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Missed Medical Appointments and the Effect on Patient Care for African Americans Living with HIV in Alabama

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Walden University

College of Management & Human Potential

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Perpetua Nazon

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Walden University

2023

Abstract

Missed Medical Appointments and the Effect on Patient Care for
African Americans Living with HIV in Alabama

Doctor of Healthcare Administration

by

Perpetua Nazon

MS, Purdue University, 2014

BS, Montclair State University, 2006

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Healthcare Administration

Walden University

November 2023

Abstract

This quantitative correlational study examined the relationship between the independent variable of missed medical appointments and the dependent variables of race and gender for African American patients living with HIV/AIDS. Previous studies described the major issue that occurs with HIV patients is an increase of missed medical appointments, causing a panic for hospital administrators, who try to implement methods to reduce the rates of missed appointments. The study sample from the Center for AIDS Research (CFAR) Network of Integrated Clinical Systems (CNICS) database covered a total population of 14,521 African American males and females living with HIV in Alabama. Pearson's method conducted a regression analysis to test the study hypotheses and address the research questions. The new cases of HIV diagnoses by race and ethnicity showed that African Americans are most effected by disease. The study's findings provide health care professionals with ways to improve social care policies such as availability of transportation services and social healthcare services targeting long-term health conditions in African American HIV/AIDS patients. The results of the study indicated that race and gender played a significant role in the number of missed medical appointments for African Americans, causing a rise in the deaths of those with HIV/AIDS in Alabama. This study contributes to positive social change through an emphasis on improving the care provided to HIV patients and the challenges causing individuals in this population to miss their appointments.

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Dedication

I first and foremost dedicate this capstone paper to my God, the rock to my faith and determination who has motivated me in times of trials and tribulations. I also dedicate this work to my inspiration, my baby girl, my princess Aryanah Jocelyne Nazon, who has inspired me to keep on pushing through this tedious journey. To my parents, who are my backbone, Jocelyne and Jean Michel Renold Nazon, Sr., thank you for your prayers, talks of wisdom, and encouragement. To my brother, my motivator Jean Michel Nazon, Jr., thank you for everything. To my friends and family, who encouraged, checked on me from time to time, and motivated me, this is for you. Thank You All!

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Once again, I would like to thank God, for His strength and knowledge. I would like to acknowledge my daughter, bringing you into this world has motivated me to strive for the best and further my education (this one is for you, Baby girl). To my parents and my brother, you have supported me in every inch of the way, believing in me to aim high and reach the skies. To my committee, thank you very much for your dedication, valuable guidance, and assistance in completing the much-involving journey. Your effort is highly appreciated.

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Section 1: Foundation of the Study and Literature Review

Introduction

HIV and AIDS remain a significant issue for many people in the United States and other countries around the world (Fauci et al., 2019; Katz & Jha, 2019). There has been important progress in the prevention and treatment of HIV following the development of antiretroviral drugs. Data from the Center for Disease Control and Prevention (CDC) estimated that some 1.2 million people in the United States had HIV in 2018. Out of these individuals, 14% did not know they had HIV (CDC, 2018). Also, in 2018, gay, bisexual, and other men who had sex with men accounted 69% of all new HIV cases. Heterosexuals accounted 24% of the new cases in the United States alone (Fauci et al., 2019; Katz & Jha, 2019). In addition, the new cases of HIV diagnoses by race and ethnicity showed that African Americans are most affected by disease. In 2018, African American adults and adolescents accounted 42% of all new cases and Hispanics accounted 27% of all new cases of HIV infection (Freeman et al., 2020). Also, while many prevention efforts have helped to reduce the number of new cases of HIV among African Americans since 2013, the progress has not been uniformed across the African American community (Freeman et al., 2020). It is essential to address the effects of HIV issues within a certain population which seems to affect an entire community.

A major issue that occurs with HIV patients is an increase in missed medical appointments, causing an uproar for hospital administrators, who are now trying to implement methods to reduce the rates of missed appointments. Tackling this issue will help improve office efficiency, patient health, and income. Examining the main reasons

that some patients miss appointments will help to develop measures to reduce their rates of missed medical appointments (Adams et al., 2020).

Freeman et al. (2020) reported that despite the advancement and benefits of medical care for HIV treatment for individuals living with HIV to prevent the spread of the virus, that has infected individuals in the United States are out of care with their treatment (CDC, 2018; Colasanti, et al., 2017). Other studies have been conducted to examine issues related to HIV diagnosis and the characteristics of health care systems and treatment of HIV among individual groups. The results of this study may contribute information to health care administrators about improving healthcare deliveries and strategies that encourage appointment compliance for African American patients living with HIV. Other benefits of reduced no-show rates include improved patient-provider relationships and improved quality of care.

Background

HIV-1 originated in southern Cameroon in monkeys and was known as simian immunodeficiency virus (SIV). HIV was first reported in the United States in the 1980s after doctors noticed clusters of Kaposi's sarcoma and pneumocystis pneumonia in homosexual men in Los Angeles, New York City, and San Francisco in 1980 (Lazzarini et al., 2013). To help prevent additional spread of HIV, the United States began preventing individuals from countries with high numbers of HIV cases from entering the United States. HIV is a sexually transmitted infection, which spreads by contact with or transfer of blood, pre-ejaculate, semen, and vaginal fluids; infecting vital cells in the

human immune system, such as helper T cells (specifically CD4⁺ T cells), macrophages, and dendritic cells (Katz & Jha, 2019).

As noted by Padamsee (2020), on October 30, 2009, President Barack Obama reauthorized the Ryan White HIV/AIDS Bill, which expanded care and treatment through federal funding to nearly half a million. On January 4, 2010, the United States Department of Health and Human Services and CDC removed HIV infection from the list of "communicable diseases of public health significance," due to its not being spread by casual contact, air, food or water. These institutions also removed HIV status as a factor to be considered in the granting of travel visas, thus removing HIV status from the list of diseases that could prevent people who were not U.S. citizens from entering the country (Padamsee, 2020).

As noted by Fauci et al. (2019), in 1986 the United States government provided funding to address the global HIV epidemic. The FY 2019 budget for HIV included an estimate of \$6.8 billion for the global epidemic, which assisted in offering a slight increase in funding for world-wide HIV activities. Federal funding for HIV has significantly increased over the years, rising from 100,000 in 1982 to \$34.8 billion in FY 2019 (Fauci et al., 2019). The increase is due to expenses in mandatory domestic care and treatment programs (largely through Medicaid and Medicare).

Problem Statement

In this study, I investigated the relationship between rates of missed medical appointments among African Americans living with HIV/AIDS in Alabama which may lead to further health complications. Since 2023, over two million individuals have

become infected with HIV in the United States. Many individuals have already succumbed to the infection (Katz & Jha, 2019).

Few studies have addressed adherence to HIV medical appointments and examined the impact on the outcomes of the patient. Some studies focus on the complete suppression of the viral load and reduced transmission rates in healthcare is critical to patient health outcomes. Researchers have recently looked at health-related outcomes due to missed medical visits by HIV patients. Mugavero et al (2014) conducted a study in which they examined the dose-response relationship between missed medical visits and mortality rates. The results of this study showed that mortality rates were less for HIV-positive individuals who adhered to their medical appointment and treatment. Nijhawan et al. (2017) reported that there is an association between missed medical appointments and poor health outcomes such as chronic diseases. The Department of Health and Human Services (2015) also highlighted missed appointments as an indicator in monitoring an HIV individual's healthcare. In 2015, the Department of Health and Human Services released an update to the national HIV/AIDS strategy on improving treatment with a focus on widespread testing of individuals in the United States and how it relates to healthcare to improve treatment adherence for persons living with HIV. Data from the updated HIV/AIDS strategy showed that many individuals living with HIV who do not link themselves to healthcare and are not regularly taking part in health care are less likely to adhere to their highly active antiretroviral therapy (HART) education, which can lead to poor CD4 counts and higher viral load (Adams et al., 2020; Zinski et al., 2015).

Research on missed medical appointments has been largely focused on the population of men having sex with men (MSM), but limited research has been conducted on African Americans and their ethnic needs. Studies are needed to examine factors that impact HIV infected populations and the relationship between missed medical appointments along with the longevity and occurrence of opportunistic diseases in African American patients living with HIV/AIDS. According to Adams et al. (2020), missed appointments are also missed opportunities for HIV patients to observe the stages of treatment plans. Missed appointments have had a strong impact on the facilities revenue and decreases quality of care, and affects the patient-physician relationship, leading to unsatisfactory patient care (Adams et al, 2020).

Nijhawan et al. (2017) described factors leading to missed appointments may be due to low income, lack of insurance, lack of transportation or lack access to public transportation. Hospital administrators aim to work with patients by trying to schedule appointments to coincide with public transportation run times or implementing teleconferencing due to transportation difficulties. According to Adams et al. (2020) another issue that leads to missed appointments is the excessive amount of time patients wait in the lobby and consultation rooms before they are examined by a health provider.

Purpose of the Study

The purpose of this quantitative correlational study was to examine the relationship between the independent variable of missed medical appointments and the dependent variables of race and gender for African American patients living with HIV/AIDS. I assessed a secondary data set involving specific information describing

barriers that disrupt continuity of care from HIV outpatient specialty clinics and outpatient medical clinics. I obtained the dataset from the Center for AIDS Research (CFAR) network of integrated systems (CNICS) in Alabama, in the United States. The CNICS database is the first electronic medical records-based network that integrates clinical data from a diverse population of those who are HIV infected and in HAART. The purpose of this database was to better define and understand the relationship between patient, treatment factors, and long-term clinical outcomes (CNICS, 20021). The key variable for this study focused on factors linked to missed medical appointments along with a focus on gender and race. The outcome of this study may be of interest to hospital administrators to have a better insight to improve patient care. The findings of the study may also be used to overcome challenges, that are causing individuals in this population to miss their appointments.

Research Questions and Hypotheses

RQ1: Is there a relationship between gender and missed medical appointments for African Americans living with HIV in Alabama?

Null Hypothesis *H₀*: There is no significant statistical relationship between gender and missed medical appointments for African Americans living with HIV in Alabama.

Alternative Hypothesis *H_a*: There is significant statistical relationship between gender and missed medical appointments for African Americans living with HIV in Alabama.

RQ2: Is there a relationship between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama?

Null Hypothesis *H₀₁*: There is no statistically significant relationship between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama.

Alternative hypothesis *H_{a1}*: There is a statistically significant relationship between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama.

Theoretical Foundation of the Study

The theoretical framework for this study is Roger's theory of diffusion of innovations theory. This theory is used to define the how, why, and at what rate new ideas and changes can be implemented in a system. Roger's theory has guided this study with works that provided innovated ideas, tackling patient care. Roger (2003) describes the four main elements as a form to design new ideas: a) the innovation itself, b) communication channels, c) time, and d) a social system.

Theory innovation is not only a new concept within the healthcare profession, but rather a format to allow healthcare professionals to engage in innovative activities daily. Most actions are motivated by the need to improve care outcomes and reduce costs to the health system. Health care professionals may find it beneficial to apply this theory to provide creative and innovative solutions for recent and future global health challenges such as aging populations, HIV/AIDS, tuberculosis, and malaria as well as an increase in

non-communicable illness. Innovations such as designing new methods also aims to control poverty, inadequate resources, and workforce shortages. Community leaders, healthcare professionals and stakeholders would benefit by teaming up for innovative solutions has been essential within healthcare environments globally to provide equitable, safe, and effective health services (Adams et al., 2020). Decision-makers such as town councils and community leader are concerned with the long-term strategy that would see every hospital administrator engaged to ensure quality care delivery.

Nature of the Study

A quantitative correlational nonexperimental design was used to examine the relationship between missed medical appointments and their effect on patient care for African Americans living with HIV. Quantitative research addresses a specific research question and involves the collection and analysis of numerical data to answer a research question in order, to generalize findings to a larger population (Farrelly, 2013). According to Creswell (2017), quantitative studies use statistical analysis techniques to reconstruct complex problems into certain numbers and variables. Quantitative studies contain a sample representative of the larger population in which the subjectivity of the researcher is reduced (Landrum & Garza, 2015). Generally, quantitative studies are conducted by collecting data, measurements, and models, and then determining the relationships or comparisons between the study variables represented by these data through statistical tests (Landrum & Garza, 2015). This quantitative study operationally defined the variables, using secondary data from the CNICS website to test the research hypotheses.

A correlational design was appropriate for this study because it allowed the researcher to examine the relationships between missed medical appointments and patient care for African Americans living with HIV by closely observing if factors such as race, gender and delivery of care play a role in the cause of missed appointments. Correlational research designs are used to assess to what extent, if any, relationships exist between two or more variables, in addition to determining the significance of these relationships. Through correlational design, the researcher will be able to investigate the degree of many relationships to ascertain the extent to which the predictor variables predict the criterion variable ((Leedy & Ormrod, 2013).

A population of African American males and females from a secondary database the CNICS website will be considered for the research. The population is highlighted in the database and involved in the category of people living with HIV and receiving treatment at different medical healthcare facilities in Alabama. Data analysis was analyzed using SPSS v.25 software. In alignment with the research design, correlation and regression analysis was conducted to test the study hypotheses and address the research questions (Creswell, 2017).

Literature Search Strategy and Literature Review

The literature was searched using the Walden University online library, and the CDC website, along with online databases and several search engines: Google Scholar, (ERIC), Global Health, Intent Connect, JSTOR, EBSCOhost Online Research Databases, JAMA, and Journal Seek. The following key search terms and combination of search terms were entered into the online database: patient care, missed appointment, lab results,

delivery of quality patient care, HIV, AIDS, viral load, virus, quality of care, African American and missed appointments, treatments, HIV infections, medical care high risk, MSM, medical care, healthcare, and risk factors. Most of the literature includes items published between 2014 and 2022. Recent findings were crucial to keeping the study as up-to-date as possible; however, it is worth noting that studies on HIV and care, as well as missed appointments for African Americans, are limited and resulted in using older sources. Therefore, older studies such as those related to the framework for this study, will be included in the references.

Human Immunodeficiency Virus (HIV) Race and Gender

In reviewing various research studies on HIV, studies have provided individuals with a better understanding of the virus and possibilities leading to missed medical appointments. According to studies done by Lazzarini et al. (2013) of the 1.1 million people over the age of 13 living with an HIV infection, 14.0% were unaware of their infection. Along with gay and bisexual men, African Americans, and Latinos remain disproportionately affected by HIV/AIDS in the U.S. The overall death rate among persons diagnosed with HIV/AIDS in New York City decreased by 62.0% from 2001 to 2012. With the introduction of three-drug anti-HIV treatments ("cocktails") that included antiretroviral drugs, progress occurred, with deaths rapidly reducing by more than half. AIDS deaths have continued to decline, but much more slowly, and not as completely in Black Americans as in other population segments (Lazzarini et al., 2013).

In a 2008 study, the Center for Disease Control found that, of the study participants who were men who had sex with men (MSM), almost one in five (19.0%)

had HIV; among those who were infected, nearly half (44.0%) were unaware of their HIV status (Center for Disease Control, 2008). Research found that white MSM "represent a greater number of new HIV infections than any other population, followed closely by black MSM—who is one of the most disproportionately affected subgroups in the U.S." and that most new infections among white MSM occurred among those aged 30–39 followed closely by those aged 40–49, while most new infections among black MSM have occurred among young black MSM (Padamsee, 2020, pg. 25). Significantly, Nachegea et al. (2014) conducted a study regarding HIV treatment and medical care, finding ways to prevent the disease from spreading to others in the United States, especially those in southern states where the transmission is very high among minority communities. Pence et al. (2018) and his team conducted a research study that identified various scheduled appointments, measuring the amount of HIV patients were no shows, cancelations, or rescheduled.

HIV Care Continuum

The introduction of antiretroviral therapy (ART) was established in 1995 for persons living with HIV/AIDS. Since then, there have been great strides in HIV treatment care, which has led to a reduction in AIDS-related deaths (Pence et al., 2018). Woodward et al (2015) designed a risk prediction to assist with medical appointment attendance among HIV-infected persons with unsuppressed viremia to help with the improvement and effectiveness of current HIV therapies in the United States. HIV has evolved from an acute and terminal illness to a chronic disease that requires ongoing system management strategies to reduce depression, anxiety, fatigue, HIV-related symptoms, and adverse

effects of HIV medication (Fauci et al., 2019; Khurana et al., 2018). Intervention studies aimed at poverty reduction and increased access to education, health insurance, and support services may improve retention and, therefore, decrease mortality risk (Khurana et al., 2018). Nachega et al. (2014) outlined the following five stages the HIV care continuum model: ensuring that individuals are aware of their infection; linking individuals to care; retaining these individuals in care; prescribing antiretroviral therapy (ART) to control their infection; and attaining viral suppression. This inability to be consistently engaged in care can lead to poor adherence to HIV medication and can hurt a person's viral load.

A study by Batchelder et al. (2021) report 50% of persons diagnosed with HIV are distributed across the HIV care continuum, consistently cycling in and out of treatment. Also, researchers noted that 25% of people miss their medical appointments. Batchelder et al., (2021) found that patients who had missed less than 25% of their medical appointments were more likely to adhere to ART medications. This can result in fewer hospital visits, decreased viral loads, and increased CD4 count. Further, Nsubuga-Nyombi (2018) conducted a study of HIV mothers on missed appointments. The authors observed 128 HIV-positive mothers since March 2023. The results of the study indicated that 43% reported missing appointments in the past six months. These studies suggested engagement and retention in care attending medical appointments may be as crucial to viral suppression as adherence to ART.

Barriers to Retention in HIV Care

Dekker et al (2003) said barriers to health outcomes include lack of transportation, food, and clothing along with health literacy. Barriers also included depression/mental illness, feeling sick, and competing life activities (Nijhawan et al., 2017). Fleishman et al. (2012) examined patients not retained in care faced more barriers, particularly social and structural barriers, than those retained in care. Adults and adolescents diagnosed with HIV in Zimbabwe did not receive proper care due to missed appointments, which caused delay in receiving treatment along with therapy (ART) and were more likely to die while waiting for ART initiation (Shroufiet et al., 2015). The CDC (2015) reported that individuals living below the poverty line were twice as likely to be infected with HIV as those above the poverty line within the same community. Also, African American women face additional barriers to medical care. Researchers noted that out of the 88% of Women Living With HIV/AIDS (WLWHA), only 45% are engaged in medical care, and only 32.0% have achieved viral suppression (CDC, 2020). Viral suppression among African Americans are even lower as compared to White women (CDC, 2020). The viral load suppression rate for African American women was 21.0% and for Hispanic/Latina 26.0% (CDC, 2020). Any minorities face discrimination and disproportionately suffer from issues such as poverty, low health literacy, and the lack of access to high-quality HIV health care. The lack of health care often results in delayed entry into medical care, and which leads to poor medical outcomes (Bulsara et al., 2018). There is a community need to understand the conditions that create these racial and gender disparities among People Living With HIV/AIDS (PLWHA) is important to

tailor intervention efforts to better understand and serve this vulnerable population of people living with HIV ((Bulsara et al., 2018).

Missed Medical Appointments in HIV Positive Patients

The term missed medical appointment is used in this study to refer to patients who failed to keep or cancel scheduled medical appointments leading to missed treatment opportunity (Ullah et al. 2018). According to Pence et al. (2018) HIV patients who missed their appointments since August 2022 were more likely to not show up at appointments in the near future, that may assist providers in taking measures to support patients' appearance at future appointments. When a patient with HIV misses their appointment, they are most likely to experience negative health outcomes, and studies have shown that about 61.0% of new HIV cases are transmitted from HIV-positive individuals who are not currently engaged in medical care (Pence et al., 2018). Ullah et al (2018) conducted a research to analyze an association to show missed appointments linkage to higher rates of hospitalization and an increase in mortality rates for people living with HIV, and it also shows a lack of quality patient care.

HIV In the South

Diagnosed HIV cases in the south have steadily increased among heterosexual African American women and African American men who have sex with men (Ludema, et al., 2018). HIV cases continue to rise in the south. Study findings reported that southern states have the highest rates of new HIV cases which is the highest percentage of people living with the disease and the lowest amount of survival for those who are HIV positive (Reif et al., 2017). Also, in 2015, 52.0% of all new HIV cases occurred in

southern states, while 37% of the United States population live in the south (Reif et al., 2017). In addition, the statistics showed that African American men who have sex with men have a disproportionate burden of HIV disease accounting for 59% of all new HIV cases. African American women also face the burden, 69% of all HIV new cases in the south (Reif et al., 2017). Another research study collected data from the National Vital Statistics System and the National HIV/AIDS reporting systems (Fauchi et al., 2019) implicating those southern states have a higher rate of mortalities from HIV than other states in the United States (Fauchi et al., 2019). Statistics from the CDC (2021) show that many minorities' groups in the United States have significantly higher rates of HIV/AIDS rates than their White counterparts (CDC,2021). Trends in statistics over the past seven years showed that the diagnosed HIV cases in the south have steadily increased among heterosexual African American women and African American men who have sex with men (Ludema, et al., 2018).

A study by Ludema, et al.2018) noted that the southern region of the United States as the core of HIV/AIDS infections cases increased faster than other regions within the United States. Therefore, there is a greater need for healthcare professionals to understand why the HIV disease is more prevalent in southern areas of the country. This means that the local, state, and federal governments need to provide more education and behavior-modified programs that can effectively impact behavior change that could decrease the HIV disease infection rates in southern states (Ludema, et al.2018).

Literature Review Summary

The purpose of this study is to conduct a quantitative correlational investigation to determine factors of missed medical appointments and the effects on patient care for African American patients living with HIV/AIDS. A secondary data set involving specific information describing barriers that disrupt continuity of care from HIV outpatient specialty clinics and outpatient medical clinics will be accessed. The population for the study will be HIV infected African American males and females living in Alabama. I used a secondary data set from the CNICS website. This database is the first electronic medical records-based network poised to integrate clinical data from a diverse population to better define the relationship between the patient, treatment factors, and long-term clinical outcomes (CNICS, 2021).

Recent findings were crucial to keeping the study as up to date as possible. However, it is worth noting that studies on HIV, care, and missed appointments for African Americans are limited, thus resulting in older sources. Therefore, during this study, older studies, involving Roger's DOI theory were included in references. Adherence to care, engagement, and retention in taking medicine and medical care are critical components for individuals with HIV living a long life. Researchers noted that there is limited research that examines how HIV medical appointment adherence affects patient outcomes (Pence et al., 2018). However, there are many barriers for a person living with HIV/AIDS (PLWHA) in the United States that can make accessing proper treatment and medical care more difficult.

Definitions

CD4 count: A CD4 count measures the number of CD4 lymphocytes or CD4 cells in a person's blood sample. CD4 cells are a type of white blood cell commonly known as T-cells. HIV attacks the CD4 cells and uses their machinery to multiply. Testing a patient's CD4 count is one way to detect HIV progression and can indicate the strength of a person's immune system (CDC, 2021).

Delivery of Care: Delivery of care for HIV patients focuses on providing individuals with a comprehensive package of HIV testing, prevention, treatment and care along with their partners, and families and caregivers. HIV delivery care should provide people-centered care that gear on the health needs of patients, along with supporting individuals and their families.

Diffusion: Diffusion impairment in the organs of the body, such as the lungs, is associated with HIV infection or attack. An HIV-related drop in diffusing capacity happens independently of other factors.

HIV/AIDS: HIV/AIDS has become one of the world's leading infectious causes of death and affects remote, under-resourced, poor areas, but improvements are established to maintain one's health with the use of antiretroviral drugs. Since 2001, effective resources have been guaranteed to treat HIV-infected patients in developing countries, but concerns have been expressed that many countries lack the infrastructure to support the complex treatment regimen for this chronic disease (Georges, 2011).

Hospital administrators: Peoples whose jobs consist of overseeing various operations within a hospital. They hold various positions throughout the larger field of

healthcare administration, there are a variety of different positions, each with specific job duties.

Men who have sex with men (MSM): Men who have sex with men (MSM are individuals who engage in sexual activities with members of the same sex, and they identify as either gay, homosexual, bisexual, pansexual or heterosexual. According to Remis (2014), in 2007, the largest estimated proportion of HIV/AIDS diagnoses among adults and adolescents in the U.S. were (MSM). Studies have determined that about one in five MSM are HIV positive, but unfortunately half of those men do not know that they are positive. HIV prevalence in the MSM population of the U.S. can vary based on ethnicity with estimates of 46% of black MSM have HIV, 21% for white MSM and 17% for Hispanic MSM (Woodward et al., 2015).

Missed Medical Appointments: Also known as no-shows, these make it difficult for providers to identify HIV patients at risk of becoming severely ill. Missing medical visits can result in negative health outcomes for patients with HIV. Providers are trying to offer different methods that will assist in decreasing the rate of missed medical appointments amongst various patients.

Assumptions

I used a secondary data set from CFAR and CNICS. It is assumed that the participants answered the questions truthfully and that the data were not tainted or corrupted by false information. It is also assumed that the data was collected ethically to prevent any harm to participants. Another assumption is that the instruments used to collect the data were accurate and reflect the role and objective of the study. I assumed

that the researchers from the CNICS website secured the participants who met criteria and were willing to take part in the study without being coerced to do so. The assumptions that are present in this study will be carefully considered during the data analysis and evaluation process.

Scope and Delimitations

Scope refers to the limitations that the researcher imposed on the study (Creswell, 2017), while delimitation is a factor that the researcher intentionally imposes to constrain the scope of the study to make it manageable (Creswell, 2017). The study's scope will only involve participants from a secondary data from the CNICS website. This database is the first electronic medical records-based network poised to integrate clinical data from a diverse population of HIV infected individuals in highly active antiretroviral therapy (HAART) to better define the relationship between the patient, treatment factors, and long-term clinical outcomes (CNICS, 2021). The expected outcome of this study may be of interest to hospital administrators who are working to change the outcomes of African Americans living with HIV to adhere to their medical care appointments. The study was delimited to only one secondary data set of HIV individuals who visited HIV outpatient specialty clinics and outpatient medical clinics associated with the CNICS website in Alabama, USA, thus, limiting the demographic sample. It is important to delimit the scope of a study to ensure that the study can be completed promptly (Creswell, 2017).

Significance of the Study

The results of this study may provide healthcare providers and health administrators associated with the medical care of African Americans living with HIV

more insight into the relationship between missed medical appointments. It will also allow them to have a better understanding on the effects on patient care for African Americans living with HIV in Alabama focusing on an association between gender and race. Also, the results of this study may inform healthcare administrators with strategies for providing more resources such as counseling and testing for African Americans to minimize the cause of missed appointments. Also, insight from this study could aid healthcare professionals as they develop strategies for advising African American populations about unhealthy coping strategies that can tempt an individual after their initial diagnosis. The success of innovation in healthcare is important for social change, along with improved service delivery in order to provide better patient care for African Americans living with HIV. The findings can also improve social care policies such as availability of transportation services and social healthcare services targeting long-term health conditions in African American HIV/AIDS patients. A focus on social change can help to strengthen the healthcare system's continuous ability to appeal to talented healthcare professionals who will be trained to address medical issues by building a sizeable clientele for organizations as they evolve to meet future needs (Bvochora et al. 2019).

Summary and Conclusions

The purpose of this quantitative correlational study was to examine the relationship between the independent variable of missed medical appointments and the dependent variables of race and gender for African American patients living with HIV/AIDS.

The population for the study were African American males and females living with HIV in Alabama. I used a secondary data set from the CNICS website. Section 2 will provide a discussion of the methodology for this research project.

Section 2: Research Design and Data Collection

Introduction

The purpose of this quantitative correlational study was to examine the relationship between missed medical appointments and race and gender for African American patients living with HIV/AIDS. I used a secondary data set from the CNICS website. This study may be of interest to hospital administrators to help guide African Americans living with HIV to adhere to their medical care appointments. This section discussed the research design and rationale, methodology, and threats to validity, and provides a summary.

Research Design and Rationale

The quantitative research addressed a specific research question that involved the collection and analysis of numerical data to answer a research question, and to generalize findings for a larger population (Farrelly, 2013). According to Creswell (2017) quantitative studies shows statistical analysis techniques to reconstruct complex problems into certain numbers and variables. Quantitative studies provide a sample frame representative of the larger population, and the subjectivity of the researcher is reduced (Landrum & Garza, 2015). Quantitative studies are generally conducted by collecting data, measurements, and models, and then determining the relationships or comparisons between the study variables represented by these data through statistical tests (Landrum & Garza, 2015). This quantitative study involved using secondary data from a database to test the research hypotheses.

A correlational design was appropriate for this study, allowing for examination of the impact of missed medical appointments and its effects on patient care in African American patients living with HIV/AIDS, controlling gender, race, and delivery of care. Correlational research designs were used to assess to what extent, if any, relationships exist between two or more variables; in addition to determining the significance of these relationships, the correlational design allowed a researcher to investigate these relationships in order to determine the degree to which the predictor variables predict the criterion variable (Leedy & Ormrod, 2013).

Methodology

Population

The participants for this research: a total population of 7646 African American males and females living with HIV in Alabama are currently in the CNICS system. Information was extracted from the secondary database. Data analysis was analyzed using SPSS v.25 software. Correlation and regression analyses were conducted to test the study hypotheses and address the research questions.

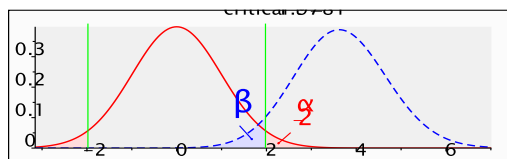
Power Analysis

In quantitative studies, a power analysis was used to determine the required sample size for a study (Creswell, 2017). There are four factors to consider when conducting a power analysis. These include (a) the effect size, (b) the level of significance, (c) the power of the test, and (d) the statistical technique (Faul et al., 2013, p. 25). Effect size refers to the degree of relationship between the independent and dependent variables (Creswell, 2017). There are three categories of effect size, which

include small, medium, and large; medium effect size is usually used to strike a balance between being too strict (small) and too lenient (large) (Creswell, 2017). The intended statistical techniques for this study were correlation point biserial model. Using an alpha level of 0.05, a medium effect size, 95% power of the test, and correlation analysis, the T test = 1.98. Using linear regression analysis with two predictor variables results in a minimum sample of 179. Therefore, the minimum sample size for the study was 179, using the G^* power to calculate the minimum sample size. I used the nonprobability method of study. All participants were 18 years of age or older, must have been diagnosed with HIV, were currently receiving medical care from an HIV clinic or a doctor in Alabama, and were African American male and female residing in Alabama.

Figure 1

Power Analysis Results



Procedures for Data Collection

I obtained permission from the relevant authority. In this case, permission was obtained from the Walden University Institutional Review Board (IRB) the research center that holds the secondary data set. The research center removed all identifying information from the data set before emailing it to me. I did not get permission from

participants because the data is a secondary data set that is used for research. Also, I did not need to obtain consent from the participants in the data set. The patients will be guided through the research questions. The Center for AIDS Research (CFAR) network of integrated systems (CNICS) website shows a total of 7646 African American males and females who are living with HIV and are receiving treatment at different medical healthcare facilities in Alabama.

Operationalization of Variables

The following information in Table 1 provides the operationalization of the variables and how they were measured. This information is important to itemize to insure consistency throughout the data analysis process.

Table 1

Operationalizations of Independent and Dependent Variables

Independent or Dependent	Type of Variable	Variable Measurement
Independent	Missed Medical Appts	Pearson's method & regression analysis
Dependent	Race	Pearson's method & regression analysis
Dependent	Gender	Pearson's method & regression analysis

Data Analysis Plan

This study responded to two research questions:

RQ1: Is there a significant statistical relationship between gender and missed medical appointments for African Americans living with HIV in Alabama?

H01: There is no significant statistical relationship between gender and missed medical appointments for African Americans living with HIV in Alabama.

Ha1: There is significant statistical relationship between gender and missed medical appointments for African Americans living with HIV in Alabama.

RQ2: Is there a statistically significant relationship between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama?

H02: There is no statistically significant relationship between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama.

Ha2: There is a statistically significant relationship between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama.

Data from the CNICS website will be downloaded in spreadsheet form and then transferred to an SPSS data file. For the described sample study, I summarized frequencies of cases in various categories based on those presented in the secondary data set. To test the data set, I used Pearson's method to conduct a correlation and regression analysis to test the study hypotheses and address the research questions. The correlation analysis showed if there is a relationship between missed medical appointments along with race and gender.

This database is the first electronic medical records-based network poised to integrate clinical data from a diverse population of HIV infected individuals in the HAART era to better define the relationship between patient, treatment factors, and long-term clinical outcomes (CNICS, 2021). The expected outcome of this study will be of

interest to policymakers working to change the outcomes of African Americans living with HIV to adhere to their medical care appointments.

Threats to Validity

Flannelly and Jankowski (2018), describe internal validity as determining whether an experimental treatment/condition changes the dynamics of the study and whether there is adequate information to support the claim, while external validity generalizes the treatment/condition outcomes. Possible threats may present physical, economic, or cultural issues that the country faces within the healthcare system. Physical threats are associated with the supply and availability of health services, along with the distance from health facilities to an individual's home. Economic threats deal with the country's expense and an individual's household income. Barriers based on cultural differences relate to the community's views on whether they will be open to receiving certain health services.

External threats to validity in a research study, affect the degree to which the results can be generalized to other populations and settings (Creswell, 2017). The findings of the study will be applied in a broader context. The aim is to produce generalized knowledge about the real world. HIV is a serious illness that should be contained using any possible strategy. Internal validity relates to the study's research design. A possible threat to validity was that the participants will come from secondary data from the CNICS website.

Another possible source of threat to validity was the reliability and validity of measures for a particular sample or population. The database was selected to be the most

appropriate because it is used by several universities and research centers in the United States to research persons with HIV at treatment clinics. It is assumed that the participants have sufficient understanding and reading ability to complete the instruments in the database, that the participants answered the questions truthfully, and that the data will not be tainted or corrupted. It is also assumed that the data were collected in an ethical manner to avoid causing any harm to participants. The instruments used in data collection are accurate. It is assumed that the researchers from CNICS have secured participants who meet the criteria and who would be willing to participate in this study. The assumptions that are present in this study will be carefully considered during the data analysis.

Ethical Procedures

According to Creswell (2017), participants should be advised of all ways the information they provide is kept, analyzed, and published. The researcher followed all procedures as outlined by Walden University IRB for conducting research with human subjects. No identifying information appeared on the data to protect the privacy of the participants in the secondary database. Participants' personal information was kept confidential and pseudo-coded to ensure anonymity. Data was stored in a locked area for five years and then destroyed. Additionally, all information published within the dissertation was presented in such a way that the identity of the participants were not revealed. Researchers have a mandate to communicate their research, to collaborate with other stakeholders, and when necessary, to exploit knowledge for the benefit of other stakeholders. Over the course of the research, honesty is critical. Honesty helps keep the

research ethical, since it offers the basis of moral behavior. Truthfulness and confidentiality are also necessary.

Summary

The quantitative correlational investigation determined factors of missed medical appointments and the effects on patient care for African American patients living with HIV/AIDS. I used a secondary data set from the CNICS websites. This database is the first electronic medical records-based network. The expected outcome of this study may be of interest to hospital administrators working to change outcomes for African Americans living with HIV so that they will adhere to their medical care appointments.

Section 2 of the study presented the quantitative processes describing research design and rationale, methodology, the sampling and sampling procedures used to collect data, the instrumentation and operationalization of constructs, and the data analysis plan. This section ends with an explanation describing the threats to internal and external validity, along with ethical concerns and procedures. Section 3 will focus on the study results and findings.

Section 3: Presentation of Results and Findings

Introduction

In this chapter, I presented the data and the results of the analysis. Descriptive statistics included means, frequencies, and percentages. Chapter 3 of this paper looks at the results and findings from the data analysis conducted on those living with AIDS in Alabama. This quantitative correlational study aimed to evaluate the association between the independent variable for various missed medical appointments and the different variables of race and gender for the different African American patients who were also living with HIV/AIDS. As discussed earlier, the paper examined these rates that led to health complications.

The hypotheses of the study were as follows:

RQ1: Is there a relationship between gender and missed medical appointments for African Americans infected with Human Immunodeficiency Virus in Alabama?

Null Hypothesis H_0 1: There is no significant statistical relationship between gender and missed medical appointments for African Americans who had been infected with Human Immunodeficiency Virus in Alabama.

Alternative Hypothesis H_a 1: A significant statistical relationship exists between gender and missed medical appointments for African Americans living with HIV in Alabama. Who had been infected with Human Immunodeficiency Virus in Alabama?

RQ2: Is there a relationship between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans infected with Human Immunodeficiency Virus in Alabama?

Null Hypothesis Ho1: No statistically significant relationship exists between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama.

Alternative hypothesis Ha1: A statistically significant association exists between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama.

Data Collection of Secondary Data Set

The data frame for data collection was accessed from a secondary data set involving specific information describing barriers that disrupt the continuity of care from HIV outpatient specialty clinics and outpatient medical clinics. The data was obtained from the CNICS website in Alabama, in the United States (Emory, 2023 pr. 1). The CNICS database is the first electronic medical records-based network that integrates clinical data from a diverse population of those who are HIV infected and in HAART. This data contained specific data on the missed appointment, gender, and race. The discrepancies regarding the use of secondary data were that others were located in the central case. The discrepancies in the study data source also came from the point where one had to request the data for analysis.

Descriptive and demographic characteristics shows an estimate sample of more males than females were used to conduct the study. The males formed 75.0% of the sample, and the females only formed 25.0%. The sample value consisted of 100 members from the total population.

Table 2**Gender**

		Numbers	%	Valid %	Cumulative %
Valid	Male	75	75	75	75
	Female	25	25	25	100
	Sum	100	100	100	

This sample was representative of the entire population as it involved being selected at random. The sample represented the larger group and accurately represented the characteristics of the entire population.

Results

This section displays the results of statistical tests evaluating the study's hypotheses. The regression model was used to test this correlation which showed that the significance value was 0.000, which was less than the alpha value of 0.05. This meant that the analysis was significant and thus showed that the value of the outcome was significant. Results indicated that most missed medical appointments were seen in the African American race, which was significant from the hypothesis analysis since the significance value was 0.00. The p-value of 0.000 was less than the alpha value of 0.05, indicating that the variable was significant. Results show high rates of African Americans with missed medical appointments. The correlation between race and missed medical appointments was also positive in the African American community. The correlation

between missed medical appointments and gender was 0.289 with a p-value of 0.002, indicating a positive correlation. This showed that gender significantly affected number of missed medical appointments in Alabama. The correlation between gender and missed medical appointments was also significant, as the p-value of 0.000 was less than the alpha value of 0.05. This indicated that gender also significantly impacted missed medical appointments. Male African Americans missed medical appointments more than females. Analysis showed that race affected amount of missed appointments compared to gender.

Results from analysis showed that there was a relationship between race, gender, and missed medical appointments among African Americans in Alabama. This led to an increase in the spread and deaths of these African Americans from HIV (Nsubuga-Nyombi et al., 2018). Due to African Americans missing their medical appointments, this led to complications in terms of type of care that was offered by medical practitioners. African Americans who missed these appointments suffered more to the point of death as a result of this.

Table 3

Descriptive Analysis (Elsevier, 2022) and (Yellapu, 2018.)

Statistics		Missed Medical		
		Race	Appointment	Gender
Number	Actual	100	100	100
	Missing	0	0	0

Table 1 shows the descriptive statistics for the paper. From the analysis, the sample picked from the total population consisted of 100 members for the race and gender and had the same number of 100, and missed medical appointments also had the same number of 100 respondents.

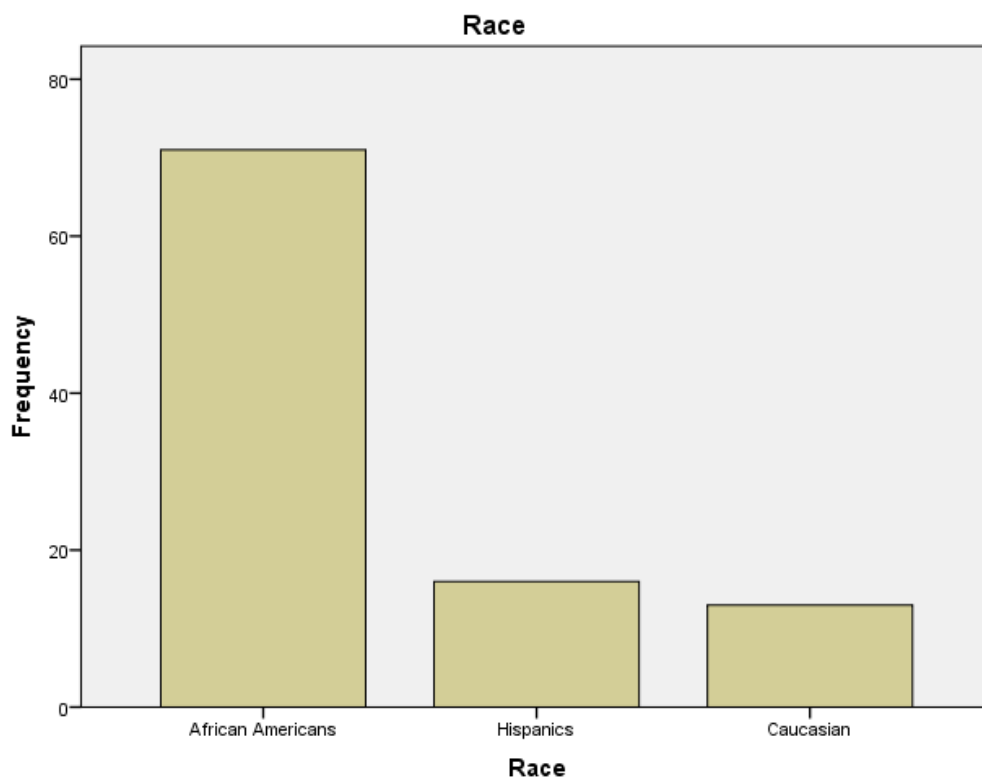
Table 4

Race

	Frequency	%	Valid %	Cumulative %
Actual African Americans	71	71	71	71
Hispanics	16	16	16	87
Caucasian	13	13	13	100
Sum	100	100	100	

Table 3: A table showing race value for the number or frequency of respondents in analysis.

From the table, the highest percentage, 71%, were African Americans, 16% were Hispanics, and only 13% were Caucasians. The analysis showed the percentage people that resided in Alabama have AIDS.

Figure 2

Graph 1: The graph shows the analysis of the race.

From the graph, since the longest bar was for African Americans, the value for Hispanics followed before being closely followed by Caucasians.

Table 5

Descriptive Analysis for Missed Medical Appointment

Missed Medical Appointment

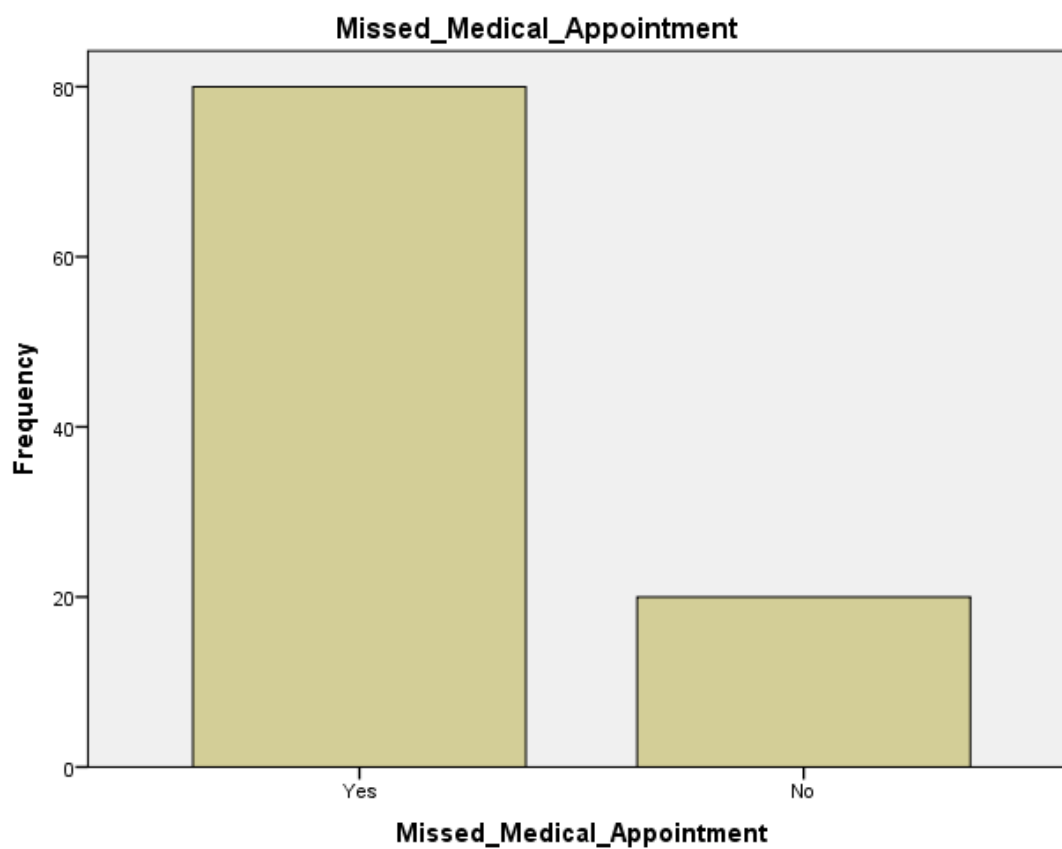
Frequency	%	Valid %	Cumulative %
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Actual	Yes	80	80	80	80
	No	20	20	20	100
	Sum	100	100	100	

Table 4: Table 3 shows the number of missed medical appointments by the respondents.

From the analysis, 80% of the respondents missed a medical appointment.

Figure 3



Graph 2: A graph showing the missed medical appointment.

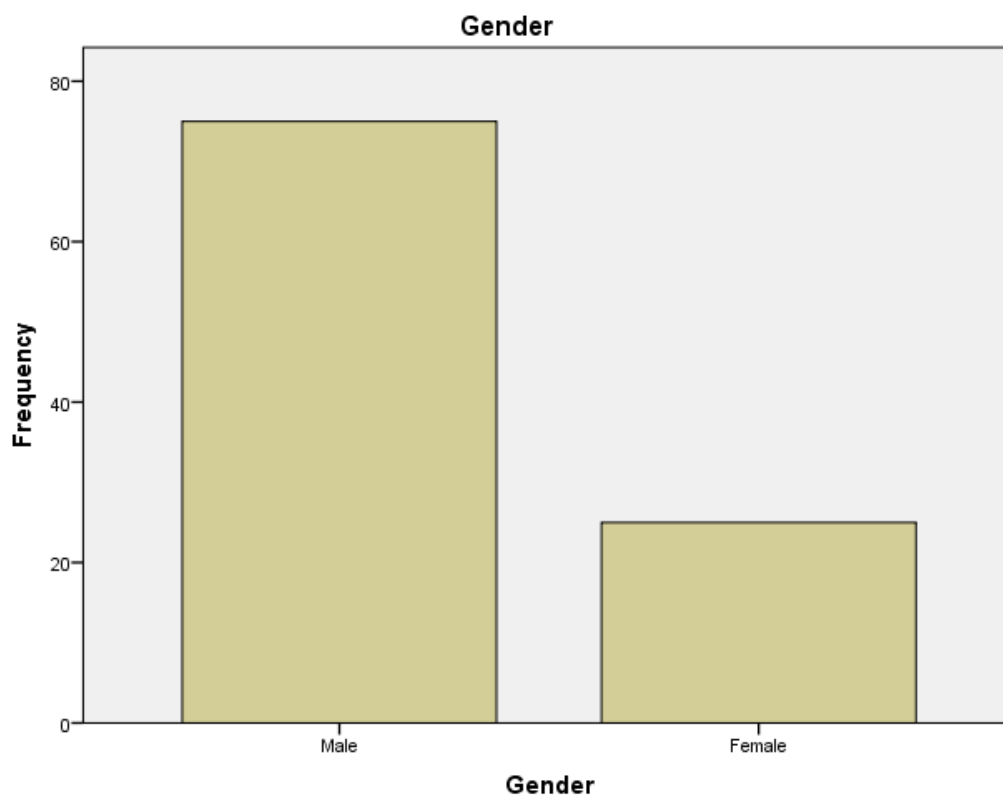
From the above graph, the number of missed medical appointments was more or higher, as represented by the longest Yes value than the No bar.

Table 6**Gender**

		Frequency	%	Valid %	Cumulative %
Actual	Male	75	75	75	75
	Female	25	25	25	100
	Sum	100	100	100	

Table

The table showed that 75% of the interviewees were males and 25% were females.

Figure 4

The graph showing gender for males and females is as shown above. The males were more than the females.

Table 7**Regression****Descriptive Statistics**

	Average	Std. Deviation	Number
Missed Medical Appointment	1.2000	.40202	100
Race	1.4200	.71322	100

Table 8
Correlations

		Missed Medical Appointment	Race
Pearson Correlation	Missed Medical Appointment	1.000	.620
	Race	.620	1.000
Sig. (1-tailed)	Missed Medical Appointment	.	.000
	Race	.000	.
N	Missed Medical Appointment	100	100
	Race	100	100

Table 9

Model Summary

Model	R	R Square	Adjusted R Square	Std. error of the Estimate
1	.620 ^a	.384	.378	.31702

a. Predictors: (Constant), race

Table 10**ANOVA^a**

		Sum of				
Model		Squares	Df	Mean Square	F value	P Value
1	Regression	6.151	1	6.151	61.203	.000 ^b
	Residual	9.849	98	.101		
	Total	16.000	99			

a. DV: MissedMedicalAppointment

b. Independent values, race

The significant value from the ANOVA table was 0.000, which was less than the alpha value of 0.05. This meant that the analysis was significant and thus remained critical in a way that showed that the value of the outcome was significant. The outcome showed that the data suited the regression model (SESRIC, 2023)

Table 11**Coefficients**

		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.704	.071		9.924	.000
	Race	.349	.045	.620	7.823	.000

a. Dependent Variable: Missed Medical Appointment

The analysis showed that race was significant from the significance value of 0.00. The p-value of 0.000 was less than the alpha value of 0.05, indicating that the variable was significant in its evaluation. This meant that race significantly affected the missed medical appointment that resulted from the same. The African American people with HIV missed these medical appointments because of their race. This also contributed to the outcome of the work as it led to more recommendations for healthcare providers.

2) Is there an association between gender and missed medical appts in African Americans living with HIV in Alabama?

Descriptive Statistics

	Mean	Std. Deviation	N
Missed Medical Appointment	1.2000	.40202	100
Gender	1.2500	.43519	100

The table shows the mean and standard deviation of gender and the different missed medical appointments.

Correlations

		Missed Medical	
		Appointment	Gender
Pearson Correlation	Missed Medical	1.000	.289
	Appointment		
	Gender	.289	1.000
Sig. (1-tailed)	Missed Medical	.	.002
	appointment		
	Gender	.002	.
N	Missed Medical	100	100
	Appointment		
	Gender	100	100

The correlation between missed medical appointments and gender was 0.289, p-value = 0.002, indicating a positive correlation. This value showed that gender significantly affected the number of missed medical appointments in Alabama.

Model Summary

	R	R Square	Adjusted R Square	Std. The error in the Estimate
1	.289 ^a	.083	.074	.38686

a. Predictors: (Constant), gender

The model summary showed that the correlation between gender and the missed medical appointment was 0.289. An R-squared value of 0.083 indicated the amount of variation that a dependent variable explained by gender. In this case, 0.083 of the missed medical appointments were defined by gender.

ANOVA^a

		Total Squares	Degree of Freedom	Average Square	F value	P.V.
1	Regression	1.333	1	1.333	8.909	.004 ^b
	Residual	14.667	98	.150		
	Total	16.000	99			

a. DV: Missed_Medical_Appointment

b. Independent variable: (Constant), Gender

The model significance was 0.004, less than the alpha value of 0.05, indicating that the data fit the model.

Coefficients

		Unstandardized		Standardized		
		Coefficients		Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.867	.118		7.333	.000

Gender	.267	.089	.289	2.985	.004
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a. Dependent Variable: Missed Medical Appointment

The analysis showed that gender significantly affected the number of missed medical appointments.

Correlations

Descriptive Statistics

	Mean	Std. Deviation	N
Race	1.4200	.71322	100
Missed Medical Appointment	1.2000	.40202	100
Gender	1.2500	.43519	100

The outcome showed that race had a mean value of 1.42 with SD = 0.71322. Missed medical appointments had a mean value of 1.2 and an SD = 0.40202. Gender had a mean value of 1.25 and SD = 0.4319.

Correlations

			Missed Medical	
		Race	Appointment	Gender
Race	R	1	.620**	.570**
	P value		.000	.000

	Number	100	100	100
Missed Medical	R	.620**	1	.289**
Appointment	P value	.000		.004
	Number	100	100	100
Gender	R	.570**	.289**	1
	P value	.000	.004	
	Number	100	100	100

Nonparametric Correlations

Correlations

			Race	Missed Medical Appointment	Gender
Spearman's rho	Race	R	1.000	.661**	.655**
		P value	.	.000	.000
		Number	100	100	100
	Missed Medical	R	.661**	1.000	.289**
	Appointment	P value	.000	.	.004
		Number	100	100	100
	Gender	R	.655**	.289**	1.000

P value	.000	.004	.
Number	100	100	100

The above table shows the correlations between race and missed medical appointments. The nonparametric correlations showed that the correlation coefficient between race and missed medical appointments was 0.661. This was significant as it resulted from a significant value of 0.00, which was less than the 0.05 alpha value. The outcome showed that a rise in race issues led to a rise in missed medical appointments. The case also occurred and followed the same gender issues. The males were highly affected than the females.

Descriptive Statistics

	Mean	Std. Deviation	N
Missed Medical Appointment	1.2000	.40202	100
Gender	1.2500	.43519	100
Race	1.4200	.71322	100

The table showed that the mean value for the missed medical appointment was 1.2. That for gender was 1.25, indicating more males than females in the study. The race also had a mean value of 1.42 with SD = 0.713.

Correlations

		Missed Medical		
		Appointment	Gender	Race
Pearson Correlation	Missed Medical	1.000	.289	.620
	Appointment			
	Gender	.289	1.000	.570
	Race	.620	.570	1.000
Sig. (1-tailed)	Missed Medical	.	.002	.000
	Appointment			
	Gender	.002	.	.000
	Race	.000	.000	.
N	Missed Medical	100	100	100
	Appointment			
	Gender	100	100	100
	Race	100	100	100

Since the significant values between gender and race in missed medical appointments were 0.000, which is less than 0.05, it is thus evident that the two correlations were significant (Srmist, 2023). That meant that with the correlation between gender and

missed medical appointment = 0.289 p-value = 0.002. The race and missed medical appointment = 0.620 with p-value = 0.000.

Model Summary

Model	R	R Square	Adjusted R Square	Std. The error in the Estimate
1	.625 ^a	.391	.378	.31705

a. Independent variables: (Constant), Race, Gender

The model summary showed that the R-value between these variables was 0.625. The R-squared value showed how much of the dependent variable, which in this case was the missed medical appointments, was explained by the different independent variables.

ANOVA^a

		Sum of Squares	Df	Mean Square	F value	Sig.
1	Regression	6.249	2	3.125	31.083	.000 ^b
	Residual	9.751	97	.101		
	Total	16	99			

a. DV: Missed Medical Appointment

b. Independent variables: (Constant), Race, Gender

The significant value for this analysis was 0.00, indicating that the model suited the data as it was less than the significance value of 0.05.

Coefficients

		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	.770	.098			7.874	.000
	Gender	-.088	.089	-.095		-.989	.325
	Race	.380	.054	.674		6.993	.000

a. Dependent Variable: Missed Medical Appointment

Conclusions

In summary, race and gender affected the number of missed medical appointments for African Americans. These issues led to a rise in the deaths of those with HIV/ AIDS in Alabama. The deaths rose as a result of more missed medical appointments. When clients missed out on this, they ended up with issues such as an increase in deaths among the people. This showed that healthcare providers should analyze the cause of missed medical appointments in African American and conclude the cause of their lack of attendance.

Section 4: Application to Professional Practice and Implications for Social Change

Introduction

This section discusses different research questions and the solutions using correlation and regression analysis. Hypothesis tests were applied in the case to establish the outcome for the two research questions. The results discuss the research questions to establish if there was an association between race, gender, and missed medical appointments for African Americans. This section utilizes significant levels to establish the outcome of the research questions.

Research Questions

RQ1: Is there a relationship between gender and missed medical appointments for African Americans who have been infected with Human Immunodeficiency Virus in Alabama?

Null Hypothesis *H₀*: There is no significant statistical relationship between gender and missed medical appointments for African Americans infected with Human Immunodeficiency Virus in Alabama.

Alternative Hypothesis *H_a*: There is a significant statistical relationship between gender and missed medical appointments for African Americans infected with Human Immunodeficiency Virus in Alabama.

RQ2: Is there a relationship between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans who have been infected with Human Immunodeficiency Virus in Alabama?

Null Hypothesis *H₀₁*: There is no statistically substantial connection between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama.

Alternative hypothesis *H_{a1}*: A statistically significant relationship exists between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama.

This quantitative correlational research aimed to study the association between the independent variable of missed medical appointments and the dependent variables of race and gender for African American patients living with HIV/AIDS. A summary of the findings showed that a relationship between race and missed medical appointments was also significant. The relationship showed that race significantly affected missed medical appointments. A summary of the relationship between gender and missed medical appointments also was significant, indicating that gender also impacted the outcome of the case.

Findings

The secondary data was used to conduct a quantitative correlational investigation to determine factors of missed medical appointments and the effects on patient care for African American patients living with HIV/AIDS. Data collected involved specific information describing barriers that disrupt continuity of care from HIV outpatient specialty clinics and outpatient medical clinics will be accessed. A review of the literatures has shown the effects missed medical appointments has on African American

patients living with HIV/AIDS. According to Pence (2018) HIV patients who missed their appointments since August 2017 were more likely to not show up at appointments in the near future. When a patient with HIV does not show up for their appointment, they are most likely to experience negative health outcomes, and studies have shown that 61.0% of new HIV cases are transmitted from HIV-positive individuals who are not currently engaged in medical care (Pence et al., 2018). Ullah et al (2018) researched to analyze an association to show missed appointments link to higher rates of hospitalization and an increase in mortality rates for people living with HIV, along with showing a lack of quality patient care.

There was positive correlation between race and gender in terms of missed medical appointments among African Americans who were living with HIV. Factors leading to missed appointments included low income, lack of insurance, and lack of transportation.

Analysis indicated most participants were affected by race more than gender when it came to missed medical appointments. In the case of gender, the significance value was higher than the alpha value of 0.05 ($0.325 > 0.05$). This showed that I failed to reject the null hypothesis, and this variable, when combined with race, did not significantly affect missed medical appointments. Analysis also showed that the significant value for race was 0.000, which was less than the 0.05 alpha value. This indicated that race was a significant

variable in this case and led to or affected missed medical appointments. The African American population in Alabama who missed their medical appointments showed declining levels of health and led to more deaths due to HIV-related health failure.

Research Questions:

1. RQ1: Is there a relationship between gender and missed medical appointments for African Americans living with HIV in Alabama?
2. RQ2: Is there a relationship between race (African Americans, Hispanics, and Caucasians) and missed medical appointments for African Americans living with HIV in Alabama?

Social change helps to strengthen the healthcare system's continuous ability to appeal to talented healthcare professionals who will be trained to address medical issues by building a sizeable clientele for organizations as they evolve to meet future needs (Bvochora et al. 2019). There was a positive correlation between race and gender with missed medical appointments among African Americans that were living with HIV. This case or issue resulted from varied factors leading to missed appointments (Mindrila & Balentyne, 2018). These factors included low income, lack of insurance, lack of transportation, or lack of access to public transportation. In this case, they were supposed to handle the cases professionally (Sarstd & Mooi, 2014). Regression analysis also showed the relationship among these variables, which formed the basis and led to the

conclusion that race and gender affected the outcome of missed medical appointments, thus affecting or leading to the deaths of African Americans (Yang, 2017).

Combining the two races is what affected missed medical appointments more than gender. In this case, the analysis indicated that, given race and gender, most of the respondents were affected by race over gender when it came to missed medical appointments. In the case of gender, a significant value was higher than the alpha value of 0.05 (That is $0.325 > 0.05$). This showed that we failed to reject the null hypothesis and concluded that this variable, when combined with race, did not significantly affect missed medical appointments. The analysis also showed that the significant value for race was 0.000, which was less than the 0.05 alpha value. This indicated that race was a significant variable in this case and led to or affected missed medical appointments. The African American population in Alabama who missed their medical appointments showing a decline in their health, led to more deaths due to HIV related health failure.

Limitations of the Study

There are several limitations in this study. I used the correlational research design, and the design could not be used to interpret causal relationships among measured variables. Limitations of this study include racism, systemic inequities, and social and economic marginalization are key drivers of HIV among African Americans living in Alabama. CNICS data were used to elaborate on effects of missed medical appointments among African Americans living with HIV in Alabama. The research was limited by trustworthiness of data as the sample was chosen from a total population of 14,452.

Recommendations

It is recommended that healthcare professionals should establish ways to monitor or manage the issues that are causing individuals to miss their medical appointments. It is also recommended that African Americans, who were highly affected by the case of missed medical appointments, be educated on their rights to medical information and rights (AHRQ, 2014). They need to report every barrier that is leading them to not show up for their appointments. The healthcare system of Alabama should implement some protocols for diverse races to ensure that all follow up treatments for HIV patients are never missed. Healthcare providers need to offer their best when it comes to providing services to their patients (AHRQ, 2014). The rules and guidelines for healthcare providers outline several ways healthcare professionals can assist with ensuring that missed appointments are avoided by: designing a flexible appointment scheduling system; providing HIV patients with a list of resources to assist with the cost of treatments; providing patients with resources to assist social and economic needs, such as transportation, food, housing, and support services; offering patients counseling services to help with any stigma, substance use, or depression they are undergoing. In this case, healthcare providers should offer resources to all the patients and address them equally to assist with keeping their appointments (Batchelder et al. 2021). These fair services should apply to all and protect African Americans from resulting in health deterioration. The government also needs to ensure that the issue of racism and gender biases does not exist in this service provision as it would lead to a divided nation (Liu, 2011). Some of the measures to be undertaken should be weekly checks, patient reports, and surveys, among

others. This would help African Americans solve the current issue of a continuous HIV/AIDS problem that lacks attendance.

Implications for professional practice and social change

It is recommended that professional practice happens at the medical level, which would see healthcare providers offer better services to the people. These services would be offered to everyone from different races along with being treated equally (Gortzis, 2011). The methodological implication is that African American people living with HIV established that race and gender were the two factors that were affecting their application. When the two factors applied together, race was the factor that affected most cases and led to more missed medical appointments. The potential impact for positive change was that African Americans were highly affected by these missed medical appointments leading to their high rate of deaths from HIV. This is because when people miss these appointments, they end up developing more issues and a rise in viral load that leads to death.

Conclusion

The current research aimed to identify the relationship between the independent variable of missed medical appointments and the dependent variables of race and gender for African American patients living with HIV/AIDS. The essential questions for this research were as follows:

1. Is race associated with the effects of missed medical appts in African Americans living with HIV in Alabama?

2. Is there an association between gender and missed medical appts in African Americans living with HIV in Alabama?

Rogers (2003), theory innovation was used as a theoretical framework for this study. It was an appropriated framework for this study, because it is not only a new concept within the healthcare profession, but rather a plan to guide healthcare professionals to engage in innovative activities daily. The activities are motivated by the need to improve care outcomes and reduce costs to the health system. Health care professionals may find it beneficial to apply this theory to provide creative and innovative solutions for recent and future global health challenges such as aging populations, HIV/AIDS, tuberculosis, and malaria as well as an increase in non-communicable illness.

The relationship between race, gender, and missed medical appointments was positive and significant, showing that gender and race played a major role with missed medical appointments in African Americans living in Alabama. The results from this study demonstrated a significant relationship between race, gender, and missed medical appointments among African Americans. This relationship led to different outcomes, such as an increase in the spread and deaths of these African Americans from HIV (Nsubuga-Nyombi et al., 2018). HIV is a disease that requires critical forms of treatment and care for people to survive, and the current level of treatment bias in Alabama has ensured that the survival rates for these groups of people remain low. Tackling the factors leading to the cause of HIV patients in Alabama missing their appointments is challenging but in the long run, it may be rewarding for both the health care professionals and HIV/AIDS patients.

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