2018; Joshi et al.,

2017; Mathis et al., 2015). Given that, researchers have pointed out that approximately 80% of older adults live in urban areas, and the urban population is expected to increase 66% in 2050 (Bramanti et al., 2018; Mathis et al., 2015).

However, from their perspective, Mathis et al. (2015) suggested the need for the development and improvement of community services for older adults with complex health needs living in urban neighborhoods. They examined the associations between neighborhood environment and self-rated health among urban older adults (Mathis et al., 2015). According to these researchers' ethnic minorities such as African older adults are 7% less likely to participate in social activities and 4% more likely to report experiencing racism (Mathis et al., 2015). They found that older adults who have poor self-rated health are 21% more likely to report fear of crime than older adults with excellent self-rated health (Mathis et al., 2015). Therefore, it can be contested based on the literature that special attention should focus on older adults who are more vulnerable to neighborhood environments' adverse effects (Choi & Matz-Costa, 2018). For example, some adverse effects of urban neighborhood environments among older adults include limited mobility, lack of social participation, poor health, low-subjective well-being (Kim & Clarke, 2014; Levasseur et al., 2015; Roster et al., 2016; Vogelsang, 2016).

Remarkably, findings from the literature review are significant in understanding that as the population of older adults continues to mature, the overall amount of ill health and disability among this population will increase (Mathis et al., 2015). Next, there is a need for the transformational emergence of precision medication, early detection, and state-of-the-art treatment approaches geared toward disease prevention (Dankwa-Mullan

et al., 2015). Also, further research is needed to increase and promote self-disclosure among HIV positive people living in low- and middle-income countries (Kennedy et al., 2015). Likewise, special attention should focus on older adults who are more vulnerable to the adverse effects of neighborhood environments (Choi & Matz-Costa, 2018).

Therefore, the literature review further supports the relevance of using the biopsychosocial model as a conceptual framework for exploring and understanding the daily lived experiences of older adults living with comorbidities like substance use and HIV/AIDS disease.

#### **Theme 4: Syndemic Effects of HIV/AIDS and Substance Use on Health and Community**

Surging interest regarding the syndemic effects of HIV/AIDS disease and substance use on health and community has emerged in recent years. Studies have revealed a strong association between heavy alcohol consumption and increased risk of HIV infection (Molina et al., 2018). Researchers have reported that people living with HIV/AIDS have a 2 to 3 times higher prevalence of problematic alcohol use (Molina et al., 2018). Experts have also found that HIV-status and baseline poverty impact both perceived financial hardship and risk of violence (Batchelder et al., 2015). Importantly, researchers have found that despite the high risk of synergetic effects of psychotropic medications and the dangerous utilization of liquor, a significant number of older adults continue to engage in psychotropic drug use, including daily, risky consumption of alcohol (Du et al., 2016). Due to the synergistic psychotropic characteristics in alcohol that mimics psychotropic medications, (Du et al., 2016).

Theoretically, Wilson et al., 2014, p. 983 proposed a modern technical definition of “syndemic” that viewed the concept as patterns of “two or more disorders, interacting synergistically, adding to the excess burden of disease in a population.” Similarly, as defined by Singer et al. (2017), “syndemics, is comprised of the undesirable interaction between diseases and health ailments of all kinds and syndemics are prone to occur under circumstances of health disparity caused by poverty, stigmatization, anxiety, or structural violence. (p.41)” Very similar, Batchelder’s et al. (2015) definition of syndemic risk is equally important when understanding the syndemic effects of HIV/AIDS disease and substance use on health and community. A syndemic risk, as defined by Batchelder et al., 2015, p. 229 is an “ecological construct, characterized by co-occurring interdependent socio-environmental, interpersonal and intrapersonal determinants.”

In discussing, empirical evidence suggest that substance abuse, violence, and AIDS are strictly interconnected and interdependent conditions that coexist within the human body and the social lives of numerous individuals living in underserved districts and communities (Singer et al., 2017). For instance, Wilson et al. (2014) discovered a considerable amount of proof that vulnerability to HIV infection among Black and Latino men has increased as fundamental biosocial determinants working collectively in social marginalization. They also found that marginalized neighborhoods in New York City are predominant, where Blacks and Latinos reside, and these communities had the highest rates of HIV/AIDS (Wilson et al., 2014). Therefore, they determined that the problem of HIV/AIDS presently affecting Black and Latino men is influenced by epidemics of substance abuse, trauma, incarceration, and poverty (Wilson et al., 2014). So much so

that, Wilson et al. (2014) conclude that these ethnic minority men (Blacks and Latino) had experienced a syndemic of HIV/AIDS, substance abuse, trauma, imprisonment, and impoverishment while living in some of the poorest marginalized neighborhoods in New York City.

Notably, Wilson et al. (2014) findings yielded some exciting results. Seeing as, former President of the United States, Bill Clinton established the Minority AIDS Initiative in 1998 (Amaro et al., 2001). The purpose of the Minority AIDS Initiative was to declare HIV/AIDS as a crisis in the African American and Latino communities (Amaro et al., 2001). In comparison, to the findings of Wilson et al. (2014), Batchelder et al. (2015) postulated that syndemic risk to be a work of violence, substance use, perceived financial hardship, emotional distress and self-worth among women with and at-risk for HIV living in an impoverished urban community. To outline, they found that progressive changes in self-esteem lead to consistent changes in drug use. Next, findings showed that as substance use builds, the likelihood of violence also increases, and as the risk of violence increases, the rate of violent events rises (Batchelder et al., 2015). Inimical, (Ojikutu et al., 2018) found that Black HIV positive men living in urban cities and neighborhoods continue to be plagued by neighborhood violence and criminal activity.

Consequently, by being exposed to crime, these older adult males will have a vulnerability to HIV and STDs (Ojikutu et al., 2018). Next, neighborhood-related stressors and poverty will negatively impact them at the macro-level (Dale et al., 2016).

Given that, HIV-status, and baseline poverty impacts both perceived financial hardship and risk of violence (Batchelder et al., 2015).

Du et al. (2016) further focused on the problem of syndemic substance use on health and community among older adults. They declare that older adults who are more prone to abusing alcohol and psychotropic medications will experience adverse drug-related and health consequences (Du et al., 2016). For example, they found that women had higher percentages of psychotropic drug usage, more mediocre health status, polypharmacy, and certified disability (Du et al., 2016). Second, the researchers found evidence that men who smoked and had risky alcohol consumption but did not have any disabilities or did not live alone could be associated with having upper social class and better health status (Du et al., 2016). However, the problem with the older adults' chronicity with substance abuse is that healthcare providers often lack competency in addressing substance abuse of alcohol and psychotropic medications in this population (Johannessen et al., 2014). Other fatalistic views about continued substance abuse among older adults reported by the researchers are that it increases their risk of morbidity and mortality (Johannessen et al., 2014).). In terms of aging, individuals who have HIV infection while indulging in heavy alcohol consumption increase their risk for several comorbidities such as myopathy, cardiovascular disease, liver cirrhosis, diabetes, and pneumonia (Molina et al., 2018). As such, Molina et al. (2018) argument builds on researchers Du et al. (2016) and Johannessen et al. (2014) statement regarding the prevalence and correlates of psychotropic drug and alcohol use among older adults.

Seeing as the researchers were able to draw parallels between the syndemic effects of HIV/AIDS and substance use and its impact on health (Molina et al., 2018).

Therefore, the findings within this literature review could assist and provide an awareness of how syndemic of multiple epidemics like HIV/AIDS and substance use impact the wellbeing and quality of life of older adults living within marginalized urban communities. By proposing new points of view and suggestions for training that incorporate the need to create evidence-based interventions to help eliminate or decrease alcohol consumption in older adults living with HIV/AIDS (Molina et al., 2018). Seeing as, the researchers propose for the involvement of public health practitioners and researchers from diverse, underrepresented backgrounds using complex systems analysis, ethnography, and other mixed methods to observe changes in relations among social conditions and maladies (Wilson et al., 2014). Suggestively, the researchers infer that health professionals should discuss additional health risks of alcohol consumption when prescribing psychotropic drugs to older adults (Du et al., 2016). Since older adults experiencing autonomy, personal loss of a friend or family member, have emotional wellbeing issues, and do not have secure interpersonal social networks are more susceptible to abusing alcohol and psychotropic drugs (Du et al., 2016). More important, because the problem with the older adults' chronicity with substance abuse is that healthcare providers often lack competency in addressing substance abuse of alcohol and psychotropic medications in this population (Johannessen et al., 2014). Equally, that other fatalistic views about continued substance abuse among older adults reported by the

researchers are that it increases their risk of morbidity and mortality (Johannessen et al., 2014).

### **Theme 5: Trust in the Patient and Healthcare Provider Relationship**

Researchers have claimed that trust is an essential component of the relationship between the patient and the healthcare provider (Murray and McCrone (2014); Petrovic and Blank (2015); and Samra et al. (2015)). Since patient trust plays an intricate role in their satisfaction with care, medical treatment, and treatment adherence (Gabay, 2015; Petrovic & Blank, 2015; Samra et al., 2015). So much so, researchers have argued that patients who trust in their healthcare provider relationship will increase their self-efficacy with improving their behaviors with managing chronic diseases, ailments, and symptoms (Gabay, 2015; Petrovic & Blank, 2015; Samra et al., et al., 2015). As a result, the patients will experience fewer demands for costly tests and referrals, which may lower cost savings in preventive services for them (Gabay, 2015; Murray & McCrone, 2014; Petrovic & Blank, 2015; Samra et al., 2015). The argument lies in the fact that Birkhäuser et al. (2017) found that from a therapeutic standpoint, patients depicted having more beneficial health behaviors practices, fewer indications, and higher caliber of life, and being increasingly happy with their treatment services when they had more prominent trust in their health care providers.

With that, Murray and McCrone (2014) discovered a new conceptual definition that consisted of three core qualities for promoting patient-provider relationships were (1) trust interpersonal and technical competence, (2) moral comportment, and (3) vigilance. According to the researchers, these three core qualities had been well-supported in the

literature, although they also found that there is limited research investigating patient-provider relationships among older adults (Murray & McCrone, 2014). In contrast, researchers argue that when there is a breach of trust in the patient and provider relationship it threatens the healthcare system, treatment services, and treatment outcomes (Graham et al., 2015; Murray & McCrone, 2014; Petrovic & Blank, 2015; Samra et al., 2015). Also, researchers have reported that while there has been a great deal of research on patient-provider trust, there continues to be a gap in the literature discussing the patient-provider trust in different populations and health provider types (Murray & McCrone, 2014).

For example, Robinson (2016) found that although few studies have investigated the relationship between patient-provider communication of HIV/AIDS and condom use intentions amongst older adults having patient trust in healthcare providers can increase HIV/AIDS prevention in the older adult population. Another example, Rørtveit et al. (2015) found that the patients' encounters of trust in nursing are reliant on the nurses' insight, their level of obligation in the discussion of creating and building up the patient-relationship and discussing relevant issues in ad hoc meetings. However, Haskard-Zolnieriek et al. (2015) provided a related idea that might explain the importance of improving patient and healthcare provider interactions. They claim that through effective communication, empathy, and trust, the patient and health care provider interactions can improve. Seeing as, effective communication and relationship building can decrease the patient's tension about their ailment and build-up their collaboration with healthcare providers (Norouzinia et al., 2015). As such, if a physician overall provides attention to

effective communication and empathy, this may increase trust and reduce the patient's anxiety (Lipp et al., 2016). For example, patients who experience white coat hypertension could decrease their anxiety by their health care provider, improving the relationship (Haskard-Zolnierek et al., 2015). Therefore, researchers have recommended the need to examine additional ways of promoting and building trust in the patient and primary care provider relationship (Gabay, 2015; Graham et al., 2015; Petrovic & Blank, 2015; Samra et al., 2015).

### ***Doctor-Trust and Patient-Doctor Relationship***

Within the health and social psychology context, sufficient evidence exists to support the concept that doctor-trust and patient-doctor relationships will become developed when there is trust, respect, and a shared commitment (Chipidza et al., 2015; Zhixia & Mengchu, 2018). In so much as, depending on the nature of these interrelationships, it will determine the impact of patient outcomes (Chipidza et al., 2015; Zhixia & Mengchu, 2018). Given that, the doctor-trust and patient-doctor relationship is a multifaceted phenomenon that is influenced by many factors (Turabian, 2018). For example, the doctor-trust and patient-doctor relationship will govern the choices patients make when choosing specialists, impacts the patient's consistency with recommended treatments, improves patient satisfaction, and improve the patient's health outcomes (Birkhäuser et al., 2017; Gu et al., 2019). However, patient-dependent, provider-dependent, health system-dependent, and patient-provider mismatch are some factors that will affect the doctor-trust and patient relationship (Chipidza et al., 2015). Some other factors that impact the doctor-trust and patient relationship are the physician's

connection with the patient, the patient's level of health awareness, financial factors, shared identity and comfort, the doctor's approach, and behaviors (Vijayaprasad Gopichandran, 2019).

With that said, a possible reason for the doctor-trust discrepancy might be that due to the advancements with technology such as the world wide web, ubiquitous broadband access along with cultural and environmental determinants that have played a significant role in changing the doctor-patient relationship (Li et al., 2016; Yellowlees et al., 2015). Another related idea that might explain the doctor-trust and patient-doctor relationship difference is that it is an intricate, multidimensional construct, and it means different things to different persons in medical professionalism (Douglass & Calnan, 2016; Turabian, 2018). Given that, it is defined differently in medical and sociological research, government medical sectors, and within various healthcare settings (Akello & Beisel, 2019; Krot & Rudawska, 2016; Vale & Good, 2020; Ward et al., 2015). For example, Samra et al. (2015) found that junior medical staff respondents described overall negative emotions about caring for older patients. Due to their inadequacies with their training, the healthcare system, and the organizational context of care (Samra et al., 2015). Even though older adult patients' have distinctive needs and concerns about their overall health and healthcare services (Samra et al., 2015). As a result, the older adults provided a perspective of their medical providers' services as an imperfect system for providing good quality care (Samra et al., 2015). Importantly, researchers have reported that medical students worldwide show a vast difference in their mentalities towards the doctor-patient relationship (Ahmad et al., 2015).

Along these lines, researchers Press et al. (2015) provided another perspective regarding the doctor-patient relationship. They report that primary care physicians have negative attitudes toward providing treatment services particularly to people addicted to drugs (Press et al., 2015). Therefore, because of the arrogance displayed by primary care physicians, patients with addictive diseases frequently use avoidance of primary care, thus potentially increasing their morbidity (Press et al., 2015). Very similar, doctors identified negative attitudes toward patients who had specific mental illness diagnoses (Noblett et al., 2015). Therefore, they conclude that the adverse impact of the physician's negative attitudes is likely to contribute to physical health disparity toward patients with and without a comorbid mental illness (Noblett et al., 2015).

Notwithstanding, a further complication for the present propositions is that if a decent doctor-patient relationship has not transpired, contemporary medicine cannot deliver its advances to the patients (Ahmad et al., 2015). Given that, contemporary medicine is the heart of a good doctor-patient relationship, and patients are getting progressively mindful about practicing their self-governance (Ahmad et al., 2015). Most of all, researchers have argued the importance of understanding patient trust and patient distrust determinants (Zhao et al., 2016). Considering, Hajizadeh et al. (2014) found that patients were generally willing to have an open dialogue with their medical doctors regarding advanced care planning regarding their end-of-life treatment decisions. Given that, generally, patients have depended on trust in clinical experts to limit the burden and vulnerability related to their disease, ailments, and symptoms.

### ***Trust in the Doctor-Patient Relationship and Medication Adherence***

In recent years, scholars from disciplines within medicine, health psychology, and consumer behavior have examined trust in the doctor-patient relationship and medication adherence among older adults (Atinga et al., 2018; Brown et al., 2016; Kelly et al., 2020; Marengoni et al., 2016; Shiyabola et al., 2018). According to Brown et al. (2016), medication-adherence behavior in patients with chronic diseases is complicated. Given that it requires multifaceted approaches that will empower patients as knowledgeable decision-makers to effect improvement and reinforce the patient-provider relationship (Laba et al., 2015). In so much as, researchers have pointed out some factors that play a significant role in medication adherence encompass the patient's trust in the doctor, the doctor's knowledge, medication effectiveness, medication side effects, and the patient's medication-taking routine (Kelly et al., 2020). Contrary, some common noted factors of poor medication adherence are when the patient perceives that their medication is non-effective, their perception of illness, and when the patient has a cognitive and physical impairment (Atinga et al., 2018; El-Saifi et al., 2017; Shiyabola et al., 2018).

Equally important researchers have reported that medication adherence is an essential component of managing chronic diseases (i.e., HIV/AIDS, hypertension, diabetes, gout, osteoporosis, and rheumatoid arthritis) in older adult patients (Dale et al., 2016; Kelly et al., 2020; Marengoni et al., 2016; Schwartz et al., 2017; Yap et al., 2016). Considering the impact of suboptimal medication adherence increases health care cost, out-of-pocket costs, and poorer health outcomes (Polonsky & Henry, 2016; Zullig et al., 2015). Another consideration reported by Smaje et al. (2018) is because older adults are

underrepresented in research; thus, treatment for older adult patients is a significant challenge. Therefore, researchers have recommended further research that will investigate how physicians create, enhance, and retain trust for the patient and themselves in the doctor-patient relationship and the effect of adherence to medications for chronic disease among older adults (Dale et al., 2016; Hawley, 2015; Kelly et al., 2020; Marengoni et al., 2016; Schwartz et al., 2017; Yap et al., 2016).

Within this area of investigation, Petrovic and Blank (2015) claim that regular medication adherence for older people living with HIV and cardiovascular disease is challenging. They also report that there is limited research investigating the influence of patient trust and adherence to statins in older adults living with HIV and cardiovascular disease within the context of patient-provider relationships (Petrovic & Blank, 2015). Therefore, Petrovic and Blank (2015) aimed to garner an understanding of the impact of trust on adherence to statins in older adults who were infected and living with HIV and heart disease in America. Notwithstanding, they discovered five restrictions related to patient-provider trust and adherence to statins in older adults living with HIV and cardiovascular disease. The five boundaries are: (a) access to healthcare, (b) alcohol use and abuse, (c) mental health issues, (d) personal belief systems, and (e) lack of trust within the patient-physician relationship (Petrovic & Blank, 2015).

Correspondingly, researchers Krause and May (2016) attempted to shed some light on the factors influencing trust for persons living with HIV/AIDS in Mississippi. Given that, Krause and May (2016) reported that Mississippi was an area significantly impacted with record-high statistics of people living with HIV/AIDS malady. Based on

survey responses from these individuals, they identified five constructs. The first construct was trust in one's provider to offer the best possible medical care. Subsequently, trust in one's provider to protect patient privacy. Thirdly was the willingness to disclose HIV status to one's provider. Fourthly, trust in one's health care system. Lastly, trust in one's community. With that, the researchers conclude that trust in one's healthcare provider, community, and in the overall health care system will affect engagement in HIV-related health care of HIV-infected individuals (Krause & May, 2016).

Further expanding these statements, Laba et al. (2015), considered to understand the extent to which intentionally nonadherent behavior in chronic disease and identify the factors that promote and prevent nonadherent decisions within an Australian community setting. Considering Laba et al. (2015) found that most patients had a willingness to follow their doctor's recommendations. Even though they found that some patients have exhibited intentional non-medication adherence (Laba et al., 2015). For example, in their study Bazargan et al. (2017) provided statistical analysis that showed that 35% of African American participants self-reported to have intentionally skipped their medications. Meanwhile, researchers Brown et al. (2016) provided statistical analysis showing that 50% of patients have nonadherent medication behaviors. According to Brown et al. (2016), most physicians believe that non-medication adherence among patients is due to a lack of access or forgetfulness, or an intentional choice made by the patient.

In comparison, other researchers have reported that medication nonadherence behaviors are due to the patient's demographic factors, perceived treatment inefficacy,

and inertia among health care professionals (Polonsky & Henry, 2016). As well that nonadherence behaviors are due to cost-related medications (Kang et al., 2018). To illustrate, in a nationally representative sample of Brazilians aged 50 years and over, researchers Loyola Filho et al. (2019) found that Brazilians who perceive their family income as insufficient for expenses underuse more medications. Likewise, Victoria et al. (2015) found that nonadherence in patients with the end-stage renal disease under hemodialysis HD is an immense problem. They also found family support, social and demographic correlations of nonadherence among the patients (Victoria et al., 2015). Therefore, researchers claim that improving medication adherence may significantly influence the health of patients than any other therapy (Brown et al., 2016).

Given that, the researchers assert that intentional medication nonadherence in chronic disease appears reversible if physicians utilize approaches that will strengthen patient-doctor relationships and empower patients as informed decision-makers (Laba et al., 2015). For example, some multifactorial solutions to improve medication adherence in patients include their doctor's recognition to improve their understanding of patients' beliefs, fears, and values, as well as their own biases (Brown et al., 2016). It also allows the patients to improve their understanding of medication benefits, access, and trust in their doctors and health system (Brown et al., 2016).

### ***Building Trust in Patient-Doctor Relationship and the Healthcare System***

Researchers have reported that in the medical context, the absence of trust by the patient in doctors, specialists, or the healthcare system will result in a decrease in their well-being status and poorer healthcare outcomes (Graham et al., 2015). Researchers

have further elucidated that building trust and maintaining trust is the chief cornerstone of any patient-doctor relationship (Baron & Berinsky, 2019; Yuan et al., 2007). Seeing as, “trust is when an individual entrusts themselves to someone, and that person acts in the best interest of the trusting individual (Kim et al., 2018, p.1).” However, a trust-based relationship involves a certain amount of peril and a willingness to risk misuse of trust. Therefore, trust-based relation entails that the person must be truthful (Dinç & Gastmans, 2011). More significantly, trust cannot be assumed, and it is necessary for the appropriate functioning of the doctor-patient relationship and the health care system (Lynch et al., 2019). Especially so for older adult patients with chronic and complex diseases and vulnerable adult and low-income adult population groups who are currently placing higher demands on the healthcare system (Amalberti et al., 2016; Kirst et al., 2017). In so much that, future research warrants investigation into the ways of building trust in physicians and healthcare systems (Graham et al., 2015).

With that said, considering the underlying importance of trust-based relationships, several researchers have turned their attention toward understanding the modern-day crisis of trust in healthcare systems (Gille et al., 2014). For example, in 2015, researcher Østergaard critically reviewed the role of trust in healthcare systems and trust issues in interpersonal, intergroup, and institutional situations in sub-Saharan Africa. Since he claims that once trust works, it will diminish the societal complication and inherent uneven distribution of authority between patient-doctor relationships in the health sector encounters (Østergaard, 2015). That said, Østergaard (2015) found four essential elements for trust to develop in health sector relationships. These elements consist of (1)

the sensitive use of discretionary supremacy by healthcare staff (2) perceived empathy by patients of the health workers, (3) the quality of medical care, and (4) workplace collegiality.

Contrary to Østergaard (2015) explanation other researchers have pointed out that due to the health and healthcare inequalities within the American healthcare system, public trust in physicians, and physician distrust has declined in America over the last 50 years (Dickman et al., 2017; Gupta et al., 2020; Martins et al., 2015). While other researchers have further argued that mistrust in physicians and health inequalities is a global phenomenon (Chan, 2017; Huang et al., 2018). To illustrate, Chan (2017) argued that problematic mistrust has led to increasing tension between patients and physicians in urban China. Since he found that the failure of the state in providing citizens with quality health care and maintaining social justice was due to the intensified mistrust in hospitals and medical doctors and the escalating tension between doctors and patients (Chan, 2017).

Notably, Chan (2017) pointed out that the horrible occurrences of physical viciousness against doctors in the previous two decades can be ascribed to the patients' increasing mistrust of hospitals and physicians and their dissatisfaction with medical clinic care. Drawing on Chan's work (2017), in a similar vein, Kim et al. (2018) found that patients who have low trust-based relationships with their doctors also have unpleasant attitudes and opinions toward the healthcare system. Therefore, discoveries that were based on the literature review could provide a way to recognize factors that

advance trust in the patient and doctor connections that could lead to the development of new interventions that will enhance trust (Murray & McCrone, 2014).

### **Theme 6: Patient Satisfaction and Health Care Quality**

Researchers continue to dedicate significant attention to understanding patient satisfaction and healthcare quality among older adults at the national and global levels. Given that, empirical evidence appears to confirm the notion that health-related behaviors are strongly associated with patient satisfaction, such as maintaining continuity of care and adhering to treatment recommendations (Murray & McCrone, 2014; Petrovic & Blank, 2015; Samra et al., 2015). In so much that, Russell et al. (2015) sought to improve the quality of healthcare and gain an in-depth understanding of patient satisfaction through the patients' perception of quality. The researchers also aimed to provide healthcare providers with the analytic capabilities to understand better the quality of care from the patient's viewpoint. Since they uncovered that variables related to access, moving through the visit, nurse/assistant, care provider, and personal issues significantly impact overall assessments of care quality. Subsequently, the researchers found that significant differences exist based on age group, the specialty of the physician, and clinic type. Therefore, the researchers conclude that their findings could provide a platform for future research for healthcare providers and physicians to garner a comprehensive awareness of the quality and care coordination of older adults (Russell et al., 2015).

With that, Meesala and Paul (2018) extended this investigation area by seeking to comprehend the effectiveness of service quality, consumer satisfaction, and patient loyalty in hospitals within the healthcare industry. They used data from 180 randomly

selected patients comprising 36% young persons, 42% middle-aged persons, and 22% old persons who received services from 40 different private hospitals in Hyderabad, India. Nevertheless, from their analysis, the researchers found that patients who committed to the hospital were strongly associated with patient satisfaction (Meesala & Paul, 2018). Next, the researchers discovered that gender, reliability, and responsiveness does impact the patient's satisfaction (Meesala & Paul, 2018). For example, the researchers found that women patients are more inclined to visit the hospital more than once, and satisfaction is more critical to building loyalty if their satisfaction with the service is high-ranking (Meesala & Paul, 2018).

Dejectedly, Bogner et al. (2015) found that older adult Medicare beneficiaries showed a great deal of dissatisfaction regarding quality and care coordination. Given that, the analysts found that obstructions to having access to providers among older adult Medicare beneficiaries are bound to be associated with significant activity limitation stages (Bogner et al., 2015). For example, the analyst found that Medicare beneficiaries at higher stages of activity limitation reported less satisfaction with medical care than Medicare beneficiaries at the lowest stage of activity limitation (Bogner et al., 2015). Meanwhile, Musich et al. (2015) argued that severe loneliness and depression negatively affected older sicker adult's quality of life and satisfaction with medical services. Given that, they found that depression was the strongest predictor of loneliness in older sicker adults (Musich et al., 2015). For example, the researchers found that 28% of older sicker adults reported experiencing severe loneliness (Musich et al., 2015). They further uncovered that loneliness significantly reduced the visceral and psychological health

elements of quality of life in patients. Also, that diminished patient satisfaction among older sicker adults was associated with severe loneliness (Musich et al., 2015).

### **Summary**

The literature review shows that, to date, the ACA remains one of the most contested healthcare reform laws amongst researchers, policymakers, and the American adult population groups (Fullerton & McCullough, 2014; Obama, 2016). Researchers continue to have varying opinions and responses regarding the ACA and its effect on access to healthcare providers and healthcare benefits for adult populations (Bradbury, 2015; Friedman et al., 2018; Khatutsky et al., 2018; Obama, 2016). Since, to date, little is known regarding the impact of the ACA Medicaid expansions on access to care, utilization, and health for low-income adults (Wherry & Miller, 2016). However, the existing research emphasis that adults aged 50 years and older living with HIV/AIDS disease and problematic substance use will continue to face a myriad of challenges with their treatment and healthcare services within the American healthcare delivery system (Bradbury, 2015; Friedman et al., 2018; Khatutsky et al., 2018). These challenges include (1) paying out-of-pocket fees for LTSS and healthcare services, (2) having higher health care expenditures (3) more indigent healthcare services and treatment outcomes (Bradbury, 2015; Friedman et al., 2018; Khatutsky et al., 2018). Including experiencing difficulties with accessing affordable health care insurance coverage and access determinants from their healthcare providers (Bradbury, 2015; Friedman et al., 2018; Khatutsky et al., 2018).

Moreover, several findings from the literature review provide convincing evidence demonstrating that older adults are more likely to experience a higher prevalence of abusing alcohol and other drugs of a dependent nature (Chhatre et al., 2017; Guidolin et al., 2016; Jafari et al., 2015; Li & Caltabiano, 2017). Given that, the literature and findings revealed that there is a high prevalence of substance use in the form of self-medication, polypharmacy inappropriate medication use, and potential drug-drug interactions among older adults living in urban ethnic environments (Lim et al., 2017). More significant, the literature review indicated that substance abuse is often undetected and unnoticed among older adults (Katz, 2017; Kuerbis et al., 2014). Next, that older adult who has life-threatening diseases such as HIV/AIDS are susceptible to having problematic substance use (Ding et al., 2015; Pilowsky & Wu, 2015). Therefore, further exploration is deemed necessary to understand the breadth and prevalence of substance use among older adults.

Furthermore, the literature review suggests a positive correlation between the biopsychosocial factors of illness and the syndemic effects of HIV/AIDS and substance use on health and community. Given that, scientists have generally argued in favor that substance use can cause various biopsychosocial factors of illness among older adults living with HIV/AIDS malady (CDC n.d, 2016; Lucas & Nelson, 2014; Schulte & Hser, 2013; WHO, n.d.). Secondly, researchers have reported that substance abuse, violence, and AIDS are strictly interconnected and interdependent conditions that coexist within the human body and the social life of numerous individuals living in underserved communities (Singer et al., 2017). In so much as, the researchers report that as substance

use increases among older adults, the probability of violence also increases, and as the risk of violence increases, the rate of violent events rises within this subpopulation group (Batchelder et al., 2015). Researchers Frumkin (2002) and Wilson et al. (2014) found that marginalized neighborhoods in New York City, was the central location for higher crime rates, HIV/AIDS malady, problematic substance use/abuse, and low employment.

Importantly, this study will fill one of the literature gaps and further extend knowledge within the behavioral health and biomedical sciences, and human social service profession. By exploring the prevalence of substance use and specific treatment preferences among adults aged 50 years and older. Given that, researchers have emphasized and recommended future research that will address the problem of substance use trends and prevalence of substance abuse among older adults (Compton et al., 2015; Han et al., 2015; König et al., 2017; Lim et al., 2017; Markota et al., 2016). Considering researchers, Clyne et al. (2017) found that few studies have examined older adult patients' views about prescribed medicines and polypharmacy in primary care settings in America. As well, since researchers have reported that the problematic prevalence of substance abuse and substance abuse trends imposes a significant impact on governments, families, individuals, and communities (Lipari & Van Horn, 2017; Martins et al., 2015). Therefore, the literature review results further support the relevance of using the biopsychosocial model as a conceptual framework. To explore and understand the daily lived experiences of older adults living with comorbidities like HIV/AIDS disease and substance use.

Additionally, the literature review yielded some other interesting findings regarding the patient and primary care provider relationship. For example, the discoveries showed that older adults report their medical providers' perspective as an imperfect system for providing good quality care (Samra et al., 2015). Also, that the unpleasant attitudes and opinions toward the current health care system significantly was correlated with the patients having low trust in physicians (Kim et al., 2018). Contrary, the literature showed that patients who had loyalty to their hospital were strongly associated with patient satisfaction (Meesala & Paul, 2018). Although significant differences do exist based on the older adults' age group, the specialty of the physician and clinic type gender does impact patient satisfaction (Meesala & Paul, 2018). Notwithstanding, these outcomes in the literature are vital when analyzing patient satisfaction and healthcare quality among older adults living with HIV/AIDS and substance use. Given that, researchers have noted that health-related behavior is associated with patient satisfaction, such as maintaining continuity of care and adhering to treatment recommendations (Murray & McCrone, 2014; Petrovic & Blank, 2015; Samra et al., 2015).

Therefore, overall, these studies provide support for the validity of further exploring the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults aged 50 years and older living with HIV/AIDS and substance use. Given such, further research is warranted to explore the problem of managing HIV/AIDS disease, other comorbidity disorders, and the prevalence of substance abuse associated with aging, and its impact on human services and quality of life in older HIV-infected adults (Chhatre et al., 2017; Deren et al., 2019; Han et al., 2009; Nevedal & Sankar,

2015; Pilowsky & Wu, 2015; Warren-Jeanpiere et al., 2014; Wing, 2016). Furthermore, Chapter 3 will provide a detailed methodological approach to my research study.

## Chapter 3: Research Method

### **Introduction**

The purpose of this descriptive, phenomenological study was to explore the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of older adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city. Research on HIV/AIDS disease and substance use in older adults has predominately focused on the challenges associated with prevention outcomes, the aging process, geriatric syndromes, and stigmas (Deren et al., 2019; Greene et al., 2015; Negrodo et al., 2017; Porter et al., 2017). However, what continues to be unknown is the drug use and new detections of HIV/AIDS disease among older adults (Chhatre et al., 2017; Ellman et al., 2014). Therefore, it is crucial to explore the experiences of adults' aged 50 years and older living with HIV/AIDS and substance use.

Chapter 3 includes a description of the study's research design and rationale, the researcher's role, methodology, instrumentation, issues of trustworthiness, and ethical procedures. Data analysis was conducted according to the aim of the inquiry. Chapter 3 will conclude with a comprehensive summary of the chosen methods for this inquiry.

### **Research Design and Rationale**

#### **Research Question**

What are the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city?

## **Descriptive Phenomenological Qualitative Study**

Descriptive phenomenology is a philosophy, and the qualitative research method is broadly used by researchers within the different orders of science and expert fields such as psychology, education, arts, and humanities as well as social, biomedical, and behavioral and human sciences (Abalos et al., 2016; Christensen et al., 2017; Jackson et al., 2018; Matua & Van Der Wal, 2015; Sundler et al., 2019). During the 18th century logicians Brentano, Kant, and Hegel presented phenomenology as a philosophical development (Dowling, 2007), with Brentano coining the term “descriptive phenomenology” (Meierdiercks & Snarey, 2018). Phenomenology refers to analyzing people’s perceptions related to a phenomenon (Dawidowicz, 2016), which is based on the individual’s experience (Smith, 2013).

During the 20th century Edmund Husserl aimed to gain a more comprehensive understanding of individualized human experiences and consciousness that did not depend on interpretive understandings (Reiners, 2012). The philosophical standpoints of hermeneutic interpretive phenomenology were that a person’s description of a phenomenon was already interpretive, considering that an individual is naturally prone to find meanings within their experiences (Heidegger et al., 1962; Horrigan-Kelly et al., 2016). Husserl also believed that the central source of knowledge of a phenomenon stemmed from an individual’s pure consciousness, perception, and description of their experiences (Husserl, 1970; Husserl & Welton, 1999). Therefore, Husserl introduced a way of thinking that is now used in the scientific and education community (Husserl, 1970; Husserl & Welton, 1999; Reiners, 2012). Husserl’s descriptive phenomenology

approach has become widely accepted and supported by researchers and experts as being an essential outline for conducting phenomenological qualitative research within the 21st century (Abalos et al., 2016; Beck et al., 2000; Christensen et al., 2017; Jackson et al., 2018; Sundler et al., 2019). Overall, the goal of phenomenological qualitative research is to explore, elucidate, and describe the implications of various components of human experiences (Khan, 2014; Padilla-Díaz, 2015; Sanjari et al., 2014).

### **Research Rationale**

I deemed a descriptive, phenomenological qualitative approach to be the most appropriate choice for this inquiry for several reasons. The first is because this methodology is based on the purpose of the study to explore the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of adults aged 50 years and older living with HIV/AIDS and substance use. Second, a fundamental approach to qualitative inquiry provides the researcher with an opportunity to learn more about a specific phenomenon (Merriam & Tisdell, 2015) because qualitative researchers seek to discover meanings that individuals assign to their individual or societal problems (Creswell, 2014; Ravitch & Carl, 2019). Qualitative researchers also attempt to explore the feelings and opinions of individuals knowledgeable about the phenomenon of interest (Rudestam & Newton, 2015). Additionally, I chose this methodology since it directly aligned with and addressed the research question guiding this inquiry, which helped fill gaps in knowledge (Matua & Van Der Wal, 2015) and guide data analysis (Austin & Sutton, 2014). Furthermore, an essential strength of phenomenological qualitative inquiry

is its use of multiple sources of data and its ability to enable the researcher to study topics in-depth, including the researcher's own biases and perceptions (Creswell, 2014).

In contrast, quantitative research strategies were not regarded suitable for my study given the purpose of my research because quantitative strategies are used for testing hypotheses, breaking down information through numerical evaluations and factual understandings (Apuke, 2017; McLeod, n.d.). Using a quantitative strategy for my exploration would not have allowed me the chance to build up an exhaustive depiction, describe significances, or comprehend the participants' account of the experienced phenomenon in a natural setting (Morrow et al., 2015). Researchers who conduct qualitative research depend on their ability to understand and evaluate what they have observed first-hand, and they do not use statistical analysis to decipher participants' experiences and categorize themes (Sanjari et al., 2014).

### **Role of the Researcher**

The role of the researcher undertaking qualitative methodologies is fundamental (Unluer, 2012) because they are primary instrument in the study, and they take on various roles when seeking to understand and recognize invariable meanings of the phenomenon from their participants in the exploration setting (Bevan, 2014; Chan et al., 2013; Clark & Vealé, 2018; Merriam & Grenier, 2019; Patton, 2015; Ravitch & Carl, 2019; Sanjari et al., 2014; Unluer, 2012). My role as a researcher involved all aspects of this study that included defining the concept of the design, conducting multifaceted narrative interviews by asking a succession of open-ended questions, transcribing and analyzing data, and reporting the themes and concepts based on my observations and measures of the

participants (Chan et al., 2013; Creswell, 2014; Dawidowicz, 2016; Patton, 2015; Ravitch & Carl, 2019; Sanjari et al., 2014). Therefore, my role as a primary and data collection instrument was an essential part of this study's credibility (Sanjari et al., 2014; Sheperis et al., 2017; Unluer, 2012).

Professionally, I have worked as a master credentialed alcoholism and substance abuse clinician in a northeastern city. I have had professional training in learning about HIV/AIDS and substance use, including having first-hand experiences with providing professional counseling services in both residential and outpatient drug treatment programs to adults who are (a) either at-risk or who have contracted HIV/AIDS disease and (b) to adults who are recovering or active substance abusers. Thus, it was essential to avoid any pre-understandings, personal values or beliefs, and experiences that would influence or become a part of this inquiry (Fink, 2000; Patton, 2015; Ravitch & Carl, 2019; Unluer, 2012). Since having prior knowledge, familiarity, or personal assumptions about the phenomenon regarding the study could be considered bias (Chan et al., 2013; Matua & Van Der Wal, 2015; & Unluer, 2012), which will ultimately impact and shape the research (Greene, 2014). Researcher bias can happen at any given moment during the research process (i.e., planning, data collection, analysis, and publication phases of research; Pannucci & Wilkins, 2010). Therefore, as a measure to address researcher bias, I clarified my role as a researcher (Musante & DeWalt, 2010; Sanjari et al., 2014). Next, I ensured that I built up transparent connections with the participants (Moravcsik, 2014).

Additionally, to minimize researcher bias I sought support, supervision, and guidance from my first and second committee members, who allowed me to engage in

self-reflection and self-monitoring (Sanjari et al., 2014). I also bracketed my personal experiences, biases, and perceptions before and while conducting my research (Chan et al., 2013; Dawidowicz, 2016), which helped me to remain mindful of my personal bias during the research process such as misinterpretations while the participants provided detailed accounts of their experiences of the phenomenon. This process of addressing bias helped to focus on the meaning that the participants had regarding the phenomenon of interest (Creswell, 2014).

Similar to researcher bias, ethical issues could transpire throughout the research process or before the study has been conducted (Creswell, 2014). Ethics are an essential attribute of professional standards and practices (Tolich & Fitzgerald, 2006). Ethical challenges could transpire between the researcher and participants during qualitative studies (Sanjari et al., 2014). The researcher is responsible to maintain ethical procedures (Neuman, 2011), acting ethically while conducting scholarly research to ensure the privacy, respect, confidentiality, and protection of the participants who willfully agreed to participate in the study (King, 1996). Since my study consists of sensitive issues and information that might pose a psychological risk to the participants, it was not easy to foresee what subjects within qualitative research will distress the participants (Sanjari et al., 2014). However, I used a pre-outlined inclusion criteria and purposeful sampling strategies to select my interview participants. Likewise, to assure ethical principles within this examination, I did not recruit or interview individuals that I had or will have direct or indirect power over. To avoid ethical or conflict of interest, I also did not recruit or interview friends or individuals in whom I had a pre-established personal connection with

or working relationship. I also did not conduct the study at either my present organization or former work setting.

## **Methodology**

### **Participant Selection Logic**

#### *Sampling Strategy*

Participants for this study consisted of six older adults living with HIV/AIDS and substance use in a large northeastern urban city. The participant selection number for this study was chosen because qualitative experts have argued that in phenomenological research, a good selection of participant numbers is between five and 15 (Marshall et al., 2013). In comparison, other researchers have argued that traditionally phenomenological research consisted of using small sample sizes from two to 25 (Alase, 2017; Dawidowicz, 2016). To provide thick, rich descriptions of the relevant data as it relates to the phenomenon under investigation, participant samples should be small and purposively selected (Vasileiou et al., 2018). Thus, researchers have emphasized that using more participant numbers in phenomenological research is impractical and will prevent saturation (Dawidowicz, 2016), which is a guiding principle when determining sample size within qualitative research (Francis et al., 2010; Hennink et al., 2016).

With that said, I used purposeful sampling as an initial sample strategy for the intentional selection and identification of the participants who have HIV/AIDS and substance use to garner an in-depth understanding of their experiences regarding the phenomenon of interest for this study (Naderifar et al., 2017; Palinkas et al., 2015). I deemed purposeful sampling appropriate for this study because it is a technique used to

carefully select individuals or groups of people for the general purpose of learning about a particular interest or unusual manifestation of the phenomenon (Palinkas et al., 2015). Further, researchers agree that purposeful sampling strategies are the most widely used qualitative research methods (Kim & Wang, 2018; Palinkas et al., 2015).

Snowball sampling was used as another method to recruit participants who individually met the study's inclusion criteria. Snowball sampling is a technique in which a selected participant becomes a referral source by using their social networks to seek other potential candidates who have the same characteristics and who may be eligible/or willing to participate in the study (Naderifar et al., 2017; Sadler et al., 2010). Snowball sampling is essential for recruiting traditionally underserved populations as well as those who are vulnerable and hard to identify or contact due to personal, sociodemographic, and socioeconomic hardships (Sadler et al., 2010). Researchers assert that elderly persons are an age group that is hard to reach and recruit for research inquires, including people living with HIV/AIDS and substance abusers (Sadler et al., 2010; Valle & Levy, 2008; Vervaeke et al., 2007). Therefore, purposeful and snowball sampling were appropriate for this study. After each interview was completed, I politely asked and encouraged the participants to refer candidates who met the specific inclusion criterion of this study.

### ***Criteria for Inclusion***

Researchers have suggested that establishing inclusion and exclusion is a relevant, appropriate, and a standardized requirement practice among researchers when designing a research study (Patino, & Ferreira, 2018; Robinson, 2014). Inclusion and exclusion criteria help to define what population will be included or excluded from a research study

(Boddy, 2016; Garg, 2016; Patino & Ferreira, 2018; Robinson, 2014; Saldaña, 2015).

Inclusion criteria specifies attributes or factors that a population or case must have to qualify for a research study (Boddy, 2016; Garg, 2016; Robinson, 2014; Saldaña, 2015).

Therefore, I purposefully selected six older adult participants who had an association with the phenomenon and who met the outlined inclusion criteria for the study.

Conversely, exclusion criteria refer to when a unit of analysis does not have the specific attributes, conditions, or stipulations necessary to qualify for study design (Boddy, 2016; Garg, 2016; Robinson, 2014; Saldaña, 2015). Exclusion criterion is important because it enhances inclusion criteria and helps the researcher to answer the research question guiding the study (Garg, 2016; Salkind, 2010). Exclusion criteria also help to ensure the sample population is accurate; it upholds ethical standards and protects the participants in the study (Salkind, 2010). Therefore, all participants who did not meet the specific identified inclusion criteria were excluded from participating in the study.

### ***Saturation and Sample Size***

Qualitative researchers consider the importance of sample size and sampling procedures within qualitative studies (Dawidowicz, 2016; Leech & Onwuegbuzie, 2007; Ravitch & Carl, 2016). In qualitative studies, the sample size is not generally justified or established (Marshall et al., 2013; Mason, 2010) since sampling is based on the methodology and phenomenon of interest (Boddy, 2016; Khan, 2014). But traditionally phenomenological research consists of using small sample sizes that are from two to 25 (Alase, 2017; Dawidowicz, 2016). One case, a piece of data, or code is all that is required to become an essential component of the analytical framework within a qualitative study

(Brownson et al., 2017; Elliott, 2018; Mason, 2010). Additionally, if the sample population is too large, the information will then become unnecessary (Alase, 2017; Garg, 2016; Mason, 2010). Thus, data analysis in qualitative studies could be impacted by using larger sample sizes (Dawidowicz, 2016).

Further, the sample size in qualitative studies typically relies on the notion of saturation or the point at which no new knowledge, data, or themes can be identified within the data (Guest et al., 2006; Marshall et al., 2013; Ravitch & Carl, 2016). In qualitative research, it is central to achieve saturation (Fusch & Ness, 2015; Mason, 2010) since failure to reach saturation can have a negative impact that can affect the validity and quality of the study (Bowen, 2008; Fusch & Ness, 2015; Kerr et al., 2010; Ravitch & Carl, 2016). Data saturation is most frequently considered in non-probabilistic sampling within qualitative studies (Guest et al., 2006; Marshall et al., 2013; Ravitch & Carl, 2016); thus, data saturation is consistent with purposeful sampling in qualitative studies (Guest et al., 2006; Marshall et al., 2013; Ravitch & Carl, 2016).

Notwithstanding, this study's chosen target population consisted of six adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city.

## **Instrumentation**

### ***Data Collection Instrument***

In qualitative research, there is a multitude of methods used to collect data that align with a research question (Benoot et al., 2016; Dawidowicz, 2016; Naderifar et al., 2017; Ravitch & Carl, 2016; Suri, 2011). That said, I was the primary data collection

instrument and researcher for this explorative study (Bevan, 2014; Chan et al., 2013; Clark & Vealé, 2018; Harris, 2015; Merriam & Grenier, 2019; Ravitch & Carl, 2019; Patton, 2015; Unluer, 2012). I designed a questionnaire consisting of 11 open-ended questions to obtain raw data from the participants (Ravitch & Carl, 2016). The questions were formulated and based on a review of literature as a measure to ensure content trustworthiness.

Before collecting data for this study, I requested permission from the institutional review board (IRB). After receiving IRB approval (approval no. 10-04-20-0550610), each participant was given a clear and detailed description of the study and the study goals (Ravitch & Carl, 2016; Rubin & Rubin, 2016). Second, the participants were offered a full explanation of having a signed written consent form before the interview. Also, each participant was advised that their participation was voluntary, and they could terminate their involvement in the study at any given time before commencing the interview session. Each participant was provided the opportunity to elaborate on their understanding of the study, the study goals, and the importance of having signed consent forms (King, 1996; Rubin & Rubin, 2016; Shenton, 2004).

Afterward, once the participants verbalized their understanding of the study and all consent forms were signed and received, I reserved and directed separate phone interviews independently for all the participants on the concurred date and time. The qualitative interviews were conducted between 45 minutes to one-hour long with each participant using an interview protocol that consists of a questionnaire of 11 predetermined open-ended questions that permitted the participants to give rich and

substantive depictions of the phenomenon of interest. Given that, researchers have noted that qualitative interviews are the most common and frequently used in qualitative studies (Ravitch & Carl, 2016). Furthermore, interviews in a qualitative study are known as the central component and provide rich, deep, and detailed information about an individual's experiences and perceptions (Ravitch & Carl, 2016; Rubin & Rubin, 2016). This is because the participants have first-hand knowledge of the phenomenon and are the experts in their experiences and knowledge (Merriam & Tisdell, 2015; Ravitch & Carl, 2016).

Moreover, researchers suggest that qualitative researchers should use open-ended interview questions when conducting qualitative interviews (Patton, 2015; Rubin & Rubin, 2016). Too, the researcher should avoid asking closed questions, imposing their understandings and opinions while conducting qualitative interviews (Rubin & Rubin, 2016). Researchers should also use layman's language and avoid using esoteric jargon while conducting qualitative interviews (McGrath et al., 2018; Patton, 2015). Likewise, experts have recommended that the qualitative researcher ascertain and develop specific skill sets pertaining to the type of methodology used to collect their data in qualitative studies (Hunter, 2012; Turner, 2010).

### ***Interview Protocol***

Researchers have noted the importance of using an interview protocol when conducting qualitative research for experienced and novice researchers (Castillo-Montoya, 2016; Jacob & Furgerson, 2012; Rubin & Rubin, 2016; Turner III, 2010). The interview protocol will help the researcher make an informed decision regarding what

information to explore in detail (Patton, 2015). The interview protocol also guides the researcher on what main questions to ask the participants before and during the interview (Patton, 2015; Rubin & Rubin, 2016). That said, for this study, I used an interview protocol and a predetermined open-ended 11- question questionnaire (see Appendix).

### **Recruitment, Participation, and Data Collection**

I used the following procedures to recruit, to inform, and to collect data from each participant for this study. Initially, I obtained authorization approval from the IRB before the data assortment. Next, I advertised and shared recruitment flyers on social media platforms (i.e., Facebook, Instagram, and LinkedIn). Alike, I distributed the recruitment flyers using publically geographical available information. The purpose of the recruitment flyers was to advertise and provide detailed information about the study. Similarly, I directly called using publically available contact information as another method to recruit and to inform participants for this study.

Additionally, I used an informational letter as another recruitment method to invite participants for the study. Participants interested in the study were provided the informational letter detailing the study's nature and their participation requirements. Also, noted within the letter, the participants were advised of their participation risks and benefits. Since they were provided financial incentives in the form of gift cards totaling \$20. Given that, even though their participation is voluntary, there continues to be much debate nationally and globally centered on ethics regarding benefits and payments among human subject participants for their participation in research (Gelinis et al., 2018; Largent & Fernandez Lynch, 2017; Molyneux et al., 2012).

Notwithstanding, researchers have generally agreed that healthy participants who have not been coerced or exploited should be provided financial incentives (Resnik, 2015; Zutlevics, 2016). The researchers also stressed that when the chance of harm to the participants is negligible in terms of degree and probability of occurrence, they should be provided financial incentives (Resnik, 2015; Zutlevics, 2016). Further, the researchers emphasized that compensating research participants with financial incentives is a common practice that increases recruitment, and the participants should be rewarded for their time and travel in the form of financial incentives (Resnik, 2015; Zutlevics, 2016).

Moreover, I used a research interview protocol and a predetermined open-ended 11- question questionnaire to collect data during individualized telephone interviews. As well, I used Google Voice App to record and collect data. This method helped me to gain a comprehensive understanding of the phenomenon of interest (Fusch & Ness, 2015). The procedure was also used since analyzing qualitative interviews can be challenging and costly (Turner, 2010). Importantly, due to my study's nature regarding sensitive content, each participant was permitted additional time if needed to complete the interview. Likewise, each participant was provided an anonymous mental health and substance abuse hotline number should they encounter any psychological stress due to sharing their HIV/AIDS and substance abuse experiences. Given that, I cannot control what the participant might disclose during their interview sessions, and the potential of triggering substance use/abuse behaviors cannot be determined. Moreover, as another recruitment strategy for this study, I used the snowball sampling method with each participant who met the inclusion criteria. As well, for the participants who decided to terminate their

interview sessions, I recruited additional participants using snowball sampling methods to collect this study data.

Correspondingly, researchers have emphasized the importance of qualitative researchers using member checking to ensure credibility by giving participants opportunities to correct errors, challenge interpretations, and evaluate results. Member checking is an essential quality control process in qualitative research (Harper & Cole, 2012). Given that, it is widely used as a technique for exploring the credibility of results within qualitative research (Birt et al., 2016). Therefore, during the initial interview sessions, I systematically checked the narrative data of each participant's account of the phenomenon of interest (Creswell & Miller, 2000). By asking the participants questions to their responses that I did not fully understand. Also, I asked the participants follow-up questions as needed for clarity to enhance my understanding of the phenomenon at hand.

Furthermore, after I re-read, analyzed, and completed a draft of the initial transcripts, I then rendered each participant a copy of their transcript based on their interpretations of the phenomenon. This helped me to further validate member checking by ensuring that I correctly elicited the participant's interpretations during the initial interview. Importantly, it also allowed each participant to recheck for meaning and mediate any distortions that may arise from the researcher's interpretation of the phenomenon. Since the central focus of the narrative interviews was based on the older adults' account of their daily lived experiences, socio-risk behaviors, and specific treatment preferences.

On the other hand, although I anticipated that each participant would recognize their experiences and shared meanings from my emerging interpretations of their accounts with the phenomenon of interest during the initial interviews, I expected that member checking has drawbacks. Further, to minimize member checking drawbacks, I contacted each participant via email or telephone for a post-interview if needed to re-read and to discuss the initial transcript. Hence, researchers have noted that one drawback of member checking is that participants may forget what they said or how they conveyed their stories (Reilly, 2013). Therefore, each participant had an additional one-week timeframe to provide feedback on the initial transcript. Since another member checking drawback for phenomenological researchers is the unavailability of participants for follow-up interviews (Sheperis et al., 2017).

However, if a participant did not provide verbal or written feedback via email or telephone, their data was not published in this study. Since the purpose of the post-interview is to provide each participant of this study an opportunity to comment, discuss any obscurities, and decide what core themes and information they desire to have written in summary (Birt et al., 2016; Carlson, 2010; Sheperis et al., 2017). Given that, I sought to explore the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults aged 50 years and older, living with HIV/AIDS and substance use in a large northeastern urban city.

### **Data Analysis Plan**

Data analysis is integral to trustworthiness in qualitative research (Maguire & Delahunt, 2017). Thus, researchers have suggested using the appropriate strategies for

planning data analysis (Chan et al., 2013). Therefore, a thematic analysis was used to analyze, organize, and transcribe the raw data in this study accurately. Thematic analysis is a qualitative method that has been used widely for analyzing multiple or single case studies due to its flexibility and accessibility (Braun & Clarke, 2019; Sahito & Vaisanen, 2018). Also, thematic analysis helps the qualitative researcher to examine various data to derive meaning, common threads systematically, and experiences from the participants (Braun & Clarke, 2019). For this study, the thematic examination approaches used by Braun and Clarke (2006) in their six stages in phenomenological of Moustakas (1994) alteration of Steve-Colaizzi-Keen approaches were used as the standard procedures for data analysis as follow:

***Step 1: Become Familiar with the Data***

I became oriented with all my collected data corpus throughout the analytical process. Initially, I prepared and organized the data into written verbatim transcripts to gain a general sense of the information from the in-depth interviews. Next, I then immersed myself in the data by reading the transcripts multiple times while focusing on the main points to identify categories and themes.

***Step 2: Generate Initial Codes***

I specifically organized and systematically arranged my data into meaningful categories. Next, I read each transcript line by line and engaged in reflexivity by jotting down analytic memos of the coding process that included my thoughts, comments, reflections, and ideas. I then applied open coding to classify groups of the data that described the meaning of the participants' involvement and knowledge with the

phenomenon of interest. Importantly, I was able to code large amounts of data relevant to my research question using the data analysis software Quirkos. By using the data management software, I was able to categorize and label each term, develop relationships between categories and primary themes, while retaining the associations to the original data.

### ***Step 3: Search for Themes***

After my codes were appropriately developed, I then grouped the text segments by relevant topics into units of meaning and themes. I then searched for any missing data, identifiable emergent themes, and subthemes that corresponded to the focus question. I also searched and identified salient themes for broader themes that could be conceptualized and associated with the first emergent themes.

### ***Step 4: Review Themes***

I reviewed each transcript at least twice to identify any repetitions, differences, or unfamiliar terms. I also reviewed the transcripts to ensure that the themes are coherent in identifying the meanings associated with them.

### ***Step 5: Define Themes***

To provide a comprehensible overall distinction of the data's essential elements, each unit of analysis was clearly defined. Each theme was also identified by using descriptive wording to clarify each passage that had an assigned code.

### ***Step 6: Writing Up***

Once the data analysis seemed to reach thematic saturation, indicating an appropriate sample size (Lyons & Coyle, 2016). All phases of the analysis in this study

were then reviewed and inspected by my committee members. In addition, I used direct citations to represent themes that are dependent upon member checking by each participant (Robson & McCartan, 2016). This was arranged using email or telephone, as indicated by the preference of each participant. The original interview transcripts were then either re-read or sent to each participant to guarantee the original data supported the final themes and information.

### **Issues of Trustworthiness**

Historically within the social sciences, integrity in qualitative research was argued among scholars (Shenton, 2004). Since validity, reliability, rigor, and credibility were considered the traditional criterion for judging qualitative research (Noble & Smith, 2015; Shenton, 2004). Likewise, researchers have noted that qualitative researchers do not use the same traditional quantitative criterion to evaluate rigor within qualitative studies (Noble & Smith, 2015). This is because the methods used for validations in qualitative research are quite different from quantitative methods (Padilla-Diaz, 2015). And because the qualitative researcher seeks to represent and understand the realities of their participants' phenomenon (Patton, 2015; Padilla-Diaz, 2015; Ravitch & Carl, 2016).

Furthermore, a researcher's bias during data collection and data analysis can affect the trustworthiness of phenomenological inquiries (Chan et al., 2013; Creswell & Miller, 2000; Unluer, 2012), resulting in the information being misrepresented (Unluer, 2012). To date, qualitative research has progressed slowly and has gained acceptance among psychological research (Williams & Morrow, 2009). For these reasons, researchers have emphasized the importance of using the appropriate strategies to ensure

trustworthiness and credibility when conducting qualitative research (Hoffman, 2010; Noble & Smith, 2015).

### **Credibility**

Researchers have suggested that credibility, dependability, transformability, and conformability are appropriate terms used to describe trustworthiness as a criterion to ensure the rigor and credibility of qualitative findings (Kyngäs et al., 2019; Polit & Beck, 2018). Researchers have also empathized that the terms and concepts of trustworthiness, credibility, transferability, dependability, and confirmability are connected (Anderson, 2017; Bevan, 2014; Lincoln & Guba, 2011; Ravitch & Carl, 2016; Shenton, 2004; Yardley, 2016). Shenton (2004) further noted that credibility is internal validity that researchers seek during data collection to make sense of the phenomenon of interest in its entirety. Other scholars point out that researcher's credibility or verification are central components of building the researcher or readers' confidence in the truth regarding the findings of the study (Kyngäs et al., 2019; Miles et al., 2014).

In addition, another way to establish credibility within qualitative studies is triangulation. Triangulation uses multiple techniques to build the believability and legitimacy of research discoveries in quantitative and qualitative studies (Fusch & Ness, 2015; Noble & Heale, 2019). In this study, open-ended interviews were used as a triangulation strategy to establish credibility. This approach enabled me to garner rich, thick, and complex descriptive information from my participants regarding the phenomenon of interest. Likewise, member-checking was used as another strategy to establish credibility in this study. During the initial and post-interviews, I used member

checking to clarify any essential points, check the interpretations, and any participant's ambiguities (Khan, 2014). The study participants had their transcript re-read, or they were provided a copy of the original transcript via email of the open-ended interviews in which they had the opportunity to validate and ensure that the findings of the study were realistic, practical, and are close to what they meant (Patton, 2015). For each participant who provided feedback regarding their transcripts' accuracy and validation, their words were transcribed truthfully and precisely (Miles et al., 2014). To further ensure this study's credibility, I obtained IRB approval from Walden University to conduct this research study.

### **Transferability**

Researchers have suggested that transferability is external validity, and it implies that the discoveries from one study are likewise appropriate to be applied in different studies (Korstjens & Moser, 2017; Kyngäs et al., 2019; Shenton, 2004; Yilmaz, 2013). Shenton (2004) further reports that transferability is the point at which the scientist has given the reader enough supporting information on a territory of research so they can decipher if the general discoveries from the study are sufficiently sound to be duplicated or applied. For this study, to ensure transferability, I used thick and rich descriptions and research strategies throughout the entire research process that started from the research methodology, sampling strategy, data collection, and data analysis.

### **Dependability**

Researchers have noted that dependability is known as reliability, and it denotes the data's stability (Kyngäs et al., 2019; Ravitch & Carl, 2016). To ensure dependability

throughout this study, I kept an audit trail of the interviews, transcribed transcripts of each participant's words verbatim, and my written notes as justification for the data collection and data analysis procedures (Anderson, 2017; Shenton, 2004). Also, to ensure that my data analysis aligns with the standards of qualitative phenomenological research standards and dependability (Korstjens & Moser, 2017), I provided a detailed record of my interview protocol (see Appendix). By providing these procedures in my study, a researcher or reader would be able to have a reliable platform to attempt to reproduce the study and gain informative results in a similar context (Ravitch & Carl, 2016).

### **Confirmability**

Confirmability refers to a researcher being able to undoubtedly demonstrate the findings of their inquiry were based on standard data collection processes with the participants and not their own interpretations or understandings (Kyngäs et al., 2019; Ravitch & Carl, 2016). To ensure that confirmability was used accurately in this study, I used audit trails, bracketing, and reflexivity. As well, to further ensure confirmability, I used member-checking and consulted with the expert advice of my committee members. Using these techniques helped to ensure that I remained objective during the research process and avoid any bias that could be potentially based on my interpretations or understandings of the participants' records of their lived experiences and shared meanings regarding the phenomenon of interest.

### **Ethical Procedures**

Scholars have argued that ethics are an essential attribute of professional standards and practices (Tolich & Fitzgerald, 2006). Significantly, researchers concur

that it is the researcher's responsibility to act ethically while conducting scholarly research that will ensure the privacy, respect, confidentiality, and protection of the participants who willfully agreed to participate in the research study (King, 1996). For these reasons, I implemented several precautions to ensure ethical considerations are sustained while conducting research and interviewing sessions with the participants. For example, before recruiting participants and data collection, I obtained permission from the IRB. Once my study was approved by Walden's IRB, I ensured to follow the IRBs' specific guidelines regarding human participants. Each participant interested in the study was provided a flyer/or informational letter detailing the study's nature, their participation requirements, including risk and benefits. Although participation in this study was voluntary financial incentives in the form of gift cards totaling \$20 was provided to each participant.

Moreover, each participant who met the inclusion criteria for this study was provided with a consent letter. The consent letter was another way of validating that ethical procedures were being adhered to for each participant. Given that, Walden University IRB approved the consent letter before recruitment, data collection, and data analysis. To make certain ethical procedures were further addressed appropriately for this study, each participant was advised that their participation was voluntary, and they could terminate their involvement in the study at any given time before commencing the interview session. With that said, each participant was provided the opportunity to elaborate their understanding of the study, the study goals, and the importance of having

signed consent forms before the interview (King, 1996; Rubin & Rubin, 2016; Shenton, 2004).

Furthermore, another essential ethical issue when conducting interviews is anonymity (Francis & Francis, 2009). To ensure the respect and anonymity of the participants, I took several precautions. As the participants might disclose sensitive information during the interview, and the study's purpose was not to explore sensitive personal issues. I also took these precautions as the telephone interviews used in this study were audio recorded using Google Voice App. To ensure the participants recorded data will be kept secure, I took the precaution to ensure that the data was stored on a secured server that requires a secure password in which the researcher only had access. Also, during transcription, the names of each participant were changed to fictional ones. Using fictional names will help ensure that the participants identifying information used for this study will be kept confidential. According to Walden University protocol, all coded data and recordings must be secured in a safe place for approximately five years. Therefore, all coded data and recordings will be kept in a secured place within my home in which I will only have access to. Afterward, the coded data and recordings will be destroyed.

### **Summary**

In Chapter 3, a qualitative phenomenological approach was used as the research design. Using this research design allowed me to explore the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city. As the

primary data collection instrument, I followed all the required ethical rules suggested by Walden's University IRB. This allowed me to address any researcher bias and ensure that all participants' confidentiality and privacy were protected.

With that said, this study's data collection consisted of confidential audio recorded open-ended telephone interviews using Google Voice App with a small purpose sample of six older adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city. Data analysis consisted of incorporating a thematic examination approach by Braun and Clarke (2006) six stages in phenomenological of Moustakas (1994) alteration of Steve-Colaizzi-Keen approaches. Each interview was accurately transcribed in English verbatim into written transcripts. Secondly, the transcript was then open-coded and analyzed using the researcher's analytical notes and the data analysis software titled Quirkos. Notwithstanding, I also established research trustworthiness by using the research strategies of credibility, transferability, dependability, and confirmability of the study result. Chapter 4 will outline an in-depth detailed analysis of the study's findings.

## Chapter 4: Results

### **Introduction**

The purpose of this descriptive, phenomenological study was to explore the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city, which the research question addressed. Chapter 4 will provide a comprehensive evaluation of the present study interview setting, participant demographics, data collection, data analysis, the evidence of trustworthiness stated in Chapter 3, the study's results, and summary.

### **Settings**

Confidential audio recorded telephone interviews were used to collect raw data in a private room within my home that was free of interruptions. The interviews were scheduled based on each participant's availability. The interviews were scheduled to last between 45 min to 1 hour; however, some participants were able to complete their interview sessions within a shorter timeframe based on their responses to the interview questions. There were no individual circumstances or organizational conditions that influenced the participants or their experiences that may have influenced the interpretation of these study findings that were known to me. With that said, given that each participant was providing sensitive information to me regarding their experiences with the research topic, their sharing could involve psychological risk or triggers unknown to me. Therefore, the participants were provided an anonymous mental health and substance abuse hotline number as outlined in the consent form.

## Demographics

The participants consisted of six older adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern, urban city. The recruitment process involved a recruitment flyer as well as using publicly available information to distribute invitational letters and call potential participants. Snowball sampling was also used as a recruitment strategy. By utilizing these recruitment methods, I received 15 responses from older adults indicating their interest in the study. However, nine participants did not meet the study's inclusion criteria. With that said, my study's sample size aligned with my initial sampling strategy that consisted of a range of five to 15 participants. Therefore, I was able to ensure that enough information was obtained from the participants' perceptions of the phenomenon until saturation was attained (Dawidowicz, 2016; Hennink et al., 2016).

To protect the participants' confidentiality and privacy, the participants were advised that their name will not be used in this study for any reason. Instead, they will be identified with a pseudonym (i.e., Participant 1, Participant 2, Participant 3). See Table 1 for a comprehensive review of the participants' demographics.

**Table 1**

*Participants' Demographics*

Participants #	Sex	Age	Marital Status	Date of HIV Diagnosis
Participant 1	Male	54	Single	1997
Participant 2	Male	52	Single	2001
Participant 3	Male	62	Single	1996
Participant 4	Female	59	Married	1994
Participant 5	Female	51	Single	1993
Participant 6	Male	63	Single	1986

### **Data Collection**

This study's data collection transpired within 3 months, from November 5, 2020, to February 5, 2021. Before data collection, I received approval from Walden University's IRB. This study's data collection consisted of 45 min to 1-hour confidential audio-recorded telephone interviews with six older adults living in a northeastern, urban city. All interviews were scheduled based on the participants' availability and were held in a private room within my home that was free of interruptions. All consent forms were received from each participant via email before data collection. As the primary data collection instrument/researcher at the introduction of each interview, I also built-up transparent connections with the participants by thanking them for taking the time to participate in the study (see bMoravcsik, 2014). Next, I informed the participants that their participation was voluntary and that I will not use their individual data in any capacity whatsoever outside of this exploration study. Additionally, I advised each participant that they could refuse to answer any question and terminate the interview at any time. I also reminded each participant that the interview's allotted time was 45 min to 1 hour, the interview would be audio recorded using Google Voice App, and if they agreed, extended time would be allotted for them to share their experiences and complete the interview. Each participant was also provided an anonymous mental health and substance abuse hotline number outlined on the consent form.

I used a research interview protocol and a predetermined open-ended 11-question questionnaire to collect this study data (see Appendix). Using the interview protocol and questionnaire, I asked each participant the same questions that addressed the study's

central research question and purpose. This process allowed me to garner a comprehensive understanding and acquire thick and rich descriptions of each participant's socio-risk behaviors, specific treatment preferences, and daily, lived experiences living with HIV/AIDS and substance use. Following the final interview question, each participant was thanked for their participation and time and was provided an opportunity to share their closing remarks and any additional information related to the research topic that was not asked. The participants were also encouraged to use snowball sampling to refer other participants who met the study's inclusion criteria.

It is worth mentioning that at the start of my initial interview with Participant 1 on November 23, 2020, and Participant 6 on January 15, 2021, minor software technicalities were identified with the Google Voice App and Participant 6 Bluetooth device. However, the technical issues were resolved quickly and did not cause an issue with Participant 1 and Participant 6, and each agreed to continue their interview sessions despite the interview being 30-minutes later than Participant 1 initial scheduled time and Participant 6 needing to restart his interview approximately five minutes into the initially scheduled time. Nevertheless, there were no other additional issues that would impose a threat to data collection during the entire interview sessions with all six participants. As a result, the data collected from the six participants' confidential audio-recorded narrative conversations were converted into written transcriptions for this study.

### **Data Analysis**

Thematic examination approaches were used as the standard data analysis procedures for this present study. Initially, to become familiar with this study's collected

data, I converted the confidential audio-recordings from each participant interview into complete written verbatim transcripts. To further validate and ensure the audio recordings' accuracy from each participant interview, I closely reviewed the transcripts. I read the transcripts multiple times while analyzing and focusing on the main points that would allow me to identify categories, patterns, and themes for content development. To assist with the second stage of data analysis I used the data management software Quirkos. By using Quirkos, I was able to use inductive reasoning by organizing and condensing large amounts of the raw data into a unit of analysis using open coding to generate initial codes. I read each participants' transcript line by line while engaging in reflexivity by jotting down analytic memos of the coding process that included my thoughts, comments, reflections, and ideas.

In the data analysis and codifying process, I ensured that I avoided any bias or presuppositions. Remaining neutral and objective helped me as the primary instrument/researcher to ensure that the participants' narratives were used as the central foundation for accurately interpreting their shared meanings regarding the phenomenon. I also bracketed my personal biases, experiences, and perceptions before and while conducting my research (Chan et al., 2013; Dawidowicz, 2016).

After my initial coded units were developed, to advance the inductive reasoning process, I then used axial coding during my second coding cycle to categorize the initial codes and text segments by relevant topics into units of meaning, patterns, and themes using the Quirkos data management software. Using Quirkos data management software further allowed me to categorize, label each term, and develop relationships between the

categories and primary themes while retaining the original data's meaning and associations. I reviewed each transcript at least twice to identify any repetitions, differences, or unfamiliar terms. By closely reviewing the transcripts, I ensured that the themes were coherent with identifying their meanings. To further analyze my data, I also searched for any missing data, newly identifiable emergent themes, and subthemes that corresponded to the study's focus question and purpose. I also continued to identify salient themes for broader themes that could be conceptualized and associated with the first emergent themes. I then moved into the fifth step of my data analysis, which required defining my themes to provide a comprehensible overall distinction of the data's essential elements. To accurately define my themes, each unit of analysis was clearly defined, and each theme was identified by using descriptive wording to clarify each passage that had an assigned code.

The final stage of using the thematic approach involved writing up my data analysis. Before finalizing my data analysis, I used member checking with each participant as a validation method. Each participant was able to review their transcripts to ensure that I had accurately captured their shared meanings regarding their socio-risk behaviors, specific treatment preferences, and daily, lived experiences with HIV/AIDS and substance use. Member checking validated the emerging themes from each participant's responses to the interview questions after reading each participant their transcript.

Further, I achieved triangulation by accurately analyzing the collected data from the participants' narrative responses using thematic examination approaches as the

standard data analysis procedures for this present study. I reached a point where data saturation was attained (Lyons & Coyle, 2016), which is achieved when sufficient information has been gathered from the participants' perceptions of the phenomenon, and no newfound information or themes can be generated (Dawidowicz, 2016; Fusch & Ness, 2015; Hennink et al., 2016). Therefore, no additional interviews were warranted for this study.

### **Significance of Codes, Categories, and Themes**

In qualitative research, codes are connections among data and sets of ideas that permit the analyst to go beyond the data (Basit, 2013). For clarity, a code is a word or phrase that summarizes information (Saldaña, 2015). To generate descriptive codes, I first created a code centered on the relevant text from the participants' responses that expressed a distinct idea and provided insights to the central research question. In the present study, 19 descriptive codes emerged from the collected data and data analysis (a) substance use, (b) risky sex, (c) HIV/AIDS, (d) physical health, (e) mental health, (f) relationships, (g) ageism, (h) stigma, (i) resources (j) support, (k) sense of coherence (l) long-term survivor, (m) community, (n) primary care, (o) behavior healthcare, (p) healthcare provider, (q) high-risk situations, (r) relapse proneness, and (s) drug addiction.

Once my qualitative codes were created, I refined the codes into classifications known as categories (Basit, 2013; Ravitch & Carl, 2016; Saldaña, 2015). In this study, seven categories emerged from the created codes: (a) high-risk behaviors, high-risk situations, substance use, drug addiction, relapse proneness, and risky sex; (b) neuropsychiatric, physical, and mental health; (c) stigma and ageism; (d) primary care,

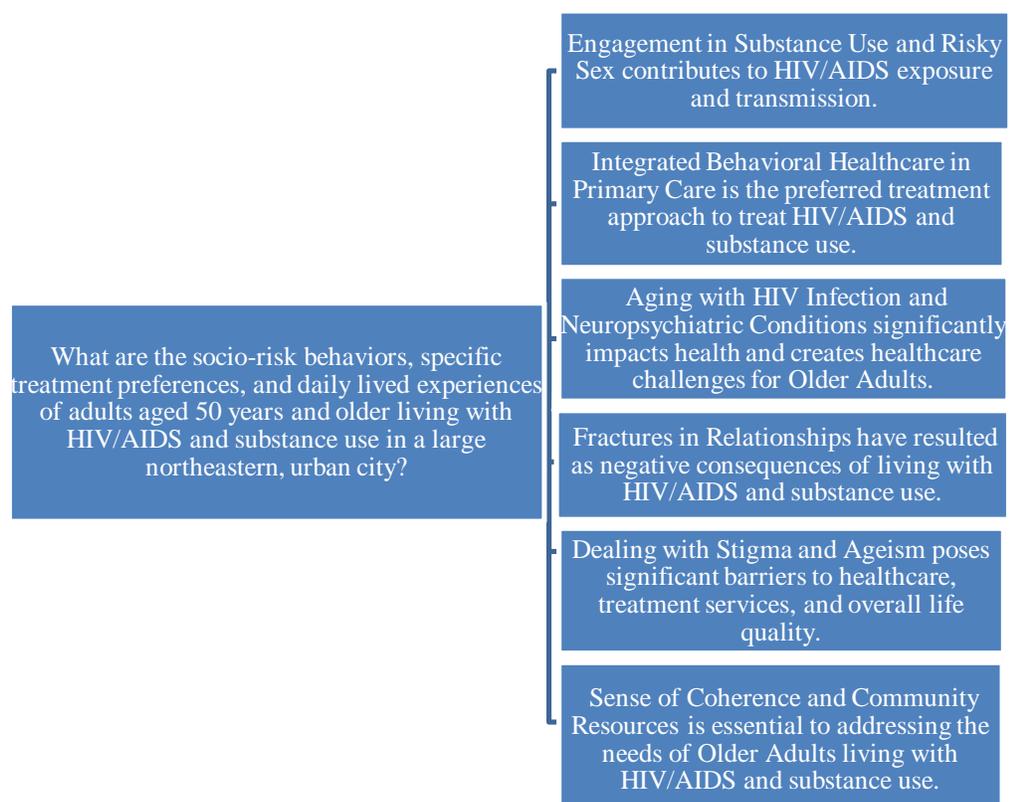
behavioral healthcare, and healthcare provider; (e) community, resources, and support; (f) relationships; (g) HIV/AIDS, aging, and long-term HIV survivor. The categories were then used to help me recognize the shared qualities, differentiations, or models inside the data that contributed to making a theory that may later be generalizable to various settings (Basit, 2013; Ravitch & Carl, 2016). Subsequently, I recognized repeating ideas, assumptions, and meanings that permitted me to identify unified themes derived from the codes and categories (Basit, 2013; Ravitch & Carl, 2016; see Figure 1). At this point of the data analysis and codifying process, six final distinct themes emerged:

1. Engagement in substance use and risky sex contributes to HIV/AIDS exposure and transmission.
2. Integrated behavioral healthcare in primary care is the preferred treatment approach to treat HIV/AIDS and substance use.
3. Aging with HIV Infection and neuropsychiatric conditions significantly impacts health and creates healthcare challenges for older adults.
4. Fractures in relationships have resulted as negative consequences of living with HIV/AIDS and substance use for older adults.
5. Dealing with stigma and ageism poses significant barriers to healthcare, treatment services, and overall life quality.
6. Sense of coherence and community resources is essential to addressing the needs of older adults living with HIV/AIDS and substance use.

In the Results section, a comprehensive presentation of these distinct final themes will be presented (see Table 2).

To further support the significance of these codes, categories, and themes, I reflected on my analytical memo notes that I wrote while codifying and analyzing the participants' responses. Similarly, I ran a query in Quirkos to further analyze the codes, categories, and themes to understand better how they might have overlapped with one another and their hierarchical structure. The codes, categories, and themes that emerged from this study were solely based on the participants' responses to the interview questions and my ability to accurately analyze the data using thematic examination approaches as the standard data analysis procedures for this present study.

I was then able to make theoretical constructs since it allowed me to figure out the participants' subjective experience based on the textual data derived from the study (Basit, 2013). Afterward, I was able to organize the theoretical constructs into a theoretical narrative, which permitted me to summarize what I had learned about the relationship between the biopsychosocial factors of illness and the participants' subjective experiences living with HIV/AIDS and substance use. Therefore, I answered the fundamental research question underpinning this study's scope.

**Figure 1***Themes Flow Chart*

### **Evidence of Trustworthiness**

Researchers have emphasized the importance of using the appropriate strategies and concepts of credibility, transferability, dependability, and confirmability to ensure trustworthiness and credibility when conducting qualitative research (Anderson, 2017; Bevan, 2014; Hoffman, 2010; Lincoln & Guba, 2011; Noble & Smith, 2015; Ravitch & Carl, 2016; Shenton, 2004; Yardley, 2016). In the present study, as stated in chapter 3, I established research trustworthiness as a criterion to ensure the rigor and credibility of this research inquiry by implementing the terms and concepts of credibility, transferability, dependability, and confirmability (Anderson, 2017; Bevan, 2014; Lincoln & Guba, 2011; Ravitch & Carl, 2016; Shenton, 2004; Yardley, 2016). Alike, I used multiple triangulation techniques to build the believability and legitimacy of the present study's research discoveries (Fusch & Ness, 2015; Noble & Heale, 2019).

### **Credibility**

Credibility is internal validity that researchers seek during data collection to make sense of the phenomenon of interest in its entirety (Shenton, 2004). Secondly, credibility or verification are central components of building the researcher or readers' confidence in the truth regarding the study's findings (Kyngäs et al., 2019; Miles et al., 2014). In this study, open-ended interviews were used as a triangulation strategy to establish credibility. This approach enabled me to garner rich, thick, and complex descriptive information from my participants regarding the phenomenon of interest as I had built up transparent connections with the participants (Moravcsik, 2014) and thanked them for taking the time to participate in the study. Likewise, member-checking was used as another strategy to

establish credibility in this study. During the initial and post-interviews, I used member checking to clarify any essential points, check the interpretations, and any participant's ambiguities (Khan, 2014). The participants had their transcript re-read, and they were provided a copy of the original transcript via email of the open-ended interviews in which they had the opportunity to validate and ensure that the findings of the study were realistic, practical, and are close to what they meant (Patton, 2015). For each participant who provided feedback regarding their transcripts' accuracy and validation, their words were transcribed truthfully and precisely (Miles et al., 2014).

### **Transferability**

Transferability is external validity, and it implies that the discoveries from one study are likewise appropriate to be applied in different studies (Korstjens & Moser, 2017; Kyngäs et al., 2019; Shenton, 2004; Yilmaz, 2013). Transferability is also described as being the point at which the scientist has given the reader enough supporting information on a territory of research so they can decipher if the general discoveries from the study are sufficiently sound to be duplicated or applied (Shenton, 2004). For this study, I used thick and rich descriptions and methodical qualitative research strategies throughout the entire research process to ensure transferability, starting from the research methodology, sampling strategy, data collection, and data analysis. These procedures will further allow a researcher or analyst to replicate this study. However, the study is limited because there only six participants and it was completed in a large northeastern urban city.

**Dependability**

Dependability is known as reliability, and it denotes to the stability of the data (Kyngäs et al., 2019; Ravitch & Carl, 2016). To ensure dependability throughout this study, I kept an audit trail of the interviews, transcribed transcripts of each participant's words verbatim, and my written notes as justification for the data collection and data analysis procedures (Anderson, 2017; Shenton, 2004). Also, to ensure that my data analysis aligned with the standards of qualitative phenomenological research standards and dependability, I provided a detailed record of my interview protocol (see Appendix) (Korstjens & Moser, 2017). By providing these procedures in my study, a researcher or reader would be able to have a reliable platform to attempt to reproduce the study and gain informative results in a similar context (Ravitch & Carl, 2016).

**Confirmability**

Confirmability refers to a researcher being able to undoubtedly demonstrate the findings of their inquiry were based on standard data collection processes with the participants and not their own interpretations or understandings (Kyngäs et al., 2019; Ravitch & Carl, 2016). To ensure that confirmability was used accurately in this study, I used audit trails, bracketing, and reflexivity. As well, to further ensure confirmability, I used member-checking and consulted with the expert advice of my committee members. Using these techniques helped to ensure that I remained objective during the research process and avoid any bias that could be potentially based on my interpretations or understandings of the participants' records of their lived experiences and shared meanings regarding the phenomenon of interest.

## Study Results

In the present study, I sought to gain a better understanding and answer the fundamental research question underpinning this study's scope: What are the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city? I conducted confidential audio-recorded telephone interviews with six older adult participants. Each participant was asked the same series of 11 open-ended questions that addressed the study's central research question. Based on the data analysis conducted using collected data from each of the participants' feedback and using thematic examination approaches as the standard data analysis procedures for this present study, six final distinct themes emerged (1) engagement in substance use and risky sex, (2) integrated behavioral healthcare in primary care, (3) aging with HIV infection and neuropsychiatric conditions, (4) fractures in relationships, (5) dealing with stigma and ageism, and (6) sense of coherence and community resources (see Fig 1. Flow Chart and Table 2).

**Table 2***Hierarchy of Emergent Themes*

Main Themes	Subthemes	Description
Engagement in Substance Use and Risky Sex	Drug addiction and sexual promiscuity. High-risk situations, high-risk behaviors, and relapse proneness.	The data analysis revealed that engagement in substance use and risky sex are socio-risk behaviors that contribute to HIV/AIDS exposure and transmission.
Integrated Behavioral Healthcare in Primary Care	Health promotion activities	In the context of specific treatment approaches to treat HIV/AIDS and substance use. The data analysis revealed that integrated behavioral healthcare in primary care is preferred.
Aging with HIV Infection and Neuropsychiatric Conditions	Growing older with HIV infection and comorbid health conditions.  Enduring post early HIV era as a long-term HIV survivor  Living with HIV/AIDS, neuropsychiatric disorders (HAND), and HIV Escape.	In the context of HIV/AIDS and substance use, the data revealed that aging with HIV infection and neuropsychiatric conditions including HIV Escape and other comorbidity diseases significantly impacts health and creates healthcare challenges for Older Adults.
Dealing with Stigma and Ageism	The impact of stigma and ageism.	In this context, the data analysis uncovered that stigma and ageism are significant barriers that impact healthcare services, healthcare treatments, and the overall quality of life.
Fractures in Relationships	Complex and broken Relationships	The data analysis revealed that the negative consequences of HIV/AIDS and substance use result in fractures in relationships.
Sense of Coherence and Community Resources	Information and referral services.  Income support programs.  Health promotion programs.  Case management programs.  Employment programs.	It was evident from the six participants' responses that having a sense of coherence and community resources is essential to addressing the needs of older adults living with HIV/AIDS and substance use.

## **Theme 1: Engagement in Substance Use and Risky Sex Contributes to HIV/AIDS**

### **Exposure and Transmission**

Engagement in substance use and risky sex emerged as the first overarching theme in this study during data analysis. The six participants in this present study concurred and deemed engagement in substance use and risky sex as the most significant socio-risk behaviors contributing to exposure and transmission of HIV/AIDS malady. Each participant also emphasized their understanding of the negative consequences of engaging in substance use and risky sex.

For instance, Participant 1 described the interconnections between having an addictive personality, substance use history, current substance use, and the negative consequences of risky sex:

I am aware that I have an addictive personality. I have been using illicit drugs and different substances off and on the majority of my life. I would characterize my substance use throughout my formative years in high school. I began experimenting with marijuana and amphetamines. In my 20s, I was introduced to cocaine, and in my late 30s/40s, I was introduced to amphetamine-like speed and stuff. I snorted it once and said I would never do it again. I did not like the feeling of being up for two days. I ended up getting addicted to crystal meth when I was in my 40s.

In the 1990s me and my partner would go clubbing at circuit parties; twice a year, we would use MDMA, a form of ecstasy - ketamine, a disassociation drug. The drugs were used to stimulate the brain and get into the music. This kind of

camaraderie or culture occurred largely in the gay community, where people would go out and dance all night with their shirts off—mainly men with men. I have been to Montreal a few times to do the same thing they were referred to as after-hour parties where no alcohol was served. Many people, including myself, used MDMA, Ketamine and drink lots of bottled water. We danced until the late morning. Currently, I use marijuana daily and drink socially when I'm out with friends. Sometimes I may have a beer or drinks during the week. I think substance use can wreak havoc in people's lives. It can bring them to the point in their lives where they reach rock bottom, and there may be no coming back.

Participant 1 further stated,

I am a strong advocate for people to be on PrEP if they are having high-risk sex. From a policy standpoint, if someone is virally suppressed the chances, they will pass on HIV to someone else is very low risk. They are protected by being on PrEP.

Similarly, Participant 2 explained,

substance abuse is more of an ongoing problem. Because I think about using and it is a day at a time process. The first time I ever took a hit of crack was in 1995 – thirty years ago, and it was the best feeling in the world. Here it is some 30+ years later, and I will never feel that feeling again. Maybe if someone showed me where the good stuff was, I will just be like, look, God forgive me for this one. I just wanted to take this last hit.

Participant 2 further noted,

my significant other still feels some kind of way about it. I tell her I took a study and educated myself on this; if your undetectable, there is no way you can pass it on, and I cannot give it to you because I'm undetectable. With her knowing this, she still wants us to use protection; that's the only effect it has on our relationship. Moreover, Participant 3 highlighted a strong interrelationship between substance use and risky sex. He accentuated,

I am using the drug as a way to connect with people and find other positive pop groups I can connect with, but at the same time, I want to get high. It's like I got to find it and use it. When you are high, you could care less about HIV, so you don't even know I'm HIV+. It is like you are over there, but once you know two or three addicts like using meth got together, and we were getting high, you did not even think about HIV. All you think about is sex, and that is that. I am an educated person, and I would disclose my status if I were engaging with someone. That was what was on my mind when I was using; I was personally responsible in that way. I do not want to put anyone else in danger that is important to me. I got to be safe and share with people my status so yeah, that was always taking place socially.

Furthermore, Participant 4 mentioned the social and personal complexity of engagement in substance use and risky sex:

I have always been high-risk and had high-risk behaviors. In 2001 somebody asked about wanting to try a particular drug I never had. Within the first six

months of using the drug, I would say I chose it over my job, my health sometimes, and over everything. Within a year, I was homeless.

Additionally, Participant 4 communicated the belief that her engagement in substance use and risky sex were due to high-risk mental health behaviors. Hence, she expresses a strong desire for others to understand that substance use engagement will contribute to risky sex because of the feelings behind it. For instance, she explained,

I have from experience my own offense that the high-risk mental health behaviors contributed to having unprotected sex with men I did not know frequently, so if your using drugs there is a chance you are going to get HIV. If you have HIV, in like my story, there is a chance you are going to pick drugs back up because of the feelings behind it. I am getting tired of people showing their bodies to buy crack, and if they are positive, they are risking infecting somebody else. If they are not positive, they are risking that. Just because we get older does not mean that we do not get frisky or risky. I am grateful I got a lot of that behavior out of my system early because I experienced all of that stuff.

Notably, Participant 5 reported the extent to which her significant life conditions contributed to engagement in substance use and risky sex. She reported,

I started using drugs after I found out how I got HIV. I got it from my son's father. I was very young; I was 23. He was my first lover, and I knew he was using drugs, and that is how he got it. For like a good ten to 15 years of my life was a living hell for reasons I was using drugs, in and out of the hospital, and not taking my medication properly.

Furthermore, in discussing, Participant 6 pointed out that:

the risky behavior for me is using crystal meth. I was introduced to crystal meth in 2000. It started slowly with being with somebody who introduced it to me unexpectedly with a pipe. I did not want to do it, but somebody said I will just blow it into your mouth, you know, take one hit. I started smoking it recreationally from 2000 to 2014, and then it started to intensify a little bit more, and in 2016, it became more of an issue. There is a reason why I became attracted to crystal meth – it affected my mood. I had like a brain fog, and I was alert, and I actually had some energy.

Moreover, Participant 6 proceeded to discuss his viewpoints, including his social connections with using crystal meth. He stated, “drug use is a way of escaping and bonding with certain people. It’s kind of being an outlaw; it feels good, you know it’s euphoric, so you feel kind of like you are doing something naughty.” However, Participant 6 further noted, the negative consequences of engagement in substance use and risky sexual behaviors:

It was definitely something I wanted to stop even recreationally because it affected my outlook on myself, and it took me like a week or so to recover from using it for one day. Using drugs cannot help you in any way physically or medically, and it’s unhelpful for people who are having unsafe sex, especially with other diseases going around, including COVID.

## **Theme 2: Integrated Behavioral Healthcare in Primary Care is the Preferred Treatment Approach to Treat HIV/AIDS and Substance Use**

The second central theme that emerged from the data was integrated behavioral healthcare in primary care. The theme title frequently emerged as a pattern within the data set during the codifying process and was considered highly salient for all six participants. The six participants endorsed integrated behavioral healthcare in primary care as the preferred treatment approach to treat HIV/AIDS and substance use when asked the interview questions three, six, and seven. For example, Participant 1 stated,

I think you need a multidisciplinary team, compliance, and adherence. From a primary care standpoint, I believe it's important to be transparent and honest with my medical providers around my behaviors, daily activities in life so they can treat me appropriately and provide me quality care. I would say I received good quality of care. Participant 1 further asserted; I believe in harm-reduction. In my opinion, harm reduction is a philosophy and approach that meets people where they are at and works towards the goal of keeping them engaged in care even if they are still using it. I have been sober for over three years from methamphetamine use.

Participant 2 said, I pretty much stay away from drugs. I am in recovery and being in recovery is an ongoing process. Might of fact, I used to be a peer volunteer at a well-known New York City drug treatment program.

Moreover, Participant 3 accentuated,

the quality of care I receive is integrated care. I go to a clinic in New York City which caters to HIV+ people with all kinds of issues. My HIV provider definitely makes sure I am healthy. He takes care of my labs, viral load numbers, and I am on medications. I take a regimen of pills each morning. I am a really good patient and very appreciative for the care I get at the clinic. For the substance, I go to therapy and support groups like a 12-step program. I'm satisfied I have stopped, and I'm clean five-plus years.

Participant 4 depicted her endorsement with the theme by stating:

my preferences are treating the whole package so as for the quality of care, its status quo. I am choosing to stay with my primary care and infectious disease clinic because I have been there for twenty-one years. Today, my experience is positive with my doctors. They are able to walk me through my diagnosis. I do not play around with seeing my doctors, taking my medications, and staying undetectable. The recovery piece, I am in recovery, I have a sponsor, drive to meetings, and a homegroup. I stay active in service and counsel people with long-term HIV and long-term sobriety. I talk to ladies who have not found their way yet. I do not play with my recovery.

Likewise, Participant 5 affirmed,

I prefer to be treated as an individual because everybody's situations are different. I had gone through treatment before and entered a drug treatment program. I can tell you I've only had good providers, and I have a great relationship with my

healthcare providers. They inquire about every aspect of my life physically and emotionally so that way they provide me with the best of care.

Participant 6 discussed his integrated behavioral healthcare in primary care at a major hospital in New York City. He stated,

I've always gone to my primary care physician for 15 to 20 years who has specialized in HIV care. As far as drug treatment is concerned, I joined what's called a Harm-Reduction Group a little over two years ago. It has been wonderful, effective, and really supportive for me. The support groups are for people with crystal meth, and I have been involved with that, and we have been doing it virtually for the last year.

### **Theme 3: Aging with HIV Infection and Neuropsychiatric Conditions Significantly Impacts Health and Creates Healthcare Challenges for Older Adults**

Aging with HIV and neuropsychiatric conditions was a third theme that emerged from the data analysis. Five participants expressed concerns centered on growing older with comorbid and neuropsychiatric (HAND) conditions, including HIV Escape. The participants' concern also revolved around their perceived realities of being forgotten and dismissed as a long-term HIV survivor post early years of the HIV epidemic.

For instance, Participant 1 voiced a strong concern regarding the impact of aging with comorbidities including HAND and HIV Escape. He expressed,

I became HIV+ in April 1997, and I have been living with HIV for over 30 years. I am concerned about HIV and its impact on aging, the aging process, and if I am dealing with HAND or HIV Escape. HIV Escape is when particles of the virus

hide in different parts of your body, like your neurological system and I'm um trying to stay on top of that. I do wonder if HIV and aging have impacted my mental health or is it HIV aging and substance use. Because of my substance use history and over 30 years living with AIDS may have caused cognitive impairment, facilitated by either HIV and aging and/or substance use/abuse. I plan to see a neurologist.

Participant 3 comments reflects his perception of aging with HIV and bipolar disease and the impact these health conditions have on his quality of life and wellbeing. He stated,

I am aging, and my quality of life is going downhill. In 1996 I was diagnosed with HIV and bipolar. I am on medications, and I have very bad dental issues going on. Those issues definitely take a toll as your aging, just making you feel, you know, not so good about yourself sometimes.

Meanwhile, Participant 4 explained her feeling about aging with HIV and being a long-term HIV survivor. She verbalized,

I think that sometimes we the predecessors are falling through the cracks, and sometimes we get forgotten. Because there is a lot of focus on the newly diagnosed and there is a lot of services for them. I have a heart for the aging addict and the aging HIV patient. People with HIV, we tend to forget to take our medications and make our appointments. It is so complicated, and it just gets worse the older we get. The older you get; the stakes get higher. I'm finding out more because I am one of those people that got sick, and I fought my way back.

In addition, Participant 5 discussed the challenges with aging with HIV and recalled the long-term effects of medications stemming from the early HIV epidemic. She asserted,

It is hard to get older because now we're finding other effects of things that we took when we were younger that nobody knew what would do to you long-time. It has gotten better as the statistics have gotten better. I fell down three steps and shattered my whole leg in 2017. I know it is aging, and from the HIV meds that were deteriorating my bones, which nobody knew how at the time because I had been on them for 20 years.

Similarly, Participant 6 further highlighted the complexities of aging with HIV, substance use, and other comorbidities. He voiced,

As far as the comorbidities, I have all of them. I have a lot of medical, emotional, and physical issues that most people are unaware of in society. Being an older man with HIV becomes even more difficult, and it is not understood by the vast number of people in society. I think there definitely needs to be more focus on the issues of long-term survivors. Since the 1980s and early 1990s, people who have lived with the virus have separate issues from those diagnosed with HIV after 1996. I feel like we're isolated, forgotten, invisible, and dismissed by most of society, so it makes me and others feel like it is better just to hide and isolate. Because people really do not understand what we are going through. Long-term survivors are sort of being left out to blow in the wind, and nobody knows about us. We are going to die soon, and nobody will know about the first early years of

the HIV epidemic, so there has to be more attention paid to people like me who are dealing with these different medical issues because of being positive at such an early time before there were any effective medications. Also, because of all of the toxic medications we did take.

#### **Theme 4: Fractures in Relationships Have Resulted as Negative Consequences of Living with HIV/AIDS and Substance Use for Older Adults**

Having fractures in relationships was another central theme that emerged from the data analysis. As a result of their HIV/AIDS status and history of substance use, most participants expressed that they encountered fractures in relationships contrary to having experienced positive relationships with people they trust. To begin, Participant 1 described having fractures in relationships and their impact on his friends, employer, co-workers, and family dynamics. He explained,

I think some relationships were affected by my substance use or abuse. My parents found out through one of my brothers that I was using methamphetamine, and they were very concerned. My relationship with my family has always been challenging since I came out at 17. My mother and I speak to each other, but we have a difficult relationship. I don't talk to two of my brothers, one of my nephews, his wife, and their respective wives. But it's because of things that have happened not related to substance abuse, but just some unfortunate events where we don't see eye to eye from a religious, spiritual, ethical, and political perspective. We have different views, and we do not talk. In my professional life, my career in state government ended on a bad note. I was terminated from the

state government on July 22, 2020. My substance use did not impact this decision; at least, I don't think so because it was never raised or brought up by my employer. In the early part of the year, I was accused of inappropriate behavior by my supervisor, who said she was intimidated by me and that I had mental health issues. Some of my friends, I frankly have told them I don't want them in my life and have ended our relationships because I do not have any expectations for a relationship with them, the same with previous co-workers.

Participant 4 talked about the changes and fractures she has encountered in her family relationships during her interview. She voiced,

I don't have many relationships. Today there still fractures and changes in the fabric of my relationships. There was a fracture with my natural daughter. She was really mad that I picked up drugs after so long. I think she was afraid I was going to die.

Participant 5 expressed feelings about how disclosing her HIV status effects and impacts her relationships. She stated, "It affects my relationships only to the point where I'll stay stuck in relationships that's not good. Just because I don't want to disclose to somebody new." Participant 6 discussed in his interview his opinion about people's perspectives regarding substance use. He emphasized,

I think people are less understanding about substance use. My family is not aware of that particular issue, so I don't share that with them and some of my friends. I'm in a harm-reduction group, and that is where I feel more comfortable talking about the issues.

He further discussed that fractures in his relationships are because of a loss of family members who have died. He states, “family most of them are gone, so that is problematic. I live here alone in public housing.”

### **Theme 5: Dealing with Stigma and Ageism Poses Significant Barriers to Healthcare, Treatment Services, and Overall Life Quality**

Dealing with stigma and ageism was one of the main themes that emerged from the data. The six participants noted that multiple types of stigmas and ageism were significant barriers. To begin, Participant 1 discussed that disclosing his sexual orientation was a barrier with his family. He stated,

my parents and siblings did not accept the fact I was gay. I had a lot of traumas when I came out to my family. I began using illicit drugs to medicate the pain of being rejected by my family.

Participant 1 further explained that “mental health has a big stigma attached to it in my perspective.” Moreover, Participant 2 remarked that disclosing his HIV status in his current work environment can be a barrier. He stated,

where I work at, of course, they do not know, and they are never going to know. Because some people are ignorant to the fact that oh if you have HIV, you can catch it or if you touch a person, you can.

Participant 3 discussed how various stigma and ageism from society and younger HIV+ people create unwanted feelings and isolation for him. He said, “there is definitely all kinds of stigma and ageism, you know, pushing me down and pushing me away from the main body like the younger gay people and the society in general.” Participant 3 also

noted his experience with stigma at well-known community center in New York City. He stated,

you just feel welcomed there is no stigma or shame. You don't have to deal with the outside world, and you navigate that walking through those doors. You just feel I'm in a great space, I'm going to be taking care of and it's a win, win for everybody so it's been great.

Participant 4 discussed how drug stigma impacted her family dynamics. She emphasized,

there is a stigma with drug abuse. It affected my nuclear family, and people still treat me a little differently. Primarily with my mother, you know she still loves me, and I'm one of her children, but she treats me a little differently.

Unfortunately, it's really showing because she is declining with dementia. People with dementia do not have any filters; they just let it fly if they feel some type of way about you; that is what they do.

Participant 4 further discussed what she is doing to reduce stigma towards herself. She elucidated,

I have gotten really involved, and should I say, smashing stigma. I am pretty open about my status if people ask. I just make sure that I do what I need to do on a daily basis. I did not run around with a big red A on my head for addict and AIDS.

Moreover, Participant 5 discussed her stigma experience with her biological parents when they initially found out her HIV status. She explained, "in the beginning, it

was hard; my parents, of course, knew nothing about HIV/AIDS; they were upper-middle class. You know, before they learned and studied about it, they did not want me to use their plates, forks, and spoons.” Meanwhile, Participant 6 recalled that in the 1990s, before he began using crystal meth while living in Boston before moving back to New York City, he heard stories about people using crystal meth as an AIDS educator. However, during this time, he began engaging in stigmatizing behavior with his friends. He expressed, “my friends and I used to make fun of those people. Those meth heads I just did not relate to at all. I was like, I am not going to be one of those meth heads.” That said, he further reports that his perspectives have changed since then, and now he describes stigma and ageism behaviors from younger HIV+ people. For example, he stated, “I think other HIV+ people who are younger do not want to recognize us because they just do not want to be reminded of older people in general.”

#### **Theme 6: Sense of Coherence and Community Resources is Essential to Addressing the Needs of Older Adults Living with HIV/AIDS and Substance Use**

Sense of coherence and community resources was the final theme that emerged from the data analysis. The present study’s six participants were pragmatic and forthcoming in discussing their accounts of having a sense of coherence and adequate community resources. For instance, Participant 1 noted,

Currently, a great deal of my time is devoted to administrative issues, doctor visits, and staying home as I hate to drive. I am also actively involved in taking care of my mental health, including weekly therapy and monthly medication management appointments. I also have a neurological assessment coming up. I

am getting back to the dentist, and I need a vision exam to update my eyeglass prescription. Participant 1 further stated, “In New York, there are different community-based organizations, outlets or venues for inpatient/outpatient care in the capital region.”

Moreover, Participant 2 discussed his sense of coherence related to educating himself on the topic of HIV/AIDS and the available community resources in community-based organizations in New York City. He articulated “I educated myself on it because I am living with it. There are services like groups for your medical and addiction to help you with HIV and substance abuse if you want to educate yourself.” Similarly, Participant 3 stated,

I’m not staying home. I’m outgoing and one that’s out in the community. In New York, at the clinic, different support groups are hosted by a therapist and brochures for different things within the organization, and also at the LGBTQ community center, there is a bulletin board, flyers, and resources for a different meeting. I know this stuff exists and is always available in the building for me.

Participant 4 stated,

I want to be self-supporting, and I have been pretty independent. I think there are resources that I do not know about, and some offered resources without me having to do the digging, so I have good experiences with the resources I know of. I have to think that there are more available resources for people on disability.

Participant 5 made clear that her quality of life has improved because of having a sense of coherence and utilizing community resources. She explained,

I started taking care of myself and being clean and sober. My quality of life has been pretty much way better than when I was diagnosed. Right now, I am negative, of course, and it really does not interfere with my daily life. In the same hospital, my clinic is in, they have a program that helps you with alcohol and a methadone program. Participant 6 emphasized, “I am an open book in terms of HIV/AIDS. Personally, in the last 15 years, I have been writing and speaking about it. In New York, there seems to be adequate HIV and drug services, but people have to be proactive and find them out around the state and country.”

### **Summary**

In the present study, I sought to gain a better understanding and answer the fundamental research question underpinning this study’s scope: What are the socio-risk behaviors, specific treatment preferences, and daily, lived experiences of adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city? Data collection consisted of the primary instrument/researcher conducting open-ended qualitative narrative interviews with six older adult participants. The interviews were audio-recorded in English using Google Voice App, then transcribed and accurately analyzed using the researcher’s analytical notes and thematic examination approaches as the standard data analysis procedures for this present study, as outlined in chapter 3. As a result, six final distinct themes emerged:

1. Engagement in Substance Use and Risky Sex contributes to HIV/AIDS exposure and transmission.

2. Integrated Behavioral Healthcare in Primary Care is the preferred treatment approach to treat HIV/AIDS and substance use.
3. Aging with HIV Infection and Neuropsychiatric Conditions significantly impacts health and creates healthcare challenges for Older Adults.
4. Fractures in Relationships have resulted as negative consequences of living with HIV/AIDS and substance use for Older Adults.
5. Dealing with Stigma and Ageism poses significant barriers to healthcare, treatment services, and overall life quality.
6. Sense of Coherence and Community Resources is essential to addressing the needs of Older Adults living with HIV/AIDS and substance use.

Chapter 4 fundamental discoveries showed that the six participants in this present study concurred and deemed engagement in substance use and risky sex as the most significant socio-risk behaviors contributing to exposure and transmission of HIV/AIDS malady. The following finding revealed that each participant preferred integrated behavioral healthcare in primary care as a treatment approach. A third finding showed that aging with HIV and neuropsychiatric conditions, including HIV Escape, was an expressed concern among the six participants. The fourth discovery revealed that most of the participants encountered fractures in relationships contrary to having experienced positive relationships with people they trust. The fifth finding showed that dealing with stigma and ageism were significant barriers that impact healthcare services, healthcare treatments, and overall life quality. The last discovery unveiled that having a sense of coherence and adequate community resources is essential to addressing the needs of older

adults living with HIV/AIDS and substance use. Chapter 5 will provide an in-depth interpretation of the central findings, the limitations of the study, recommendations, implications, and conclusion.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

The purpose of this descriptive, phenomenological study was to explore the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults 50 and older living with HIV/AIDS and substance use in a large northeastern urban city. I selected six older adults living with HIV/AIDS and substance use in a large northeastern urban city and conducted open-ended, qualitative, narrative interviews. The interviews were audio-recorded in English using Google Voice, then transcribed and analyzed to identify six themes:

1. Engagement in substance use and risky sex contributes to HIV/AIDS exposure and transmission.
2. Integrated behavioral healthcare in primary care is the preferred treatment approach to treat HIV/AIDS and substance use.
3. Aging with HIV Infection and neuropsychiatric conditions significantly impacts health and creates healthcare challenges for older adults.
4. Fractures in relationships have resulted as negative consequences of living with HIV/AIDS and substance use for older adults.
5. Dealing with stigma and ageism poses significant barriers to healthcare, treatment services, and overall life quality.
6. Sense of coherence and community resources is essential to addressing the needs of older adults living with HIV/AIDS and substance use.

These final distinct themes helped answer the fundamental research question: What are the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city?

This study fills a gap in the literature because, to date, no study has looked specifically at the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city. Researchers have also suggested that further research is warranted to explore the problem of managing HIV/AIDS disease, other comorbidity disorders, and the prevalence of substance abuse associated with aging as well as the impact on quality of life in older HIV-infected adults (Chhatre et al., 2017; Deren et al., 2019; Han et al., 2009; Nevedal & Sankar, 2015; Pilowsky & Wu, 2015; Warren-Jeanpere et al., 2014; Wing, 2016). Moreover, drug use remains understudied, and there are limited amounts of information on new detections of HIV/AIDS disease among older adults (Chhatre et al., 2017; Ellman et al., 2014). Thus, the discoveries from this present study will support and promote social changes in professional practice by providing social, behavioral, and health care providers with a more in-depth understanding of the psychological factors, social circumstances, and health consequences impacting older adults that stems from the syndemic associations of HIV/AIDS disease and substance use. Chapter 5 will present an in-depth interpretation of the study's findings, limitations and implications of the study, recommendations for future research in the United States and abroad, and the study's conclusion.

## **Interpretation of the Findings**

Interpretations derived from adopting a descriptive phenomenological approach. Six themes and 13 subthemes emerged from the data set that corroborates with the fundamental research question underpinning this study's scope and peer-reviewed literature conducted by researchers within the social, behavioral, medical, and human services sectors on the topic HIV/AIDS and substance use outlined in Chapter 2. Moreover, each emergent theme from the data was prominent in understanding the socio-risk behaviors, specific treatment preferences, and daily lived experiences of older adults, aged 50 years and older, living with HIV/AIDS and substance use in a large northeastern urban city. In the following section, these six themes are examined and discussed more in-depth:

1. Engagement in substance use and risky sex contributes to HIV/AIDS exposure and transmission.
2. Integrated behavioral healthcare in primary care is the preferred treatment approach to treat HIV/AIDS and substance use.
3. Aging with HIV infection and neuropsychiatric conditions significantly impacts health and creates healthcare challenges for older adults.
4. Fractures in relationships have resulted as negative consequences of living with HIV/AIDS and substance use for older adults.
5. Dealing with stigma and ageism poses significant barriers to healthcare, treatment services, and overall life quality.

6. Sense of coherence and community resources is essential to addressing the needs of older adults living with HIV/AIDS and substance use.

### **Theme 1: Engagement in Substance Use and Risky Sex Contributes to HIV/AIDS**

#### **Exposure and Transmission**

The initial overarching theme of engagement in substance use and risky sex corroborates researchers' peer-reviewed work presented in Chapter 2 (Chhatre et al., 2017; Massah et al., 2018; Schonfeld et al., 2015). They emphasized that substance abuse differs from person to person due to biopsychosocial, socio-cultural factors, personal perspectives, changes within the older adults' demographic compositions, and their previous histories with using harmful mood-altering substances like alcohol at a younger age (Chhatre et al., 2017; Massah et al., 2018; Schonfeld et al., 2015). This is in line with other researchers who asserted that older adults who have life-threatening diseases such as HIV/AIDS are susceptible to problematic substance use as well as indulging in multiple high-risk behaviors like unprotected sex (Ding et al., 2015; Pilowsky & Wu, 2015). Notably, Degenhardt et al. (2018) found a significant correlation between 1990–2016 that suggests that the global burden of disease is attributable to alcohol and other drug use in 195 countries and territories.

Consistent with the previous literature review and this theme, my analysis and findings revealed that engagement in substance use and risky sex are socio-risk behaviors that contribute to HIV/AIDS exposure and transmission. Moreover, the study participants' description of engagement in substance use and risky sex validates the assertions and conclusions of researchers (Chhatre et al., 2017; Degenhardt et al., 2018;

Ding et al., 2015; Massah et al., 2018; Pilowsky & Wu, 2015; Schonfeld et al., 2015).

The study's participants described their personal experiences and perspectives regarding engagement in substance use and risky sex was due to the following biopsychosocial factors:

1. Having an addictive personality and previous substance use history, including drug addiction.
2. Using drugs to make social connections with other people/population groups and being in high-risk social situations (i.e., being introduced to drugs).
3. Experiencing personal and complex significant life situations and having high-risk mental health behaviors contributing to exposure and transmission of HIV infection and negative socio-risk behaviors such as sexual promiscuity.

In addition, the participants expressed concerns around relapse proneness, and described that their engagement in substance use and risky sex occurred between 1990–2016.

Finally, all six participants concurred and deemed engagement in substance use and risky sex as the most significant socio-risk behaviors contributing to exposure and transmission of HIV/AIDS malady.

## **Theme 2: Integrated Behavioral Healthcare in Primary Care is the Preferred Treatment Approach to Treat HIV/AIDS and Substance Use**

The second theme also aligns with the peer-reviewed literature as presented in Chapter 2 (Hajizadeh et al., 2014; Massah et al., 2018; Moradinazar et al., 2020; Salama et al., 2016). The research accentuated that substance abuse is a complex biopsychosocial

problem that can lead to numerous psychological, medicinal, and societal difficulties in adults (Massah et al., 2018; Moradinazar et al., 2020; Salama et al., 2016). Additionally, researchers have projected that approximately 1.7 million older adults would need substance use treatment services, and 4.4 million adults will need substance use treatment services during 2020 in the United States (Gfroerer et al., 2003).

The study participants' accounts of their specific preferred treatment approaches when asked the Interview Questions 3, 6, and 7 support the literature. For example, all six participants indicated that integrated behavioral healthcare in primary care is their preferred treatment approach when addressing their primary care, mental health, and behavioral healthcare needs. They specifically identified primary care, harm-reduction, abstinence, having a sponsor, attending self-help and home group meetings as their preferred treatment approaches during their interview sessions. Based on the literature, generally, patients have depended on trust in clinical experts to limit the burden and vulnerability related to their disease, ailments, and symptoms (Hajizadeh et al., 2014). Furthermore, my analysis and findings revealed that there is a significant need for future studies to look at ways that health care providers working in the medical, social, psychological, and behavioral health fields utilize integrated behavioral healthcare in primary care to address the healthcare and treatment needs for people living with HIV/AIDS and substance use.

### **Theme 3: Aging with HIV Infection and Neuropsychiatric Conditions Significantly Impacts Health and Creates Healthcare Challenges for Older Adults**

Aging with HIV infection and neuropsychiatric conditions, including HIV Escape, was the third theme and considered one of the most critical concerns reported by the study's participants. Their concerns also revolved around their perceived realities of being forgotten and dismissed as long-term HIV survivors post the early years of the HIV epidemic. The participants' statements confirm researchers Justice and Tate's (2019) assertion that it is imperative to understand that aging with HIV/AIDS present biomedical complexities, harmful health behaviors, growing disparities in health outcomes, cognitive impairment, comorbid diseases, and societal implications among older adults living with HIV/AIDS. Other research has also indicated that aging with HIV leads to difficulties maintaining social contacts and supports; underutilization of medical and substance use treatment services; social stigmas and health determinants from peer networks, health care providers, employers; and increased death rates as consequences of HIV/AIDS and problematic substance use (CDC, n.d., 2017; Chambers et al., 2014; Deren et al., 2019; Durvasula & Miller, 2014; Katz, 2017). Therefore, aging with HIV infection and neuropsychiatric conditions, including HIV escape, presents distinct challenges with other comorbidity diseases among older adults living with long-term HIV infection and substance use.

#### **Theme 4: Fractures in Relationships Have Resulted as Negative Consequences of Living with HIV/AIDS and Substance Use for Older Adults**

My analysis and findings revealed that most of the study's participants experienced fractures in relationships because of disclosing their HIV/AIDS status and substance use history, contrary to having positive relationships with people they trust. For example, Participant 1 explained that the fractures in his family dynamics were due to his history with substance use, disclosure of his sexual orientation at a young age, and differences regarding religious, spiritual, ethical, and political perspectives. Participant 1 also reported conflicts with his supervisor due to a comment she made regarding her perception of his mental health status and gender views about women, resulting in termination from his employer of 30 years and fracturing relationships with coworkers. Similarly, Participant 4 reported having fractures in relationships with her family due to her relapse proneness. Participant 5 also expressed feelings about disclosing her HIV status and its negative impact on her relationships. As a result, she reported the negative impact her HIV status has on her relationships. Participant 6 discussed why he believes there are fractures in relationships in a similar vein because people are less understanding of substance abusers, which is why he did not disclose his substance use history with his family and friends. Participant 6 further discussed that his fractures in his relationships were because of familial death in which he was left to live alone in a public housing apartment in New York City.

This theme aligns with the work of researchers highlighted in Chapter 2 literature review. For example, Atukunda et al. (2017) argued that social support for HIV-positive

adults has not always been optimistic. Given that HIV-positive individuals have voiced their concerns that after disclosing their HIV status among their confided social support networks, their confidentiality was often broken (Atukunda et al., 2017). Similarly, this theme validates the assertions of researchers Chomchai and Chomchai (2015), Haile et al. (2020), and Lee et al. (2017), who emphasized that substance abuse prevalence negatively affects individuals' health and their relationships within society and produces an economic dilemma on governments.

#### **Theme 5: Dealing with Stigma and Ageism Poses Significant Barriers to Healthcare, Treatment Services, and Overall Life Quality**

Participants deemed multiple stigma and ageism as significant barriers within their family dynamics, work environments, and social relationships. Based on my data analysis and findings, stigma and ageism are significant barriers that impact healthcare, social support networks, healthcare treatment services, and the overall quality of life for people living with HIV/AIDS and substance use. This theme is consistent with researchers contending that HIV-positive older adults are a populace affected by HIV stigma and shame (Johnson Shen et al., 2018). Similarly, this theme supports claims that HIV-stigma could be challenging to eliminate, which destabilizes the health of people living with HIV (Earnshaw et al., 2015). HIV-related shame has been a barrier to discontinuing problematic substance abuse and is associated with inconsistent ART nonadherence and avoidance (Batchelder et al., 2015; Bennett et al., 2015; Turan et al., 2016). Further, there is an association between HIV-related shame and health-related quality of life, and that HIV-related stigma is negatively associated with mental health

status (Li et al., 2020; Vincent et al., 2017). Researchers have also emphasized that to date, approximately 1.1 million people are living with the HIV disease and aging with the virus imposes challenges with using medical and substance use treatment services (CDC, n.d., 2017; Deren et al., 2019; Durvasula & Miller, 2014). With that said, this study's analysis and findings corroborate with current studies in the Chapter 2 literature review.

**Theme 6: Sense of Coherence and Community Resources is Essential to Addressing the Needs of Older Adults Living with HIV/AIDS and Substance Use**

The final theme of this present study was a sense of coherence and community resources. In this theme, the study's six participants were pragmatic and forthcoming in discussing their accounts of having a sense of coherence and adequate community resources within their communities/neighborhoods. Some of the community resources identified by the participants were information and referral services, income support programs, health promotion programs, case management programs, and employment programs. Participant 1 reported that his sense of coherence centered around devoting his time to administrative issues, doctor visits, and staying home as well as being actively involved in taking care of his mental health, including weekly therapy and monthly medication management appointments. Similarly, Participant 2's sense of coherence involved educating himself on HIV/AIDS and the available community resources in community-based organizations in New York City. Participant 3 reported that his sense of coherence involved him not staying home and outgoing into the community. Participant 4 further stated that her sense of community involved her being self-supporting and independent. Equally, Participant 5 sense of coherence involved her

taking care of herself, remaining clean and sober while utilizing her community resources. Likewise, Participant 6's sense of coherence involved him writing and speaking about his HIV diagnosis and experiences living as a long-term HIV survivor.

Moreover, this study's theme validates the assertions of Mathis et al. (2015) and Brennan-Ing et al. (2014) as presented in chapter 2 literature review. Mathis et al. (2015) recommended the need to develop and improve community services for older adults with complex health needs living in urban neighborhoods. Findings from this study are also consistent with Brennan-Ing et al. (2014), who postulate that primary care physicians, social, and behavioral healthcare professionals are responsible for ensuring that their patients are well-informed about their health diagnosis, connected to supportive social networks, provided health education, and receive adequate healthcare and treatment services. Furthermore, this study's analysis and findings revealed that having a sense of coherence and community resources is essential to addressing the needs of older adults living with HIV/AIDS and substance use.

### **Interpretations of the Findings in the Context of the Conceptual Framework**

This research study's present analysis and findings provide some novel insights into the interconnectivity between biopsychosocial factors of illness, HIV/AIDS, and substance use in older adults in a manner that is highly consistent with the study's fundamental research question, previous research literature, and the conceptual framework of Engel's biopsychosocial model presented in chapter 2. It is worth remembering that the fundamental research question underpinning this study's scope was: What are the socio-risk behaviors, specific treatment preferences, and daily lived

experiences of adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city? That said, while conducting the in-depth, open-ended narrative interviews with the study's participants, I sought to garner a more in-depth understanding of the topic, including the participants identified and associated meanings with the study's fundamental research question. Considering the study's participants have first-hand knowledge of the phenomenon and are the experts in their experiences and knowledge (Merriam & Tisdell, 2015; Ravitch & Carl, 2016). Additionally, I sought to comprehend better how Engel's biopsychosocial model fits in with the study's fundamental research question, the participants' shared meanings, and the critical concepts of HIV/AIDS and substance use. As such, I will discuss how the analysis and results connect with the fundamental research question guiding this study; the participants shared meanings and Engel's biopsychosocial model in the following sections.

### **Engel's Biopsychosocial Model**

The conceptual framework that was most appropriate to ground this qualitative inquiry is the biopsychological model (Engel, 1977, 1981). Engel was known as the authorizing creator that established the biopsychological model in the year 1977 (Engel, 1977, 1981). According to Engel (1977, 1981), the model is used to enhance the understanding of individualized well-being and disease through the multifaceted interconnections of health care delivery and biopsychosocial factors. Engel (1977, 1981) also postulates that the model is used to examine an individual holistically by distinguishing that the person has their personal views, experiences, a frame of mind, and

a detailed history (Engel, 1977, 1981). Lastly, Engel (1977, 1981) emphasized that the biopsychosocial model seeks to explain the function of a person's development in physical health and illness through analyzing his/her biological, psychological, environmental, and social processes.

### **Connections with Engel's Biopsychosocial Model**

Initially, during their interview sessions, the participants shared their socio-risk behaviors, specific treatment preferences, and daily lived experiences living with HIV/AIDS and substance use. It is worth mentioning that while the socio-risk behaviors, specific treatment preferences, and daily lived experiences may include variations for the study's participants. The participants discussed and described several biopsychosocial factors of illness that negatively impacted their physical health, psychological wellbeing, social and personal relationship status, and quality of life while living with HIV/AIDS and substance use. In this respect, my analysis and findings revealed that engagement in substance use and risky sex are socio-risk behaviors that contribute to HIV/AIDS exposure and transmission. These results aligned with Engel's (1977, 1981) assertions that the biopsychosocial model examines an individual holistically by distinguishing that the person has their personal views, experiences, a frame of mind, and a detailed history.

Similarly, the participants reported that integrated behavioral healthcare in primary care was their preferred treatment approach. Since they reported having a history of multiple comorbidity health conditions (i.e., substance use, mental health conditions, comorbid physical diseases), including HIV infection in which they were receiving professional medical and behavioral treatment services. In this context, my analysis and

conclusions revealed that there is a significant need for future research studies to look at ways that health care providers working in the medical, social, psychological, and behavioral health fields utilize integrated behavioral healthcare in primary care to address the healthcare and treatment needs for people living with HIV/AIDS and substance use. These findings corroborate Engel's (1977, 1981) claims that the biopsychosocial model is used to understand individualized wellbeing and disease through the multifaceted interconnections of healthcare delivery biopsychosocial factors.

Notably, aging with HIV infection and neuropsychiatric conditions, including HIV Escape, was considered one of the most critical topics and concerns reported by the study's participants. The study's participants also reported concerns that revolved around their perceived realities of being forgotten and dismissed as long-term HIV survivors post the early years of the HIV epidemic. My analysis and findings revealed that aging with HIV infection and neuropsychiatric conditions, including HIV Escape, presents distinct challenges with other comorbidity diseases. These study results indicated that aging with HIV infection and neuropsychiatric conditions are biopsychosocial factors that will impact older adults' overall health. These results aligned with Engel's (1977, 1981) assertion that the biopsychosocial model seeks to explain the function of a person's development in physical health and illness by analyzing his/her biological, psychological, environmental, and social processes.

Furthermore, as described by the study's participants during their interview sessions, dealing with multiple types of stigmas and ageism were significant barriers. Similarly, most of the study's participants expressed that due to their HIV/AIDS status

and history of substance use, they encountered fractures in relationships contrary to having experienced positive relationships with people they trust. The data analysis and findings revealed that stigma and ageism are significant barriers that impact healthcare, healthcare treatment services, and the overall quality of life. These findings substantiate Engel's biopsychosocial model in that it showed the impact of the interconnectedness of physical health, socio-factors, psychosocial wellbeing, and issues of substance use and HIV-management (Millar et al., 2016). Given that, Engel (1977, 1981) sought to develop a new model that would be an extension of a paradigm transformation from the traditional reductionistic biomedical model used as a medicalized method that dominated the Western medical and scientific health care fields for decades and centuries. By proposing to the scientific community how the traditional biomedical model lacked in examining the associations of illness's biopsychosocial factors and the onset of various diseases that influence social determinants and health disparities.

Moreover, the present study's participants were pragmatic and forthcoming in discussing their accounts of having a sense of coherence and adequate community resources. For example, the study's participants discussed that they were aware of the community resources in their communities/neighborhoods and actively implemented community resources in their daily activities, medical regimens, recovery, and treatment process. This expanded view of having a sense of coherence and community resources substantiates my analysis and findings that revealed having a sense of coherence and community resources is essential to addressing the needs of older adults living with HIV/AIDS and substance use. Also, the data from this study showed that there is a dire

need for community resources such as information and referral services, income support programs, health promotion programs, case management programs, and employment programs that will help to enhance healthcare and treatment services for older adults living with HIV/AIDS and substance use malady. These findings further align with Engel's biopsychosocial model since the central proposition of the biopsychosocial model uses a systematic approach that focuses and helps to give details on the interaction between an individual's biological, psychological, social/environmental systems and processes (Babalola et al., 2017; Becoña, 2018; Carpenter, 2017; Elizabeth, n.d.; Engel, 1977, 1981). For these reasons, Engel's biopsychosocial model overall further helped me better understand that the participants' social, environmental, cultural, psychological aspects and physical illness go further than medical symptom manifestations (Carpenter, 2017; Elizabeth, n.d.; Engel, 1977, 1981). Given that, I sought to understand the socio-risk behaviors, specific treatment preferences, and daily lived experiences of older adults, aged 50 years and older, living with HIV/AIDS and substance use in a large northeastern urban city.

### **Limitations of the Study**

Several limitations occurred from the implementation of this present research study, as outlined in chapter 1. This research study was initially limited to using purposeful and snowball sampling methods to recruit participants. Since purposeful sampling is practiced in qualitative research, widely used, and it is the utmost significant type of non-probability design strategy that will offer rich information (Kim & Wang, 2018). Subsequently, because researchers assert that elderly persons are an age group that

is arduous to reach and recruit for research inquires, including people living with HIV/AIDS and substance abusers (Sadler et al., 2010; Valle & Levy, 2008; Vervaeke et al., 2007).

However, a possible limitation with using a small purposeful and snowball sampling size for this study is that it might not have signified large enough for saturation or replication, which could have significantly impacted this study's results. Therefore, at the outset of this examination, I projected to select between five to 15 participants who met the study's inclusion criteria. To assist in my recruitment endeavors, I used social media platforms to advertise my research flyers. Alike, I used geographically publicly available information to distribute invitational letters, and I directly called using the publicly available contact information as additional methods to recruit and inform the participants of this study. Considering I did not use any partnering organizations to distribute research invitations on my behalf. Neither did I conduct interviews at a partnering organization such as an HIV/AIDS clinic, HIV/AIDS center, substance abuse treatment program, or hospital.

Further, a \$20 gift card incentive was provided to participants who met the inclusion criteria and consented to participate in this research study. Notably, by utilizing these additional qualitative recruitment strategies within three months, this study's sample size fell within the initially proposed range, and I could reach data saturation sufficiently. Given that experts have argued that in phenomenological research, a good selection of participant numbers are between five and 15 and that the sample size in qualitative studies typically relies on the notion of saturation or the point at which no new

knowledge, data, or themes can become further identified within the data (Guest et al., 2006; Marshall et al., 2013; & Ravitch & Carl, 2016).

With that said, although my sample size was sufficient for this research study. Generalizability was a definite limitation of this study's results. Since I explored the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern, urban city. Therefore, this study's discoveries were not generalizable to the entire population of people living with HIV in New York, including individuals who shared similar lived experiences and challenges like this study's participants. The study was also not generalizable to a broader range of general adult and younger adult population groups living with HIV/AIDS and substance use in various cities in the United States and other New York State areas.

An additional limitation of this study's trustworthiness was the participants' self-reporting data. This study relied on the participants' voluntarily agreeing to participate in a scheduled 45 minutes to 1-hour open-ended confidential telephone interview sessions with the primary instrument/researcher to discuss their lived experiences with HIV/AIDS and substance use. Although the participants volunteered for this research study, it is plausible that the participants' decided to answer the interview questions based on their need to communicate how they felt about the topic, given that they had insight beforehand of this study's nature and purpose, including example interview questions highlighted on their consent forms. Additionally, having these potential clues beforehand could have influenced and produced unaware bias effects (i.e., selective memory, telescoping, or

exaggeration) with the participants' self-reporting data during their interview sessions. Nevertheless, I had to accept the participants' self-reporting data as factual. Also, I could not verify the participants' narratives independently as the primary instrument/researcher of this study.

Moreover, my involvement as the primary instrument/researcher could have impacted the study's participants' self-reporting in a similar vein because I conducted the participants' interviews. Second, the interviews were conducted based on my competency level and how well I could conduct the in-depth narrative interviews by establishing trust, building a rapport, and having empathetic listening skills with the study's participants. For these mentioned reasons, the older adults' self-reporting could have impacted and influenced this study results' legitimacy.

Furthermore, it is worth mentioning that no deception was used on behalf of the primary instrument/researcher at any time that would have influenced the participants of their lived experiences during their interview sessions or the interpretation of this study's results. Given that, the study's purpose was conveyed verbally and offered to each participant in the form of written consent before their voluntary participation. The participants were informed that they were at liberty to answer all questions or terminate the interview at their discretion. Secondly, each participant was informed that their identity would be kept anonymous, and their information would not be used whatsoever outside the context of this research study. Notably, the participants were provided an anonymous mental health and substance abuse hotline number as outlined in the consent form. Since each participant provided sensitive information to me regarding their

experiences based on the research topic, their sharing could involve psychological risk or triggers unknown to me. Additionally, based on the participants' agreement, extended time was provided after the initially allotted interview timeframe of 45 minutes to 1 hour.

### **Recommendations for Future Research**

To date, there is limited research investigating the prevalence of HIV/AIDS disease and substance use among adults aged 50 years and older (Mahy et al., 2014; Ompad et al., 2016). Also, currently, there are limited amounts of information on new HIV/AIDS disease detections among older adults (Ellman et al., 2014). Similarly, drug deaths are continuing to increase in America, and the prevalence of substance use is often undetected and unnoticed among older adults (Katz, 2017; Kuerbis et al., 2014).

With that said, the purpose of this descriptive, phenomenological study was to explore the socio-risk behaviors, specific treatment preferences, and daily lived experiences of older adults, aged 50 years and older, living with HIV/AIDS and substance use in a large northeastern urban city. As reported previously, this research study's present analysis and findings provide some novel insights into the interconnectivity between biopsychosocial factors of illness, HIV/AIDS, and substance use in older adults in a manner that is highly consistent with the study's fundamental research question, the conceptual framework of Engel's biopsychosocial model, and previous literature review presented in chapter 2.

However, this study's findings were not generalizable beyond the study's sample size. Therefore, I recommend that any future research replication (i.e., qualitative, quantitative, or mixed methods) of this study include a larger sample size with a broader

range of general adult population groups living with HIV/AIDS and substance use in various cities in the United States and other northeastern areas. Given that there is an extensive number of studies focusing on HIV/AIDS disease and prevalence of substance use in the younger generation of young adults (Degenhardt et al., 2016; Gamarel et al., 2016; Inelmen et al., 2014; Pilowsky & Wu, 2015).

Secondly, I recommend that future qualitative research studies explore the relationship between substance use and risky sex found in this present study. It may be wise for researchers working in the medical, social, and behavioral health vocations to see if the same analysis and findings exist in their sample. Especially in New York State areas that have shown to have the most significant population density of people infected with HIV/AIDS disease than other major cities within the United States (Radcliffe et al., 2015; Remien et al., 2015). These studies should focus on reducing or halting the progression of HIV/AIDS and decreasing HIV-risk-taking behaviors by exploring a comprehensive range of potential risk factors, including unsafe risky sexual behaviors, sexual orientation, and the participants' perspectives regarding safer sex practices, HIV/AIDS, and substance use. Additionally, I recommend that these future qualitative research studies highlight the importance of utilizing substance use treatment and primary and secondary HIV approaches to promote risk reduction behaviors for people living with HIV/AIDS and substance use.

Thirdly, I recommend the need for future action research studies to look at ways that health care providers working in the medical, social, psychological, and behavioral health fields utilize integrated behavioral healthcare in primary care to address the

healthcare and treatment needs for people living with HIV/AIDS and substance use. These studies should shed light on the challenges that these helping professionals may encounter with providing essential information regarding safer sex practices and alternative strategies while maintaining the patient-trust relationship with people living with HIV/AIDS and substance use.

Fourthly, I recommend that future studies address aging with HIV infection and neuropsychiatric conditions and HIV Escape among long-term HIV/AIDS survivors post the early HIV era in various cities in the United States and other northeastern areas. These studies should specifically examine the impact and interconnected nature of accelerated aging, comorbid and neuropsychiatric conditions, psychiatric substance-related disorders, and medication effects among long-term HIV/AIDS survivors post the early HIV era. Essentially since addressing the health care needs of older adults with HIV/AIDS and substance use will continue to be difficult (Edelman et al., 2014). Also, given researchers found that older adults are exceptionally disproportionately affected by comorbid health-related conditions like HIV/AIDS disease and problematic substance use/abuse (Dawson-Rose et al., 2017; Oursler & Sorkin, 2016).

Fifthly, I recommend future research studies that will further our understanding of the adverse impact of stigma, ageism, and fractures in relationships among people living with HIV/AIDS and substance use. These future research studies will have to explore and assess the extent to which multiple types of stigmas and ageism, including fractures in relationships, help to create significant barriers to older adults' overall health, social support network, healthcare, and treatment services. Given that, to date, approximately

1.1 million people are living with the HIV disease and aging with the virus imposes challenges with maintaining social contacts and supports, underutilize medical and substance use treatment services, social stigmas, and health determinants from peer networks, health care providers and employers (CDC, n.d., 2017; Deren et al., 2019; Durvasula & Miller, 2014).

On the same note, my analysis and findings in the current study revealed that having a sense of coherence and community resources is essential to addressing the needs of older adults living with HIV/AIDS and substance use. These analysis and findings also suggest that there is a dire need for community resources such as information and referral services, income support programs, health promotion programs, case management programs, and employment programs that will help to enhance healthcare and treatment services for older adults living with HIV/AIDS and substance use malady. As such, I recommend the need for further action research among medical, social, and behavioral health practitioners. These practitioners will need to provide action research that meets the challenge of finding adequate resources, providing alternative funding options and linkages among service providers, and ensuring that the resources and services are assessable to people living with HIV/AIDS and substance use. Considering that primary care physicians, social and behavioral healthcare professionals are responsible for ensuring that their patients are well-informed about their health diagnosis, connected to supportive social networks, provided health education, and receive adequate healthcare and treatment services (Brennan-Ing et al., 2014).

## **Implications**

It is worth mentioning that the analysis and findings of this study may have practical implications for the senior population of adults aged 50 years and older, general adult populations, primary care physicians, social workers, and behavioral health clinicians. That said, this qualitative research study contributed to filling a research gap that existed within the biomedical, social, and behavioral healthcare field of HIV/AIDS and Substance Abuse. Since to date, no research has explored the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults aged 50 years and older living with HIV/AIDS and substance use in a large northeastern urban city. As a result, this study's analysis and findings may have practical implications that support the professional practice by providing social, behavioral, and health care providers with a more in-depth understanding of the psychological factors, social circumstances, and health consequences impacting older adults that stems from the syndemic associations of HIV/AIDS disease and substance use.

Likewise, the study can employ professional application by allowing interprofessional teamwork between social, behavioral, and health care providers within the behavioral, medical, human, and social services field to provide more safe, high-quality patient care, patient services, and patient education to adults aged 50 years and older (Reeves et al., 2017). Furthermore, this research study's analysis and findings could help social, behavioral, and health care providers foster social changes at the state or national level. Considering they will have a more thorough scholarly understanding of the causality of HIV/AIDS, substance use/abuse, social-risk behaviors, and insights into

preferred treatment approach for older adults that derived from the analysis and findings of this study. In so much as this study may hopefully encourage other researchers and scientists to replicate this study analysis and findings on a grander scale within the United States and in different northeastern areas. Since their investigations might help create correlations between older adults/general adult population groups and the information will be valuable in actualizing the social and underlying changes that will enhance the overall quality of life and care for people living with HIV/AIDS and substance use. In such a way that no matter what the results of any of these investigations are (i.e., qualitative, quantitative, or mix-methods), they will be pivotal in helping others to comprehend the biopsychosocial factors adding to the antagonistic effect of HIV/AIDS and substance use among older adults and general adult populations.

### **Conclusion**

The purpose of this descriptive, phenomenological study was to explore the socio-risk behaviors, specific treatment preferences, and daily lived experiences of older adults, aged 50 years and older, living with HIV/AIDS and substance use in a large northeastern urban city. The fundamental research question underpinning this study's scope was: What are the socio-risk behaviors, specific treatment preferences, and daily lived experiences of adults aged 50 years and older, living with HIV/AIDS and substance use in a large northeastern urban city? The conceptual framework used to ground this qualitative study was Engel's biopsychological model. The purposeful sampling method was used to select six older adults living with HIV/AIDS and substance use in a large northeastern urban city based on this study's inclusion criteria. Data collection methods included in-depth

and open-ended telephone interviews. Themes were generated using thematic examination approaches, which involve using a standard multi-step process to analyze data, create codes, and develop themes from the participants' interviews.

Notably, this study's significant contribution to the existing literature on HIV/AIDS and substance use was its attempt to identify the socio-risk, specific treatment preferences, and daily lived experiences of older adults aged 50 years and older living in a large northeastern urban city. This study's analysis and results confirmed that engagement in substance use and risky sex are socio-risk behaviors that contribute to HIV/AIDS exposure and transmission. Second, that there is a significant need for future action research studies to look at ways that health care providers working in the medical, social, psychological, and behavioral health fields utilize integrated behavioral healthcare in primary care to address the healthcare and treatment needs for people living with HIV/AIDS and substance use. Third, aging with HIV infection and neuropsychiatric conditions, including HIV Escape, presents distinct challenges with other comorbidity diseases among older adults living with long-term HIV infection and substance use. Fourthly, my data analysis and findings revealed that most of the study's participants experienced fractures in relationships because of disclosing their HIV/AIDS status and substance use history, contrary to them reporting having experienced positive relationships with people they trust. Fifthly, my data analysis and findings uncovered that stigma and ageism are significant barriers that impact healthcare, social support networks, healthcare treatment services, and the overall life quality for people living with HIV/AIDS and substance use. Lastly, my study revealed that having a sense of coherence

and community resources is essential to addressing the needs of older adults living with HIV/AIDS and substance use.

Furthermore, this study will support and promote social changes in professional practice by providing social, behavioral, and health care providers with a more in-depth understanding of the psychological factors, social circumstances, and health consequences impacting older adults that stems from the syndemic associations of HIV/AIDS disease and substance use. As the primary instrument/researcher of this current study, I hope that researchers and scientists within the medical, social, and behavioral healthcare field are encouraged and inspired to replicate this study analysis and findings on a grander scale within the United States. Especially in different northeastern areas. Since their investigations might help create correlations between older adults/general adult population groups and the information will be valuable in actualizing the social and underlying changes that will enhance the overall quality of life and care for people living with HIV/AIDS and substance use. In such a way that no matter what the results of any of these investigations are (i.e., qualitative, quantitative, or mix-methods), they will be pivotal in helping others to comprehend the biopsychosocial factors adding to the antagonistic effect of HIV/AIDS and substance use among older adults and general adult populations.

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## Appendix: Interview Protocol

**Title of Study:** HIV/AIDS and Substance Use among Older Adults

**Date:** \_\_\_\_\_

**Time:** \_\_\_\_\_

**Interviewer:** Jamerlia Wyatt

**Interviewee Pseudonym:** \_\_\_\_\_

**Interview Questions**

1. Describe your daily experiences living with substance use and HIV/AIDS since diagnosis?
2. Describe the effects that HIV/AIDS and substance use has had on your relationship with healthcare providers, family dynamics, and other social support systems?
3. Describe your experiences with receiving quality health care and treatment services from your healthcare providers?
4. Describe your understanding of the available substance use and HIV/AIDS resources, services, and support systems in your community/or neighborhood?
5. What is your insurance status and ability to pay for healthcare and treatment services financially?
6. Describe your daily experiences with managing the combination of HIV/AIDS, substance use, and other comorbidity disorders?
7. What are your specific treatment preferences for treating HIV/AIDS, substance use, and other comorbidity disorders?
8. Describe your awareness of social risk behaviors and health complications associated with substance abuse, HIV/AIDS, and other comorbidity disorders while aging?
9. Describe your relationship with healthcare providers, family, and other social support systems?
10. Describe your overall satisfaction and trust in healthcare providers, health care, and treatment services?
11. Describe your overall quality of life while aging with HIV/AIDS and substance use?

Reminders: Thank all participants for their time and participation in the study.

Assure participants of confidentiality/privacy.

Review follow-ups with all participants.