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**The Impact of Acculturation on Quality of Life in African American
Women Living with A Lung or Colorectal Cancer Diagnosis**

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**The Impact of Acculturation on Quality of Life in African American
Women Living with A Lung or Colorectal Cancer Diagnosis**

by

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Dedication

This work is dedicated to my family, who have always provided encouragement of my
life's work and goals.

To my grandfather: Isaiah Garner, who taught me that education unlocks doors.

To my late great aunt: Ona Mae Williams, who provided the foundation to my life's work
as a registered nurse.

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The Impact of Acculturation on Quality of Life in African American Women Living with A Lung or Colorectal Cancer Diagnosis

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The purpose of the proposed pilot study was to explore potential relationships between acculturation, selected demographic characteristics and perceived quality of life in African American women who have been diagnosed with and received treatment for colorectal or lung cancer. There is limited research examining potential cultural and demographic factors related to the ability to cope and maintain quality of life.

A descriptive, exploratory research design was used for this study and utilized three surveys to gather data including the African American Acculturation Scale-Revised World Health Organization Quality of Life Instrument – BREF, and a Demographic Data Form.

A total of 15 African American women who had been diagnosed with lung or colorectal cancer during the past five years were recruited for this pilot study.

Data were analyzed using descriptive statistics including measures of central tendency, interquartile ranges, variance, and standard deviation as well as tests of differences, Mann Whitney U, and linear regressions. A statistical significance of $\alpha < .05$ was the standard used for this research.

Results of the research study provided baseline data about the impact of American women with colorectal or lung cancer . Published results will assist in filling the existing gap in research literature.

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List of Abbreviations

AHRQ	Agency for Health Care Research & Quality
AAAS-R	African American Acculturation Scale - Revised
ACS	American Cancer Society
CDC	Centers for Disease Control and Prevention
GSBS	Graduate School of Biomedical Science
IOM	Institute of Medicine
ONS	Oncology Nursing Society
NIMHD	National Institute on Minority Health and Health Disparities
SEER	Surveillance, Epidemiology, and End Results
US	United States
UTMB	University of Texas Medical Branch
WHOQOL-BREF	World Health Organization Quality of Life – BREF
WHO	World Health Organization

CHAPTER 1: INTRODUCTION

INTRODUCTION

This dissertation is arranged into five chapters, including appendices, tables, figures, and a reference list. Chapter One introduces the dissertation research study by illustrating the problem, purpose, and significance of the study. Additionally, it outlines the theoretical framework, defines the variables, states the specific aims and research questions, and provides a brief overview of the study design. Chapter Two presents a review of the relevant literature regarding how African American women with forms of lung and colorectal cancers “live with” and experience cancer over time, as well as the extent to which culture may be associated with their perceptions about quality of life after diagnosis and during systemic cancer treatments. Chapter Three explains the research design and methodology of the study, including data collection procedures, sampling, and data analysis. Chapter Four informs the study results and findings. The dissertation concludes with Chapter Five in providing a discussion section and synthesis of the research findings with current literature and ends with conclusions and recommendations for future nursing research.

PROBLEM STATEMENT

African Americans with a cancer diagnosis have the highest death rate and shortest survival rate among ethnic groups in the United States even though African Americans have seen a decrease in cancer incidence during the past decade (American Cancer Society, 2021; Lawrence et al., 2022). The number two cause of death among African American women in the United States is cancer. Lung cancer is the second most common cancer diagnosis in African American women followed by colorectal cancers. For the year 2022, the American Cancer Society (2021) has estimated that 11% of cancer deaths in this group

will be from lung cancer and 9% of cancer deaths from colorectal cancer. An estimated 73,680 deaths from cancer are forecasted to occur within this group in 2022 (American Cancer Society, 2022). The cancer incident rate for African American women is 8% percent lower than for White women; however, African American women have a 12% higher mortality rate. Added significance includes that African American women are often diagnosed at later stages and as a result are at higher risk of dying than non-African women diagnosed with these forms of cancer (Ellis et al., 2018; Howlader et al., 2018). Highlights from a study by the Surveillance, Epidemiology, and End Results Program (SEER) by Lam et al. . (2018), included those additional comorbidities, such as diabetes, further compounds the experiences of the cancer journey in African American women. However, despite the current rate of diagnoses of cancers in African American women, there continues to be apparent health disparities including socioeconomic status and access to health care.

BACKGROUND

The disparities in cancer diagnoses and mortality have an impact on quality of life and include acculturative factors. Despite the substantial morbidity and escalating mortality rates of these specific cancers, there has been limited research addressing factors that may be associated with this increase as well as studies that address the extent to which culture may be associated with African American women's abilities to cope with and maintain their overall quality of life in the face of cancer diagnosis and subsequent treatments (Ellis, 2018). There are notable studies that detail the disparities that exists in African Americans regarding cancer screening including health insurance status, financial barriers, adherence to follow-up testing recommendations, and decrease in access to preventive testing (Biddell, 2021; Brown et al., 2021; Jones et al., 2022) with discrete cancer treatment inequities seen in African American cancer patients (Penner et al., 2016;

Ward et al., 2004). Also, there has been research focused on life after cancer treatment with significant emphasis on breast cancer patients (Jewett et al., 2022; Yan et al., 2019).

Quality of life is a personal experience of health and of how comfort and happiness is qualified individually. Persons with cancer are not able to choose how various cancer treatments may affect their physical capacities which play a role in their overall quality of how they are able to live life and carry out activities of daily living. In addition, psychosocial stressors add to the decrease in overall quality of life in people living with cancer (Phillips et al., 2022). Fortunately, cancer treatments have advanced over the last several decades and produce less physical experience burdens. There are numerous research studies that have examined various interventions to positivity affective quality of life including physical activity and dietary modifications (Beebe-Dimmer et al., 2020; Long et al., 2022). There are supporting studies that have found correlation between socioeconomic disparities and quality of life (McDougall et al., 2019; Sleight et al., 2019)

There are historical racial perspectives that have been known to influence how African Americans participate in their health and how they view medical professionals, including nurses, in their healthcare including such notable events as the pilfered cell line of Henrietta Lacks (2011), the numerous outrageous experimental surgeries on African American women by Dr. James Marion Sims (2006), and the objectionable Tuskegee Syphilis Study (Katz, 2008). Additionally, culture has shown to still affect how African Americans relate to and experience health with specific generational cultural beliefs embodying how cancer metastasizes and how individuals acquire cancer (Lannin et al., 1998). The National Institute on Minority Health and Health Disparities (NIMHD, 2022) has acknowledged that cancer is one of the three main focus areas that have significant health disparities and has targeted research efforts to focus on decreasing and ultimately dismembering the disparity.

SIGNIFICANCE

Having cancer creates multifaceted dimensions of living. Often cancer treatments are focused on treating the cancer and not treating the holistic being, encompassing the person advantages, disadvantages, and preferences, that must traverse a new normal while living with cancer. There is ample research that highlights that there are health disparities present in African American women who are living with cancer or are free of disease. However, there is little research that focuses on two of the topmost prevalent cancers in African American women and what impacts quality of life and acculturation have in their cancer journeys allowing them to cope optimally. In addition, much focus has been on heavily funded cancer disease sites such as breast cancer and has been limited to addressing cultural norms and not the dimensions of acculturation. Moreover, the outcomes of this research study seek to explore the relationships between acculturation, quality of life, and demographics to better understand how to provide culturally consistent and preferred holistic nursing care to African American women living with a lung or colorectal cancer diagnosis. This study seeks to establish baseline data that will contribute to filling the existing gaps related to acculturation, demographic characteristics, and quality of life.

This research may enhance the awareness of the relationships between acculturation, demographic characteristics, and perceived quality of life in order for the registered nurse to provide culturally competent care that is personalized per individual as part of their culture and not generalized across individuals from a specific culture. Subsequent studies could provide significant data that has the potential to be generalized to other cancers and other chronic conditions experienced among diverse populations. The research objectives associated with the specific aims of this study are significant because they examine the extent to which cultural and socio-economic variables may be associated with African American women's abilities to cope with and maintain their overall quality of life in the face of cancer diagnosis and treatment. By exploring the relationships of acculturation, quality of life, and demographic characteristics, there is a potential to use further research and develop specific assessment tools that can be implemented into the

care planning of African American women with a lung or colorectal cancer diagnosis and ultimately being able to be used among all vulnerable at-risk cancer populations.

THEORETICAL FRAMEWORK

The Culture Care Theory of Diversity and Universality was the theoretical framework used for this study. Developed by Leininger (1985), the Culture Care Theory of Diversity and Universality draws on the tenets of and links between nursing and anthropology. According to Leininger (1985), “culture is the broadest, most comprehensive, holistic and universal feature of human beings...(p. 2). Caring is embodied in the explicit act of helping patients and the mode of care and interventions provided should be based on discreet patient preferences and cultural beliefs. Leininger (2006) defined culture as what is learned, shared, and conveyed values, norms and way of life of specific cultures that are used to guide thinking, decisions, and actions in repeated ways.

There are thirteen (13) assumptions of The Culture Care Theory of Diversity and Universality. Seven of the assumptions apply to this study and include:

1. Culturally based care is essential for well-being, health, growth and survival, to face handicaps or death.
2. Culturally based care is the most comprehensive and holistic means to know, explain, interpret, and predict nursing care phenomena and to guide nursing decisions and actions.
3. Culture Care concepts, meanings, expressions, patterns, processes, and structural forms of care vary transculturally with diversities and some universalities.
4. Every human culture has generic care knowledge and practices and usually professional care knowledge and practices, which vary transculturally and individually.
5. Culture Care values, beliefs, and practices are influenced by and tend to be embedded in the worldview, language, philosophy, religion,

kinship, social, political, legal, educational, economic, technological, ethnohistorical, and environmental context of cultures.

6. Beneficial, healthy, and satisfying culturally based care influences the health and well-being of individuals, families, groups, and communities within their environmental contexts.

7. Culturally congruent and beneficial nursing care can occur only when care values, expressions, or patterns are known and used explicitly for appropriate, safe, and meaningful care. (Lininger, 1985)

The provision of cultural congruent and holistic nursing care is needed in order to provide health services to patients in culturally expressive aspects. By purposefully including the domain of culture into the care of patients, further assessments of patients' preferences and beliefs can be incorporated into their care. Leininger (1998) was pivotal in recognizing and championing that different cultures have different health and illness beliefs that should be honored.

CONCEPTIONAL DEFINITIONS

Acculturation for this study is conceptually defined by the Social Science Research Council (1954) as the

culture change that is initiated by the conjunction of two or more cultural systems.

Acculturative change may be the consequence of direct cultural transmission; may be derived from non-cultural causes, such as ecological or demographic modification by an impinging culture; it may be delayed, as with internal adjustments following upon the acceptance of alien traits or patterns; or it may be a reactive adaptation of traditional modes of life. (Social Science Research Council, 1954, p. 974)

Acculturation is not a one-time process but involves active exchanges between a person's innate culture and the culture in majority (Schwartz et al., 2011). In psychology, acculturation is defined as "the process by which groups or individuals integrate the social and cultural values, ideas, beliefs, and behavioral patterns of their culture of origin

(VandenBos, G., 2007, p. 3). While there is not a definition directed related to nursing, Leininger (2002) adapted anthropological perceptions from anthropology that she notes are essential in transcultural nursing.

Quality of life for this study is conceptually defined by the World Health Organization (WHO, 1997) as “individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.” Quality of life in cancer patients is defined by “a sense of well-being . . . multidimensional perspective that includes dimensions such as physical, psychological, social, and spiritual” (Jitender et al., 2018, p. 217).

OPERATIONAL DEFINITIONS

Age – measured by direct inquiry on the demographic survey as a count of years alive

Age at Diagnosis – measured by direct inquiry on the demography survey as a count of years of age at cancer diagnosis for lung or colorectal cancer

Acculturation – measured by the AAAS-R total and subscale scores.

Colorectal Cancer - measured by direct inquiry on the demographic survey as a participant self-report

Education – measured by direct inquiry on demographic survey as years of education

Quality of Life – measured by the WHOQOL-BREF subscale scores

Lung Cancer - measured by direct inquiry on the demographic survey as a participant self-report

PURPOSE AND GOAL

The purpose of this proposed pilot study was to explore possible associations between acculturation, selected demographic variables and perceptions about quality of life in African American women who have been diagnosed with either lung or colorectal cancer and have received surgical, anticancer therapy and/or radiation treatments. The goals of this study were (1). to investigate how demographic characteristics are related to acculturation score in African American women with lung or colorectal cancer, (2) to investigate how demographic characteristics are related to quality of life score in African American women with lung or colorectal cancer, and (3) to examine the correlation between the African American Acculturation Scale (AAAS-R) score and the World Health Organization Quality of Life score.

SPECIFIC AIMS AND RESEARCH QUESTIONS

AIM 1: Investigate how demographic characteristics are related to acculturation score in African American women with lung or colorectal cancer.

RQ1.1: What are the relationships between demographic variables and acculturation using the African American Acculturation Scale (AAAS-R)

RQ1.2: What are the differences across demographic variables on acculturation in American women with lung or colorectal?

AIM 2: Investigate how demographic characteristics are related to quality of life score in African American women with lung or colorectal cancer.

RQ2.1: What are the relationships between demographic and quality of life using the World Health Organization Quality of Life Instrument (WHOQOL-BREF)?

RQ2.2: What are the relationships between demographic variables (age, age at diagnosis, etc.) and quality of life using the World Health Organization Quality of Life Instrument (WHOQOL-BREF) Perception of Health score?

RQ2.3: What are the differences across demographic variables on quality of life in American women with lung or colorectal cancer?

AIM 3: Examine the correlation between the African American Acculturation Scale (AAAS-R) score and the World Health Organization Quality of Life score.

RQ3.1: Does a correlation exist between the African American Acculturation Scale (AAAS-R) score and the World Health Organization Quality of Life score?

SUMMARY

This study explored possible associations between acculturation, selected demographic variables and perceptions about quality of life in African American women who have been diagnosed with either lung or colorectal cancer and have received surgical, anticancer therapy and/or radiation treatments. To accomplish the study purpose and goals, a descriptive, exploratory research design was used for this pilot study. Furthermore, participants were given the opportunity to provide narrative responses to two optional, open-ended questions regarding their preference for aspects of self-included as they deem to include in their healthcare and self-report of the two most important aspects of their life while living with cancer.

Study findings may be important and relevant to oncology nurses who work with African American women with a lung or colorectal cancer diagnosis and their families. This study examined the amount of acculturation present and the relationships concerning quality of life perceptions in this vulnerable patient population.

CHAPTER 2: REVIEW OF LITERATURE

INTRODUCTION

This chapter will present a review and critique of the existing literature that examined how African American women with forms of lung and colorectal cancers “live with” and experience cancer over time, as well as the extent to which culture may be associated with their perceptions about quality of life after diagnosis and during systemic cancer treatments. African Americans are the third-largest ethnic group and primarily reside in the southern portion of the United States (US Census Bureau, 2021). One’s ethnicity has been linked to structural racism with resultant contribution to inequalities in the social determinates of health (Pinheiro et al., 2020). As such, African Americans have the highest death rates and shortest survival rates in the US for most cancers (American Cancer Society, 2022). Research has revealed that racial and ethnic disparities play a role in early cancer detection (Landy et al. ., 2021; Wray et al., 2022). Posielski et al. (2022) found that quality of life in African American men undergoing radical prostatectomy for prostate cancer was negatively affected by race. In addition, Posielski et al. found that age was not significant in affecting quality of life in African Americans. The American Cancer Society (2022) reported that 33% of African American women have reported experiencing racial discrimination during a visit with a healthcare provider. Research is thoroughly established on the experiences of African American women with breast cancer in part due to the availability of early detection diagnostics and philanthropic contributions to breast cancer research (Cho et al., 2021; Davis, 2021; Lehrberg et al., 2021; Molina et al., 2022).

Nurses are in a prime position to enhance their cultural competency in order to elevate the role of the nurse as patient advocate and by doing so, positively impacting morbidity and mortality rates of cancers (Clayton & Tariman, 2018; Nolan et al., 2021). Bandera et al. (2020) found that cultural competency and awareness are important in order

to most opportunely develop rapport and establish mutual respect with research study participants. Culture competency is the ultimate long-term goal; however, initial strides in incorporating cultural sensitivity is a positive step in the right direction. Owens et al. . (2020) identified the themes of “cancer versus culture” and “quality of life” in their qualitative study that examined cultural sensitivity regarding African American lung cancer survivors and their families. Quality of life outcomes were not only associated with the patient, but also with their defined family. In addition, the first step to more cultural awareness is the identification of the impact that culture and quality of life have in the lives of African American women living with lung and colorectal cancers.

Fontaine (2018) from The Centers for Disease Control and Prevention (CDC) has highlighted that epidemiological data provides a systematic approach to revealing a health problem, section by section, as well as identifies populations at risk for certain health conditions. Jayasekera et al. (2018) utilized the Surveillance, Epidemiology and End Results (SEER) dataset, to discover that epidemiological factors interact with individual characteristics as well as with health behaviors to affect subsequent health outcomes.

Acculturation is rooted in anthropology and creates a basis by which health behaviors of cultural groups can be examined (Mills et al., 2017). Within health behaviors, health literacy informs the behaviors. Anderson et al. (2021) evaluated health literacy within a multi-ethnic cohort to examine whether prevalence of limited health literacy differs for race/ethnicity and concluded that African American women were more likely to have limited health literacy compared to other African American men and Whites. Furthermore, the association of health literacy and acculturation has not been studied within a non-clinical sample of African Americans within the United States.

Quality of life in patients with cancer has been studied in robust numbers of due effects of both cancer symptomology and systemic cancer treatment sequelae. In seminal research of quality of life in patients with cancer (Lindley & Hirsch, 1994; Padilla et al., 1990), there has been unveiling of the perception of quality of life through the lenses of

patients, families, and nurses; oftentimes noncongruent. Gaston-Johannson et al. (2015) evaluated the symptom burden occurring in African American women receiving chemotherapy for breast cancer and its impact on their quality of life due to few research studies exploring these faucets. Gaston-Johannson et al. (2015) found that pain and depression adversely impacted quality of life in this sample suggesting future research to determine interventions that would adjust quality of life scores positively.

EPIDEMIOLOGICAL DATA RESEARCH

The significance of this research is underscored by the growing body of epidemiological evidence that African American women as a group not only have high incidence and prevalence rates of many forms of cancers but, importantly, experience the shortest survival rates after cancer diagnosis and the highest death rates from most cancers than other ethnic groups in the U. S. (American Cancer Society, 2022). Based on projections from ACS's surveillance research 2022-2024, an estimated one out of three African American women will be diagnosed with cancer during their lifetime and one out of six will die from cancer in 2022. African Americans are the third largest racial/ethnic group in the U.S. after Whites and Hispanics and represent about fourteen (14%) of the population according to recent census data (U. S. Census Bureau, 2020).

Although incidence rates of breast, colorectal, and lung cancer have decreased somewhat among African American women during the past few years and are similar to Non-Hispanic White women, African American women are often diagnosed with more advanced disease and have significantly higher mortality rates from these forms of cancer than any other group of women in the country (DeSantis, et al., 2019). The scope of cancer mortality in African American women is reflected in type-specific comparative data documenting that breast cancer deaths are 41% higher among African American women than White women, deaths from colorectal cancers are 19% higher, and lung cancer-related

deaths are about eighteen (18%) higher. Notably, lung cancer causes the most cancer-related deaths among African American women (Jemal et al., 2018).

Several research studies have examined if there were epidemiological factors that affect African American women with a cancer diagnosis disproportionately. In order to uncover if there was a difference in dietary vitamin A intake and breast cancer risk among African American women and women of European descent, Bitsie, et al.(2021) findings indicated increased epidemiological factors among the groups.

The current and projected high rates of colorectal and lung cancers and cancer-related deaths among this population of African American women have substantial individual human costs of illness and death and can also have far-reaching impacts on communities and society. Health providers are also impacted by the escalating numbers of African American women and others being treated for cancer. By the year 2024, the number of individuals in the U. S. living beyond a cancer diagnosis is expected to reach almost nineteen (19) million (American Cancer Society, 2019). Nurses will continue to play a larger leading role in the increasingly complex care of oncology patients in both inpatient and ambulatory settings across the United States It is crucial that nurses and other health providers are knowledgeable about and responsive to both demographic characteristics and cultural dimensions of care among African American women so that they can help develop more culturally relevant interventions during and after treatments that can potentially help improve overall quality of life.

RESEARCH RELATED TO ACCULTURATION

Acculturation is generally viewed as a framework and process that can be used to help explore health beliefs and behaviors among varied ethnic or cultural groups. It can also potentially help explain some of the health disparities that various groups, including

African Americans, may experience as they engage with the dominant medical culture in the U. S. (Mills et al., 2017). The concept of acculturation may also be especially useful in exploring African American women's journeys as they attempt to navigate the unique and often unfamiliar terrain of oncology.

During the past decade, social scientists have made a major change in the concept of acculturation among African Americans. It has shifted from a model that implied that different cultural groups had to give up their native or heritage culture entirely in order to adapt to a new dominant culture to a multi-cultural model that recognizes that members of the group may move between the two cultures and retain elements of both (Abraido-Lanza, et al., 2006).

There have been relatively limited studies until the past two decades which explored acculturation among African American women and men in the U. S., especially related to health behaviors and medical care. The historical lack of research may have been due in part to many social scientists' beliefs that African Americans did not have a distinct culture and were actually culturally deprived due to years of racism and discrimination. Researchers instead focused on assimilation and acculturation experiences of Black immigrants from other countries and the extent to which they had blended in and adopted American cultural beliefs and practices (Parham et al., 1999).

Much of the research on acculturation among African American women and men was spurred by growing evidence of increased morbidity and mortality among this group as well as the emerging picture of health disparities in access to and quality of care. While the underlying factors related to these health disparities are complex, there is a body of research that points to socio-economic disparities that can affect income, housing, food and education as well as access to quality health care (American Cancer Society, 2019). The Institute of Medicine's (IOM, 2003) ground-breaking report entitled *Unequal Treatment* also found that racial attitudes and lack of understanding of African American culture by many healthcare providers as well as patients' frequent mistrust of their

physicians' attitudes toward them were significant contributors to health disparities (Penner et al., 2016). Further research on "structural racism" has verified the decades long denial by many individuals and institutions of the meaning and value of African American culture by many and its impact on health care disparities (Hardeman et al., 2016). Sussner et al. (2009) studied the relationship of acculturation and breast cancer-specific distress with perceived barriers to genetic testing in African American women at increased risk of hereditary breast and/or ovarian cancer. Sussner et al., (2009) found that less acculturated African American women experienced more anticipation of negative emotional reactions about genetic testing.

Landrine and Klonoff's (1994) development of the African American Acculturation Scale AAAS and the revised version of the scale (AAAS-R) in 2000 paved the way for exploring some of the related cultural dimensions. Landrine and Klonoff (2000 & 2004) and other researchers have used the scale to examine relationships between acculturation and health risk behaviors among African American men and women including smoking, alcohol use, cancer screening, and health-promoting behaviors.

Overall, results of the various studies reflected that those participants who scored higher on the AAAS-R as having a more traditional African American cultural orientation tended to have more unhealthy behaviors than participants with higher acculturation scores including for smoking (Fernander et al., 2008; Guevarra et al., 2005; Landrine & Corral, 2014; Landrine & Klonoff, 1996); more limited involvement in selected health-promoting behaviors (Baker, 2011); and overall less cancer screening (Bryne et al., 2011). Bryne's cancer screening study using the AAAS-R is especially relevant to the current proposed study since it explored 60 African American women's use of mammography and found those who were more acculturated had taken decisive steps to contact a health care provider and get more information about breast cancer screening than other women who had never had a mammogram or were screened 2 years or more before the study (Bryne et al., 2011).

RESEARCH RELATED TO QUALITY OF LIFE

Given the large number of African American women who are diagnosed with cancer annually, as well as those who have undergone treatment and currently living with cancer, it is critically important to explore their perspectives about quality of life during and after treatment and to examine how their quality of life may be associated with various demographic characteristics and acculturation. This pilot study utilized the World Health Organization's (WHO) Quality of life conceptual definition "Individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns" (WHO, 1997). Quality of life is a largely subjective and multi-dimensional concept that may change over time and reflects multiple components of well-being. The WHO Quality of Life instrument examines four domains including physical, psychological, social and environmental and is described in detail in the Methods section.

Much of the current research on quality of life among African American women with cancer has largely focused on comparative differences between African American and Caucasian women with breast cancer (Gaston-Johannson et al., 2015; Nolan et al., 2019; Schootman et al., 2020). The results from some of those studies provide important data about how women perceived the quality of their life over time through diagnosis, treatment, and for some, reoccurrence of cancer and may be relevant to the study of African American women with either colorectal or lung cancer. The American Cancer Society noted a clinical consensus among researchers across studies that Quality of Life among African American women with breast cancer diagnosis was notably lower than Quality of Life among other racial/ethnic groups in the U. S. (2019). African American women reported differential experiences in follow-up care including information about resources and support after treatment (von-Friederichs-Fitzwater & Denyse, 2012), a lack of culturally focused care and less effective treatments (Agency for Health Care Research & Quality, 2012), as well

as an increased risk of late diagnosis of second primary cancers and reoccurrence of cancer (Jemal et al., 2018).

One of the few studies that has examined comparative differences between health-related quality of life among African American women survivors of breast cancer and those with different forms of cancer was conducted by Claridy et al., (2018) who analyzed a data set from the National Health Survey (2010). Results indicated that African American women who had been diagnosed and treated for breast cancer reported substantially better physical and mental health than women who had other forms of cancer including those with colorectal and lung cancers. Cancer survivors with other types of cancers noted that they not only had overall poor physical health, but difficulty with physical activities, as well as fatigue and pain.

As reflected in the preceding discussion and examination of selected epidemiological and clinical research studies, African American women have relatively high incidence and prevalence rates of colorectal and lung cancer and are at much higher risk of dying from those cancers. However there has been much less research addressing how women who are diagnosed with and undergo treatment for those cancers respond to the physical, social and emotional challenges of the diagnosis and while undergoing cancer treatments.

One of the goals of the study is to disseminate meaningful research results to health care providers in both acute care hospitals and ambulatory clinics about the critical role that acculturation and cultural preference may play in helping African American women with colorectal or lung cancer maintain or regain a quality of life that is meaningful to them. Nurses can play a central part in assessing both cultural and quality of life dimensions in cancer patients and in developing interventions that are responsive to patients' unique socio-cultural values and preferences.

SUMMARY OF LITERATURE

In summary, although known disparities exist in African American women with a lung or colorectal cancer diagnosis exists, limited studies have addressed issues related to the quality of life and acculturation among African American women with a lung or colorectal cancer diagnosis. There are numerous studies that reveal socioeconomic abilities and access to health; however, none have examined relationships of acculturation and quality of life in African American women while they are receiving active treatment for a lung or colorectal cancer diagnosis. Many studies have concluded with positive interventions for African American women with a breast cancer diagnosis and for African American men with a prostate diagnosis. African American women have relatively high incidence and prevalence rates of colorectal and lung cancer and are at much higher risk of dying from those cancers. However, there has been much less research addressing how women who are diagnosed with and undergo treatment for those cancers respond to the physical, social and emotional challenges of the diagnosis and treatments over time. There is a need to examine the extent to which acculturation and play a role in cancer survivors' quality of life as they journey through initial cancer diagnosis, treatment, and post-cancer treatment survivorship.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

INTRODUCTION

This chapter details research design, describes recruitment, identifies sampling methods, and describes data collection. In addition, this chapter confirms the study setting along with inclusion and exclusion criteria and discusses the study instruments. Also, presentation of limitations and ethical considerations to human subjects will be addressed. This chapter concludes with an explanation of the data analysis procedures.

RESEARCH DESIGN

A descriptive, exploratory research design was used for this study. An exploratory research design was used because it allows investigation of the relationship among two or more variables. This type of research aims to uncover possible relationships between variables. (Portney & Watkins, 2009). A descriptive research design was used to identify and describe the degree of acculturation within a pilot cohort of African American women diagnosed with lung or colorectal cancer. In addition, it sought to describe the relationships between demographic variables as they related to quality of life. Lastly, awareness of the poignancy of their view of their quality of life as well as their perception of what their healthcare providers, including nurses, did not know about them that they felt to be important during their cancer journey, was sought to be described. A descriptive research design was chosen because it allows data to be collected void of study interventions (Gliner et al., 2009).

SAMPLE, SETTING, AND RECRUITMENT

The pilot study sample was comprised of fifteen (15) African American women living in Texas diagnosed with having either lung or colorectal cancer undergoing active

systemic cancer treatments. Participants were able to access the survey via a recruitment flyer contact with either subsequent REDCap® survey link or a paper survey. Participants were able to complete the survey via the electronic link at the day and time of their choosing while allowing saved response until survey completion and subsequent submission. Participants who completed the paper survey were able to complete the survey during their medical appointment. The sample consisted of voluntary participants utilizing purposeful sampling that resulted in a specific pilot sample of African American women with a diagnosis of lung or colorectal cancer for inclusion in this study. Survey participants were recruited from an ambulatory cancer infusion center that is a part of a tertiary care hospital, in Texas. The recruitment flyer is included in Appendix A.

INCLUSION CRITERIA

Inclusion criteria for participation in the study were women who self-identified as being African American living in the United States and diagnosed with a form of lung or colorectal cancer for no longer than five years. In order to be included in the sample population, these African American women were at least eighteen (18) years of age, were able to read, write, and comprehend English, and received active cancer treatment within the past three years.

EXCLUSION CRITERIA

Exclusion criteria for participation in the study were those who did not self-identify as being a woman or African American or lived outside of the United States, and not having a diagnosis of lung or colorectal cancer. In addition, those with a diagnosis of breast cancer or who were on current hospice or palliative systemic therapies were excluded from the study. Moreover, ages of persons less than eighteen (18) years, and those who could not read, write, and comprehend English were also excluded.

DATA COLLECTION

Data collection began on May 5, 2020, and concluded on December 20, 2021. The data collection process included contacting African American churches and their affiliated national offices, African American sororities, lung cancer patient and survivor foundations, colorectal cancer patient and survivor foundations, African American cancer specific social media groups, tertiary healthcare institutions, the American Cancer Society, Researchmatch.org, as well as networking with cancer survivors, oncology nurses and oncology physicians for opportunities to disseminate the study recruitment flyer. Over eighty (80) direct contacts were made. The recruitment flyer provided a brief explanation about the research study and invited African American women with a diagnosis of lung or colorectal cancer to participate in the study. After contact via phone or email, information was provided regarding informed consent including protection of human subjects' (Appendix B).

The survey data were entered into REDCap®, which is a secure web-based application online survey and database. The research study flyer was posted on-site and virtually to encompass a total of (25) locations. Total views of the study flyer included 300. total clicks of the survey link equated to 150 hits. A total of 50 follow-up emails were transmitted based upon contact. In addition, invitation emails were sent through Researchmatch.org that included a total 150 potential participants. Of the invitation responses transmitted through Researchmatch.org, only two potential participants elected to receive additional information with one subsequent incomplete survey submission. Of the paper surveys that were distributed, a total of twenty-five (25) were taken, and only (fifteen) 15 were fully completed. The power analysis for this pilot study yielded a minimum of 15 responses; The completed surveys were obtained at one recruitment site and the recruitment site. The recruitment site did not receive any more new patients that met the inclusion criteria of the study

DATA MANAGEMENT

As data were collected, it was stored in the secure and encrypted UTMB license of REDCap® survey. The data were subsequently downloaded from REDCap®, cleaned, and subsequently stored on a password protected personal laptop. Next, the data were uploaded into IBM® Statistics Statistical Package for Social Sciences (SPSS) 24 for Windows, a statistical software suite. The overall data set was assessed for completeness, then stored within the password protected UTMB personal cloud drive as well as backed up as a saved file on a password protected laptop stored at the principal investigator's home office. Completed paper surveys were stored in a legal-sized envelope file folder and locked in a desk file drawer in the principal investigator's home office. The narrative responses for the two narrative questions contained on the study instrument were extracted from the study instrument by the principal investigator and stored in separate word document, and sorted by a participant ID.

INSTRUMENTATION

This study used two instruments and a demographic collection form, as well as two narrative response questions. The first instrument was the World Health Organization Quality of Life-BREF which was developed by the WHOQOL Group that included fifteen (15) international field centers (WHO, 1997). The second instrument was the African American Acculturation Scale – Revised which was developed by Klonoff and Landrine (2000) as a revised version of their originally developed African American Acculturation Scale (1994) (Klonoff & Landrine, 2000). The demographic collection form included two narrative, optional response questions that asked: What would you like the healthcare provider that you visit for your cancer care to know about you that you believe that they do not already know, and what is the most important part of your life that you want to keep in focus during your cancer journey?

DEMOGRAPHIC SURVEY

Demographic data were captured from the African American women with a diagnosis of lung or colorectal cancer through the use demographic questions elicited from the Demographic Collection Form (Appendix C). The Demographic Collection Form collected the following information:

- Age in years, age at cancer diagnosis in years;
- Highest education level achieved (Some High School, High School Graduate/GED, Some College, Associates Degree, Bachelor's Degree, Master's Degree, Doctorate Degree);
- Marital status (single-never married, single cohabitating, domestic partner, separated, divorced, widowed, married);
- Yearly household income (less than \$20,000, \$20,000 – \$34,999, \$35,000 – \$49,999, \$50,000 – \$74,999, \$75,000 – \$99,999, greater than \$100,000),
- Type of cancer diagnosis (lung, colorectal (colon, rectal);
- Number of relatives living in household and relationship(s) (child, grand, parent, grandparent, roommate, romantic partner, sibling);
- Employment status(fulltime, parttime, not employed, retired, disabled);
- Type of health insurance (private/employer sponsored, Medicare/Medicaid, Affordable Care Act, no insurance), and
- Gender, ethnicity, and date of cancer diagnosis World Health Organization Quality of Life – BREF.

The WHOQOL-BREF is an instrument developed by a group designated by the World Health Organization (WHO) that created a quality of life assessment tool that would be applicable cross-culturally that envelopes continued promotion of holistic health and healthcare. (WHO, 1996). Cronbach's alpha for the instrument was 0.89. It evaluates four (4) different domains:

- Physical health (WHOQOL-BREF_Physical Health – 7 items),
- Relationships (WHOQOL-BREF_Relationships – 6 items),
- Environment (WHOQOL-BREF_Environment, - 3 items), and
- Psychosocial (WHOQOL-BREF_Psychosocial – 8 items) (WHO, 1997).

Two separate items are examined separately, overall perception of quality of life, and overall perception of health.

The WHOQOL-BREF was developed from the original WHOQOL-100 (WHO, 2007). The initial step in the development of the instrument was a consensus on the definition of quality of life (WHO, 1994). Focus group meetings attended by both healthcare professionals, patients, and non-ill subjects from 15 culturally diverse worldwide field centers, assembled a list of a maximum of six items that depicted areas/facets that they considered to be relevant to the assessment of quality of life. Then, questions were assembled from all fifteen (15) focus groups to form a single repository. The single repository yielded a 236-item assessment encompassing twenty-nine (29) facets. The assessment was administered to 300 participants within each field center. After the assessment was administered, initially 100 items were selected to be included in the original WHOQOL-100 instrument (WHO, 1997).

After utilization of the WHOQOL-100, a shorter version, WHOQOL-BREF, was developed as a result of condensing domains to four instead of six. Each of the domains addresses specific facets. The first domain, Physical Health, includes activities of daily living, dependence on medicinal substances and medical aids, energy and fatigue, mobility, pain and discomfort, sleep and rest, and work capacity. The Psychological domain includes items that address “bodily image and appearance, negative feelings, positive feelings, self-esteem, spirituality, religion, personal beliefs and thinking, learning, and memory and concentration” (WHO, 1997). The third domain, Social Relationships, addresses “personal relationships, social support, and sexual activity” (WHO, 1997). The last domain, Environment, addresses, “financial resources, freedom, physical safety and security, health

and social care, home environment, opportunities for acquiring new information and skills, participation in and opportunities for recreation and leisure activities, physical environment and transportation” (WHO, 1997).

Response options to items in each domain vary by item grouping and included:

- “not at all, not much, moderately, a great deal, and completely, or
- not at all, a little, a moderate amount, very much, and an extreme amount, or
- very poor, poor, neither, good, and very good, or
- very dissatisfied, dissatisfied, neither satisfied nor dissatisfied, satisfied, and
- very satisfied” (WHO, 1997)

Option representation encompassed a value of 1 to 5 on a Likert scale. Each item in each of the four domain subscales were added together to provide summated subscale scores. Two independent scores were examined separately as relating to overall perception of quality of life, and overall perception of health.

Higher scores on each of the domain subscale scores of the WHOQOL-BREF mean higher quality of life. Raw scores were transformed based upon the mean scores of items with each domain. Total transformed score ranges were from 0 to 100. Percentages of each item within each subscale were also assessed for overall knowledge of the subscale’s concept. Permission to use the instrument for this research study was granted by the Seattle Quality of Life Group, Instrument Dissemination Coordinator, Hsio-Yin. The Seattle Quality of Life Group is responsible for the USA English version of the WHOQOL-BREF. The WHOQOL-BREF instrument and its instructions are included in Appendix D.

AFRICAN AMERICAN ACCULTURATION SCALE – REVISED (AAAS-R)

The African American Acculturation Scale -Revised (AAAS-R) is an instrument developed by Klonoff and Landrine (1994) to assess levels of acculturation among African Americans (2000). Cronbach's alpha for the total acculturation (AAAS-R_Total – 47 items) score was 0.93. In addition, the eight (8) subscales have reliabilities ranging from .67 - .89 and are as follows:

- “.89 for Religious Beliefs and Practices (AAAS-R_1 – 10 items),
- .89 for Preferences for Things African American (AAAS-R_2 – 9 items),
- .87 for Interracial Attitudes (AAAS-R_3 – 7 items),
- .79 for Family Practices (AAAS-R_4 – 4 items),
- .77 for Health Beliefs and Practices (AAAS-R_5 – 5 items),
- .76 for Cultural Superstitions (AAAS-R_6 – 4 items),
- .76 for Racial Segregation (AAAS-R_7 – 4 items), and
- .67 or Family Values (AAAS-R_8 – 4 items)” (Klonoff & Landrine, 2000).

The AAAS-R was developed from the original AAAS (Klonoff & Landrine, 2000). The original AAAS was developed because there were no scales developed for African Americans. The instrument was first developed after a thorough literature review concerning aspects of culture that could be included as well as evidence on African American culture which depicted the eight subscales: Religious Beliefs and Practices, Preferences for Things African American, Interracial Attitudes, Family Practices, Health Beliefs and Practices, Cultural Superstitions, and Racial Segregation. Subsequently, the authors developed items reflective of the eight (8) dimensions of African American culture as well as invited seven (7) African American from around the United States to produce a list of their beliefs, practices, rituals, foods, games, and superstitions held by African Americans. In addition, they were also asked to include family practices, religious rituals, leisure activities and other items to be included in the scale. This produce a total item scale composed of 189 items, each item included was listed by at least three (3) individuals. Fifty-seven items were dropped because they did not discriminate between African

Americans and non-African Americans. In addition, items on which 50% of African Americans agreed, a rating of four (4) or higher, were retained and the lower ratings were dropped. A final total of 74 items were retained. Response options to items in each of the subscales were: I totally Disagree/Not True at All, Sort of Agree/Sort of True, and I Strongly Agree/Absolutely True, representing a value of 1 to 7 on a Likert scale.

The AAAS was administered to a sample of 183 adults (51 mean, 132 women) with representation of African American, Whites, Latinos, Asians, and mixed African American heritage. The total acculturation scores as well as the eight (8) subscale scores revealed that the scale scores were unrelated to social class gender and education. After utilization of the AAAS, a shorter version, AAAS-R, was developed as a result of studies that identified objectionable items, which were subsequently dropped, to include a total item count of forty-seven (47) after being administered to a sample of 520 African American adults.

Higher scores on the subscales and subsequent total acculturation score, reflect higher agreement or a more traditional (less acculturated) cultural orientation, and lower scores on the subscales and subsequent total acculturation score, reflect low immersion in African American culture (acculturated). The subscale scores ranged from 4 to 70 and the total acculturation score ranged from 47 to 329. Permission to use the instrument for this research study was granted by the author, Dr. Elizabeth Klonoff. The AAAS-R instrument and its instructions are included in Appendix E.

PROTECTION OF SUBJECTS

The University of Texas Medical Branch (UTMB) Institutional Review Board (IRB) granted permission to conduct this study (Appendix B). All data collected remained confidential and anonymous. Completed surveys were stored in a password protected database. Participants were provided with contact information for the principal investigator on the recruitment flyer and submitted survey responses were not linked to email addresses.

or other identifying information. i.e., deidentified. No participant was denied involvement in the research study on the basis of religion, sexual orientation, or educational status.

LIMITATIONS AND ASSUMPTIONS

This research study had several limitations. Firstly, study advertisement and subsequent recruitment was limited to by-proxy advertisement through secondary and tertiary sources with no knowledge, specifically contact information, of those meeting the inclusion criteria of being an African American women diagnosed with lung or colorectal cancer. The study was also limited to recruitment due to an active worldwide pandemic of COVID19, which resulted in inabilities to connect with people due to mandated lockdowns and social distancing restrictions. Most healthcare institutions, who provide care to potential participants who met the study's inclusion criteria had policies in place that prevented non-employee access and advertisement at their facilities. As a result, all sample participants were recruited from one study site in which the subjects may not have been representative of the general population of African American women with a diagnosis of lung or colorectal cancer. Likewise, many potential sites of study recruitment would not accept research study recruitment that was not generated by their own employees and many cancer survivor report groups elect not to have anyone but cancer survivor participant in the groups. The ability to generalize the results of this research study could have been limited by the relatively small sample size. Additionally, there were several assumptions applicable to this current study. The principal investigator assumed that participants provided honest responses to the survey according to their perception of their quality of life and their self-identify of their cultural norms at the time they completed the survey.

DATA ANALYSIS

In this descriptive, exploratory research design, African American women with a diagnosis of lung or colorectal cancer completed the survey instrument, which included the World Health Organization Quality of Life – BREF (WHOQOL-BREF), the African American Acculturation Scale – Revised (AAAS-R), and the Demographic Data Collection Form including two narrative questions. The IBM SPSS version 24 was utilized for purposes of scoring, statistical analyses, and comparison of results. All data were entered when submitted and examined for any missing data. Data were analyzed using descriptive statistics which included measures of central tendency, interquartile ranges, analysis of variance, standard deviations, Pearson Correlation, and Mann Whitney U tests. All data were analyzed for normality and homogeneity of variance to support if the observed relationships were enough to be meaningful to the data. Standard descriptive statistics were used to describe the distribution of scores for each subscale.

The narrative responses to the two optional questions were reviewed and analyzed utilizing thematic analysis to describe and interpret the written experiences of the participants (Lincoln & Guba, 1985). The Specific Aims and Research Questions were analyzed as described below:

AIM 1: *Research Question 1.1* was answered using descriptive statistics (means, interquartile ranges, medians, frequency distributions and skewness) to compute for AAAS-R subscales. Descriptive statistics were used to present the distribution of scores for each subscale to illustrate the shape, central tendency, and variability within a set of data to define a population (Portney & Watkins, 2009). Also, numbers and percentages of responses to each item of the subscales were reported. Research Question 1.2 was answered using Mann Whitney U Tests to explore the relationship between type of cancer and AAAS-R subscales and total acculturation scores.

AIM 2: *Research Question 2.1* was answered using simple linear regressions were used for demographic variables, age, age at diagnosis, and education, and quality of life Perception score.

Research Question 2.2 was answered using simple linear regressions were used for demographic variables, age, age at diagnosis, and education, and quality of life Perception of Health score. *Research Question 2.3* was answered using Mann Whitney U Tests to explore the relationship between type of cancer and WHOQOL-BREF scores.

AIM 3: *Research Question 3.1* was answered using Pearson correlations were calculated the overall acculturation score, its subscales and quality of life of subscales.

SUMMARY

The results of the analyses are presented in Chapter 4. Chapter 4 will detail the analytic process. In addition, Chapter 4 will provide data and subsequently answer the research questions.

CHAPTER 4: RESULTS AND FINDINGS

INTRODUCTION

Chapter four presents the results of the study including the African American women with a lung or colorectal cancer diagnosis demographic characteristics, the descriptive psychometric results for the study sample, and the analysis and results for each research question.

The study had one purpose and three aims. The purpose of the study was to explore possible associations between acculturation, selected demographic variables and perceptions about quality of life in African American women who have been diagnosed with either lung or colorectal cancer and have received surgical, anticancer therapy and/or radiation treatments within the past five years. The three aims of the study were as follows: 1). to investigate how demographic characteristics are related to acculturation score in African American women with lung or colorectal cancer, 2). to Investigate how demographic characteristics are related to the quality of life score in African American women with lung or colorectal cancer, and 3). to examine the correlation between the African American Acculturation Scale score and the World Health Organization Quality of Life domain scores.

AFRICAN AMERICAN WOMEN DEMOGRAPHIC CHARACTERISTICS

A final pilot sample of fifteen (15) African American women with a diagnosis of lung or colorectal cancers were recruited and completed the demographic survey (n=15). The resulting sample (15) and all self-identified as being African American (100%) and female (100%). The age of the participants ranged from 40 to 80 years, with a mean age of 60.9 years (s.d.=10.21). Most of the sample population identified as being diagnosed with having lung cancer (40%) with an average diagnosis for of 12 months (s.d.= 14.13). More

than 50% of survey participants possessed a college degree with 60% still employed or retired. The primary health insurance held by the participants was Medicare/Medicaid (53%). Additionally, 46% of the survey participants made at least \$35,000 annually. Demographic information for the sample population is presented in Table 4.1.

Table 4.1: Demographic Characteristics of African American Women Sample

N=15	Minimum	Maximum	Mean	s.d. (σ)
Age	40	80	60.93	10.21
Age at Diagnosis	40	78	55.05	16.94
Variable	Value		Percent	
Highest Level of Education	13 = 11 th Grade		7	
	14 = HS Graduate		33	
	15 = Some College		7	
	16 = Associate degree		33	
	17 = Bachelor's Degree		7	
	18 = Master's Degree		13	
Marital Status	1 = Married		20	
	2 = Widowed		20	
	3 = Divorced		13	
	7 = Single, Never Married		47	
Yearly Income	1 = < \$20,000		31	
	2 = \$20,000 – 34, 999		23	
	3 = \$35,000 – 49,999		15	
	4 = \$50,000 – 74,999		31	
Type of Cancer	1 = lung		40	
	2 = colon		33	
	3 = rectal		6	
	4 = colorectal		20	
Employment Status	1 = Full-time		20	
	2 = Part -time		13	
	4 = Retired		27	
	5 = Disabled		40	
Health Insurance	1 = Private/Employer		33	
	2 = Medicare/Medicaid		53	
	3 = Public Health		13	
Comorbidities	1 = Diabetes		27	
	2 = Hypertension		40	

To analyze if any of the demographic characteristics (other than relatives in household) would influence the research findings, statistical tests were performed to

ascertain the relationship between the demographic variables and both the total AAAS-R score and subscales and the WHOQOL-BREF scores and subscales.

INTERNAL CONSISTENCY AND VALIDITY FOR INSTRUMENTS

The reliability of index for internal consistency was addressed for the two instruments: The World Health Organization Quality of Life (WHOQOL-BREF) instrument and African American Acculturation Scale – Revised (AAAS-R). Internal consistency is a measurement of the correlation of the items in a scale to each other and to the total score (Portney & Watkins, 2009, p. 606). DeVellis (2017) concludes that research scales between .65 and .70, are minimally acceptable; between .70 and .80, are respectable; between .80 and .90, are very good; and are far above .90, results in plans to shorten the scale (DeVellis, 2107, p.145). Nunnally and Bernstein (1994) and Pedhazur and Schmelkin (1991) both also addressed the standards of reliability as values of .70 and above will be adequate.

Everhart, Miadich, Leiback, Borschuk & Koinis-Mitchell (2016) reported the Cronbach alpha for the AAAS-R subscales as .75 for AAASR-1, .72 for AAASR-2, .83 for AAASR-3, .69 for AAASR-4, .56 for AAASR-5, .73 for AAASR-6, .72 for AAASR-7, .52 for the AAASR-7 and for the overall AAASR as .83. In this study, the AAASR-4 had a Cronbach alpha in the minimally acceptable range of .65 and .70, with AAASR-1, AAASR-2, AAASR-6, and AAASR-7 were in the respectable range of .70 and .80, while AAASR-3 and the overall AAASR were in the very good range of .80 and .89.

de Mol et al., (2018) reported Cronbach alpha's for WHOQOL-BREF subscale domains of Physical Health (.77), Psychological Health (.77), and Environment (.77) were in the respectable range.

Using PASS 2021, it was determined that a sample size of fifteen (15) achieves 81% power to detect a non-zero R^2 attributed to one independent variable using an F-Test (or two-sided t-test) at a significance level (alpha) of 0.050. The power was calculated assuming that the actual value of R^2 is as low as 0.38. We had no preliminary data for this, so used a wide range of potential R^2 values. With an R^2 as low as 0.175, 15 subjects will have at least 80% power for creating a simple linear regression with each of our metrics (acculturation and quality of life). The secondary outcomes looked at differences in scores within each demographic variable. We did not know the population would be and did not enroll equal numbers of subjects from each portion of a demographic group, so this study is not powered for the secondary outcomes.

STUDY QUESTIONS

AIM 1: Investigate how demographic characteristics are related to acculturation score in African American women with lung or colorectal cancer.

RQ1.1: What are the relationships between demographic variables and acculturation using the African American Acculturation Scale (AAAS-R)?

In order to explore if any relationships existed between the AAAS-R total score, the results to the eight AAAS-R subscales and the AAAS-R total score are presented in the following tables. The summary descriptive statistics are provided in Table 4.2 for each of the AAAS-R subscales and the AAAS-R overall. The total scores could range from 47-329 ranging from 1 = I totally disagree; not at all true to 7 = I strongly agree; absolutely true. Five of the subscales had a negative or left skew. Five of the subscales and AAAS-R overall had a positive or right skew. Because the overall scale has a kurtosis, how heavily the tails of the distribution differ from a normal distribution

(Portney & Watkins, 2009), -0.5 and 0.5, the data are nearly symmetrical. The mean score = 217.9 for the scale overall with a standard deviation of 34.9.

Table 4.2 Summary Descriptive Statistics of AAAS-R subscales (n=15)

	Mean (Standard Deviation)	Median (Interquartile Range)	Min.	Max.	Skewness	Kurtosis
AAAS-R-1 10 items	61.8 (8.8)	64 (10)	39	70	-1.569	2.307
AAAS-R-2 9 items	40.1 (15.5)	46 (28)	15	63	-.314	-1.065
AAAS-R-3 7 items	18.7(11.5)	16 (22)	7	39	.629	-.925
AAAS-R-4 4 items	12.4 (6.2)	13 (10)	4	22	.172	-1.053
AAAS-R-5 5 items	18.4 (8.2)	18 (15)	5	33	.131	-.924
AAAS-R-6 4 items	15.5 (6.9)	16 (9)	4	28	.303	-.169
AAAS-R-7 4 items	20.9 (5.7)	22 (10)	10	28	-.410	-.532
AAAS-R-8 4 items	21.8 (4.3)	22 (8)	15	28	-.168	-1.237
AAAS-R Overall	217.9 (34.9)	207 (50)	169	272	.411	-.993

Table 4.3 depicts the percentage of responses for each Likert category to each item of the AAAS-R-1: Religious Beliefs and Practices (10 items). When reviewing the percentages of each of the answers from the responses, 50% of the participants chose the highest *I strongly agree/absolutely true* for a minimum of 80% to a maximum of 93%. Seventy-five percent (75%) of the participants were current members of a Black church with 73% of the participants affirming that *the church is the heart of the Black Community*. The lowest response was 40% of the participants indicated that they *used to sing in the church choir* (Klonoff & Landrine, 2000).

Table 4.3: Religious Beliefs and Practices – AAAS-R-1

	I Totally Disagree Not True at All		Sort of Agree/Sort of True			I Strongly Agree/Absolutely True	
*(Klonoff & Landrine, 2000).	1	2	3	4	5	6	7
*01. I believe in the Holy Ghost.	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	1(7%)	14(93%)
*02. I like gospel music.	0(0%)	0(0%)	0(0%)	0(0%)	2(13%)	1(7%)	12(80%)
*03. I believe in heaven and hell.	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	3(20%)	12(80%)
*04. The church is the heart of the Black Community.	0(0%)	0(0%)	1(7%)	0(0%)	0(0%)	3(20%)	11(73%)
*05. I have seen people “get in the spirit” or speak in tongues.	0(0%)	0(0%)	0(0%)	1(7%)	0(0%)	3(20%)	11(73%)
*06. I am currently a member of a Black church.	2(13%)	2(13%)	0(0%)	0(0%)	0(0%)	0(0%)	11(73%)
*07. When I was young, I was a member of a Black church.	1(7%)	0(0%)	0(0%)	0(0%)	0(0%)	1(7%)	13(87%)
*08. Prayer can cure disease.	1(7%)	1(7%)	0(0%)	2(13%)	0(0%)	0(0%)	11(73%)
*09. What goes around, comes around.	0(0%)	0(0%)	0(0%)	1(7%)	1(7%)	1(7%)	12(80%)
*10. I used to sing in the church choir.	6(40%)	2(13%)	0(0%)	0(0%)	1(7%)	0(0%)	6(40%)

The participants indicated their preferences for things African American in Table 4.4. In, this subscale, the majority of participants indicated, at a minimum of 40% and maximum of 57%, that most of the music that they listen to is by Black artists, they like Black music more than White music, they read Essence of Ebony magazine, and the person that they admire the most is Black (Klonoff & Landrine, 2000).

Table 4.4: Preferences for Things African American – AAAS-R-2

	I Totally Disagree Not True at All		Sort of Agree/Sort of True			I Strongly Agree/Absolutely True	
*(Klonoff & Landrine, 2000).	1	2	3	4	5	6	7
* *11. Most of the music I listen to is by Black artists.	3(20%)	2(13%)	0(0%)	1(7%)	2(13%)	1(7%)	6(40%)
*12. I like Black music more than White music.	3(20%)	3(20%)	0(0%)	1(7%)	0(0%)	2(13%)	6(40%)
*13. I listen to Black radio stations.	1(7%)	2(13%)	1(7%)	1(7%)	2(13%)	4(27%)	4(27%)
*14. I try to watch all the Black shows on TV.	5(33%)	3(20%)	2(13%)	1(7%)	1(7%)	0(0%)	3(20%)
*15. The person I admire the most is Black.	1(7%)	2(14%)	0(0%)	0(0%)	2(14%)	1(7%)	8(57%)
*16. I feel more comfortable around Blacks than around Whites.	3(20%)	3(20%)	0(0%)	3(20%)	1(7%)	0(0%)	5(33%)
*17. When I pass a Black person (a stranger) on the street, I always say hello or nod at them.	2(13%)	1(7%)	1(7%)	1(7%)	5(33%)	1(7%)	4(27%)
*18. Most of my friends are Black.	4(27%)	0(0%)	1(7%)	3(20%)	2(13%)	0(0%)	5(33%)
*19. I read (or used to read) Essence or Ebony magazine.	3(20%)	2(13%)	1(7%)	0(0%)	1(7%)	2(13%)	6(40%)

Table 4.5 includes the subscale that represents interracial attitudes. Forty-seven percentage of the responses chose *I totally disagree/not true at all* for the item *I don't trust White people*. No response was chosen for *I strongly agree/absolutely disagree* for the same item choice. Whereby a minimum of 40% and a maximum of 47% choose *I totally disagree/not true at all* for all other items on the scale (Klonoff & Landrine, 2000).

Table 4.5: Interracial Attitudes – AAAS-R-3

	I Totally Disagree Not True at All		Sort of Agree/Sort of True			I Strongly Agree/Absolutely True	
*(Klonoff & Landrine, 2000)	1	2	3	4	5	6	7
*20. I don't trust most White People.	7(47%)	3(20%)	2(13%)	1(7%)	2(13%)	0(0%)	0(0%)
*21. IQ tests were set up purposefully to discriminate against Black people.	7(47%)	4(27%)	0(0%)	1(7%)	1(7%)	0(0%)	2(13%)
*22. Most Whites are afraid of Blacks.	6(40%)	3(20%)	1(7%)	1(7%)	0(0%)	3(20%)	1(7%)
*23. Deep in their hearts, most White people are racists.	6(40%)	3(20%)	2(13%)	1(7%)	0(0%)	2(13%)	1(7%)
*24. Whites don't understand blacks.	6(40%)	3(20%)	2(13%)	0(0%)	0(0%)	2(13%)	2(13%)
*25. Most tests (like SATs and tests to get a job) are set up to make sure that Blacks don't get high scores on them.	7(47%)	2(13%)	3(20%)	0(0%)	0(0%)	1(7%)	2(13%)
*26. Some members of my family hate or distrust White people.	6(43%)	3(21%)	1(7%)	0(0%)	0(0%)	2(14%)	2(14%)

Family practices were represented in Table 4.6 below. The two most chosen responses included *I totally disagree/not true at all* for all items 27, *when I was young, I shared a bed at night with my sister, brother, or some other relative.* and 30, *when I was young, I took a bath with my sister, brother, or some other relative.* The most chosen response for *I strongly agree/absolutely true* was *When I was young, I shared a bed a night with my sister, brother, or some other relative* (Klonoff & Landrine, 2000).

Table 4.6: Family Practices - AAAS-R-4

	I Totally Disagree Not True at All		Sort of Agree/Sort of True			I Strongly Agree/Absolutely True	
	1	2	3	4	5	6	7
*(Klonoff & Landrine, 2000)							
*27. When I was young, I shared a bed at night with my sister, brother, or some other relative.	4(27%)	4(27%)	0(0%)	2(13%)	0(0%)	0(0%)	5(33%)
*28. When I was young, my parent(s) sent me to stay with a relative (aunt, uncle, grandmother) for a few days or weeks, and then I went back home again.	7(47%)	4(27%)	0(0%)	1(7%)	0(0%)	0(0%)	3(20%)
*29. When I was young, my cousin, aunt, grandmother or other relative lived with me and my family for a while.	5(33%)	2(13%)	1(7%)	1(7%)	1(7%)	2(13%)	3(20%)
*30. When I was young, I took a bath with my sister, brother, or some other relative.	7(47%)	3(20%)	2(13%)	0(0%)	1(7%)	1(7%)	1(7%)

In Table 4.7 health beliefs and practices were represented. The choice of *I totally disagree/not true at all* was chosen at 47% and 40% respectively for *illnesses can be classified as natural types and unnatural types* and *I was taught that you shouldn't take a bath and then go outside.* Twenty-seven percent (27%) of participants chose *I strongly agree/absolutely true* for *some older Black women know a lot about pregnancy and childbirth* (Klonoff & Landrine, 2000).

Table 4.7: Health Beliefs & Practices – AAAS-R-5

AAAS-R Health Beliefs & Practices	I Totally Disagree Not True at All		Sort of Agree/Sort of True			I Strongly Agree/Absolutely True	
	1	2	3	4	5	6	7
(Klonoff & Landrine, 2000)							
*31. Some people in my family use Epsom salts.	1(7%)	2(13%)	1(7%)	3(20%)	0(0%)	4(27%)	4(27%)
*32. Illnesses can be classified as natural types and unnatural types.	6(40%)	2(13%)	1(7%)	0(0%)	2(13%)	2(13%)	2(13%)
*33. Some old Black women/ladies know how to cure diseases.	5(33%)	3(20%)	1(7%)	2(13%)	0(0%)	2(13%)	2(13%)

*34. Some older Black women know a lot about pregnancy and childbirth.	3(20%)	2(13%)	1(7%)	0(0%)	2(13%)	3(20%)	4(27%)
*35. I was taught that you shouldn't take a bath and then go outside.	7(47%)	3(20%)	1(7%)	0(0%)	1(7%)	0(0%)	3(20%)

Cultural superstitions were rated in Table 4.8. Forty percent (40%) of participants chose *I strongly agree/absolutely true* for item 39, *I eat black-eyed pea on New Year's Eve*. Whereas 33% of participants chose *I totally disagree/not true at all* for item 36, *I avoid splitting a pole* (Klonoff & Landrine, 2000).

Table 4.8: Cultural Superstitions – AAAS-R-6

AAAS-R Cultural Superstitions	I Totally Disagree Not True at All		Sort of Agree/Sort of True			I Strongly Agree/Absolutely True	
* (Klonoff & Landrine, 2000)	1	2	3	4	5	6	7
*36. I avoid splitting a pole.	5(33%)	3(20%)	1(7%)	0(0%)	2(13%)	1(7%)	3(20%)
*37. When the palm of your hand itches, you'll receive some money.	4(27%)	2(13%)	3(20%)	0(0%)	3(20%)	0(0%)	3(20%)
*38. There's some truth to many old superstitions.	5(33%)	1(7%)	1(7%)	1(7%)	2(13%)	1(7%)	4(27%)
*39. I eat black-eyed pea on New Year's Eve.	3(20%)	1(7%)	1(7%)	1(7%)	1(7%)	2(13%)	6(40%)

The racial segregation subscale in Table 4.9 (4 items) asked about predominately Black neighborhoods and schools. The majority of participants responded to item 40, *I grew up in a mostly Black neighborhood*, and item 41, *I went to (or go to) a mostly Black high school*, with *I strongly agree/absolutely true* at 53%. No one chose *I disagree/not true at all* for item 40, *I grew up in a mostly Black neighborhood* (Klonoff & Landrine, 2000).

Table 4.9: Racial Segregation – AAAS-R-7

	I Totally Disagree Not True at All		Sort of Agree/Sort of True			I Strongly Agree/Absolutely True	
* (Klonoff & Landrine, 2000)	1	2	3	4	5	6	7
*40. I grew up in a mostly Black neighborhood.	0(0%)	0(0%)	3(20%)	0(0%)	2(13%)	2(13%)	8(53%)
*41. I went to (or go to) a mostly Black high school.	3(20%)	0(0%)	1(7%)	0(0%)	0(0%)	3(20%)	8(53%)
*42. I went to a mostly Black elementary school.	1(7%)	1(7%)	1(7%)	2(13%)	0(0%)	3(20%)	7(47%)
*43. I currently live in a mostly Black neighborhood.	4(27%)	1(7%)	1(7%)	1(7%)	0(0%)	3(20%)	5(33%)

Table 4.10 represents the family values subscale and item questions are position around family including children customs. Majority of the participants, 60%, chose *I strongly agree/absolutely true* to item 47, *a child should not be allowed to call a grown women by her first name, “Alice.” The child should be taught to call her “Miss Alice.”* No participant chose *I totally disagree/not true at all* for item 45, *old people are wise*. Forty percent of participants chose *I strongly agree/absolutely true* to item 44, *It’s better to try and move your whole family ahead in this world than it is to be out for only yourself* (Klonoff & Landrine, 2000).

Table 4.10: Family Values – AAAS-R-8

	I Totally Disagree Not True at All		Sort of Agree/Sort of True			I Strongly Agree/Absolutely True	
*(Klonoff & Landrine, 2000)	1	2	3	4	5	6	7
*44. It’s better to try and move your whole family ahead in this world than it is to be out for only yourself.	1(7%)	0(0%)	0(0%)	3(20%)	0(0%)	5(33%)	6(40%)
*45. Old people are wise.	0(0%)	2(13%)	0(0%)	4(27%)	1(7%)	3(20%)	5(33%)
*46. I often lend money or give other types of support to members of my family.	3(20%)	1(7%)	0(0%)	2(13%)	2(13%)	2(13%)	5(33%)
*47. A child should not be allowed to call a grown women by her first name, “Alice.” The child should be taught to call her “Miss Alice.”	0(0%)	0(0%)	0(0%)	2(13%)	0(0%)	4(27%)	9(60%)

Simple linear regressions were used for demographic variables, age, age at diagnosis, and education, and total acculturation score. The demographic variables of age and age at diagnosis had a weak positive correlation. The education variable had a negligible correlation. There was no significant difference between groups. Results are presented in Table 4.11.

Table 4.11: Simple Linear Regression for Demographic Variable and Acculturation Score

Variable	R	R ²	p
Age	.312	.098	.257
Age at Diagnosis	.320	.103	.245
Education	.265	.070	.340

AIM 1: Investigate how demographic characteristics are related to acculturation score

in African American women with lung or colorectal cancer.

RQ1.2: What are the differences across demographic variables on acculturation in African American women with lung or colorectal cancer?

In order to determine differences across demographic variables on acculturation scores, Mann Whitney U Tests were conducted the statistics are provided in Table 4.12 among cancer types of lung and colorectal cancers. There were no significant differences between groups.

Table 4.12: Mann Whitney U Tests Results for Demographic Variables and Acculturation

	N	Mann-Whitney U test	Sig. (2-tailed)
Total AAAS-R	15	.637	.689
AAAS-R Religion	15	.633	.689
AAAS-R Preferences	15	.238	.272
AAAS-R Interracial	15	.719	.776
AAAS-R Family	15	.766	.776
AAAS-R Health	15	.955	.955
AAAS-R Superstitions	15	.953	.955
AAAS-R Segregation	15	.765	.776
AAAS-R Values	15	.906	.955

AIM 2: Investigate how demographic characteristics are related to quality of life score in African American women with lung or colorectal cancer.

RQ2.1: What are the relationships between demographic variables and quality of life using the World Health Organization Quality of Life Instrument (WHOQOL-BREF)?

Simple linear regressions were used for demographic variables, age, age at diagnosis, and education, and quality of life Perception score. The demographic variables of age and age at diagnosis had a weak positive correlation. The education variable had a negligible correlation. Results are presented in Table 4.13.

Table 4.13: Simple Linear Regression for Demographic Variable and Quality of Life Perception Score

Variable	R	R ²	p
Age	.312	.098	.257
Age at Diagnosis	.320	.103	.245
Education	.265	.070	.340

AIM 2: Investigate how demographic characteristics are related to quality of life score in African American women with lung or colorectal cancer.

RQ2.2: What are the relationships between demographic variables (age, age at diagnosis, etc.) and quality of life using the World Health Organization Quality of Life Instrument (WHOQOL-BREF) Perception of Health score?

Simple linear regressions were used for demographic variables, age, age at diagnosis, and education, and quality of life Perception of Health score. The demographic variable of age had a strong positive correlation, followed by age at diagnosis with a moderate correlation, ending with education as a weak correlation. Results are presented in Table 4.14. Statistical significance seen in age and age at diagnosis.

Table 4.14: Simple Linear Regression for Demographic Variable and Quality of Life Perception of Health Score

Variable	R	R ²	p
Age	.754	.569	.001
Age at Diagnosis	.707	.499	.003
Education	.130	.017	.643

AIM 2: Investigate how demographic characteristics are related to quality of life score in African American women with lung or colorectal cancer.

RQ2.3: What are the differences across demographic variables on quality of life in African American women with lung or colorectal?

In order to determine differences across demographic variables on quality of life sub scores, Mann Whitney U Tests were conducted the statistics are provided in Table

4.15 among cancer types of lung and colorectal cancers. There were no significant differences between groups.

Table 4.15: Mann Whitney U Tests Results for Quality of life Subscales and Cancer Diagnosis

	N	Mann-Whitney U test	Sig. (2-tailed)
WHOQOL-BREF : Physical Health Score	15	21.5	.510
WHOQOL-BREF : Relationships Score	15	22.5	.590
WHOQOL-BREF : Environment Score	15	20.0	.403
WHOQOL-BREF : Psychosocial Score	15	18.5	.327

AIM 3: Examine the correlation between the African American Acculturation Scale (AAAS-R) score and the World Health Organization Quality of Life score.

RQ3.1: Does a correlation exist between the African American Acculturation Scale (AAAS-R) score and the World Health Organization Quality of Life score?

Pearson correlations were calculated the overall acculturation score, its subscales and quality of life of subscales. The resultant coefficients of seven subscales were negative, when one variable increased, the other variable decreased, and visa versa. The relationships may or may not represent causation. The Pearson's correlations for the AAAS-R scales are displayed in Table 4.16.

Table 4.16: Pearson's Correlation with AAAS-R Scores and Quality of Life Scores

		WHOQOL-1	WHOQOL-2	WHOQOL-3	WHOQOL-4
Total AAAS-R	Pearson Correlation	-.482	.134	.286	.078
	Sig. (2-tailed)	.069	.634	.301	.781
AAAS-R Religion	Pearson Correlation	.383	.615*	-.030	.633*
	Sig. (2-tailed)	.159	.015	.916	.011
AAAS-R Preferences	Pearson Correlation	-.428	-.391	.014	.171
	Sig. (2-tailed)	.111	.149	.960	.542

AAAS-R Practices	Pearson Correlation	-.075	.379	.359	.109
	Sig. (2-tailed)	.790	.163	.189	.698
AAAS-R Health	Pearson Correlation	-.044	.247	.517*	.139
	Sig. (2-tailed)	.876	.375	.048	.622
AAAS-R Superstitions	Pearson Correlation	-.496	.017	.277	.025
	Sig. (2-tailed)	.060	.952	.317	.930
AAAS-R Segregation	Pearson Correlation	-.242	.083	.085	.176
	Sig. (2-tailed)	.385	.768	.764	.531
AAAS-R Values	Pearson Correlation	-.123	.396	.252	.081
	Sig. (2-tailed)	.661	.144	.365	.774

*Correlation is significant at the 0.05 level (2-tailed)

Scores of the AAAS-R subscales and total acculturation score is presented below in Table 4.17. Highest scores were achieved on the subscales of Religious Beliefs and Practices (70), Racial Segregation (28), Preferences for Things African American (63), and Family Practices (28).

Table 4.17: AAAS-R Subscales and Total Acculturation Score

	Minimum Score	Maximum Score	Mean Score	s.d. (σ)
Total AAAS-R	169	272	217.96	34.90
AAAS-R Religion	39	70	61.89	8.87
AAAS-R Preferences	15	63	40.14	15.54
AAAS-R Interracial	7	39	18.73	11.59
AAAS-R Family	15	28	21.86	4.37
AAAS-R Health	5	33	18.46	8.27
AAAS-R Superstitions	4	28	15.53	6.94
AAAS-R Segregation	10	28	20.93	5.78
AAAS-R Values	15	28	21.86	4.37

Scores of the WHOQOL-BREF subscales is presented below in Table 4.18. Highest scores were achieved on the subscales of Psychological (94), Social Relationships (100), and Environment (100).

Table 4.18: WHOQOL-BREF Subscales Scores

	Minimum Score	Maximum Score	Mean Score	s.d. (σ)
Overall Perception of QOL	3	5	4	0.75
Overall Perception of Health	2	5	3.13	0.99
Physical Health	38	78	54.80	11.44
Psychological	38	94	68.73	15.22
Social Relationships	19	100	63.33	19.89
Environment	44	100	73.00	16.50

OTHER FINDINGS OF THE STUDY: NARRATIVE QUESTIONS

In addition to asking the study participants to complete the AAAS-R and WHOQOL-BREF instruments, two narrative questions were included in the study:

Question 1: *What would you like the healthcare provider that you visit for your cancer care to know about you that you believe they do not already know?* Question 2: *What is the most important part of your life that you want to keep in focus during your cancer journey?*

The two narrative questions were asked at the end of the demographic section; however, not all participants chose to answer the open-ended questions of the study. Of the fifteen (15) participants, four (4) participants chose to answer question 1, and ten (10) participants chose to answer question 2. Participants could write as much as little as they chose to respond.

For Question 1, three (3) of the responses included their description of personal attributes, and the final response indicated a call for help.

Here are a few examples of the responses to narrative Question 1:

Participant #11:

“I’m strong.”

Participant #6:

“I am a lifelong learner.”

Participant #14:

“I need help.”

For Question 2, these responses were noted and are categorized by frequency in Table 4.19.

Participant #13 : “My goal is to heal completely; not lose my individuality nor dreams; my family.”

Participant #15 : “To stay strong and active”

Participant #4 : “To work and have a business”

Table 4.19 Narrative Question Responses

<i>What is the most important part of your life that you want to keep in focus during your cancer journey?</i>	
Category	Frequency
Positive outlook	4
Being able to work	4
Religious practices	1
Family	2

In summary, the demographic data of the study participants indicated noteworthy differences from the current demographic data in Facts and Figures for African American/Black People (ACS, 2022). This group had higher individual socioeconomic status encompassing including income, education, and occupation.

Similarities in demographic data distribution was evident in majority of the study participants being diagnosed with having lung cancer, followed by colorectal cancers

which is in line with lung cancer being the second most common cancer and colon and rectum cancer being the third most common cancers diagnosed in African American women (ACS, 2022). Additionally, the comorbidity of diabetes was the most frequent presenting comorbidity known to increase risk of cancer incidence (ASC, 2022). WHOQOL reflected the lowest scoring categories Overall Perception of Health and Physical Health.

Due to the sample size of this pilot study, there were no significant differences between groups on with Mann U Whitney test among demographic variables and both acculturation and quality of life subscale scores.

The optional narrative responses revealed significant findings that represented meaning in life and in living with cancer by the participants who elected to respond. The relationship of the AAAS-R and WHOQOL-BREF findings to the theoretical framework, along with implications for nursing, is discussed in Chapter 5.

CHAPTER 5: DISCUSSION AND RECOMMENDATIONS

INTRODUCTION

This chapter provides a brief overview of the study's purpose and rationale including a discussion of the major study findings, a synthesis of the findings relative to the theoretical framework, and synthesis of significant research from the review of literature. In addition, this chapter addresses important implications of key study results regarding the impact of acculturation and quality of life in African American women with a lung or colorectal cancer diagnosis. This chapter concludes with a discussion of the strengths of the study, study limitations, and recommendations for future research that can further examine the impact of acculturation and quality of life in African American women with a lung or colorectal cancer diagnosis, surmising a needed call to actionable interventions.

The purpose of this proposed pilot study was to explore possible associations between acculturation, selected demographic variables and perceptions about quality of life in African American women who have been diagnosed with either lung or colorectal cancer and have received surgical, anticancer therapy and/or radiation treatments. Cancer is the second leading cause of death in the United States. Lung and colorectal cancer are in the top three most commonly diagnosed cancers in African American women resulting in an 8% lower cancer incidence rate than White women, but importantly a 12% higher cancer mortality rate (ACS, 2022). It is also significant to note that one (1) in three (3) African American women will be diagnosed with cancer during their lifetime and one (1) in sixteen (16) African American women will succumb from cancer. The relevance and significance of this study is emphasized by the growing body of research literature during the past decade related to health disparities and quality of life variables among African American women with breast cancer (American Cancer Society, 2019; Ashing et al., 2018; Claridy

et al., 2018). In addition, the history of the racial bias and discriminatory practices in the United States is often directed towards African Americans having a higher mistrust in the medical system (Corbie-Smith et al., 2002; Kinlock et al., 2017). This mistrust may lead to African Americans withholding information regarding their culture or quality of life that could have negative impacts on their health.

Cancer in adults is often a chronic condition which requires lifelong medical care (NCI, 2022). A striking body of evidence suggests that the journey of living with cancer is a much unique perspective than living after cancer (ACS, 2019). Of the factors that affect a person living with cancer including their beliefs and institutions that are passed down from one generation to another, culture, and how innate culture manifests into dominant societal culture equated to overall quality of life expression. These long-held beliefs and customs must be incorporated into the care of African American women living with a lung or cancer diagnosis to not only improve their quality of life, but also to make living with cancer a personal journey. There is a lack of research which addresses the acculturation of African American women with lung or colorectal cancer and the possible relationships with quality of life given that lung cancer is the leading cause of cancer deaths in African American women followed closely with colorectal cancer that leads to health disparities. This current study addressed those sizable gaps in current research.

DEMOGRAPHIC CHARACTERISTICS

The sample for this pilot study consisted of fifteen (15) African American women with a lung or colorectal cancer diagnosis drawn from a population in Southeast Texas, United States. The overall collective demographic profile of the study sample provided an explanatory view of the participants. The age of the participants ranged from 40 to 80 years, with a mean age of 60.9 years (s.d.=10.21). Most of the sample population identified as being diagnosed with having lung cancer (40%) with an average diagnosis of 12 months

(s.d.=14.13). More than 50% of survey participants possessed a college degree with 60% still employed or retired. The primary health insurance held by the participants was Medicare/Medicaid (53%). Additionally, 46% of the survey participants made at least \$35,000 annually.

In comparison, the mean age for lung cancer diagnosis is 70 and the mean age for colorectal diagnosis is 72 (ACS, 2022). Current demographics for African Americans reflect that 19% of African Americans live below the federal poverty level and 28% have completed a college degree (U.S. Census Bureau. (2020). In addition, African Americans are more disadvantaged because they have a higher likelihood of having inadequate health insurance (Bailey et al., 2017).

DISCUSSION OF MAJOR FINDINGS

The purpose of this proposed pilot study was to explore possible associations between acculturation, selected demographic variables and perceptions about quality of life in African American women who have been diagnosed with either lung or colorectal cancer and have received surgical, anticancer therapy and/or radiation treatments.

AIM 1.

The first Aim was to investigate how demographic characteristics are related to acculturation score in African American women with lung or colorectal cancer. African American women with a lung or colorectal cancer diagnosis was asked complete a demographic collection form as well as complete an acculturation scoring instrument, the African American Acculturation Scale – Revised (AAAS-R). Previous research studies that examined acculturation scores and demographic characteristics in cancer risks factors found a lower degree of acculturation in negative health behaviors (Guevarra et al., 2004; Hooper et al., 2016; Klonoff & Landrine, 1999).

The demographic variables of age and age at diagnosis had a weak positive correlation even though the correlations increased in response to one another, their relationship was not strong. This finding is related to the sample having been diagnosed within five (5) years and most being diagnosed within the past year. There was no significant difference between groups. (Table 4.11)

In the Religious Beliefs and Practices subscale of the AAAS-R, 50% of the participants chose the highest *I strongly agree/absolutely true* for a minimum of 80% to a maximum of 93%. Seventy-five percent (75%) of the participants were current members of a Black church with 73% of the participants affirming that the church is the heart of the Black Community. (Table 4.3) This statistic reflects that religious beliefs and practices encompasses a sizable portion of culture and of the participants overall acculturation scores. In addition, the Religious Beliefs and Practices subscale was the highest-ranking subscale. In a study by Everhart et al. . (2016), who examined acculturation and quality of life in African American caregivers of children with asthma, the researchers found that less acculturation was linked to religious beliefs and practices may serve as a protective role. Interracial attitudes were represented by 47 % of the participants chose *I totally disagree/not true at all* for the item *I don't trust White people*. No participant chose *I strongly agree/absolutely disagree* for the same item choice. (Table 4.5) This data is concurrent with previous studies revealing the mistrust of White medical professionals (Bailey et al., 2017; Kinlock et al., 2017; Scharff, 2010). In the AAAS-R subscale of Health beliefs and practices, the choice of *I totally disagree/not true at all* was chosen by 47% of the participants for the item *Illnesses can be classified as natural types and unnatural types*. Forty percent (40%) of the participants selected the choice of *I totally disagree/not true at all* for the item *I was taught that you shouldn't take a bath and then go outside*. (Table 4.7). The beliefs expressed by this pilot study are similar to the seminal research by Snow (1983) regarding the classifications of diseases as natural versus unnatural in African American culture. The racial segregation subscale of the AAAS-R asked about

predominately Black neighborhoods and schools. Most participants responded to item 40, *I grew up in a mostly Black neighborhood*, and item 41, *I went to (or go to) a mostly Black high school*, with *I strongly agree/absolutely true* at 53%. It is interesting to note that in response to item 40, *I grew up in a mostly Black neighborhood*, no participants disagreed with the statement (Table 4.9) This supports the previous research by Nardone et al. . 2020, which highlighted chronic health inequities among urban African Americans living in dense neighborhoods. Aim 1 also examined the differences across demographic variables on acculturation in African American women with lung or colorectal cancer. There were no significant differences between groups. The experience of cancer, regardless of whether it was lung or colorectal cancer, did not show a statistical difference.

AIM 2.

The second Aim examined the relationships between demographic variables and quality of life using the World Health Organization Quality of Life Instrument (WHOQOL-BREF). The demographic variables of age and age at diagnosis had a weak positive correlation. The participants in this sample reflected a lower age than the national average of these cancers diagnoses that may be contributed to this lack of correlation The education variable had a negligible correlation with the quality of life subscales. It is important to note however, in a related study by Martini et al. (2022) researchers utilized the WHOQOL-BREF and did find that age was associated with the psychological and health domains in a population of African American women.

Aim 2 also examined the relationships between demographic variables and quality of life using the World Health Organization Quality of Life Instrument (WHOQOL-BREF) Perception of Health score. The demographic variable of age had a strong positive correlation, followed by age at diagnosis with a moderate correlation, ending with education as a weak correlation.(Table 4.11). Statistical significance was seen in age and age at diagnosis with the Perception of Health score. Cancer incidence raises with increasing age as well as many cancers are being treated as chronic conditions. In the study

by Quinten et al. . (2015), quality of life in cancer patients is worse than non-cancer patients and increasing age has varying impacts on quality of life as associate with different quality of life domains. In addition, Aim 2 examined the differences across demographic variables on quality of life in African American women with lung or colorectal. There were no significant differences between groups.

AIM 3.

The last aim examined if there was a correlation between the African American Acculturation Scale (AAAS-R) score and the World Health Organization Quality of Life score. The overall acculturation score, its subscales and quality of life of subscales of the resultant correlation coefficients of seven subscales were negative. The relationships may or may not represent causation (Table 4.16). It is evident in this study's data that those with higher AAAS-R scores (less acculturated), greater than 240, expressed higher quality of life score in the subscales of Social Relationships (mean 63.3) and in Psychosocial (mean 68.7). It is equally important to note that the data clearly demonstrated between the two survey subscales that African American women with a lung or colorectal cancer diagnosis with lower acculturation scores, exhibited higher quality of life subscale scores. In other words, African American women who have retained more of their African American culture rather than adopting mainstream culture, exhibited better quality of life. This is a very significant finding regarding acculturation and quality of life.

NARRATIVE RESPONSES

In addition to responding to the AAAS-R and WHOQOL-BREF. Participants were given an opportunity to provide important personal insights about their experiences as African American women living with cancer. Analysis of those participant responses revealed significant insights about African American women living with a lung or colorectal cancer diagnosis. Participants were asked to share in two (2) narrative responses

1) what they would like the healthcare providers provide their cancer care to know about them, and 2) what they wanted to keep in focus about their life during their cancer journey.

SUMMARY OF FINDINGS

The demographic profile of the participants in this specific study population revealed that their mean age and age at diagnosis was lower than the national average of African American women diagnosed with lung or colorectal cancer. This finding may be explained by the fact that many of the participants had health insurance and that they were able to access a private healthcare facility. Statistical significance was seen in age and age at diagnosis. Cancer incidence raises with increasing age as well as many cancers are being treated as chronic conditions. Most of the sample population identified as being diagnosed with having lung cancer possessed a college degree and are majority are either still employed or retired. The primary health insurance held by the participants was Medicare/Medicaid and the study participants made above minimum salary wages .

Religious beliefs and practices encompassed a generous portion of culture. The Religious Beliefs and Practices accounted for the highest sub scores for participants overall acculturation scores. This finding is confirmed in a study by Everhart et al. (2016), who examined acculturation and quality of life in African American caregivers of children with asthma, found that less acculturation linked to religious beliefs and practices may serve as a protective role.

It was evident in this study's data that those who exhibited less acculturation expressed higher quality of life score in the subscales of Social Relationships and in Psychosocial. Moreover, equally impactful was that the data demonstrated that the African American women with a lung or colorectal cancer diagnosis who exhibited lower acculturation scores, exhibited higher quality of life subscale scores. Lastly, the narrative responses from the survey participants revealed that having a positive outlook, being able

to work, incorporating religious practices, and involving family, were pivotal in the participants lives while they navigate living with a lung or colorectal cancer diagnosis.

THEORETICAL FRAMEWORK RELATIONSHIP

The Culture Care Theory of Diversity and Universality was crucial in guiding this research study as it allowed the researcher to draw on the tenets of and links between nursing and anthropology. Acculturation, quality of life, and life experiences, have foundations in cultural relativeness (Hudelson, 2004; Kim & Alamilla, 2017). When providing nursing care to patients, caring is embodied in the explicit act of helping patients and the mode of care and interventions provided should be based on discreet patient preferences and cultural beliefs that in addition impact overall quality of life features (Leininger, 1985). Of the assumptions of the Culture Care Theory of Diversity and Universality, the significant assumption that informed this study was the assumption that, “Culturally congruent and beneficial nursing care can occur only when care values, expressions, or patterns are known and used explicitly for appropriate, safe, and meaningful care (Leininger, 1985). The results of this study emphasize that both the degree of acculturation and the perception of one’s quality of life may play a role in living with a lung or colorectal cancer diagnosis for African American women. Responses by African American women with lung or colorectal cancer to the AAAS-R and WHOQOL-BREF instruments, which explored the amount of acculturation and perception of quality of life, supported Leininger’s (1985) optimum nurse relationship that nurses are aware and of and subsequently incorporate cultural into the plan of care to exercise culturally congruent care.

STRENGTHS

One of the major strengths of this research study is that it is one of the few studies that examine acculturation and quality of life in African American women living with

cancer undergoing active cancer treatments. The study explored whether there were possible relationships between demographic variables as well as acculturation and quality of life scores. In addition, this study focused on the top causes of cancer death, as the focus of the study sample where health disparities exist. There has been a significant gap in the research examining the role that acculturation and quality of life in African American women who were diagnosed and living with lung or colorectal cancer due to a focus on more survivorship cancers such as breast cancer in this group. Health disparity research with this group has mainly focused on socio-economic data and often is focused on either cancer prevention or cancer survivorship, not the in-between. An additional strength was that participants completed all three surveys within the single study instrument demonstrating their commitment to sharing about their culture and quality of life paradigms.

STUDY LIMITATIONS

There were several limitations in this current study including the use of a non-randomized convenience sample of fifteen (15) African American women with a lung or colorectal cancer diagnosis recruited from a single ambulatory cancer infusion center in Southeast Texas. This convenience sample may limit the generalizability of the results to a large population of African American women with a lung or colorectal cancer diagnosis. The limited size of the pilot sample may have contributed to the inability to find significant relationships between the demographic variables, acculturation scores, as well as quality of life scores. Another considerable limitation was the response to participate in the research study. Previous research studies have affirmed that African Americans participant in research at a substantially less rate than Whites (Barret et al., 2017; Webb et al., 2019). The length of the total survey instrument may also have contributed to a low survey response rate. Regarding the AAAS-R, the absent of text qualifiers above each of the points

on the 7-point Likert scale categories , may have contributed to less than optimum Likert response selections. Regarding the WHOQOL-BREF, the changing of the text qualifiers above of the 5-point Likert scale categories may have contributed to less than optimum Likert response selections. Lastly, recruitment for participants begin during the height of the COVID19 pandemic in which people faced uncertainties and coping with living with cancer and living in a pandemic.

IMPLICATIONS FOR NURSING

One of the major implications of this study's findings is a demonstrated need for oncology nurses to seek opportunities to incorporate culturally competent care their practice. Nursing is an art and a science whose purpose is to provide holistic care while incorporating patients' cultural preferences to help them achieve their quality of life while living with cancer (Nightingale, n.d.). While this study specifically focused on African American women, this study may be applicable to other cultures. This study was able to use standardized instruments as assessment tools to quantify acculturative and quality of life scores in African American women with a lung or colorectal cancer diagnosis.

Although the study did not find numerous statistically significant relationships, results of the independent surveys, AAAS-R and WHOQOL-BREF, suggest that acculturation and quality of life should be assessed and results included in a mutually agreed upon plan of care for patients and their families. Lastly, the anecdotal understandings from the survey participants revealed that having a positive outlook, being able to work, incorporating religious practices, and involving family, were pivotal in the participants lives while they navigate living with a lung or colorectal cancer diagnosis. This finding provides additional support for holistic and culturally competent nursing care to patients by nurses.

RECOMMENDATIONS FOR FUTURE RESEARCH

Based upon the findings of this current exploratory pilot study, there is a need to replicate this research among a larger, and more representative sample of African American women living with a lung or colorectal cancer diagnosis. Expanding the diversity within African American women to include different geographic regions and cancer treatment locations within the sample may provide more substantial data about the differential impact of other variables on acculturation and quality of life measures. In addition, there may be a need to further refine the upcoming study samples into specific types of cancer diagnosis to support potential relationships that can be extracted to a more generalizable study sample.

CONCLUSIONS

The results of this exploratory study provided further support for the current body of related research literature that suggests there may be additional relationships among acculturation and quality of life in African American women with a diagnosis of lung or colorectal cancer. The results of this study reflect that African American woman living with a diagnosis of lung or colorectal cancer have experiences of varying degrees of acculturation that may affect their quality of life and may lead to negative effects contributing to health disparities.

Ultimately, the results provide insight into the vital need for continuing research related to establishing and subsequently maintaining cultural competence of nurses and other healthcare professionals that provide care to patients at their most vulnerable moments in life while they navigate various healthcare institutions while living with cancer. There is also an urgent need for seminal research which examines the viewpoints and practices of African Americans living with all forms of cancer that prefer not to use traditional cancer treatment plans. It is extremely important that healthcare professionals

continue to examine additional cultural beliefs and their impact of living with other chronic illnesses.

Appendix A: Study Recruitment Flyer

What have you experienced as an African American Woman living with Lung or Colorectal Cancer?

I want to hear your story!

Research Study Purpose: explore the relationships between quality of life and acculturation in African American women receiving treatment for a cancer diagnosis.

If you are:

- African American (Black)
- Female (Age 18 or Older)
- Are currently diagnosed as having Lung or Colorectal (Colon or Rectal) Cancer
- Have been diagnosed at least 6 months

To complete a 3-questionnaire survey (estimated 30-45 minutes to complete):

Please Visit: <https://redcap.link/AACancer>

For Questions, Please Contact:

Danya Garner, MSN, RN, NPD-BC, OCN, CCRN-K
Cancer Nurse Educator/ Nursing PhD Student
University of Texas Medical Branch at Galveston
School of Nursing
301 University Blvd
Galveston, TX 77555
dagarner@utmb.edu

Appendix B: IRB Approval Letters

Institutional Review Board
301 University Blvd.
Galveston, TX 77555-0158
[Submission Page](#)

04-Aug-2020

MEMORANDUM

To: Danya Garner
Grad School Biomedical Science GSBS9999

FROM: Heid Sperger, CIP
IRB Staff

RE: Amendment/Miscellaneous Request Approval

IRB#: IRB# 19-0296

Submission Number 19-0296.005

TITLE: The Impact of Acculturation on Quality of Life in African
American Women
Living with A Lung or Colorectal Cancer Diagnosis

DOCUMENTS: Recruitment Flyer

The **Miscellaneous** request to the above referenced study has been reviewed via an expedited review procedure on **04-Aug-2020** and approved by the UTMB Institutional Review Board (IRB) in accordance with 45 CFR 46.110(a)-(b)(2).

The approval period for this modified research protocol begins on **04-Aug-2020**. Amendment approvals do not change the approval period of the protocol. Therefore, the expiration date will remain the same as was determined for the protocol at the time of initial or continuing review.

If you have any questions, please do not hesitate to contact the IRB office via email at IRB@utmb.edu.

Description of Changes/Submission

The addition of use of Research Match for recruitment and the addition of research flyer

28-Apr-2020

MEMORANDUM

To: Danya Garner
Grad School Biomedical Science GSBS9999

FROM: Jacqueline Stout-Aguilar, PhD
Vice-Chairman, IRB #1

RE: Initial Study Approval

IRB#: IRB# 19-0296

Submission Number 19-0296.004

TITLE: The Impact of Acculturation on Quality of Life in African
American Women
Living with A Lung or Colorectal Cancer Diagnosis

DOCUMENTS: Recruitment Flyer
Research Protocol
African American Acculturation Scale
Demographic Data Collection form
Email Script
Fast Fact Sheet
Recruitment Flyer
World Health Organization Quality of Life Instrument

The UTMB Institutional Review Board (IRB) reviewed the above-referenced research protocol via an expedited review procedure on **23-Apr-2020** in accordance with 45 CFR 46.110(a)-(b)(1). Having met all applicable requirements, the research protocol is approved. The approval for this research protocol begins on **28-Apr-2020**. Continuing Review for this protocol is not required, as outlined in 45 CFR 46.109.

Written documentation of consent is waived in accordance with 45 CFR 46.117(c).

Appendix C: Demographic Data Collection Form

Demographic Data Collection: The following questions ask information relating to yourself. Please circle your responses or write out, as applicable.

Do you self-identify as being African American?	1. Yes 2. No	
Do you self-identify as being female?	1. Yes 2. No	
Age? (in years)		
Approximately what was the date that you were diagnosed with cancer? (in years)		
What was your age when you were diagnosed with cancer?		
I am currently diagnosed with having this type of cancer:	1. Lung Cancer 2. Colon Cancer 3. Rectal Cancer 4. Colorectal Cancer 5. Other _____ (Please list)	
What is the highest level of education you have completed?	1. Did not attend school 2. 1 st grade 3. 2 nd grade 4. 3 rd grade 5. 4 th grade 6. 5 th grade 7. 6 th grade 8. 7 th grade 9. 8 th grade 10. 9 th grade	11. 10 th grade 12. 11 th grade 13. Graduated high school 14. Some college 15. Associate degree 16. Bachelor's degree 17. Master's degree 18. Doctorate degree
Have you been diagnosed with other illnesses, besides cancer?	1. Yes, Please List _____ 2. No	
In the past 12 months, how many times did you visit a Health Care Provider for an appointment?		
How many people currently live in your household?		
Who, if anyone, currently lives with you in your household? Please include permanent residents only. (Please select all that apply).	1. Child 2. Grandchild 3. Parent 4. Grandparent 5. Roommate/Friend 6. Romantic partner	

	7. Sibling 8. None of the above
Which of the following best describes your current relationship status?	1. Married 2. Widowed 3. Divorced 4. Separated 5. In a domestic partnership or civil union 6. Single, but cohabiting with a significant other 7. Single, never married
What is your yearly household income?	1. Under \$20,000 2. Between \$20,000 and \$34, 999 3. Between \$35,000 and \$49,999 4. Between \$50,000 and \$74,999 5. Between \$75,000 and \$99,999 6. Above \$100,000
I currently have this type of health insurance:	7. Private/Employer Sponsored 8. Medicare/Medicaid 9. Affordable Health Care Act (Obamacare) 10. No Insurance
Which of the following categories best describes your employment status?	1. Employed, working full-time 2. employment status? Employed, working part-time 3. Not employed 4. Retired 5. Disabled, not able to work
What would you like the Healthcare Provider that you visit for your cancer care to know about you that you believe that they no not already know?	
What is the most important part of your life that you want to keep in focus during your cancer journey and why?	

Appendix D: World Health Organization Quality of Life- BREF

Instructions:

This assessment asks how you feel about your quality of life, health, or other areas of your life. Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response. Please keep in mind your standards, hopes, pleasures and concerns.

We ask that you think about your life in the last two weeks. For example, thinking about the last two weeks, a question might ask:

Example 1: Do you get the kind of support from others that you need?

Not at all - 1

Not much - 2

Moderately - 3

A great deal - 4

Completely - 5

You should choose the answer that best fits how much support you got from others over the last two weeks. So you would choose number 4 if you got a great deal of support from others.

You would choose number 1 if you did not get any of the support that you needed from others in the last two weeks.

Please reach each question, assess your feelings, and select the number on the scale for each question that gives the best answer.

	Very poor	Poor	Neither poor nor good	Good	Very good
1. How would you rate your quality of life?					
Please read each question, assess your feelings, and select the number on the scale for each question that gives the best answer.					
	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2. How satisfied are you with your health?					

The following questions ask how much you have experienced certain things in the last two weeks.					
	Not at all	A little	A moderate amount	Very much	An extreme amount
3. To what extent do you feel that physical pain prevents you from doing what you need to do?					
4. How much do you need any medical treatment to function in your daily life?					
5. How much do you enjoy life?					
6. To what extent do you feel your life to be meaningful?					
7. How well are you able to concentrate?					
8. How safe do you feel in your daily life?					
9. How healthy is your physical environment?					
The following questions ask about how completely you experience or were able to do certain things in the last two weeks.					
	Not at all	A little	Moderately	Mostly	Completely
10. Do you have enough energy for everyday life?					
11. Are you able to accept your bodily appearance?					
12. Have you enough money to meet your needs?					

13. How available to you is the information that you need in your day-to-day life					
14. To what extent do you have the opportunity for leisure activities?					
The following question ask about how completely you experience or were able to do certain things in the last two weeks.					
	Very poor	Poor	Neither poor nor good	Good	Very good
15. How well are you able to get around?					
The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the last two weeks?					
	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16. How satisfied are you with your sleep?					
17. How satisfied are you with your ability to perform your daily living activities?					
18. How satisfied are you with your capacity for work?					
19. How satisfied are you with yourself?					
20. How satisfied are you with you personal relationships?					
21. How satisfied are you with your					

sex life?					
22. How satisfied are you with the support you get from your friends?					
23. How satisfied are you with the conditions of your living place?					
24. How satisfied are you with your access to health services?					
25. How satisfied are you with your transport?					
The following question refers to how often you have felt or experienced certain things in the last two weeks.					
	Never	Seldom	Quite Often	Very often	Always
26. How often do you have negative feelings such as blue mood, despair, anxiety, depression?					

Appendix E: African American Acculturation Scale – Revised

Below are some beliefs and attitudes about religion, families, racism, Black people, White people, and health. Please tell us how much you personally agree or disagree with these beliefs and attitudes by selecting a number. There are no right or wrong answers, we simply want to know your views and your beliefs.

	1 I totally Disagree; Not True at All	2	3	4 – Sort of Agree or True	5	6	7 I Strongly Agree/ Absolutely True
1. I believe in the Holy Ghost.							
2. I like gospel music.							
3. I believe in heaven and hell.							
4. The church is the heart of the Black community.							
5. have seen people "get the spirit" or speak in tongues.							
6. I am currently a member of a Black church.							
7. When I was young, I was a member of a Black church.							
8. Prayer can cure disease.							
9. What goes around, comes around.							
10. I used to sing in the church choir.							
11. Most of the music I listen to is by Black artists.							

12. I like Black music more than White music.							
13. I listen to Black radio stations.							
14. I try to watch all the Black shows on TV.							
15. The person I admire the most is Black.							
16. I feel more comfortable around Blacks than around Whites.							
17. When I pass a Black person (a stranger) on the street, I always say hello or nod at them.							
18. Most of my friends are Black.							
19. I read (or used to read) Essence or Ebony magazine.							
20. I don't trust most White people.							
21. IQ tests were set up purposefully to discriminate against Black people.							
22. Most Whites are							

afraid of Blacks.							
23. Deep in their hearts, most White people are racists.							
24. Whites don't understand Blacks.							
25. Most tests (like the SATs and tests to get a job) are set up to make sure that Blacks don't get high scores on them.							
26. Some members of my family hate or distrust White people.							
27. When I was young, I shared a bed at night with my sister, brother, or some other relative.							
28. When I was young, my parent(s) sent me to stay with a relative (aunt, uncle, grandmother) for a few days or weeks, and then I went back home again.							

29. When I was young, my cousin, aunt, grandmother, or other relative lived with me and my family for a while.							
30. When I was young, I took a bath with my sister, brother, or some other relative.							
31. Some people in my family use Epsom salts.							
32. Illnesses can be classified as natural types and unnatural types.							
33. Some old Black women/ladies know how to cure diseases.							
34. Some older Black women know a lot about pregnancy and childbirth.							
35. I was taught that you shouldn't take a bath and then go outside.							
36. I avoid splitting a pole.							

37. When the palm of your hand itches, you'll receive some money.							
38. There's some truth to many old superstitions.							
39. I eat black-eyed peas on New Year's Eve.							
40. I grew up in a mostly Black neighborhood.							
41. I went to (or go to) a mostly Black high school.							
42. I went to a mostly Black elementary school.							
43. I currently live in a mostly Black neighborhood.							
44. It's better to try to move your whole family ahead in this world than it is to be out for only yourself.							
45. Old people are wise.							
46. I often lend money or give other types of support to members of my family.							

47. A child should not be allowed to call a grown woman by her first name, "Alice." The child should be taught to call her "Miss Alice."							
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Vita

Danya Tymon Garner was born in Nacogdoches, Texas, on February 2, 1984, to Felicia Garner and Earl Robertson and adopted by his maternal grandparents, Isaiah, and Lonzetta Garner. Danya graduated from Stephen F. Austin State University, in Nacogdoches, TX, in December of 2006 with a Bachelor of Science degree in Nursing. He moved to Houston, TX and began working at The University of Texas M.D. Anderson Cancer Center (MDACC) in January 2007 on the inpatient Bone Marrow Transplant unit, later renamed the Stem Cell Transplantation and Cellular Therapy Unit where he progressed to the top of the clinical ladder achieving the Maturation stage. In March of 2009, Danya accepted a position as a Clinical Nurse in the combined Medical Intensive Care Unit (MICU) and Surgical Intensive Care Unit (SICU) at MDACC. During the time that he worked in the MICU/SICU, he served as both Preceptor and Resource Nurse while managing critically ill oncology patients. While working in the MICU/SICU at MDACC, Danya began his Master of Science in Nursing (MSN) with a concentration in Nursing Education in the Fall of 2009. Shortly after graduating in the Fall of 2011, Danya accepted a position as a Nursing Educator in the Department of Nursing Education at MDACC where he worked in a hybrid model of both centralized and decentralized nursing education. In addition to Danya's fulltime employment as a Nursing Educator at MDACC, he also accepted adjunct nursing faculty teaching positions at Lone Star College Kingwood in the Associate Degree Nursing program in the fall of 2013 and in the BSN degree program in the School of Nursing at The University of Texas Medical Branch (UTMB) in the Fall of 2014. In December 2021, Danya accepted the promotion to the position of Associate Director of Continuing Professional Education at MDACC. In his current position, Danya has oversight and guides the strategic priorities for both nursing and medicine continuing

education as designated by the American Nurses Credentialing Center, and the Accreditation Council for Continuing Medical Education, respectively. In the Fall of 2015, Danya entered the Doctoral Graduate program in Nursing at UTMB, in Galveston, TX.

EDUCATION

B.S.N, December 2006, Stephen F. Austin State University, Nacogdoches, TX

M.S.N., December 2011, The University of Houston – Victoria, Victoria, TX

PUBLICATIONS

Abstracts:

Whitcher, C, **Garner, D** Lafrentz, K, & Bowe, A. Starting, Growing and Maintaining an ANPD Affiliate: Leading at the Local/Regional Level. Presented at the Annual Association for Nursing Professional Development Conference, July 1, 2018, Orlando, FL

Garner, D, Saria, M, Smith, M, & Sanders, L. Continuing the Conversation: A Panel Discussion Addressing Racism in Nursing. Presented at the Annual Oncology Nursing Society Bridge Virtual Conference, September 10, 2021.

Garner, D, Smith, M, Nolan, T, Cartwright, C, Jaffer, I, & Fairley, R. Diversity in Clinical Trials: Oncology Nurses Role in Access and Care. Presented at the Oncology Nursing Society fall virtual event, October 7, 2021.

Summary of Dissertation

The purpose of this dissertation study was to explore potential relationships between acculturation, selected demographic variables and perceived quality of life in African American women who have been diagnosed with and received treatment for colorectal and lung cancer. There is limited research examining potential cultural and demographic factors related to the ability to cope and maintain quality of life. A

descriptive, exploratory research design was used for this study and utilized three surveys to gather data including the African American Acculturation Scale - Revised, World Health Organization Quality of Life Instrument - BREF, and a Demographic Data Form. The sample included African American women who have been diagnosed with lung or colorectal cancer during the past five years. Data were analyzed using descriptive statistics including measures of central tendency, interquartile ranges, variance, and standard deviation as well as tests of differences, Mann Whitney U and linear regressions. In summary, the demographic data of the study participants indicated noteworthy differences from the current demographic data in Facts and Figures for African American/Black People (ACS, 2022). This group had higher individual socioeconomic status encompassing including income, education, and occupation. Similarities in demographic data distribution was evident in majority of the study participants being diagnosed with having lung cancer, followed by colorectal cancers which is in line with lung cancer being the second most common cancer and colon and rectum cancer being the third most common cancers diagnosed in African American women (ACS, 2022). Additionally, the comorbidity of diabetes was the most frequent presenting comorbidity known to increase risk of cancer incidence (ASC, 2022). WHOQOL reflected the lowest scoring categories Overall Perception of Health and Physical Health. These findings have established baseline data about the impact of acculturation and on perceived quality of life in African American women with colorectal or lung cancer and help fill an existing gap in research literature.

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