#### ATHABASCA UNIVERSITY

# TOWARD A CULTURALLY-TAILORED SELF-MANAGEMENT CONCEPTUAL FRAMEWORK FOR BLACK ADULTS: A SCOPING REVIEW

BY

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# A THESIS/DISSERTATION SUBMITTED TO THE FACULTY OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

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#### **Approval of Dissertation**

The undersigned certify that they have read the dissertation entitled

# TOWARD A CULTURALLY-TAILORED SELF-MANAGEMENT CONCEPTUAL FRAMEWORK FOR BLACK ADULTS: A SCOPING REVIEW

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#### **Doctor of Education in Distance Education**

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#### Dedication

First and foremost, I dedicate this work to God, whose grace, strength, and guidance have carried me through every step of this journey. Without His love and presence, this accomplishment would not have been possible.

I also dedicate it to my mother, Mary Austin, who has been an example of resilience and strength throughout my life. Thank you for your constant prayers and encouragement. Your unconditional belief in me sustained me through the years of this journey.

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#### **Abstract**

Chronic disease self-management empowers individuals and their families and eases the financial burden on the healthcare system. Despite this, self-management education programs have been shown to have limited self-efficacy among older Black adults, primarily because these programs have not adequately addressed the importance of the social determinants of health and inequities that impact upstream health outcomes.

To address this issue, an extensive scoping review was conducted (4513 articles searched) to broadly review the literature in this area using Arksey and O'Malley's (2005) framework further advanced by Levac et al. (2010). The scoping review included 51 studies and iteratively explored current evidence illuminating the characteristics, elements and gaps in existing literature in relation to the uptake and success of chronic disease self-management education programs for older Black adults. In this knowledge synthesis, in the form of a scoping review, I identified the types of available evidence, analyzed knowledge gaps and reviewed the methods used to study culturally-tailored chronic disease self-management programs and practices for older Black adults. Additionally, I identified key characteristics, clarified key concepts and definitions through the lens of social determinants and health inequities and the four tenets of Critical Race Theory (CRT).

The findings from this review have highlighted key factors that influence the self-management of chronic conditions in older Black adult populations. The analysis of these attributes has culminated in the identification of an adapted socio ecological model that will serve as the conceptual framework for a chronic disease self-management education program for older Black adults living with one or more chronic diseases. This program will be used by health professionals who provide self-management education and day-to-day support for older

Black adults (and their families) with chronic conditions such as cardiac disease, hypertension and/or diabetes. The purpose of the culturally-tailored program is to provide healthcare professionals with the instructional strategies required to address embedded structural barriers such as racism, and socioeconomic factors that often exacerbate health inequities experienced by older Black adults. It is important to note that the development of the entire education program is beyond the scope of this research.

**Keywords**: Chronic disease, health inequities, older Black adult, race, racism, self-management, social determinants of health

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#### Glossary

- 1. Black/African American/African Canadian race. Definitions of the term 'Black' and Black race continue to evolve and vary widely in the literature. Generally, the term typically refers to persons with visibly darker skin pigmentation.

  https://bcblackhistory.ca/definitions/. In Canada, the term Black designation is for people of African or Caribbean ancestry. Many organizations have now embraced the term 'Black' however, there are varying identities associated with the term including African Canadian, People of African descent, Caribbean Canadian and others. Similarly, in the United States Black people are described as African American and Non-Hispanic Black and Caribbean American. More recently, definitions have included the concept of self-identification intimating an element of choice. This is contentious to some members of the Black community who experience Blackness as a visual manifestation of oppression based on innate hereditary Afrocentric features that cannot be self-selected. https://bcblackhistory.ca/definitions/
- 2. Chronic disease/Chronic condition/Chronic illness. Condition or illness that typically lasts a year or longer. These illnesses may include cardiovascular, cancer, respiratory or Alzheimer's disease, and diabetes. They are the leading cause of death in most countries and are largely caused by modifiable risk factors and complex pathways that have been associated with upstream structural and social determinants (*About Chronic Diseases | CDC*, 2024, World Health Organization, 2010).
- Chronic disease self-management. A partnership between a person with a chronic
  illness (and their family) and health professionals. Self-management includes day-to-day
  decision making and management of one or more chronic illnesses. Activities may

- include medication management, managing and coordinating healthcare appointments and dietary management (Garnett et al., 2018).
- 4. Determinants of health (social determinants of health): Social determinants of health (SDH) are the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life' (World Health Organization, 2010).
- 5. Multimorbidity: Defined as having more than one chronic illness in the same individual.

  Persons with multimorbidity tend to be disadvantaged and belong to ethnic groups

  (e.g., Black, Hispanic adults). They typically encounter more frequent hospitalizations

  and are of older age and have longer hospitalizations (Skou et al., 2022).
- 6. **Non-communicable disease**: This terminology is used by the World Health Organization to describe diseases that are not spread by infection and are also referred to as chronic diseases (e.g., cardiovascular disease, cancer, diabetes). When acquired, these diseases tend to have a longer trajectory and are responsible for 74% of all deaths annually (*The Lancet*, n.d.).
- 7. Older Black adult: Black people are disproportionately impacted by chronic disease.

  Quiñones et al., 2019 study explores the development of multimorbid chronic conditions by ethnic group. They emphasize that chronic conditions develop earlier in ethnic populations. The age range of the population in their study was from 51-71 years. Similarly, in my scoping review the mean age of study participants is over 50 years. This age parameter allows for a broader participant age range and may account for studies that include younger participants with one or more chronic conditions. For

- this reason, in my study older Black adults are defined as Black persons who are part of a study where the population represents a mean age of greater than 50 years.
- 8. Race: Race is a social construct, and both race and ethnicity are complex concepts that convey social and material stratification (e.g., explicit socioeconomic difference across race). In the past, race was used as a proxy to emphasize biological differences. Despite an awareness of the danger of attributing biological attributes or cultural inferiority to race, scholars continue to 'biologitisize' race and ethnicity. Lett et al. (2022) suggest ...' within the Public Health Critical Race Praxis, racism's role in the production of social hierarchy is central to health inequity and, therefore, research that does not challenge such hierarchies is seen as counterproductive (p. 157).
- 9. Scoping review: A form of evidence synthesis that is like systematic reviews with key methodological differences. Scoping reviews are broader in nature. They are typically conducted to determine what is known or to identify gaps about a body of evidence (see chapter 3 below) (Peters et al., 2022).

#### **Chapter 1. Significance of the Problem**

#### Introduction

The prevalence of non-communicable disease (NCD) or chronic disease is a serious social and public health issue, in Canada and globally (World Health Organization, 2010). NCDs interfere with international progress towards the United Nations 2030 agenda for Sustainable Development, an agreement and action plan between nations to end poverty (closely linked to NCDs) with the vision of 'a world of universal respect for human rights and human dignity, the rule of law, justice, equality and non-discrimination' (World Health Organization, 2010).

The World Health Organization (WHO) emphasizes that NCDs are responsible for 74% of deaths annually (WHO, 2022) leading to increased mortality, poor quality of life, and high healthcare expenditures (Budreviciute et al., 2020; CDC, 2024). In classifying the four major noncommunicable disease types, WHO highlights that:

Cardiovascular diseases account for most NCD deaths, or 17.9 million people annually, followed by cancers (9.3 million), chronic respiratory diseases (4.1 million), and diabetes (2.0 million including kidney disease deaths caused by diabetes) (WHO, 2022).

Risk factors for developing chronic disease are generally divided into two categories: modifiable and non-modifiable. Modifiable risk factors are associated with behaviors that can be controlled by lifestyle changes which include weight, smoking, stress, and activity levels (Shelton et al., 2022). Alternatively, non-modifiable risk factors are unchangeable and include age, gender and genetics (Budreviciute et al., 2020). Health equity scholars believe that modifiable risk factors are shaped upstream by structural factors such as government policies (e.g. social programs), economic policies and cultural and societal values (Balasuriya et al., 2023). The impact of upstream factors that contribute to chronic disease(s) will be discussed below.

Chronic disease and Black populations. North American older Black adults have a predisposition to certain chronic diseases such as Type 2 diabetes and cardiovascular disease (Fritz et al., 2023; Lynch et al., 2014; Moss et al., 2019) due to both modifiable and non-modifiable risk factors. For example, in a report describing health inequities, the Public Health Agency (P.H.A) of Canada (2018) highlighted that the prevalence of diabetes among Black adults is 2.1 times that of White adults. Similarly, in a US study looking at hypertension self-management, Moss et al., (2019) reported that older African Americans have disproportionately high rates of hypertension leading to complications such a stroke, coronary artery and kidney disease. Furthermore, in a systematic review examining community-based, culturally tailored education programs, Singh et al., (2022) emphasized that 'Black communities experience a higher risk of burden of chronic disease including cardiovascular disease, hypertension and stroke ...' (p. 2). Despite the acknowledgement that Black adults have a high predisposition to certain chronic illnesses, authors emphasize that current chronic disease self-management practices in healthcare do not appear to routinely take this critical information into consideration in the development of selfmanagement education programs (Moss et al., 2019). For instance, these programs often lack culturally tailored elements important to Black persons and families such as dietary, social and spiritual considerations. Taking this into account, this study will help to illuminate more broadly what is known in the literature about the characteristics and structural factors that contribute to uptake of chronic disease self-management programs.

*My positionality.* I have elected to study chronic disease self-management because of my early career experience as a visiting nurse working in home and community care and my personal experience with family and friends who are impacted by chronic disease; some of whom have since passed away. My life and career experiences have shaped my view of the world and will undoubtedly influence this study. I am a Black cis-gender, late-career female immigrant that strongly identifies with the Christian

faith. I immigrated to Canada from the United Kingdom when I was a teenager, and my background is Caribbean. I now have 2 adult children and 2 grandchildren.

Undertaking research exploring the trauma and inequities experienced by a marginalized group such as older Black adults, who I personally identify with, presents a layer of complexity that must be disclosed and reflected upon with complete and authentic transparency. Authors agree that researchers are unable to be an objective bystander in their own research especially when dealing with topics of a highly sensitive nature such as my study (Darwin Holmes, 2020; Fenge et al., 2019; Vanner, 2015). The researcher's worldview, values and beliefs or positionality provide insight into the perspective of the study (Darwin Holmes, 2020). Fenge et al. (2019) contend that understanding positionality is especially critical in qualitative research where the researcher is immersed with individuals who may be reliving extremely traumatic experiences such as intimate partner violence, grief or racism. Although I am not conducting a qualitative study, per se, I recognize that as a Black woman my personal and professional experiences with anti-Black racism will influence the perspective, I adopt in every area of my study including the research topic selection, questions and qualitative interpretation of the results (Darwin Holmes, 2020). I believe that as a healthcare professional, health advocate and older Black adult, my centeredness will add strength to my study. My thirty plus years of nursing experience working directly and indirectly with people and families with chronic conditions affords a unique insight into the complexities of this topic. Furthermore, my personal and professional exposure to the complex nuances of anti-Black racism I, and my family members have experienced will provide additional depth and passionate insight into this important work that will strengthen the quality and impact of this study. With the above discussion in mind, in the following section, I discuss the integration of Critical Race Theory perspectives into my study.

Critical Race Theory (CRT). CRT can be traced to the early writings of Derrick Albert Bell Jr. further developed by legal scholars such as Delgado, Stefano and Crenshaw (Delgado & Stefancic, 2001). CRT refers to 'interrogating the role of race and racism in a society that emerged in the legal academy and spread to other fields of scholarship' (George, 2021 para. 2). CRT is a theory and social movement founded on the premise that race is a social construct not based on biology that is used to oppress people of color (Delgado & Stefancic, 2001). CRT is an evolving philosophy that continues to expand from where it originated in the legal field to other domains such as education and healthcare.

Incorporating the tenets of CRT reinforced the significance of race as a social determinant of health and racism as a key barrier to health equity (Williams & Kaniki, 2023). As I discuss throughout this study, race and systemic and structural racism have contributed to the shortcomings of Canadian healthcare and other healthcare systems and contribute to inequities in chronic disease self-management (Williams & Kaniki, 2023).

It is critical to acknowledge my positionality and the significance of race that is woven into all aspects of my study. Therefore, I have integrated the tenets and lens of CRT into this topic and my research questions. I will draw on the 4 Tenets of CRT highlighted below in George (2021) and Lantz (2021):

- Tenet 1-Race is a social construction the way that race is defined and experienced is the result
  of social and political thought and actions that change over time.
- Tenet 2-Although individuals can indeed be racist, racism and its outcomes are perpetuated in society through social processes above and beyond individual actions including through cultural norms, institutional rules, and laws and regulations.
- Tenet 3-Because the differential treatment of individuals based upon racial classification is embedded within social systems and institutions—including public policy and law—racism is commonplace rather than rare and aberrant.

Tenet 4-While racism is perpetuated at the structural/macro level in society, understanding and
reflecting on the lived experiences of individuals is essential for understanding how racism
works to create inequities in individual outcomes, including health.

In summary, the four tenets of CRT have been interwoven through this study augmenting the philosophical underpinnings of this research and integrated into the design of the conceptual framework (Hopkin et al., 2025; Hossaini et al., 2023; Lattof et al., 2020; Munn et al., 2018) highlighted in chapter 6 that I developed to inform the chronic disease self-management education program.

#### Background

The section below provides a brief chronology of the evolution of self-management and chronic disease self-management programs and practices. Included in this overview, the discussion will bring to light the economic impact of chronic disease on the healthcare system and on individuals and families. The section will conclude with a discussion of the importance of viewing this topic through a lens of determinants of health and equity which will shed light on the causes of disadvantaged groups, and older Black adults, experiencing limited benefit from self-management programs to date.

#### **Evolution of Chronic Disease Self-management**

Early in the chronic disease management discourse, Wagner, Austin and Korff (1996) described self-management as educating patients on the use of health measurement tools such as blood pressure cuffs, blood glucose monitoring devices and delivering patient education, using interactive methods. The term self-management was used to describe the behaviors, attitudes and beliefs required to manage a chronic disease, including patient education, self-care, empowerment, and self-efficacy, for example (Bodenheimer & Wagner, 2002). In Bodenheimer and Wagner's, (2002) foundational study, self-management is defined as, "...collaboratively helping patients and their families acquire the skills and

confidence to manage their chronic illness, providing self-management tools... and routinely assessing problems and accomplishments" (p.1776). The appeal of this definition at the time and in some programs today, is the focus on empowerment and the implication that providing this support was enough to empower individuals to take control of their chronic disease(s), with healthcare providers teaching individuals self-management skills. This approach was aimed at addressing the fact that fighting chronic disease was and continues to be a long-term endeavor that is costly to the system (Sheldon et al., 2022). It further implies that if self-management practices are implemented as designed, they would help people live longer, ultimately consuming fewer healthcare resources and would empower individuals leading to an improved quality of life. For the most part, this perspective was pervasive until the COVID 19 pandemic began to change the narrative (Balasuriya et al., 2023).

In a February 27th, 2023, Canadian Health Information Podcast (CHIP) interview, Dr. Chika Stacy Oriuwa, a Canadian physician and psychiatric resident, stated that the pandemic brought to light the impact of racial differences on disease outcomes. This striking contemporary assertion emphatically underscores the need for specific self-management programs that include elements designed for older Black adults. Although chronic disease self-management programs are increasingly considering more than individual health behaviors, skills, and decisions to include social determinants including race/ethnicity, socioeconomic status and health inequities. More can be done, as the core of self-management may be inconsistent with Black and African American culture due to the individualistic euro-centric focus. Therefore, it is timely to identify what is currently known in the literature about the characteristics of current chronic disease self-management programs developed for older Black adults and how these elements integrate social determinants and are evolving based on the outcomes of the pandemic and the changing landscape of healthcare in Canada and North American at large. This is, therefore, one of the main aims of this scoping review study, as elaborated below.

Characteristics of Chronic Disease Self-Management Programs. Although widely studied, conceptually, self-management varies in literature. As previously noted, studies that look at self-management programs describe activities and interventions such as goal setting, teaching behavioral/lifestyle changes and physical activities. These activities are aimed at stabilizing an individual's chronic disease and preventing the deterioration of their health that could result in greater reliance on healthcare services. Two examples of such variation stand out in the literature. In 2018, Garnett et al. conducted a concept analysis to determine if current definitions can be applied to adults aged 65 and over. In a similar study, Velde et al., (2019) sought to explore the concept of self-management to provide an operational definition that can support the development, implementation and evaluation of self-management interventions and programs. Although the two studies (Garnett et al., 2018 & Velde et al., 2019) used similar methods, the studies otherwise shared few similarities. However, similarities related to self-management attributes were to:

- 1. Acquire disease-related education from health professionals.
- 2. Include social support (e.g., family peers).
- 3. Continue engagement with the healthcare system.
- 4. Participate actively in disease management activities.
- 5. Have a positive coping mechanism.

Although these concepts align with other authors (Hardman et al., 2020, Kearney et al., 2022), it is notable that neither Garnett et al. nor Velde et al. discussed the impact of social determinants and health equity explicitly. Garnett et al., however, did highlight the importance of persons having adequate employment and financial resources to manage chronic disease, asserting that:

...self-management may be underutilized in populations without adequate financial resources, shortfalls in enabling physical environments, weak social support networks, and lacking access to a health-care team. Future research could address the exact role of these

shortcomings in limiting self-management of multiple chronic conditions (MCC) in older adults and possible avenues to overcome them. (p.13).

The statement from Garnett et al. (2018) above supports growing evidence that generally self-management practices have become standardized to include consistent elements for a single disease (e.g., diabetes) focused on advantaged populations. However, if one-size-fits-all interventions are implemented without tailoring self-management practices and programs to a person's unique needs (including addressing multiple chronic diseases) associated with social determinants of health (e.g., income, food insecurity, social support) and their inherent disadvantages, health inequities may be inadvertently amplified.

Adding another dimension of complexity to the concept of chronic disease self-management is the need for persons to contend with more than one chronic illness also known as multimorbidity. In a qualitative study that explored everyday dietary challenges experienced by older Black adults with hypertension (Jones et al., 2022), participants with more than one chronic disease reported feelings of confusion on how to incorporate practices when they had additional illness(s), such as cancer. The likely rationale for the confusion is the emerging discourse that chronic disease self-management activities are typically designed around one disease, even though a large proportion of the aging population, including older Black adults (discussed later) have more than one chronic illness (Jones et al., 2022; Lynch et al., 2014).

In the following section, I will discuss the impact of multimorbidity on the healthcare system in general and for older Black adults in particular. I will begin to discuss the emerging evidence calling for a paradigm shift that focuses on integrated person-and family-centered care approaches to chronic disease self-management.

Multimorbidity in Chronic Disease. As previously discussed, the burden of chronic conditions on the healthcare system due to the growing aging population is well documented (Skou et al., 2022). However, a report by the Public Health Agency of Canada (2020) highlights that over one third of adults over the age of sixty-five have at least two chronic conditions that includes cancer, cardiovascular disease, diabetes and hypertension. For persons with multimorbidity, self-management has an even greater impact on their quality of life and life expectancy due to issues such as increased stress, and financial burden, for example (Boeykens et al., 2022; Skou et al., 2022). Kudesia et al. (2021) emphasizes that the added complexity of multimorbidity now constitutes a 'global crisis' (p. 1) in relation to the impact on individuals and families and the increased economic weight placed on the healthcare system. Although the magnitude and importance of multimorbidity has become more evident, the prevalence and trajectory of multimorbidity as discussed in the literature is less clear as there is a lack of consensus on the conditions studied and the approaches used to measure multimorbidity (Kudesia et al., 2021; Lee et al., 2021; MacRae et al., 2023). Adding to the intricacy of chronic disease self-management, Johnson-Lawrence et al. (2017) stress the importance of understanding multimorbidity from a younger age, as 25% of adults 18 and over reported having multiple chronic conditions. This realization supports the need to keep in view a broad upstream perspective on chronic disease self-management that considers the complex interrelated social factors that begin to impact persons at an early age and increase as they become older (Balasuriya et al., 2023).

Multimorbidity disproportionately affects individuals of low socioeconomic status and those belonging to specific cultural/ethnic groups, especially older Black adults (Fritz et al., 2023; Ingram et al., 2020). In a US study, Quiñones et al. (2019) explored the development of multimorbid chronic disease (i.e., diabetes, heart disease, lung disease, stroke, cancer and arthritis) over a 16-year period in ethnic groups and found middle aged Black persons had 40% higher levels of disease burden and developed additional chronic diseases earlier than Hispanics and non-Hispanic White persons aged between 51-61

years. Upstream structural determinants for example, earlier exposure to risk factors such as poor access to good quality health care, obesity, elevated levels of stress, and low socioeconomic status were cited as the rationale for these findings (Quiñones et al., 2019). In a similar study of adults aged 51-55, that looked at disease accumulation by body mass index, Botoseneanu et al. (2022) found similar effects, in that Black participants had a higher initial burden and faster accumulation of disease over time. Furthermore, in a qualitative study by Fritz et al. (2023) exploring multimorbidity and physician empathy, the authors describe the complexity and precarity of managing multimorbidity through a lens of disadvantage. They emphasize the challenge that health providers face when charged with supporting this population and the paucity of research in this area. Considering the inherent intricacies of managing one, and in many cases multiple chronic diseases in this vulnerable group, there is a growing need for research into the components required to design self-management programs that support the most vulnerable populations with multiple chronic illnesses. These integrated strategies will be discussed in the following section.

Integrated Chronic Disease Self-Management Programs and Practices. As highlighted in the discussion above, chronic disease self-management programs are designed based on single disease models that include disease-specific activities, leaving individuals and their families primarily responsible for bearing the stress of implementing the day-to-day activities necessary to manage their illness.

However, Allegrante et al. (2019) contend that, as a mature science chronic disease self-management has shown only moderate effectiveness to date. Furthermore, these programs ought to be organized into unified chronic disease-integrated systems of care that are adaptable to the patient's holistic changing needs instead of focusing on a specific disease type. The daily burden of self-management practices is often the responsibility of the individual and their family members, who may initially be unaware of the magnitude of the daily work effort and financial responsibility required to successfully

manage their illness (Fritz et al. 2023). The result of this lack of awareness may lead to health crises, undue harm to individuals, and result in additional financial burden on the healthcare system (Skou et al., 2022).

Taking a closer look at persons with a single chronic disease such as diabetes, typical examples of self-management activities might include blood sugar monitoring, diabetes diet management, physical activity, medication management, communicating with physicians, pharmacists and therapists and coordinating medical appointments. All of these are self-management practices that require a certain level of knowledge and skill, and financial, psychological and social support. Taking this example a step further, if the same person with diabetes was living with another chronic condition such as hypertension, distinctive and separate care pathways and self-management practices for both hypertension and diabetes are required. Additionally, Hardman et al. (2020) emphasizes the importance of acknowledging the medical, physical, financial, and emotional challenges of self-management on persons and families, stressing the need to directly address specific barriers and to screen to determine areas of disadvantage and patient workload. From a psychological perspective, in a systematic review examining the relationship between hopelessness and chronic disease Robinson et al., (2020) underscored the devastating impact of chronic disease burden on African Americans and Caribbean persons that may be compounded with other racial discriminatory experiences. Bearing in mind the multifaceted care and varying needs of older Black adults, my study will help to illuminate what is known in the area of integrated chronic disease management programs and practices to aid in the design of culturally-tailored educational program.

Older Black Adults and Chronic Disease. As previously discussed, chronic disease disproportionately impacts certain ethnic groups including Hispanic, Asian and Black populations. Hacker (2021) and Singh et al. (2022) highlight chronic diseases such as cardiovascular disease, hypertension,

diabetes and stroke occur at higher rates in Black communities than in any other identifiable community. More specifically, the prevalence of diabetes in Black persons in the USA (African Americans) is 13.4 % higher than that of White persons (Caucasians) (Senteio & Akincigil 2020). Canadian findings are similar, as affirmed in a qualitative study included in this review by Swaleh and Yu (2021) who reported that Canadian Black individuals are two times more likely to have diabetes compared to White Canadians. Although these findings are largely consistent in the literature, the root cause for the pervasiveness of certain chronic diseases among Black persons is complex, multi-layered (Senteio & Akincigil, 2021; Singh et al., 2022) and likely relates to economic, environmental, behavioral and social factors (Singh et al., 2022). In a study examining racial inequities in diabetes control, for example, Senteio and Akincigil (2021) highlight factors such as environment, sociocultural, biological and behavioral factors that impact racial disparities in health outcomes. Compounding these factors is the impact of the COVID 19 pandemic. There is a significant body of evidence underscoring the interrelated social and structural determinants that leads to a higher prevalence in morbidity and mortality of persons with chronic disease in disadvantaged populations, including ethnic and Black adults. However, there appears to be little agreement on the strategies required to resolve this issue (Johnson-Lawrence et al., 2017; Jones et al., 2022; Quiñones et al., 2019). In the following section, I will briefly discuss the impact the pandemic had on individuals with chronic disease and on older Black adults.

COVID 19 Pandemic Chronic Disease and Social Determinants. In Canada and around the world, the pandemic brought to light the devastating impact COVID 19 (caused by severe acute respiratory syndrome coronavirus 2 [SARS-CoV-2]) had on those with chronic diseases such as hypertension, heart disease, diabetes and cancer causing an increased risk of severe illness (Booth et al., 2021; Gupta & Aitken, 2022; Hacker, 2021). The pandemic highlighted health inequities prevalent among marginalized ethnic groups including Black, Hispanic, and Indigenous persons that can be traced back to social determinants of health such as race, and socioeconomic status (Balasuriya et al., 2023). In a large United

States of America (USA) cohort study of 64,781 records, Rosenthal et al. (2020) found the most common comorbidities of persons with chronic disease were hypertension, obesity and diabetes. In terms of ethnicity, 39.9% were White, 22.1% Black and 21.3% Hispanic, confirming findings that Black persons were disproportionately impacted by the COVID 19 as, at the time of the study, only 13.4 % of the population identified as Black. These findings are in keeping with a study by Price-Haywood et al. (2020), who also highlighted that Black race, higher disease burden, and lower socio-economic status were associated with increased potential for hospitalization for COVID 19. The disproportionate impact of ethnicity may often be underestimated as the need for rapid risk stratification that only includes easily identifiable risk factors such as age and gender may be the focus of these studies, resulting in the omission of more complex risk factors such as ethnicity (Booth et al., 2021). Of note however, multimorbid chronic diseases such as diabetes and cardiovascular disease (Hacker, 2021) and hypertension (Rosenthal et al., 2020) were associated with increased morbidity and mortality rates in persons hospitalized with COVID 19 infections.

In Canada, the impact of the COVID 19 pandemic was similar. Gupta and Aitken (2022) conducted a multivariate logistic regression analysis to determine the likelihood of specific ethnic groups dying from COVID 19 and reported that Black persons had the highest, age standardized mortality rates (49/100,000 population) compared to non-racialized, non-Indigenous (22/100,000). Furthermore, these results showed low-income Black persons are at 3.5 times higher risk of dying of COVID-19 compared to non-racialized, non-Indigenous low-income persons (Gupta & Aitken, 2022). Although these results have limitations, they are consistent with other results linking chronic disease, ethnicity, Black race in particular, and social determinants of health to poor outcomes. The devastating impact of the COVID 19 pandemic on ethnic groups and specifically Black persons has been widely discussed; however, the complex intricate social and structural pathways that expose the Black population to health inequities in the system are still largely unclear.

Social Determinants of Health. A 2010 report commissioned by the World Health Organization to develop a conceptual framework to initiate action on social determinants of health and to uncover the complex causes of health inequities, revealed in part that the economic, sociocultural and political structures that shape social hierarchies according to key stratifiers such as race/ethnicity, gender, education, income and occupation are the cause of health inequities (WHO, 2010). In keeping with the focus on key stratifiers, a Canadian report by the Public Health Agency of Canada (2020) highlighting health inequalities in the healthcare system, suggests "...fully addressing these [identified] inequalities will require policy interventions that affect broader influences such as poverty and socioeconomic inequalities, built environments, access to healthy and affordable foods, and access to services, to name just a few" (p.211). Considering the devastating effects of the pandemic, the evidence seems indisputable that the impact of chronic illness on racialized individuals is interconnected with social determinants of health. With the above discussion in mind, new approaches to chronic disease selfmanagement programs ought to be designed and standardized to take into consideration the complex upstream pathways that include assessment of social determinants of health, multimorbidity and overall disease burden.

Significance. As a Black healthcare professional for over thirty years, a significant part of my career has been spent working in the community as discussed above. From the time I became a registered nurse I have had a growing passion for health system transformation and advocating for individuals and their families in the management of their health and healthcare needs, avoiding hospitalization and health crises. More recently, the illumination of the increased morbidity and mortality rates of Blacks persons and other ethnic groups with chronic illness such as diabetes and hypertension and the depth of marginalization and health inequities experienced by older Black adults has increased my passion for social justice and health equity for this vulnerable population. Ansah and Chiu (2023) estimated that in the US:

...Of the population 50 years and older, the number with at least one chronic disease is estimated to increase by 99.5% from 71.522 million in 2020 to 142.66 million by 2050. At the same time, those with multimorbidity are projected to increase 91.16% from 7.8304 million in 2020 to 14.968 million in 2050. By 2050, 64.6% of non-Hispanic Whites will likely have one or more chronic conditions, while for non-Hispanic Black, 61.47%, and Hispanic and other races 64.5% (p. 1).

The COVID 19 pandemic exposed discrimination and disparities in the healthcare system that affected the disadvantaged, including low-income Black adults with one or more chronic diseases (Gupta & Aitken, 2022) in North America. Furthermore, it has been noted that Black older adults with chronic disease from certain communities are treated differently in healthcare environments and experience health inequities as a result (Fritz et al., 2023). The unique cultural and contextual needs of this group are seldom considered outside of the one-size-fits-all models of chronic disease self-management programs resulting in poor uptake and devastating health outcomes. This study provides insight into culturally tailored chronic disease self-management education programs and practices that have been implemented to address health disparities and inequities experienced by older Black adults in the United States of America, United Kingdom and Africa. The results of this study will amplify the notion that this area of study requires persistent development to ensure culturally tailored education programs practices become the routine standard of care as opposed to a novel or niche adaptation of mainstream healthcare.

#### **Statement of Problem**

With the above discussion in mind, the following research problem for this study is captured.

Older Black adults seem to underutilize self-management practices for their chronic conditions. This under-utilization appears to stem predominantly from social determinants including race and inequities

in health, mainly in the areas of financial resources, social support networks and health system access and structural racism. This problem led to the research question and sub questions outlined below that guided this scoping review study.

#### **Research Question and Sub questions**

What does the literature report about the uptake of self- management practices in Black adults with one or more chronic diseases? In more detail, this study seeks to address the following subquestions:

- 1. What types and key characteristics of chronic disease self-management education programs have been reported in the literature for older Black adults?
- 2. What links are reported between determinants of health and health inequities and the utilization of self-management practices in older Black adults?
- 3. What types of research designs have been used to understand the development, implementation, and evaluation of chronic disease self-management in older Black adults?
- 4. What types of chronic disease self-management assessment and education tools have been used for older Black adults
- 5. What are the gaps in the literature, including those identified by researchers, related to the development, implementation, and evaluation of tailored chronic disease management education programs for Black older adults?

#### Summary

In this chapter I provide a summary of the current state of chronic disease and chronic disease self-management education programs for older Black adults. Furthermore, I highlight that the utilization of self-management education programs has shown to have limited efficacy among older Black adults. This is primarily because these programs have not adequately addressed the importance of the social determinants of health and inequities that impact health outcomes in this population. I discuss my social position and the impact of my personal experiences leading to the incorporation of the tenets of critical race theory which augments the philosophical underpinnings of this review. I conclude the chapter presenting my overarching research question and five sub questions. Next, I will discuss the methodology for my study.

#### **Chapter 2. Scoping Review Methodology**

In this chapter, rather than composing a review of the literature, I provide a comprehensive overview and chronology of evidence synthesis and scoping review methodology. I review two similar types of evidence synthesis and compare and contrast the closely aligned scoping review and systematic review, emphasizing the rationale for my selected methodological approach. Finally, I will describe the methods used for my dissertation and discuss the *a priori* protocol that has been registered (https://osf.io/) including a discussion of the inclusion/exclusion criteria, search terms and resource management strategies that have been implemented.

#### **Evidence Synthesis**

Evidence-based practice in healthcare is a systematic data driven, scientific, rigorous process used to apply, analyze, and translate research evidence into patient care decisions (Aromataris & Munn, 2020; Grant & Booth, 2009). It is an evolving field that has grown rapidly resulting in the increased availability of many primary research studies and many different forms of evidence. Some of these studies include randomized control trials, case reviews, expert opinion, and gray literature. The rapid growth in the number and availability of literature has resulted in the need to collate, categorize, and synthesize different forms of evidence to better understand, discuss, and examine what has been studied in each topic or research area. Campbell et al. (2023) define evidence synthesis, '...as the rigorous collation, evaluation and analysis of literature, studies, and reports' (p. 1). This approach has become increasingly vital to inform decision-making in healthcare, to identify gaps in research and to prevent duplication of research effort (Grant & Booth, 2009; Munn et al., 2018).

In the context of chronic disease self-management, identified as a mature science, a vast amount of literature may be available. As a result of this, it may be challenging for researchers to apply the existing research evidence to healthcare situations without completing the initial step of collating, analyzing, and evaluating existing literature, reports and studies to identify the direction to take toward

informed decision-making in healthcare situations (Allegrante et al., 2019). The rationale for using evidence synthesis in the form of a scoping review as the methodology for this study: synthesizing the evidence to determine what is known about key concepts or gaps in the literature and to understand in greater depth how these programs are currently being adopted and adapted by the less understood, disadvantaged persons such as older Black adults.

#### **Comparative Discussion of Scoping Reviews**

In a descriptive analysis study exploring evidence synthesis and review types, Grant and Booth (2009) noted that such review types had their beginnings as early as 1992 with the inception of the Cochrane Collaboration providing systematic reviews of randomized control trials. At the time of Grant and Booth's (2009) review, fourteen review typologies were identified, including systematic reviews, literature/narrative reviews, and scoping reviews. However, Grant and Booth (2009) concluded that reviews were poorly defined and completed using varied approaches. A decade later, in a study conducted to characterize evidence synthesis approaches, Sutton et al. (2019) distinguished forty-eight review types that were subsequently categorized into seven families. These review families include traditional reviews, systematic reviews, reviews of reviews, rapid reviews, qualitative reviews, mixed method reviews, and purpose-specific reviews (Sutton et al., 2019). It has become evident that review types and categories are continuing to grow and evolve. Therefore, it is critical that researchers have a clear understanding of how to differentiate the types, categories, and indications for when one type should be conducted rather than another kind of review to avoid ambiguity (Arksey & O'Malley, 2005; Campbell et al., 2023; Grant & Booth, 2009; Levac et al., 2010; Munn et al., 2018). In this and the following sections, I provide an overview of reviews that align with scoping reviews. Following this, I will discuss in more depth the parameters for scoping reviews in comparison to systematic reviews. Campbell et al. (2023), for example, define scoping review as:

... a type of evidence synthesis that aims to systematically identify and map the breadth of evidence available on a particular topic, field, concept, or issue, often irrespective of source (i.e., primary research, reviews, non-empirical evidence) within or across contexts. Scoping reviews can clarify key concepts/definitions in the literature and identify key characteristics or factors related to a concept, including those related to methodological research (p. 3).

Scoping reviews are often confused with various review types including systematic review and big picture reviews (Campbell et al., 2023; Munn et al., 2018). This is likely attributable to similarities in methods such as a systematic, rigorous search strategy and inclusion of a priori protocols; for systematic reviews the differentiating factor lies in the specificity of the research question and the intended use of findings in clinical practice. Alternatively, big picture reviews such as mapping reviews and evidence gap maps are designed to answer broader research questions but have key methodological differences in relation to how findings are structured which will be discussed below (Aromataris & Munn, 2020; Campbell et al., 2023; Munn et al., 2018). As evidence synthesis methodologies continue to mature, some authors emphasize the importance of using a priori systematic rigorous methodological approaches that are documented to refine review approaches and ensure replicability (Moher et al., 2015; Sutton et al., 2019; Tricco et al., 2016). In a study examining reviews that answer less specific questions such as scoping reviews, evidence gap maps and mapping reviews, Campbell et al., (2023) and Booth (2016) compare mapping reviews and scoping reviews. In common with scoping reviews, the aim of mapping reviews is 'categorizing, classifying, characterizing patterns, trends or themes in evidence production or publication' (p.15). However, these reviews differ in the depth and use of the extracted data, where mapping reviews use higher-level structured, pre-defined coding frameworks and scoping reviews use in-depth data extraction and iterative data analysis approaches (Campbell et al., 2023; Booth, 2016). Akin to mapping reviews, evidence and gap maps (EGMs) provide interactive visual representation of evidence using coding and categorization frameworks and may in fact be used in

conjunction with a mapping review or as a stand-alone review (Booth, 2016). In view of this analysis, using a scoping review methodology for my study will provide a deeper yet systematic and flexible method of addressing the exploratory research questions discussed in chapter 1. In the following section, I compare, and contrast closely related, often confused systematic reviews and scoping reviews, providing the proposed approach toward addressing the research questions.

#### Systematic Reviews and Scoping Reviews

As previously described, evidence synthesis began in response to a focus on evidence- based medicine leading to the establishment of the Cochrane Collaboration, a charitable foundation now known as Cochrane, named in honor of Archibald Cochrane dating back to 1993. This foundation was established in response to a call for the synthesis of medical research to better support evidence-based decision-making and has produced high-quality systematic reviews for over thirty years (Archie Cochrane, n.d.; Stavrou et al., 2014). While systematic reviews remain the cornerstone of evidence-synthesis, scoping reviews have emerged as one of the most popular alternative review typologies according to Peters et al. (2021), who emphasize that the number of published scoping reviews doubled between 2014-2017. In an article exploring the differences in indications between systematic and scoping reviews, Munn et al., (2018) describe systematic reviews as,

A type of research synthesis that is conducted by review groups with specialized skills, who set out to identify and retrieve international evidence that is relevant to a particular question or questions and to appraise and synthesize the results of this search to inform practice, policy and in some cases, further research. (p.2).

They further stipulate that while both review types share similarities in the use of systematic approaches that include rigorous search strategies, and development of an *a priori* protocol, systematic reviews answer very specific questions. These questions are concerned with "whether or not current practice is based on relevant evidence, establish the quality of that evidence, and to address any

uncertainty or variation in practice" (p. 2). Alternatively, scoping reviews answer far-reaching questions that require exploration of a wide array of study types and designs. This will be described in greater detail below.

Fundamentally, methods for conducting systematic reviews are well established. However, it has been suggested that researchers may be conducting scoping reviews where systematic reviews may be warranted (Munn et al., 2018; Sutton et al., 2019). From a methodological standpoint, it is important to note that because risk of bias and critical appraisal of studies is optional when conducting scoping reviews, their use is limited to the identification and clarification of key concepts, exploration of methodological designs and identification of gaps in the literature (Aromataris & Munn, 2020; Levac et al., 2010; Munn et al., 2018; Sutton et al., 2019). To avoid this common error, in **Table 1** below a summary of the key differences between the two review types including two example research questions are described. This visual comparison affirms that conducting a scoping review for my study captures the nuanced evolution of chronic disease self-management. Although chronic disease self-management as a topic has been described as an advanced science, there are gaps in key areas related to the impact of social determinants and uptake of chronic disease self-management practices among Black older adults and other ethnic groups, as previously discussed in Chapter 1. In the next section I describe the specific indications for selecting a scoping review and the alignment between specific indications and my research question and sub-questions.

 Table 1

 Comparison of Systematic and Scoping Reviews

Characteristics	Systematic Review	Scoping Review
Indications for use	<ol> <li>Uncovering the international evidence</li> <li>Confirm current practice/ address any variation/ identify new practices</li> <li>Identify and inform areas for future research</li> <li>Identify and investigate conflicting results</li> <li>Produce statements to guide decision-making</li> </ol>	<ol> <li>As a precursor to a systematic review.</li> <li>To identify the types of available evidence in each field.</li> <li>To identify and analyze knowledge gaps.</li> <li>To clarify key concepts/ definitions in the literature.</li> <li>To examine how research is conducted on a certain topic or field.</li> <li>To identify key characteristics or factors related to a concept.</li> </ol>
	Munn et al. (2018)	Aromataris and Munn, (2020)
Protocol registration	Yes (PROSPERO)	Yes (Open Science Framework (https://osf.io/) or Figshare (https://figshare.com/)
Guidance for methods (and reporting)	Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)	PRISMA Extension for Scoping Reviews (PRISMA-ScR)
	Page et al. (2021)	Tricco et al. (2018)
Quality appraisal required	Yes	No (not currently required. May be completed if warranted)
Example of research question	What is the effectiveness of culturally tailored chronic disease self-management intervention?	What does the literature report about the uptake of self- management practices in Black adults with one or more chronic diseases?

#### Justification for Use of a Scoping Review

My study provides a broad overview of literature on the characteristics of culturally-tailored self-management programs for older Black adults with one or more chronic illnesses. Following a systematic search of the literature using key search terms, the extracted data results will show if there are gaps in the literature related to the types of culturally-tailored chronic disease self-management programs and practices and what the nature of these gaps are, leading to recommendations or implications for future research. The scoping review will also help to clarify emerging concepts such as integrated chronic

disease management programs and will support the exploration of the experiences of older Black adults using chronic disease self-management programs.

In Arksey and O'Malley's (2005) foundational paper that set out the original methodological framework for scoping studies (later identified as reviews), the authors highlight that 'scoping studies can be undertaken as stand-alone projects where an area is complex and has not been reviewed comprehensively before' (p. 21). Many years later, the use of this methodological approach has increased in frequency in research studies including dissertations (Filho & Tricco, 2019). In a scoping review to explore relevant methodological approaches for knowledge synthesis in Brazil's health literature, Filho and Tricco, (2019) highlight that out of the thirty-five studies included in the review, twelve were scoping review dissertations. Other healthcare related dissertation studies with chronic conditions (Alanazi 2023; Jones, 2023; Sharma, 2023) and health equity topics (Betker 2016) have also used a scoping review methodology. This underscores that using this methodological approach for my study is feasible and supported in the literature. Exploring examples of the alignment between the indicators for using a scoping review and my research questions, in Table 1 indicators # 2 and # 6 align with two of my research sub-questions (1 and 4) below:

- 1. What types and key characteristics of chronic disease self-management education programs have been reported in the literature for older Black adults?
- 4. What types of chronic disease self-management assessment and education tools have been used for older Black adults?

Taken together, the comprehensive analysis of the scoping review indications and research evidence above solidifies the rationale and justification for the selected methodological approach for my study.

### **Scoping Review Methodology**

In this section I discuss the evolution of the scoping review methodology that has led to the most current systematic process developed by my JBI (Aromataris & Munn, 2020) which will then lead to

a description of the *a priori* scoping review protocol submitted prior to conducting my full scoping review study. Since Arksey & O'Malley (2005) proposed their original framework that was further advanced by Levac et al. (2010), the use of scoping reviews has grown in the literature and the methods for conducting these reviews have evolved significantly with progressive refinements (Aromataris & Munn, 2020; Campbell et al., 2023; Peters et al., 2015; Peters et al., 2021).

# Scoping Review Steps

Almost two decades ago, in their foundational paper, Arksey and O'Malley (2005) recognized the need for a rigorous documented methodological process with sufficient detail as these types of studies were increasing in popularity but lacked a consistent application in the literature. They developed a novel framework that included five distinct stages with an optional sixth stage (consultation phase). In the section below, I list the stages and describe, in brief, the key areas advanced by Levac et al. (2010) and others (Aromataris & Munn, 2020; Peters et al., 2015; Peters et al., 2021).

Arksey and O'Malley's (2005) stages are described as follows:

- O Stage 1: identifying the research question
- Stage 2: identifying relevant studies
- O Stage 3: study selection
- O Stage 4: charting the data
- O Stage 5: collating, summarizing and reporting the results
- Optional Consultation Exercise

### Stage one: Identify the research question.

As with most studies, the initial stage of the process begins with identifying the research question(s). Arksey and O'Malley (2005) suggested formulating the questions with emphasis on the population, intervention and outcome as a starting point. Notably, Levac et al. (2010) suggests providing greater focus on research questions by stating the population, concepts and outcomes. Peters et al.,

(2015) further clarified the key areas of focus as the Population, Concept and Context (PCC) in contrast to the traditional Population, Intervention, Context and Outcome (PICO) format typically used to formulate research questions. In my study, the population is older Black adults, the concept is chronic disease self-management programs and practices, and the context is any sector within North America. The PCC criteria are used to develop the search strategy and are critical in the identification of elements such as search terms, keywords and the development of the inclusion/exclusion criteria discussed in stage 2. Although the purpose of the study in relation to the research questions is not considered a formal stage of the scoping review process, Levac et al. (2010), Peters et al. (2015) and Munn et al. (2018) emphasize the importance of articulating a purpose and objectives of the scoping review to help envision the intended outcome. In my study the purpose is to have a greater understanding of the factors that can influence the uptake of chronic disease self-management practices including social determinants, barriers and facilitators and values and preferences. Having a clear understanding of the purpose and objectives (see chapter 1) of my study supports the refinement of my research questions and helps to keep the focus and scope of my study on track.

### Stage two: Identifying relevant studies.

Identifying relevant studies involves searches that are broad and iterative to draw on a vast amount of literature (Arksey & O'Malley 2005). Arksey and O'Malley (2005) describe the steps in the process as reflexive and adaptable where these steps may be changed for the purpose of conducting more precise searches that may include electronic databases, reference lists and hand searching of key journals, for example. Arksey and O'Malley (2005) and Levac et al. (2010), agree on the importance of working with a health science librarian to develop sensitive search strategies, careful auditing of searches including the date of searches, and changes made to search strategies with the rationale and inclusion and exclusion criteria so that the search can be replicated. It is imperative to note that scoping review searches may yield a large amount of literature as previously stated in chapter 1. Arksey and

O'Malley (2005) and Levac et al. (2010) concur that practical issues related to time and resources may be a concern when it comes to balancing the breadth of literature in relation to the comprehensiveness of the scoping review. They suggest that limiting scope is unavoidable, to be transparent and justify all decisions acknowledging any potential limitations to the study. However, Levac et al. (2010) and others further expand on this, suggesting the establishment of a scoping review team, ideally composed of persons with methodological and content expertise (Aromataris & Munn, 2020; Peters et al., 2015; Munn et al., 2018). With this best practice advice in mind, in my study I engaged support from experienced researchers and a health science librarian at my place of employment to provide critical expertise regarding systematic library searches and inclusion and exclusion criteria. The details of the involvement are discussed further below.

# Stage three: Study Selection

Study selection in scoping reviews includes an organized approach to searching the literature (Aromataris & Munn, 2020) due to concern related to study rigor. Levac et al. (2010) and others suggest study selection should be completed by at least 2 reviewers. Over time, however, the specificity of the process is evolving. Initially Arksey and O'Malley (2010) describe an *ad hoc* two-reviewer iterative process to study selection whereas Levac et al. (2010) suggests for the title and abstract screening, that reviewers should meet in the beginning, middle and end and that two independent reviewers complete full-text screening. The JBI updated methodological guidance in Peters et al. (2015) suggests a 3-step process to study selection beginning with an initial limited or sample database search to confirm the search strategy 2. A second search using all identified keywords and index terms should be undertaken across all included databases. 3. Reference lists should be searched to identify additional studies.

Several years later, Peters et al. (2021) reinforced the need for a rigorous, documented search and study selection process. They noted, however, that scoping review searches are generally iterative and non-linear. For this reason, I conducted a mini or sample scoping review based on the concept of testing the

search strategy, and inclusion/exclusion criteria to iterate the search strategy, becoming familiar with the key words and evidence and sources with timeline considerations (Arksey and O'Malley 2005).

Furthermore, I conducted a sample scoping review to examine one area of my topic focused on one of my research questions. This detailed process and results of the sample scoping review are documented in Chapter 3 were the foundation for my scoping review study. The plan and evolution of the process I used for this are discussed later in this chapter.

### Stage Four: Charting the Data

In this stage of the process, Arksey and O'Malley (2005) suggest developing a framework for charting the data. Levac et al. (2010) however, note that static frameworks may be challenging to apply to a variety of studies and suggest testing the framework during extraction (Stage five), with the first 10-15 studies to determine whether the planned approach to data extraction is consistent with the research question and purpose. This is the approach that was followed in my sample scoping review documented in Chapter 3. This approach aligns with authors who generally concur that although most frameworks used to chart the data will need to be adapted to the studies identified, an initial chart with the planned framework ought to be included in the protocol and final reporting of results (Aromataris & Munn, 2020; Peters et al., 2015; Peters et al., 2021).

# Stage five: Collating, Summarizing and Reporting the Results

Closely integrated with the previous step, Arksey and O'Malley (2005) and Levac et al. (2010) refer to this stage as collecting, summarizing, and reporting the results. Although they use the same nomenclature, Levac et al. (2010) recommends 3 distinct steps that include:

- 1. analysis of results.
- 2. reporting the results in relation to the purpose and objectives of the study.
- 3. considering the meaning of the findings and implications for future research.

Similarly, Peters et al. (2015) identify this stage as extracting and charting the results, suggesting a narrative summary of the search including rationale for adaptations to inclusion and exclusion criteria. Additionally, when reporting data, authors suggest flexible approaches may be appropriate based on the type of data being extracted, including, but not limited to, visual maps, themes, and charts. In this review, key characteristics and summarized data from the studies are captured using pie charts, tables, bar graphs and included as appendices, where appropriate.

# **Content Analysis**

For scoping reviews incorporating a significant volume of qualitative data, content analysis may be used to describe key characteristics and concepts from the studies. Importantly, Pollock et al. (2023) emphasize that qualitative thematic analysis designed to re-interpret findings are not appropriate for scoping reviews, a high-level content analysis is appropriate for reviews with qualitative evidence sources. Since approximately 40% of the studies in this review include qualitative data, I have completed a high-level qualitative content analysis and will map and describe the high-level themes/concepts identified in the studies. The findings from the content analysis will be discussed further in chapter 5.

The criteria for what are to be reported has become increasingly specific over the years. For example, in 2010 Levac et al. recommended the following fields:

- 1. overall number of studies included
- 2. types of study designs,
- 3. years of publication
- 4. types of interventions
- 5. characteristics of the study populations
- 6. countries where studies were conducted.

However, five years later, Peters et al. (2015) aligned with reporting on systematic reviews recommending 11 extractions fields:

- 1. Author(s)
- 2. Year of publication
- 3. Source origin/country of origin
- 4. Aims/purpose
- 5. Study population and sample size (if applicable)
- 6. Methodology
- 7. Intervention type and comparator (if applicable)
- 8. Concept
- 9. Duration of the intervention (if applicable)
- 10. How outcomes are measured
- 11. Key findings that relate to the review question

More recently, the JBI scoping review methodology group developed a reporting guide called the Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Review (PRISMA-Scr).

### **Optional Stage Six**

The final stage of the process was initially deemed optional. In Arksey and O'Malley (2005), a consultation step was endorsed to validate study findings, as in their study they consulted with 3 stakeholder groups who provided additional studies and insights based on their experiences that were not identified in the scoping review. Levac et al. (2010) expanded on this perspective, suggesting that consultation should be essential and begin earlier during the preliminary stage to review preliminary findings. This is consistent with the most recent JBI methodological guidance where the consultation process is integrated into the scoping review process captured in the assembling of the scoping review team prior to starting the study (Aromataris & Munn, 2020; Peter et al. 2015; Peter et al. 2021). In this study, I did not complete this step due to doctoral time constraints. Instead, I collaborated with my

advisor and a health science librarian with extensive systematic and scoping review expertise who provided expert advice on the design of my search strategies for each of the databases searched. In the following section I review the original plan for conducting the scoping review outlined in the protocol requirements and will describe the adaptations and iteration made during the review. I will conclude with a brief introduction to the approach and evolution of chapter 3.

Ethics Approval. Ethics approval was sought from Athabasca University Research Ethics Board (REB). The research ethics board determined that my scoping review met the requirements for exemption status as the research falls within the provisions of the Tri-Council Policy Statement, Article 2.2, and related Athabasca University Policy and is therefore exempt from ethical review.

# **Scoping Review Protocol and Amendments**

Peters et al. (2015) and Peters et al. (2022) emphasize that an *a priori* protocol detailing the proposed plan for the scoping review ought to be developed before conducting the review. Due to the iterative nature of scoping reviews, authors do acknowledge that the initial plan is likely to change. However, the process undertaken in my study, including any amendments, ought to be audited, transparent and rigorous throughout the entire process, including the summary section of the scoping review. Hence, this protocol will address this critical requirement. In the section below, I describe the planned elements of the dissertation protocol that was submitted prior to the completion of the broader study based on the JBI methodology and will also integrate the amendments (Aromataris & Munn, 2020; Peters et. al., 2022).

In the introductory section of the protocol, I describe the purpose of the scoping review and highlight that self-management programs are critical in the management of chronic diseases providing justification for the scoping review. I argue that the successful uptake of self-management programs and practices is complex. Older Black adults are impacted by chronic diseases such as Type 2 Diabetes and Hypertension, for example, as described in Chapter 1. They are more susceptible to developing multiple

chronic diseases with greater chance of complications and death. Hence, standardized one-size-fits-all chronic disease self-management programs have been under-utilized in the Black population due to socio economic and cultural factors. Within this context, a broad review of the literature is necessary, related to the chronic disease self-management programs and practices for older Black adults, considering all types of related evidence.

### Inclusion criteria

In planning the inclusion criteria, I intended to consider all English-language studies concerning multimorbid chronic disease self-management practices in older Black adults (aged 50 and older). The original intent of this review was to focus on Black adults aged 50 and older who have one or more chronic diseases that are the most common in the Black population. However, following the sample scoping review and now, the current review, many of the studies include a broad age range of older Black adults (i.e., between 18-90 years) providing an average or mean age of the population. Therefore, the studies in this review primarily include older Black adults where the mean age of the population is greater than 50 years. Furthermore, this review considers older Black adults described in multiple ways including but not limited to Black Caribbean, Black Canadian, African American, non-Hispanic Black (see glossary of terms) and will not be specific to gender or frailty. Of note, a few of the international papers included in the review from Uganda, Tanzania and the United Kingdom, use terms such as African and sub-Saharan African, respectively to describe older Black adults. **Table 2** below illustrates examples of the updated search terms and search strings from the Medline database incorporated into the review.

**Table 2**Search Terms/Keywords

	Research sub-questions	Key words	Examples of search string (Medline)
1.	What types and key characteristics of chronic disease self-management education programs have been reported in the literature for older Black adults?	<ul> <li>Self-management, self-care Self-care strategies, Self-empowerment, Self-efficacy</li> <li>Chronic disease, chronic condition, chronic illness, disease management, non-communicable disease</li> <li>Patient education, education programs, Learning resources         <ul> <li>Online courses</li> </ul> </li> <li>Black, African American, Caribbean, Sub-Saharan African</li> </ul>	AB ("Education program*" OR Teaching OR "Learning resource*" OR "Online course*" OR "Training program*" OR workshop* OR "Teaching method*") TI ("Education program*" OR Teaching OR "Learning resource*" OR "Online course*" OR "Training program*" Or workshop* OR "Teaching method*"(MH "Education, Nonprofessional+")
2.	What links are reported between determinants of health and health inequities and the utilization of self-management practices in older Black adults?	<ul> <li>Self-management, self-care Self-care strategies, Self-empowerment, Self-efficacy</li> <li>Chronic disease, chronic condition, chronic illness, disease management, non-communicable disease</li> <li>Social determinants of health, health inequities, racial disparities, marginalization</li> <li>Older Black adults, African American, Caribbean, Sub-Saharan African</li> <li>Race, racism, anti-racism</li> </ul>	AB ("social determinants of health" OR "structural determinants of health" OR "health disparities" OR "health inequity" OR "health inequality") (MH "Health Status+") OR (MH "Minority Health") (MH "Social Determinants of Health") OR (MH "Socioeconomic Disparities in Health")
3.	What types of research designs have been used to understand the development, implementation, and evaluation of chronic disease self-management in older Black adults?	<ul> <li>Self-management, self-care, Self-care strategies, Self-empowerment, Self-efficacy</li> <li>Chronic disease, chronic condition, chronic illness, non-communicable disease</li> <li>Research design, research strategy, Research techniques</li> <li>Program development, program implementation, program evaluation</li> <li>Black adults, African American, Caribbean, Sub-Saharan African</li> </ul>	(MH "Research Design+") OR (MH "Research+") OR (MH "Methods+") OR (MH "Qualitative Research+")(MH "Implementation Science) OR (MH "Health Plan Implementation") (MH "Program Evaluation+") OR (MH "Self-Evaluation Program Development") OR (MH "Voluntary Programs")
4.	What types of chronic disease self-management assessment and education tools have been used for older Black adults?	<ul> <li>Self-management, Self-management, self-care, Self-care strategies, Self- empowerment, Self-efficacy</li> <li>Chronic disease, chronic condition, chronic illness, non-communicable disease</li> </ul>	AB ("Nutrition Assessment" OR "Risk Assessment+" OR "Needs Assessment+" OR "Symptom Assessment" OR "Geriatric Assessment"

Research sub-questions	Key words	Examples of search string (Medline)	
	<ul> <li>Patient education, education programs, patient education tools, assessment tools, Formative assessment</li> <li>Education tools, teaching tools, online tools, learning tools e-learning tools</li> <li>Black adults, African American, Caribbean, Sub-Saharan African</li> </ul>	OR "Nursing Assessment+" OR "Patient Assessment" OR "Health" Impact Assessment")	
5. What are the gaps in the literature, including those identified by researchers, related to the development, implementation, and evaluation of tailored chronidisease management education programs for Black older adults?	Research gaps, research	AB ("Knowledge gaps" OR "equity gaps" OR "skills gaps" OR "learning gaps" OR "Health equity gaps" OR "Care quality gaps") (MH "Knowledge") OR (MH "Evidence Gaps") OR (MH "Professional Practice Gaps") OR "Knowledge gap"	

#### Methods

This scoping review follows JBI methodology for scoping reviews and considers elements described by Arksey and O'Malley (2005) and Levac al. (2010) related to the use of a scoping review team and time limits pertaining to searching the literature. The (PRISMA) diagram in **Table 3** below provides the summarized search for reporting scoping reviews. The electronic databases that were originally to be searched included CINAHL, MEDLINE, and PsycINFO, from January 1, 2019, to the present, to capture eligible articles. However, due to the large number of studies retrieved following the initial Medline search (2746 before removing duplicates), I determined that searching only two other databases would be sufficient to keep the volume of studies manageable for this review. Therefore, Medline, CINAHL and a grey literature database (Grey Matters) were searched. The search process was guided and conducted in consultation with a health science librarian outside of Athabasca University who was able to assist with identifying search terms, subject headings and creating search strings for

each of the respective databases. In consultation with the health science librarian, I conducted separate searches for each sub-question summarized in **Table 3** and exported the files into the Zotero reference manager.

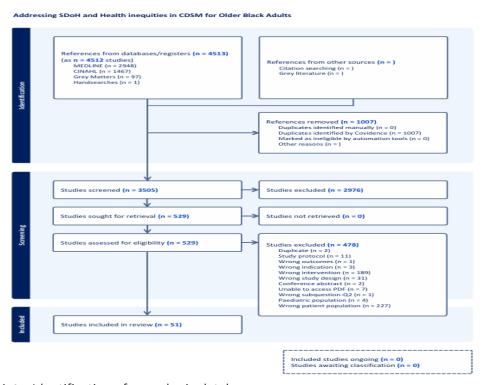
**Table 3**Retrieved studies by sub-question

Sub-question	Database	# of papers
1	Total (after duplicates removed)	458
2	2 Total (after duplicates removed)	
3 Total (after duplicates removed)		438
4	Total (after duplicates removed)	1042
5	Total (after duplicates removed)	82
All questions Grey literature		97
	Total	3505

The review considered all study designs, including quantitative, qualitative, mixed methods designs, as well as text and opinion papers, and systematic reviews that met the inclusion criteria. All the retrieved files were uploaded into <a href="Covidence">Covidence</a> software. After duplicates were removed, titles and abstracts were screened followed by full-text review. Although authors suggest two reviewers participate in the screening process, due to doctoral program time constraints, I screened all papers within the review myself (Aromataris & Munn, 2020; Levac et al., 2010; Peters et al., 2015). I did take careful note of inclusion and exclusion criteria decisions in my research journal to ensure all relevant studies were included. Reasons for exclusion were also documented in the <a href="Covidence">Covidence</a> software as illustrated in the PRISMA diagram below. As the review progressed, a significant number of studies aligned with the one or more of the research sub-questions resulting in a significant number of 135 studies. As I began data extraction, I noted that some of the included studies were higher-level papers

discussing the topic more broadly. Upon closer review, some of these authors did not discuss self-management practices specifically but discussed chronic disease more generally. Additionally, there were other studies that included a very small percentage of older Black adults and didn't address cultural tailoring or Black adults specifically therefore, these studies were excluded later in the review process resulting in 51 included studies. The PRISMA diagram (**Figure 1**) captures the summarized process below.

Figure 1
PRISMA diagram-full scoping review



Note: Identification of records via databases

In Peters et al. (2022), the recommendation is that the inclusion criteria follow a participant, concept, context (PCC) format described below and within the original protocol.

**Population**. This review considers both male and female older Black adults with a mean age of 50 years and older as chronic disease begins earlier in Black adults than in other segments of the population, the age threshold is pertinent to this review (Quiñones et al., 2019). Participants will have

been diagnosed with and/ or self-report having one or more chronic diseases. In the protocol, it was determined that chronic disease(s) would include diabetes, heart disease, hypertension and kidney disease, which are among the chronic diseases highly prevalent among the Black population. For the present review, the inclusion criteria were slightly adjusted to include studies with these proposed self-reported conditions in addition to chronic pain and chronic obstructive pulmonary disorder (COPD) as participants in these studies also had other comorbid chronic conditions common to older Black adults.

Concepts. The central concept of interest in this scoping review is one or more chronic disease self-management programs or practices used by older Black adults. This includes the available methods, approaches, tools, and measures used to understand and assess such programs and practices. The prevalence of chronic disease is acknowledged to be a serious social and public health issue in all the studies retrieved. Studies retrieved explore either self-management educational programs, practices, interventions and medication management. Many of the studies that met the inclusion criteria described patient/family/caregiver perspectives related to barriers, challenges facilitators related to self-management practices such as goal setting, behavioral change activities and physical activities programs that are thought to lead to improved health (Allegrante et al., 2019). Although many chronic disease self-management programs have been implemented for decades, they have had a limited impact in this population. In response to this, many of the studies in this review incorporate culturally tailored self-management programs and practices addressing social determinants such as race, racism and health inequities. In chapters 3-5, I describe the concepts identified in the studies related to adapted self-management education programs and practices.

Context. There were no planned restrictions in place related to a particular setting or sector highlighted in the protocol. It is important to take into consideration all settings where chronic disease self-management among older Black adults will take place including home, hospital, long-term care, and retirement homes, for example. Ory et al., (2024) suggest most chronic disease management programs

occur in community settings. Similarly, most of the studies in the review are situated in community settings including community centers, churches, outpatient clinics and hospitals. Lastly, geographically, the majority of the studies were conducted in the United States America (USA). One Canadian study, 2 United Kingdom studies and 2 African studies were included in the review and will be reviewed in subsequent chapters in more detail.

Types of Sources. The review included all sources available to me as a doctoral student. Included in the review are quantitative and mixed method designs including experimental and quasi-experimental studies, case-control studies, and analytical cross-sectional studies. Also included are qualitative studies, quality improvement and narrative discussion papers. Grey literature was searched however no documents met the inclusion criteria and were excluded from this review.

**Study Selection.** Following an extensive search, 4517 selected studies were imported into Covidence software. As highlighted in **Table 3** above, after the duplicate publications and sources that do not directly relate to the research question were eliminated 3505 remained. Following title and abstract screening, 2976 were excluded for reasons stated in **Table 3** above. 478 full text papers were assessed in detail against the inclusion criteria resulting in 51 papers selected for data extraction. Reviewing this extensive number of papers was an extremely lengthy and deeply reflective process. Given resource limitations, I documented all decisions in my research journal having to read studies numerous times and revisit the inclusion exclusion criteria continually.

Data Extraction, Analysis and Presentation. The data extracted from the studies is described and presented in a variety of formats throughout this document. The full chart of retrieved studies captures the author and publication date, setting, study purpose, study methods and design, sample, key findings, including the type of chronic disease self-management tools and strategies identified as relevant to the review questions. Due to the large number of studies retrieved, details of the data extracted can be reviewed in Appendix A. Key findings from the literature have been mapped using

descriptive approaches according to each research sub-question integrating the 4 tenets of CRT discussed in chapter 1. The findings will be presented using tables, graphs, and narrative descriptions.

# Summary

In conclusion, in the section above, I have provided an overview of the evolution of evidence synthesis and big picture reviews. I reviewed, compared, and contrasted the indications for using systematic reviews and scoping reviews, delineating the benefit and rationale for using a scoping review methodology for my study. I discussed the methods I use for my sample scoping review (in Chapter 3) and in this study more broadly. Additionally, I described the evolution of the methods used to conduct a scoping review and provide an update of the *a priori* protocol that was submitted, as recommended by scoping review methodologists. Lastly, I summarized my methodology describing the extensive, systematic search process I implemented for this scoping review.

In Chapter 3, I will discuss in detail the results of my sample scoping review that provides the foundation for the broader scoping review study. Following this, I provide the results of the expanded review pertaining to sub-question 3. Finally, I will briefly highlight the emerging gaps in the literature to be further described in chapter 6.

### **Chapter 3. Part A-Sample Scoping Review**

In the following chapter, I will explore the outcome of my sample scoping review which created the foundation for the broader scoping review research study. I will expand on the discussion to include updated search terms and new findings that come to light. I will describe the purpose and objectives and research sub-question of focus. Next, I will describe the checklist I followed as recommended by JBI according to the PRISMA (Munn et al., 2018; Page et al., 2021; Peters et al., 2021). This sample scoping review heretofore referred to as the sample review, was conducted following the methodological approach identified in Arksey and O'Malley (2005) based on the advantages of testing search strategies and inclusion and exclusion criteria to obtain highly targeted study results. Taken a step further, the review, described below, will conclude by identifying some limitations and gaps, illuminating where modifications to each stage of the broader study are needed to enhance the quality of my study.

# Sample Review: Purpose and objectives

The overall purpose/goal of this sample review and by extension the broader scoping review study is to have a greater understanding of the factors that can influence the uptake of chronic disease self-management practices including social determinants, barriers and facilitators, values and preferences, and assessment tools for older Black adults. Furthermore, this purpose is integrated into the research question and sub-questions previously outlined. Lastly, the objective of my scoping review study is to map the available evidence on chronic disease self-management practices and programs for older Black adults in North America and internationally, as appropriate. The results of this study will inform the conceptual framework (Hopkin et al., 2025; Hossaini et al., 2023; Lattof et al., 2020; Munn et al., 2018) for an educational program which is beyond the scope of this dissertation.

# Population, Concept, and Context

Turning to the focus of this chapter, in this section, I will discuss the development of the inclusion and exclusion criteria for the sample review. This sample review was initiated with the selection of one of four sub-questions as a test. Authors emphasize the importance of scoping review questions that address key elements such as population, concepts and context (PCC) of the identified topic area (Munn et al., 2018; Peters et al., 2022). In this sample review, these critical components include social determinants of health, health inequities and chronic disease self-management uptake and older Black adults as previously discussed (Arksey & O'Malley 2005; Levac et. al 2010; Peters et al., 2015; Peters et al., 2022). For this reason, I selected sub-question 2. How are determinants of health and health inequities linked to the utilization of self-management practices in older Black adults, as the basis of the review in the is chapter. The examination of each area of focus within the PCC aspect of the question facilitated the tailoring of my search strategy and inclusion/exclusion criteria when selecting and refining keywords and search terms. This refining process resulted in a more specific and accurate yield of papers that ultimately provided useful insights I applied to my broader scoping review study. These insights will be described below.

#### Method

This part of the sample review follows the JBI methodology for scoping reviews and considers methodological elements including the process of combining the five stages or steps used to complete this review (Arksey and O'Malley, 2005; Levac et al. 2010; Munn et al., 2018; Peters et al., 2022).

# Identifying relevant studies: Inclusion/Exclusion Criteria and Search Strategy

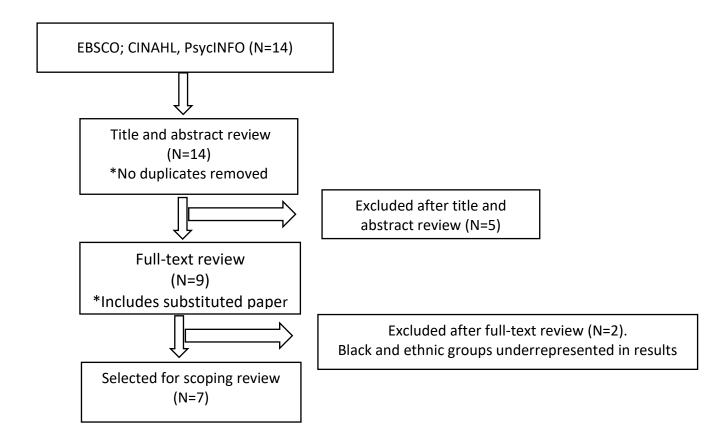
For the sample review, I conducted a comprehensive search in accordance with Arksey and O'Malley (2005) and Levac et al. (2010) who describe the steps in the process as reflexive and adaptable, recognizing the steps may be revised for the purpose of conducting more precise searches that may include electronic databases, reference lists and hand-searching of key journals, for example, the search

was conducted using EBSCO database which includes multiple databases including CINAHL and PsycINFO. Search terms included keywords relevant to chronic disease (such as Multimorbid OR Diabetes OR Cardio\* OR hypertension), social determinants (OR social risk factors OR social needs OR health related social problems) and Black older adults (OR African American OR Non-Hispanic Black OR Elderly Black). Search strings were combined using Boolean operators. The full search strategy is available below (see Figure 1).

Study selection. The results of the sample search were uploaded into Zotero citation management software V.6.0.23 (https://www.zotero.org/). Fourteen papers were identified for inclusion. Following the screening of titles and abstracts, five papers were excluded, as the primary focus of these studies was not on older Black adults. One paper (Hill-Briggs et al., 2022) identified in the references was substituted in place of one of the original 14 papers (Davies et al., 2022). The substituted paper aligned more specifically with the eligibility criteria in relation to the African American population and other key concepts (i.e. social determinants of health and race). As a result, 9 papers were included for full-text screening. Following the full-text screening, 2 additional papers were excluded. The first, a scoping review, was excluded as few studies included in the scoping review included Black participants. The second, a randomized control trial (RCT) was excluded as no direct reference to older Black adults or other ethnic groups was reported in the outcomes of the RCT. Ultimately, 7 studies were selected for this review (see Figure 2).

Flow Chart-Sample Scoping Review

Figure 2



**Note:** Sample scoping review search process

Charting the data. During this stage of the process, Arksey and O'Malley (2005) suggest developing a framework for charting the data. Notably, Levac et al. (2010) suggests that using static frameworks to determine whether the planned approach to data extraction is consistent with the research question and purpose may be less effective. Therefore, there may be a need to adapt the data chart throughout the review process as described in chapter 2.

**Table 4** below represents the data extracted from the studies and includes the following 8 items:

- 1. Author/publication date
- 2. country of study

- 3. study purpose/aim
- 4. population/sample size
- 5. study methods/design
- 6. Concept/context
- 7. Outcome measures

key findings include other findings that answer the research sub-question (Arksey & O'Malley 2005; Levac et al., 2010).

Table 4

Data Extraction-Sample Scoping Review

Author(s)/Year of publication	Aims/ Purpose	Study population and sample size	Study type /Methodology	Concept & Context	Outcome measure & Key findings (Link between CDSM and SDOH)
Abbott et al. (2021)	Secondary analyses of existing clinical trial data to determine whether a culturally relevant diabetes health promotion and disease risk reduction intervention influenced diabetes fatalism, social support, and perceived diabetes self- management.	African Americans (N=146) Age (26-91)-61 (mean)	Randomized control trial (RCT)-secondary analysis	Concept(s): -Diabetes & pre-diabetes -Diabetes self- management -Diabetes self- management knowledge social determinants of health (SDOH)  Context: -Primary care, rural community	Key findings: Study results showed that perceived self-management score increases when social support is higher, and fatalism or diabetic distress scores are lower. This answers the research sub question in that Interventions that incorporate Social Determinants of Health (SDoH) like social supports and psychosocial factors may improve perceived chronic disease self-management practices leading to improved overall diabetes outcomes.
Hill-Briggs et al. (2022)	To summarize evidence of impact of social determinants of health (SDOH) on diabetes risk, morbidity, and	African American adults *Age not specified	Review of American Diabetes association (ADA) recommendations	Concept(s): -Diabetes -SDOH -Racism  Context: -Population	Key findings: Recommendations from the ADA for a healthcare response includes routine assessment of SDOH however, there is no consensus on the items or

Author(s)/Year of publication	Aims/ Purpose	Study population and sample size	Study type /Methodology	Concept & Context	Outcome measure & Key findings (Link between CDSM and SDOH)
	mortality and to illustrate this impact in a population context.			health management -All settings	components of these assessments or how to respond to individual and community needs. The tools to address SDoH interventions exist but appear to have short-term effectiveness and fail to address underlying structural issues. Existing assessments are not standardized across sectors. This review paper partially answers the research subquestion in that SDoH can lead to inequities in marginalized groups such as African Americans which can lead to poorer diabetes clinical outcomes. This review does not address self-management practices directly but refers to the outcomes of good self-management practices such as the achievement of clinical and quality target (e.g., A1C goal, blood pressure targets, and poor self-management such as retinopathy, end stage renal disease, chronic kidney disease, lower extremity amputations and hospital admission for short term complications). Interventions that address the SDOH and the inequities highlighted here will influence positive self-management practices and may result in improved access to self-management programs.
Jia et al. (2022)	To explore the relationship	African American men;	Cross- sectional study	Concept(s): -Diabetes	<b>Key findings:</b> Adherence to self-management behaviors

Author(s)/Year of publication	Aims/ Purpose	Study population and sample size	Study type /Methodology	Concept & Context	Outcome measure & Key findings (Link between CDSM and SDOH)
	between resilience and diabetes self- management among African American men with type 2 diabetes who receive primary care at a large, urban, safety-net hospital.	Mean age 60 N=234		-Diabetes self- management adherence - Resilience -SDOH -Racism Context: -Primary care	(i.e., dietary control, medication adherence, blood glucose monitoring, physical activity, and physician contact) is associated with higher levels of resilience in African American men living in diabetes hotspots.  Programs that integrate resiliency-based interventions for older Black adults with diabetes may demonstrate higher selfmanagement adherence and clinical outcomes.  Furthermore, findings also showed that integrating spirituality into selfmanagement programs and practices has a positive impact on social determinants of health that adversely affect African American men, such as structural racism and mass incarceration.
Moore et al. (2023)	To explore the lived experience and meaning of resilience of individuals in the setting of chronic illness who reside in low resource communities	African American N=8 Age between 33-64 years	Qualitative	Concept: -Chronic disease management -resilience -Self reliance -SDOH  Context: -Community	Key findings: This study found that a strong knowledge base can enhance resilience and potentially impact overall health outcomes. Early and ongoing education throughout the course of chronic illness can help diminish the fear and uncertainty of chronic illness but also strengthen aspects of the self and consequently the community. The study showed that SDoH such as SES, geographic location and health disparities of poverty, low income and limited

Author(s)/Year of publication	Aims/ Purpose	Study population and sample size	Study type /Methodology	Concept & Context	Outcome measure & Key findings (Link between CDSM and SDOH)
					education impact protective resilience factors which indirectly impact selfmanagement.
Reddick and Gray, (2023)	The aim of this study was to evaluate a diabetes shared medical appointment (SMA) model program that has been culturally tailored to address the unique social determinants of health barriers faced by an inner city African American population	African American N=37 Mean Age=58	Pretest/post test education	Concept: -Diabetes knowledge -Self-efficacy -SDOH  Context: -Primary care	Key findings: Findings indicate that the SMA model may be an effective and engaging approach to improving self-care ability and diabetes disease management knowledge among African Americans. Although results from the Modified Michigan Knowledge Test were not statistically significant, the Diabetes Self-Efficacy Scale (DSES) showed increased perceived diabetes self-care confidence. This could infer that the educational intervention impacted confidence in self-management ability. The results partially answer the research sub-question as it relates to perceived self-efficacy, but further research may be needed to determine the impact on long term outcomes and effectiveness.
Ruggiero et al. (2023)	The purpose of this study is to describe patterns of DRD and co-occurrence with depressive symptoms in urban low income African American and Hispanic/Latinx adults with type 2 Diabetes Mellitus (T2DM).	247 participants with 118 (47.8%) Hispanic/Latinx and 129 (52.2%) African American adults with T2DM	RCT -Secondary analysis	Concept: -Type 2 Diabetes Mellitus -Diabetes related distress (DRD) -Depressive symptoms  Context: -Primary care	Key Findings: Findings indicate that the low-income racial-ethnic minority groups in this study experienced substantial levels of DRD and depressive symptomatology, underscoring the importance of assessing and addressing these areas early in the disease trajectory. It is noted that younger age may be a risk factor for these issues emphasizing the importance of doing holistic assessments

Author(s)/Year of publication	Aims/ Purpose	Study population and sample size	Study type /Methodology	Concept & Context	Outcome measure & Key findings (Link between CDSM and SDOH)
					that include psychosocial factors when providing care. This study partially answers the research sub-question in that SDoH and health disparities in older Black adults are impacted by diabetes related distress and depression. However, the impact on diabetes selfmanagement was not studied, only inferred based on previous research.
Sherman et al. (2023)	To identify social support and other factors associated with lower personal agency to manage health by race and ethnicity.	Non-Hispanic Black and Hispanic men > 40 Mean age 58		Concept: -Type 2 Diabetes Mellitus -Personal agency -Social support Context: -Primary care	Key Findings: Generally, the men in this sample reported high levels of personal agency and strong social support, which are important for T2D selfmanagement. However, additional research is needed to determine whether stronger agency results in better T2D regulation (e.g., HbA1c levels)

# Results

Of the 7 studies included in this review, 2 were secondary analyses of RCTs, 1 was a qualitative study, 2 were cross-sectional survey studies, 1 a review, and 1 a pretest/posttest educational intervention. The chronic disease(s) of focus of the studies were 2 Diabetes (including Type 1 and Type 2 diabetes mellitus) and 4 Type 2 diabetes mellitus with a single study focused on participants with multiple chronic diseases which included hypertension, diabetes and migraine headaches. All 7 studies made indirect reference to participants with comorbid conditions, however, the comorbid conditions had no reported impact on the findings. For most of the studies, the target groups were older Black

adults with a mean age of greater than 50 years (N=5), of these studies, N=2 were African American males (Jia et al., 2022; Sherman et al., 2023), a single study selected a small sample of African American male and female participants between the age range of 33-64 years old. Another study described the population of study as African American adults which was inclusive of the older Black adult population however, no age range was provided (Hill-Briggs et al., 2022). Lastly, a single study (Ruggiero & Leng, 2023) had a population of both Non-Hispanic Black and Hispanic adults where 52.2% were Non-Hispanic Black and 47.8% were Hispanic. Geographically, all studies reviewed were in the USA. Furthermore, the consensus across all studies confirmed assertions from other authors that African Americans, Black persons or Non-Hispanic Blacks are disproportionately impacted by high rates of chronic disease(s) including diabetes and hypertension as compared to non-Hispanic whites. In the section below I describe the review themes and gaps in relation to the research sub-question.

# Discussion

Themes were identified in the sample review and will be discussed below. The themes, resilience, race and racism are discussed in relation to the population, concept and contexts and the linkages to the research sub-question. These concepts will be further developed in part 2 of this chapter.

### **Population**

As previously discussed above, the population identified in my study is older Black adults. In the sample review, the population represented across studies were identified as African American and Non-Hispanic Black as anticipated. However, all the studies included a broader age range including participants over 18 years up to 91 years of age. Most of these studies (5) calculated average or the mean age as over 50 years based on the population sample size. The remaining studies either did not address age groups or included an age range (33-64 years). It was surmised that this finding would have implications for inclusion/exclusion criteria when conducting the full scoping review study as authors suggest that chronic disease in Black adults may be diagnosed earlier stressing that the focus of self-

management practices should begin at the time of diagnosis (Quiñones et al., 2019; Ruggiero & Leng, 2023). With this said, there was a vast number of studies retrieved that met the inclusion criteria for the desired age range eliminating the need to address early diagnosis in this review.

# Concept

The concept (s) of interest in my study are one or more chronic diseases, self-management, social determinants of health and health inequities. Only 2 studies referenced self-management directly (Abbott et al., 2021; Jia et al., 2022). It is important to note that other studies reference personal agency (Sherman et al., 2023), self-care or self-efficacy (Reddick & Gray, 2023) and self-reliance (Moore, 2023). As discussed in chapter 1, conceptually, self-management varies widely in the literature and there is a lack of clarity related to what constitutes self-management practices (Velde et al., 2019 and Garnett et al., 2018). This is in keeping with the studies reviewed here (Moore, 2023; Reddick & Gray; 2023; Sherman et al., 2023) and is further described in chapter 4.

Addressing the concepts of social determinant of health and health inequities with respect to answering the research sub-question, few studies had a direct (Abbott et al., 2021; Jia et al., 2022; Hill-Briggs et al., 2022) rather than indirect (Moore, 2023; Reddick & Gray, 2023; Ruggiero & Leng, 2023; Sherman et al., 2023) link to social determinants of health. For example, individual social determinants were described including socioeconomic status and health inequities such as poverty and racism, poor social support were discussed in relation to diabetic distress and incarceration. Although the population(s) of study in the sample review were from the USA, the findings related to social determinants and health inequities aligns with a Canadian report by the Public Health Agency of Canada (2020) which contends that '...fully addressing [health]inequalities will require policy interventions that affect broader influences such as poverty and socioeconomic inequalities, built environments, access to healthy and affordable foods, and access to services, to name just a few'(p.211). This Canadian report

supported the rationale for my broader scoping review study which will delve more deeply into the connections between social determinants, health inequities and chronic disease in part B below 

Context

There were no planned restrictions to a particular setting or sector applied to inclusion/exclusion criteria for the sample review. All settings where chronic disease self-management takes place including community, home, hospital, long-term care and primary care were considered. Most of the studies in the sample review were conducted in primary care low-income urban settings (Abbott et al., 2021; Jia et al., 2022; Reddick & Gray, 2023; Ruggiero & Leng, 2023; Sherman et al., 2023). Therefore, for the broader study, it was determined that including Canada and other countries would provide important perspectives to determine if tailored disease management programs for Black adults share similar characteristics internationally.

### Race and Racism

The devastating effects of the COVID-19 pandemic illuminated the impact of chronic disease on racialized individuals and the link to social determinants of health. (Balasuriya et al., 2023; Booth et al., 2021). Racism is linked to health disparities in Black persons/African Americans with chronic disease. This was discussed in 2 studies in the review (Hill-Briggs et al., 2022; Jia et al., 2022) in the context of eliminating structural racism and mass incarceration which disproportionately affects the health of African American Men. In consideration of the evidence, it was important to include race, racism and critical race theory in my updated search strategy, inclusion/exclusion criteria and analysis for the broader scoping review to discuss racism as a social determinant of health and the linkage to self-management uptake. This will be discussed in further detail in Part B below.

### Resilience

Two of the reviewed studies (Jia et al., 2022; Moore, 2023) in sample and broader scoping review were centered on the concept of resilience as a moderating factor in the management of chronic disease self-management. Moore (2023) defines resilience as 'an artful skill of being able to negotiate, adapt to, survive and manage chaos, stress, or trauma related to the experience of the individual during chronic illness in an effort to overcome pain and suffering' (p.2). Both authors emphasize that resilience can be developed by Increasing knowledge about the chronic illness and how to manage the illness, diminishing fear and increasing self-efficacy (Moore, 2023) or by enhancing family, social support, church community and spiritual interventions (Jia et al., 2022). This concept may provide insight into the types of interventions and tools that may be beneficial in self-management education programs in certain contexts or environments. Although resilience was included as a concept in my inclusion-exclusion criteria to identify whether chronic disease self-management tools and resources for older Black adults include resilience-based interventions, the studies did not reference this concept more broadly.

### **Strengths and Limitations**

This sample review has several strengths. The review allowed me to test a key research subquestion, search strategy and inclusion/exclusion criteria. Importantly, all of the studies in **Table 4** above were retrieved in the broader search; however, only 4 (Abbott et al., 2022; Jia et al., 2022; Reddick & Gray, 2023; Singh et al., 2023) of the 7 studies above were selected for final inclusion based on refinement of the criteria, as discussed above. The studies selected and analyzed in this review supported the rationale for conducting the broader study and either partially or fully answered the research sub-question. The review confirmed gaps exist in relation to the concept of self-management and activities connected to self-management practices and programs. The review also confirmed that terms such as self-efficacy and self-care are used interchangeably in the context of self-management

within the literature when describing and evaluating self-management outcomes. The sample review has helped to confirm additional keywords and search terms such as race, racism, CRT, resilience, and diabetic distress based on the studies included. Another strength of the review was the opportunity to implement the stages of the scoping review methodology. This allowed me to determine the additional support and resources I would benefit from when conducting the broader study, especially in the consultation stage (Arksey & O'Malley 2005).

There were three limitations to this review. First, all studies were limited to the USA. This was addressed in my broader scoping review by consulting the health science librarian to help identify the filters that will help to pull more diverse studies. Due to the small scope of this review, only a few studies were retrieved which may have provided a limited perspective on the topic area. This limitation was addressed in several ways when conducting my present study. I consulted with an Athabasca University health science librarian (as discussed above) to support the development of the search strategy. I also consulted with a University of Toronto health science librarian who had extensive systematic review and scoping review expertise. She was able to support the creation of search strategies using search strings and Boolean operators for each database I searched. Additionally, I was able to benefit from my prior experience conducting scoping reviews and systematic reviews in my role as a guideline development methodologist with access to my research colleagues throughout the process, if required. Lastly, since I conducted the review independently there may be implications in the interpretation of the results. For the broader study, I consulted my advisor through the process to ensure the review remains within the parameters of the timelines and resource limits of a doctoral dissertation. In the part B of this chapter, I will expand on the sample scoping review describing the amendments made to the search terms and search strategy I used. Based on the 51 retrieved studies I will augment the findings related to social determinants of health race and racism highlighted above to answer research sub-question 2.

# **Chapter Three: Part B-Sample Scoping Review (Expanded)**

As an extension of the sample review focused on research sub-question 2 (How are determinants of health and health inequities linked to the utilization of self-management practices in older Black adults?) This section augments the above review by describing the impact of social determinants of health on the utilization of self-management practices. As with all the research sub-questions, a separate search strategy was conducted as discussed in chapter 2. In consultation with the health science librarian key search terms were used to develop a search strategy in the Medline and CINAHL databases. A total of 454 papers were retrieved from both databases after duplicates were removed in (Covidence). These papers were screened along with the other papers and eventually amalgamated with the papers from the other searches as almost all the included studies implicitly or explicitly address sub-questions 2. In this expanded review, I build on the findings above discussing my personal reflections during the iterative review cycles. I also expand on the discourse positioning race and racism as a social determinant of health and narratively present a high-level summary of the health inequities of note in the review.

### **Reflection of Racism**

As a researcher, I am deeply connected to the topic and the narratives captured in the studies who could represent my siblings, aunties or grandparents. Based on my positionality, and the social context of this work, it is important to pause and reflect on my perspective and ideas about the topic and how it is conceptualized in the review studies. As I mentioned above, most of the papers in the review focus on older African American or Black adult populations with chronic conditions of varied types. As I systematically searched the literature, I had to reflect on how to refine my inclusion-exclusion criteria repeatedly as there were a significant number of studies exploring chronic disease self-care or self-management that included racially and ethnically disadvantaged persons in disparate contexts. This presented a surprising challenge because when I began this research, I didn't think I would be able to

the studies focused solely on an older Black and ethnic population. As I reflected more deeply on the studies that superficially discuss the concepts of interest, it became clear there was a proverbial elephant in the room in many of these studies. While the studies focus on disadvantaged populations (e.g., Latino, Asian), oftentimes, they are not explicitly investigating the links, causes or pathways that connect social determinants such as poverty, race to health inequities. I noticed this trend while conducting the sample review, as noted above. However, it intensified while reviewing the larger volume of studies. This realization highlighted the importance of overtly addressing implied or hidden evidence of racism, discrimination oppression in the absence of causation (Lett et al., 2022). I recognize that addressing the elephant in the room is a responsibility that comes with a level of discomfort. As I continue my research, I acknowledge the complexity of this topic of race, racism and health inequities in the context of chronic disease self-management and commit to developing an authentic understanding of the impact of racism by courageously continuing to discuss this topic in contexts that may be conveniently hidden. In the section below I expand on this by discussing research sub-question 2 through this lens of CRT, racism and social determinants of health. Following this I will introduce the concept of cultural-tailoring which I expand further in chapter 4.

### Racism as a Social Determinant of Health

The health disparities of older Black adults, when viewed through the tenets of CRT illuminate the pervasive impact of structural racism individually, socially and within society more broadly which creates a barrier to self-care and the management of chronic conditions. In a systematic review linking racism, mental and physical health outcomes, Paradies et al., (2015) emphasize that racism impacts health through recognized pathways such as restricted access to education, housing and employment, for example. Many of the studies in this review focused on underserved or disadvantaged African American, Black older adult populations with one or more chronic conditions in the USA. In these studies, although racism is not explicitly mentioned, social determinants of health and inequities are

often discussed as the rationale for the study. For example, in Arévalo Avalos et al. (2024) study evaluating the implementation of a technology-enabled peer coaching intervention to support diabetes self-management among patients with uncontrolled diabetes, African American and Hispanic participants are on Medicaid, have high rates of food insecurity and low literacy. The outcome of the study was a positive effect on blood sugar levels and although social determinants are explicitly described and racialized groups are the focus of the study, racism is not explicitly discussed. Admittedly, Arévalo Avalos et al. (2024) acknowledge that the underlying causes of disparities remain unaddressed. In this context, the SDOH may have served as the proxy for racism. Since many of the studies in this review stratify by racial groups, it is important to differentiate race and racism in relation to SDOH. Ramsoondar et al., (2023) emphasize that identifying race as a social determinant of health may be misleading since race is a socially constructed categorization of people into groups based on appearance and other superficial features. In other words, racism not, race is the direct cause of the disparities experienced by the older Black adults that are the focus of the studies. In the insightful words of Ta-Nehisi Coates, esteemed journalist and author of the acclaimed work Between the World and Me, he insightfully proclaims, "Race is the child of racism not the father (p.7)" In other words, racism precedes race perpetuating socially defined inherently biased racial categorizations.

Of the 51 studies in the review, 7 (Chard et al., 2022; Conway-Phillips et al., 2020; Greer & Abel, 2022; Janevic et al., 2022a; Janevic et al., 2022b; Matthias et al., 2024; Woods et al., 2023) link structural racism and social determinants to health disparities and chronic disease self-management. Although racism may not have been explicitly mentioned or addressed in many of the studies, disparities such as poverty, lack of access to healthcare and healthy foods can be viewed as proxies for racism or as evidence that structural racism is likely the latent cause of these disparities. This critical perspective supports the need to incorporate the lens of CRT in this and other studies to make explicit insidious evidence of systemic and structural racism as a root cause of health inequities in this population.

### **Health Inequities**

Many of the studies in this review confirm the disproportionate impact of social determinants and health disparities on older Black adults and other disadvantaged groups. 27 or 53% of the studies identify participants reporting lower income levels (i.e. \$50,000 annually or less). For example, in Chard et al. (2022) participants report an income of less than \$2,000 USD monthly and Ellis et al. (2023) highlight 46 % of participants with an annual income <\$12,000 USD. For some studies disparities are identified by participants' insurance coverage; for example, in Dzikowicz et al. (2024) 68% of participants had Medicaid coverage, similarly in Mitchell et al. (2023) 71% of participants were on Medicare or Medicaid. Connecting the root cause of structural racism to geographical areas, Bailey et al. (2021) describe the devastating impact of a government sanctioned redlining where "Homeowners' Loan Corporation (HOLC) drew red lines (hence "redlining") around communities with large Black populations, flagging them as hazardous investment areas whose residents would not receive HOLC loans" (p. 768). Although redlining ended in 1968, relined neighborhoods remain significantly more disadvantaged. This was evident in the review studies where annual income tends to be lower and studies are conducted in safety-net community centers or hospitals that provide care for patients regardless of their citizenship or insurance status (Chatterjee et al., 2020; Jia et al., 2022; Lee et al., 2019; Mitchell et al., 2023; Morenz et al., 2024; Presley et al., 2020). In addition to the SDOH mentioned, education and literacy are notable indicators of inequities. Of note in this review, 12 (23.5 %) of the studies report between 40-94% of participants attained a high school degree or less. Based on the social determinants and health disparities identified in the papers, the literature clearly illustrates that older Black adults are disproportionately impacted by chronic disease due to inequities such as limited education, low income and poverty. These disparities impact a person's ability to manage their chronic condition effectively. For example, lower income results in limited access to medications, supplies and critical equipment such as blood pressure cuffs or blood sugar monitoring machines (i.e., glucometers). Limited education

challenges a person's ability to comprehend complex instructions related to managing a chronic condition. Lastly, low-income neighborhoods impact the availability of healthy foods, access to quality healthcare and physical activity.

It is imperative to answer research sub-question 2 here. The discussion above is evidence of a clear link between SDOH and the limited uptake of chronic disease self-management education programs and practices. Furthermore, inequities such as racism, poor literacy and poverty are prevalent among older Black adults and for this reason culturally-tailored chronic disease management programs are increasingly being implemented in response to the issue.

# **Culturally Tailored Self-Management Education Programs**

Building on assertions emphasized above and through this study, culturally adapted self-management education programs and practices could enhance the health outcomes of older Black adults. Sidhu et al. (2015) define culturally tailored self-management programs and practices as,

"Cultural adaptation refers to the extent to which ethnic/ cultural characteristics, experiences, values, Behavioural patterns and beliefs of a target population as well as relevant historical, environmental and social factors are incorporated in the design, delivery, and evaluation of targeted health promotion materials and programs" (p.2)

Far from being a new concept, this definition builds on the foundational work of Kreuter et al. (2003) describing an integrated, multilevel approach to designing culturally appropriate interventions emphasizing 5 targeted approaches:

- Peripheral strategies: are superficial strategies that aim to visually appeal to a cultural group
  and may include program material, colors, image or fonts and could include thoughtful culturally
  sensitive messaging.
- Evidentiary strategies: that use data, compelling science or an evidence-based statement or argument that will enhance the relevance of the issue.

- Linguistic strategies: Are implemented to increase accessibility to interventions by
  incorporating linguistic diversity. For example, translating health education into Spanish for a
  Latina group
- 4. **Constituent-involving strategies**: This approach aims to align the experiences of members of a group by integrating individuals or lay-persons who have lived experience and are indigenous to the group.
- Sociocultural strategies: Aim to integrate the values, beliefs or 'culturally normative' practices
  of the group

Over time, this approach continues to be integrated into culturally tailored programs highlighted in this review. For example, Singh et al., (2023) explored the characteristics and outcomes of Community-based culturally tailored education programs of 74 studies in a systematic review categorized according to Kreuter et al. (2003) framework. Similarly, the elements of Kruetuers and colleagues' strategies are evident in many of the studies in this review. In Adinkrah et al., (2024) study exploring health disparities among under-resourced older African American adults, the constituent-involving element included Community Health Ambassadors trained to address tradition and cultural health preferences into evidence-based medicine. It is important to note that cultural groups are not homogeneous and variations within cultures exist which may present challenges when designing interventions (Kreuter et al., 2003). Similarly, in systematic reviews Senteio and Murdock (2022) and Singh et al. (2023) emphasize the importance of studying culturally-tailored practices in more depth to gain deeper knowledge of how these interventions can improve health outcomes. This will be explored in greater depth in chapters 4-6.

# **Summary**

In part A of this chapter, I presented the outcome of my sample scoping review which created the foundation for the broader research study. I expanded on the discussion to include updated search terms and new findings that have emerged. I expanded on the sample scoping review in Part B, building

on the key concepts and reflecting on the state of the discourse related to race, racism and social determinants introducing the concept of culturally-tailored self-management education programs. In chapter 4, I discuss research sub-questions 1 and 3 focused on the exploration of the research designs and the types and the key characteristics of the retrieved studies. The high-level review of these studies will illuminate critical aspects of chronic disease self-management education programs, the strategies researchers employed to tailor these interventions for older Black adults, and the primary theoretical frameworks that underpin the research designs in this review. Furthermore, I will discuss significant attributes of the study population such as nomenclature used to describe the groups.

### **Chapter Four: Concepts and Study Designs**

In this chapter, I will discuss the findings pertaining to research sub-questions 1 (What types and key characteristics of chronic disease self-management education programs have been reported in the literature for older Black adults?) and 3. (What types of research designs have been used to understand the development, implementation, and evaluation of chronic disease self-management in older Black adults?). In the concluding sections of this chapter, initial gaps will be identified and expanded upon chapters 5 and 6.

I have chosen to review research sub-questions 1 and 3 together in this chapter as they focus on the exploration of the research designs, and the types and key characteristics of the retrieved studies. Combining these sub-questions will provide a high-level perspective of chronic disease self-management education programs, the strategies researchers employed to culturally tailor these interventions for older Black adults, and the framework and philosophy that underpin the research designs. Furthermore, I will discuss significant attributes of the study population, and the language used to represent the groups (i.e., older Black adults, African American, sub-Saharan African) and will also discuss the context in which the studies are conducted.

The systematic search of the literature exploring the sub-questions stated above resulted in a significant yield of studies. As discussed in chapter 2, the 51 studies (See Appendix A) included in this review will be described in relation to the two research sub-questions being highlighted in this chapter. I describe the key characteristics of the included studies according to the scoping review methodological approach describing the population, concept and context in this following section (Peters et al., 2022).

### **Key characteristics of Self-Management Programs and Practices**

Building on the discussion in chapter 1, Chronic disease self-management programs continue to be developed using similar formats irrespective of the population or chronic condition. The programs are often community-based, led by individuals who have experience managing the same chronic condition and span a duration of weeks to months (Ory et al., 2024). Further, the programs include but are not limited to interventions that focus on increasing knowledge about the chronic condition, monitoring disease-specific markers, increasing dietary knowledge, managing physical activity, stress and goal setting (Ory et al., 2024). The retrieved studies in this review share many of these characteristics and incorporate other attributes authors have selected to customize or tailor the programs specifically for older Black adults. In the next section, I will discuss the key attributes of the population being studied.

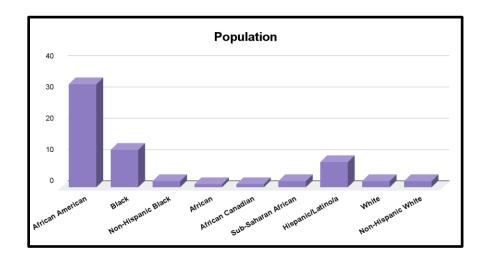
### **Population**

Much of the chronic disease self-management literature is conducted in the USA (Goff et al., 2021). Similarly, 88.2% (45) of the included studies in this review were conducted in the USA. Only one Canadian study met the inclusion criteria (Swaleh & Yu, 2021), 3 studies were conducted in the United Kingdom (UK) (Goff et al., 2021; Moore et al., 2019; Omodara et al., 2022) and an additional 3 from the African continent representing the countries of Liberia (Bleah et al., 2023), Tanzania (Sato et al., 2023) and Uganda (Ingenhoff et al., 2023). The mean age of most of the population within the studies is greater than 50 years old aligning with the study protocol. Studies with younger populations or non-specified ages were excluded from the review. There were 2 studies that included healthcare providers and caregivers who were younger than the participants. These studies were included because their perspectives contributed to the rich data collected about culturally tailored practices (Goff et al., 2021; Poon et al., 2022; Woods et al., 2023).

Additionally, all the studies in this review primarily focus on older Black adults. Terminology used to describe older Black adults varies in the literature. **Figure 3** below highlights that older Black adults are referenced in various ways. Most studies from the USA refer to older Black adults as African American. This is a common nomenclature used in the USA. 12 studies include smaller populations from other races or ethnic backgrounds, specifically Hispanics/Latinos (8) and White/Non-Hispanic White persons (4).

Figure 3

Population Terminology

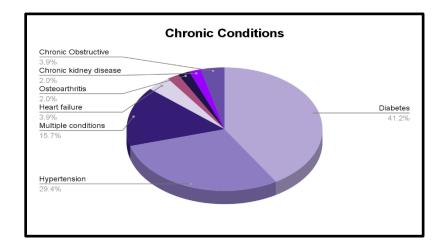


Chronic Conditions. Of the 51 studies in the review, self-management programs targeted diabetes (21), hypertension (15), multiple conditions (8), heart failure (2), chronic pain/osteoarthritis pain (2), chronic kidney disease (1) and chronic obstructive pulmonary disorder (COPD) (2). The higher percentage of Black adults diagnosed with diabetes and hypertension aligns with Fernandez et al. (2021) who highlight that non-Hispanic Black Americans have higher rates of hypertension (42%) compared with non-Hispanic White Americans (28%). Further, the rates of diabetes are also higher among non-Hispanic Black Americans (12%) compared with non-Hispanic White Americans (7%). It is important to

mention that many of the participants in the studies had other chronic conditions that were considered burdensome and impacted on their ability to cope with their illness. **Figure 4** below illustrates the range of diagnosis of the included studies.

Chronic Conditions

Figure 4



# Concepts

Since the central concept of interest in this scoping review is chronic disease self-management programs or practices used by older Black adults, in this section of the review, I describe the key concepts that emerged in relation to sub-questions 1 and 3. This includes concepts used to describe self-management in the selected studies such as self-care and non-communicable diseases. Also discussed are the common characteristics of chronic disease self-management education programs in the review including peer and community health worker-led programs. These concepts highlight unique aspects of culturally tailored self-management practices that have been incorporated into self-management

interventions including faith-based programs, race concordant coaching and ethnic dietary practices such as culture cooking classes (Goff et al., 2021; Moore et al., 2019; Reddick & Gray, 2023).

Chronic disease management programs (CDSMP). As previously discussed in chapter 1, CDSMP was originally developed in the 1990s at Stanford University in the USA and disseminated in over 35 countries. The CDSMP model is used in adapted formats through many of the studies in the review (Ory et al., 2024). Many of these programs often follow a similar format with local or disease specific variations. In a comprehensive summary highlighting the utilization of chronic disease programs for older adults, Ory et al. (2024) report that between January 2010-January 2023,

The majority of participants were enrolled in CDSMP workshops (58%), followed by Diabetes Self-Management Program (DSMP) workshops (21%), Tomando Control de su Salud (Spanish version of CDSMP) workshops (6.0%), and Chronic Pain Self-Management Program (CPSMP) workshops (5%). The five most common delivery sites within the United States were healthcare organizations (25%), senior centers (18%), residential facilities (14%), faith-based organizations (7%), and Area Agencies on Aging (6%). (P. 149).

The statistics cited above align with the general characteristics of the studies within this review. For example, a vast number of the retrieved studies focus on diabetes self-management education (DSME) programs as illustrated in **Figure 4**. Furthermore, of the 41% of the diabetes focused studies 5 studies implemented a culturally tailored version of the diabetes self-management education support (DSMES) (Ewen et al., 2024; Goff et al., 2021; Lynch et al., 2019; Mitchell et al., 2023; Peña-Purcell et al., 2019; Presley et al., 2020). Many other studies implemented a similar format of the CDSMP typically community-based, peer or community worker-led with a duration of weeks to months of health and dietary education and coaching. Although the CDSMP program described above is widely disseminated, as previously emphasized, the standardized version of this program has had limited success among

ethnic populations including older Black adults. Issues such as access to reliable transportation, poverty, racism and healthcare mistrust have had a profound impact on disadvantaged populations (Senteio & Murdock, 2022). Culturally tailored self-management practices researchers are exploring such as race concordant facilitators, community health workers and coaches and virtual technology to address these challenges will be discussed below.

Self-management concepts and terminology. As discussed in chapter 1, terms used to describe self-management in the literature vary (e.g., non-communicable disease, self-care). Self-management and self-care are discussed here. The ambiguity in the literature with terminology used to describe self-management is evident in the studies enclosed in this review. For example, in a study exploring the way spirituality is incorporated into a mobile health intervention, Thomas-Purcell et al., (2020) define self-management as the ability of persons, in conjunction with the family, community, and healthcare professionals, to manage symptoms, treatments, lifestyle changes, and psychosocial, cultural, and spiritual consequences of health conditions. This holistic definition closely aligns with World Health Organization's (2019) definition of Self-care which states

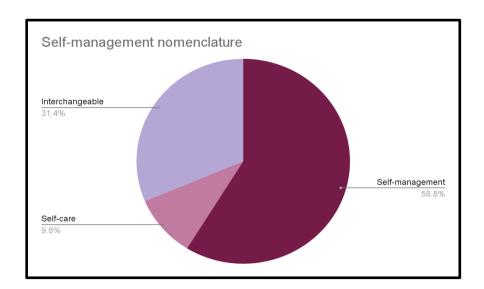
"self-care is the ability of individuals, families and communities to promote health, prevent disease, maintain health, and to cope with illness and disability with or without the support of a healthcare provider (p.135)".

Of note in the WHO definition, self-care is an umbrella term that incorporates principles of self-reliance, empowerment, autonomy, personal responsibility, self-efficacy, encompassing the concept of self-management. The principles embedded here are often used to describe attributes of self-management behavior throughout the studies in this review. Adding to the ambiguity of these terms, in a study examining bivariate correlations among diabetes knowledge, diabetes self-care activities, perceived

diabetes self-management, Abbott et al. (2022) reference diabetes self-care activities and diabetes self-management interchangeably without clear delineation of nomenclature. **Figure 5** below illustrates how authors have used the terms within the studies, highlighting where the terms are used in isolation or interchangeably. For example, 58% of studies in the review use the term self-management along, 9.8% use self-care and 31.4% use the terms interchangeably confirming that ambiguity persists in the use of these terms which continues to be a clear gap in the literature.

Figure 5

Self-management Nomenclature



*Peer-leaders.* A hallmark of the CDSMP model are the lay-leader facilitators trained by master facilitators. The signature train-the-trainer model engages participants in small group behavior change discussions while providing intensive emotional and practical support (Ory et al., 2024). Of the studies in this review 18 (35%) integrate racially concordant peer-leaders, lay community health workers and coaches. Scholars such as Ku and Vichare (2023) highlight that racial inequities may be exacerbated with racial and ethnic differences between patient and healthcare providers. Therefore, researchers suggest

racial concordance so that patients-persons are of the same ethnicity or race as their provider (Ku & Vichare, 2023). In this review, peer leaders were often of the same racial background and recruited from the same communities as participants. This involved forging partnerships with community and faith-based organizations who also facilitated the recruitment of peer leaders. In Goff et al. (2021) opinions were divided; some participants expressed general satisfaction with racially concordant leaders facilitating self-management interventions. Other participants reported they preferred to have culturally concordant educational material. Interestingly, peer leaders and healthcare professionals of the same racial background felt more confident supporting their patients of the same racial/ethnic group. In other studies, participants provided positive feedback about leaders of the same ethnicity or race, citing the benefit of engaging with providers who can relate to the cultural nuances that impact dietary choices and spiritual beliefs (Adinkrah et al., 2024; Singh et al., 2023). Racially concordant leaders may be ideal and not always available therefore, it is imperative that peer leaders and healthcare providers working closely with older Black adults have appropriate training and in-depth evidence-based knowledge about cultural differences and tailoring strategies for this population (Singh et al., 2023) to ensure culturally tailored education is effective.

Community Health Workers (CHW). CHW are integrated into self-management programs in a similar capacity as peer leaders and may be trained healthcare professionals. In 5 studies CHWs lead self-management programs, educating patients and families and also perform a coaching role (Brewer et al., 2023; Ingenhoff et al., 2023; Janevic et al., 2022; Joseph et al., 2024; LeBrón et al., 2022). In the review, this support involves follow-up calls, appointment reminders and emotional support. Lay-CHWs must be trained by healthcare professionals to answer disease-specific questions related to the chronic condition. This may present a challenge for healthcare providers who must build capacity in the community by recruiting and training willing CHW for these roles. Based on focus groups in Goff et al.

(2021) healthcare providers shared their challenges managing the recruitment and retention of qualified personnel stating,

"I've been involved in training for lay educators. It's quite time consuming. We invested a lot of time with one educator who was very keen, very motivated, but then she got another job and then she left. So, I think it's good to have that skill mix, but it then poses problems in training and keeping people updated."

Strategies to address recruitment and retention of peer leaders and CHW were not directly addressed therefore there is a gap in the studies. The importance of meeting this population where they are is key. Recruiting from and embedding peer leaders and CHWs into settings where older Black adults spend the most time such as churches, barber shops and hair salons ought to be standardized and further evaluated to determine efficacy (Singh et al., 2023). The integration of CHW and peer leaders into these settings addresses' capacity building and access to care and is discussed in more depth in chapters 5 and 6. Another concept incorporated into culturally tailored self-management programs to address the challenges of poor access to healthcare services is the use of remote or virtual technology. I discuss the characteristics of these programs in the following section.

Technology-based and Self-management Programs and Practices. Facilitating access to health information technology (HIT) can be a solution for individuals such as older Black adults who are unable to access in-person self-management programs due to mobility issues, poorer health and lack of transportation (Arévalo Avalos et al., 2024; Senteio & Murdock, 2022; Thomas-Purcell et al., 2020). In a systematic review that describes the efficacy of consumer-oriented HIT interventions designed to support self-management involving African American and Hispanic patients, Senteio & Murdock, (2022) findings highlight gaps in the type of technology that can support underserved populations who have

smartphones but may experience limited access to the internet. Senteio & Murdock, (2022) argue that patients with chronic diseases may use information technology such as mobile apps as sources of health information to help answer important questions regarding symptoms and treatment options. However, ethnic and racial inequities often impede access to information and communication technologies (ICTs) due to socioeconomic and system barriers. For example, only approximately two-thirds of African American individuals (66%) own either a laptop or desktops; in contrast to 83% of White and 58% of Hispanic individuals. Addressing perspectives in HIT use, Lauffenburger et al. (2023) suggest gaps may also exist between the availability of person-centered health information technology and uptake. Furthermore, emerging evidence remains mixed about HIT such as mobile health apps and text messaging which have been studied minimally in diverse populations (Lauffenburger et al., 2023). Although some of the studies in this review have embedded various aspects of HIT such mobile health apps(Brewer et al., 2023; Greer & Abel, 2022; Presley et al., 2020; Thomas-Purcell et al., 2020), which includes text messaging, virtual education, further research is required to understand in more depth how this population can benefit from and access technology to support self-management practices (Senteio & Murdock, 2022). Given the demographic of the population being studied in the review, researchers suggested that navigating technology or digital literacy may be difficult for older Black adults. Furthermore, Senteio & Murdock, (2022) highlight that sociocultural factors may present barriers that contribute to intervention-generated inequality when technology-enabled health informatics approaches disproportionately benefit advantaged populations. In a study with the review exploring perceived ease of use, usability, and the feasibility of using mobile health applications to manage hypertension self-care, Greer & Abel, (2022) stress that 16% of Americans lack basic computer skills having poor digital literacy with a disproportionate number among Black, Hispanics and other non-White individuals. Therefore, HIT must consider sociocultural factors that influence digital literacy such as older age and trust (Senteio & Murdock, 2022). Greer and Abel (2022) explored the experiences of

African American (AA) persons using mobile technology to manage their hypertension. The study integrated caregivers/families who supported older AA in the use of mobile apps. Findings from the study were positive as the older adults reported having challenges using the health monitoring features of the hypertension app and relied on caregivers/family to help navigate the technology (Greer & Abel, 2022). This highlights a tailored supportive strategy incorporating family support that may be effective in bridging the digital divide and resource needs in Black communities (Greer & Abel, 2022; Senteio & Murdock, 2022). Similarly, recognizing the need to bridge access to digital equipment, in a pulmonary rehabilitation study for patients with chronic obstructive pulmonary disorder (COPD), Polo et al., (2023) provided older AA adults with the telehealth equipment in their homes. Despite this, use of the program was limited due to issues such as mistrust of the technology. Senteio & Murdock, (2022) noted a similar sentiment where participants were reluctant to use technology due to lack of acceptance. Therefore, continued exploration of novel approaches in the design, access and support needs for older Black adults using HIT is warranted to improve digital literacy and acceptance.

#### **Context**

Community based participatory research (CBPR)emphasizes community engagement, equity and empowerment (LeBrón et al., 2022). This method of action research engages diverse communities by supporting and amplifying the voices of community members (Haboush-Deloye et al., 2023). CBPR seeks to prioritize equity in the relationship between researchers and community-based organizations by committing to practice the principles of co-learning, ensuring efforts have mutual benefit, and making a long-term commitment to community members (Haboush-Deloye et al., 2023). CBPR principles have been used across disciplines such as nursing, public health, medicine and psychology combining knowledge and action to improve community health and reduce health disparities (Collins et al., 2018). It provides the foundational principles to understand community members' context and lived

experience, informing strategies to create transformative lasting change with and for the community (Collins et al., 2018). Therefore, it is not surprising that many studies in this review embed CBPR or participatory principles as the framework within their studies to explore self-management programs for Black older adults in underserved communities (Abbott et al., 2022; Adinkrah et al., 2024; Bleah et al., 2023; Brewer et al., 2023; Goff et al., 2021; Joseph et al., 2024; LeBrón et al., 2022; Moore et al., 2019; Senteio et al., 2021; Woods et al., 2023). Furthermore, many studies in this review were conducted in the community or community-based settings such as community centers, churches and clinics. Collins et al., (2018) suggest that CBPR principles are flexible and adaptable to diverse communities, partnerships and contexts where practitioners are committed to addressing social determinants of health such as race, ethnicity and cultural humility (Collins et al., 2018). In this review, Adinkrah et al., (2024), employed CBPR approaches to evaluate a COVID-19 health ambassador program. The program integrated interventions into AA communities and investigators partnered with 17 faith-based community organizations to recruit participants and concordant peer leaders into a 3-month selfmanagement program (Adinkrah et al., 2024). Additionally, Goff et al. (2021) designed a culturallytailored diabetes self-management education & support (DSMES) program engaging community leaders and Black British older adults in the co-creation of self-management interventions. These are strong examples highlighting that participatory approaches are being explored to address health disparities in Black and minority communities.

Faith-based Organizations or Programs Engagement in faith-based activities are embraced among AA who have some of the most consistent church attendance (May & George, 2021). Thus, faith and spirituality are important to the Black communities in the USA and other countries which is seen clearly in this scoping review. May & George, (2021) suggest that culturally, AA are more likely to engage in prayer and religious practices than other racial/ethnic groups. Consequently, church organizations and Pastors are very engaged with and acutely aware of the health of congregants and chronic

conditions among congregants. They routinely partner with researchers and other organizations to address health disparities (Woods et al., 2023). In this review 10 studies incorporate partnerships with faith-based organizations (e.g., churches). Additionally, 7 studies collaborate with churches or FBO to recruit participants (Adinkrah et al., 2024; Brewer et al., 2023; Harvin et al., 2020; Joseph et al., 2024; May & George, 2021). 3 studies emphasize the incorporation of prayer and biblical/spiritual principles into self-management interventions and practices (Harvin et al., 2020; May & George, 2021; Thomas-Purcell et al., 2020) acknowledging the importance of spirituality in the lives of older Black adults.

Studies in this review leverage the traditional role of faith-based organizations (FBOs), particularly AA churches, as trusted sources of social support, advocacy, and resources for Black communities. FBOs are also seen as key platforms for disseminating health information and organizing health-related activities (Adinkrah et al., 2024). As a result, in the USA, through formal partnerships such as shared-use agreements, FBO may partner with community organizations and schools to share facilities and costs to improve health behaviors such as physical activity in the community (Foster et al., 2022). While shared use agreements are not extensively discussed in this review, it ought to be explored further as a cost-saving strategy that could be standardized in Black communities to promote the management of chronic conditions.

Despite the focus on American programs, prioritizing spirituality and religion is not limited to AA/Blacks in the USA. In this review Black Saharan African/Black adults in the UK (Omodara et al., 2022) and Caribbean Black participants in Canada (Swaleh & Yu, 2021) also describe the critical role of faith as a lifestyle and coping strategy and the church as a source of health information. It is very clear that faith plays a critical role in the lives of Older Black adults and, culturally appropriate, faith-enhanced chronic disease risk reduction programs are key to positive outcomes in communities of color (May & George, 2021). Given the above, I explore the role of faith, spirituality and religion in greater depth in chapter 5

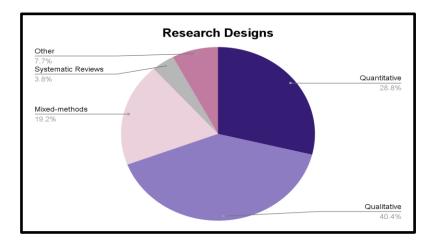
by describing the perspectives and lived experiences of participants within review studies as a component of the content analysis of qualitative studies. In the following section I discuss finding pertaining to research sub-question 3 and describe the research design implemented in the studies.

#### **Research Designs**

Research design determines the method in which the research questions will be answered and how data will be analyzed, typically divided into three groups, qualitative, quantitative or mixed methods (Asenahabi, 2019). The design includes the plan, structure and strategy that will be used to address the research problem. Here I summarize the research designs of the 51 studies captured in Figure 6 (below).

Research designs

Figure 6



#### **Qualitative Studies**

Forty percent of the retrieved studies use qualitative research designs. In these studies researchers explored Black participants' and their caregivers' perspectives with day-to-day chronic disease self-management practices describing barriers and facilitators to successful disease

management. The number of participants in the studies was between N=8 to N=56 and the participants represented patients, family/caregivers, healthcare providers and peer-leaders. In terms of the concepts, researchers investigated cultural preferences related to dietary intake and health professional interaction to determine satisfaction and strategies that could be implemented to tailor self-management educational interventions. Many of the studies conducted focus groups exploring acceptance of self-management practices or as adjuncts to previously conducted studies to gain deeper understanding of a resiliency in diabetes programs (Conway-Phillips et al., 2020; Jia et al., 2022), a CHW-led COPD program (Ingenhoff et al., 2023) and a chronic pain management program (Matthias et al., 2024)

The context of the qualitative studies was community-based primarily conducted in homes, community centers and churches. The studies in this review illuminated the voices of the participants and individuals within the studies and provided deep insights into their lived experience. It is through this lens we can see the impact of their physical and social circumstances creating an opportunity to create a path toward improvement and change. As a result of the breadth of this qualitative data, a high-level content analysis was conducted and is described in chapter 5. This analysis will augment the review by providing deep insights into the values, preferences barriers and facilitators of participants in the studies.

# **Quantitative studies**

Twenty-eight percent of the studies using quantitative research designs were pre-post intervention, randomized, cluster and non-randomized control trials. These studies used statistical analyses to explore chronic disease self-management education programs for older Black adults. The number of participants within each RCT ranged from N=46 (Janevic et al., 2022) to N=495(Feldman et al., 2020) participants. While the population studied was primarily AA, many of these studies included

Hispanic or Latino/a persons. It is beyond the scope of this study to critically appraise the studies, however, some of the studies reported challenges with recruitment and attrition rates (Polo et al., 2023) and inconclusive outcomes.

Most of the quantitative studies evaluated the effectiveness of self-management education programs/interventions and explored diabetes (7), hypertension (4), heart disease (1), chronic pain (1) and chronic kidney disease (1). All quantitative studies included culturally tailored interventions such as education programs that engaged participants over a period of months to years. In terms of context or settings, many of the studies were conducted in hospital settings (emergency department) or community-based outpatient clinics. Recruitment and retention efforts were conducted through community partnerships with community organizations as discussed above (Tharakan et al., 2024). However, as mentioned above many of the participants within the studies did not remain in the intervention until the end of the studies. Authors suggest that further research is needed to determine the rationale for this occurrence (Adinkrah et al., 2024; Feldman et al., 2020; Polo et al., 2023).

### **Mixed Methods**

Nineteen percent of the studies were mixed method including both quantitative and qualitative data analysis. This research method was primarily used in pre-post intervention studies (Adinkrah et al., 2024; Greer & Abel, 2022; Harvin et al., 2020; Peña-Purcell et al., 2019; Reddick & Gray, 2023), correlational cross-section (Ellis et al., 2019) and intervention design (Morenz et al., 2024). In these studies, quantitative data was the primary mode of data collection, and the qualitative data was collected via focus groups or open-ended survey responses to deepen patient experience and understanding about the intervention. Alternatively, almost four percent of the studies retrieved were evidence synthesis in the form of systematic reviews. These two studies (Senteio & Murdock, 2022; Singh et al., 2023) included 27 papers and 74 papers respectively, exploring culturally tailored self-

management programs for Black adults. In Senteio & Murdock (2022), 27 studies that reviewed health information technology in disparate populations were retrieved. Of the 27 studies 14 (52%) focused exclusively on African American patients, 4 (15%) focused on Hispanic patients, and 9 (33%) focused on both. All articles focused on health information technology in the home setting and diabetes, hypertension, and heart failure were the most common chronic conditions studied. In Singh et al. (2023) 74 studies primarily conducted in the USA were retrieved. Community Based culturally tailored education (CBCTE) programs targeted diabetes (65%), hypertension (30%), diabetes and hypertension (1%), cardiovascular disease (3%), and stroke (1%). Cultural tailoring strategies included targeted Black communities, constituent-involving (e.g., community informed), evidential (e.g., integrated community resources), linguistic (e.g., delivered in community's dialect/accent), and sociocultural (e.g., integrated community members' religious practices). These findings are aligned with the cultural tailoring within this review. Finally, almost eight percent of the remaining studies are categorized as other research designs. One study implemented a Plan-Do-Study-Act quality improvement approach that involved telephone outreach and self-management education classes (Raman et al., 2022).

Other Studies. The remaining two studies applied a secondary analysis of RCTs and intervention development studies. These studies provided an in-depth quantitative analysis of the data from randomized control trials with limited statistically significant results and contextual results. In Abbott et al. (2022) researchers analyzed the data that tested a culturally relevant diabetes health promotion program among participating congregants of churches located in four rural counties in northern Florida. The study explored the correlation between diabetes distress, perceived diabetes self-management and diabetes fatalism. Using a similar approach, Dzikowicz et al., (2024) examined the relationship between insurance type (i.e., private insurance and Medicaid) and self-care stratified by races to identify differences in 30-day readmission among patients with HF with cognitive impairment.

#### Summary

This chapter focused on research sub-questions 1 and 3 (What types and key characteristics of chronic disease self-management education programs have been reported in the literature for older Black adults?) and (What types of research designs have been used to understand the development, implementation, and evaluation of chronic disease self-management in older Black adults?). I have explored the types and key characteristics of the studies which included a high-level perspective of chronic disease self-management education programs. I also discussed the attributes of the study population, and the language used to represent the groups (i.e., older Black adults, African American, sub-Saharan African) and reviewed the community and faith-based context in which the studies were conducted. Lastly, I described primary research designs used within the studies which included many qualitative and mixed methods studies. The initial gaps identified in this review are the paucity of research studies outside of the USA including Canada. While many of the studies in the review incorporate culturally tailored practices, it is not clear to what degree these practices are integrated or effective in producing long term behavior change. Furthermore, more research is needed around training and education for healthcare practitioners who serve this population. I discuss this briefly in chapter 5 and present the qualitative content analysis.

### **Chapter 5: Health Assessments and Content Analysis**

In this chapter I discuss the findings pertaining to research sub-questions 4 and 5 (What types of chronic disease self-management assessment tools have been used for older Black adults?) and (What are the gaps in the literature, including those identified by researchers, related to the development, implementation, and evaluation of tailored chronic disease management education programs for older Black adults?). For sub-question 5, rather than exploring gaps in the literature in this chapter, I will review the research gaps in Chapter 6, Alternatively, I review the qualitative discussion of participant perspectives related to the challenges and benefits, barriers and facilitators of tailored chronic disease management education programs and practices. In the concluding sections of this chapter, I present a content analysis of the qualitative studies, and the initial gaps and themes of this review will be identified.

### **Health Assessment Tools**

At their core, self-management education and interventions are the measures used to evaluate an individual's ability to successfully regulate their illness. According to Lawless et al. (2023), to develop, implement and evaluate self-care or self-management practices and education, tools to assess self-care and self-management are necessary to demonstrate the effectiveness of programs, policies, and interventions. In the field of self-management, many assessment tools are used by healthcare providers in various capacities. Various assessment tools used within the studies of this review were disease-specific and were implemented to quantify numerous dimensions of self-management. This data was often quantitative, numerical data used for statistical analysis. Many of the assessments completed within the studies were in the form of questionnaires; other assessments could be categorized as health assessments. For example, disease-specific monitoring such as blood pressure recording and blood

glucose evaluations. Authors acknowledged the conceptual and disease-related complexities linked to self-management or self-care instruments (El-Osta et al., 2023, Lawless et al., 2023, Wientzek et al., 2023). Ambiguity with the use of disease-management terms such as self-care used more broadly in the literature to encompass a wide array of activities related to lifestyle, hygiene, socioeconomic environmental factors and self-management often used interchangeably add to the complexity of this topic (El-Osta et al., 2023Lawless et al., 2023). In this section, I will briefly describe the types of chronic disease self-management assessments and tools that have been used for older adults; then I discuss how these assessments have been tailored to be used for older Black adults in the review.

# **Self-management Assessment Complexity**

In a scoping review to identify and map instruments measuring self-care and self-management of chronic conditions by older adults, Lawless et al. (2023) retrieved 103 studies used to assess an individual's self-care, self-efficacy or self-management ability. As previously noted, these terms are often interchangeable in the literature. The focus of recent scoping reviews mapping self-management or self-care instruments also varies considerably. El-Osta et al. (2023) review primarily aimed to delineate instruments that are 'non-mono' or single disease-specific. Furthermore, Lawless et al. (2023) conducted scoping reviews mapping both disease-specific and disease non-specific studies reviewing self-management and self-care instruments for older adults. Authors concurred that comparison of these tools may be complex and is complicated by the ambiguity of the concepts and nomenclature (Wientzek et al., 2023). The ambiguity and lack of clarity surrounding these instruments aligns with findings in the present review. Adding to this complexity is the varied length of the assessments. In Lawless et al. (2023), for example, the assessments reviewed ranged from 8 to 58 items. The length of the longer questionnaires is important to note as it potentially adds to the patient's disease management burden during primary care interactions, particularly if more than one assessment is being conducted. Few self-

management assessments are specifically designed for older adults. Apart from Wientzek et al., (2023) review that described 6 instruments validated for adults 70 years and older, authors emphasized it is not always clearly articulated which tools are specifically validated for older adults (Lawless et al., 2023, Wientzek et al., 2023). Importantly, self-management assessments have not been validated in racially diverse populations for older Black adults. This gap brings into question the reliability of the tools used in the studies, measuring the effectiveness of self-management abilities in this population. (El-Osta et al., 2023, Lawless et al., 2023). In the following section I will briefly present the types of assessments identified.

### Types of Self-management Assessment Tools

There were several assessments used to evaluate and measure self-management ability in older Black adults. It is beyond the scope of this review to analyze individual assessments within each study due to the large number of studies in the review and the vast number of assessments used in each study. Furthermore, many of the qualitative studies describing patient and caregiver experiences, barriers and facilitators did not include self-management assessments in the form of instruments or questionnaires. My objective at this juncture is to provide a high-level overview quantifying the number and type of assessments described within the review studies. For example, most of the studies described the assessment instruments used to evaluate dimensions of self-management such as self-efficacy, depression, diabetic distress, for example (Abbott et al., 2022; Dzikowicz et al., 2024; Ellis et al., 2019; Ewen et al., 2024). On average, where described in the studies, between 1 to 7 assessments are used in each study. Although many of the studies described culturally-tailored interventions, this does not appear to have included the assessment tools. Cultural tailoring is restricted to adapting educational material such as videos, including race concordant peer-leaders and adapting dietary recommendations (Singh et al., 2023). There is very little information within the studies in this review related to the

effectiveness of questionnaires. Nevertheless, assessments may not be restricted to questions or forms. Healthcare professionals must conduct patient assessments and monitor self-management practice as a part of routine care. I will discuss the role of the healthcare practitioner assessment below.

#### **Healthcare Practitioner Assessment**

In a systematic review exploring self-management interventions that facilitate positive outcomes, Dineen-Griffin et al., (2019) suggested that collaborative partnerships with primary care professionals providing evidence-based strategies are beneficial for patients. There is a significant physical and emotional and informational burden associated with the management of chronic conditions which highlighted the importance of having access to high-quality education programs and knowledgeable healthcare providers. However, there is limited access to knowledgeable primary care providers in contemporary healthcare. For example, in the 2022 National Standard for Diabetes Self-Management Education and Support, Davis et al. (2022) contended that "...people with diabetes (PWD) generally visit their primary care physician (PCP)/other qualified healthcare professional two to four times per year, where the average appointment lasts 15-20 min and addresses four or more health conditions" (p.484). This compelling statement solidified the importance of high-quality health provider support ensuring that an individual's limited interactions with healthcare providers is as beneficial as possible. In addition to knowledgeable practitioners, high-quality formal self-management education programs are recommended as discussed in chapter 4. Widely recognized formal education initiatives such as the chronic disease management program (CDSMP) and diabetes self-management education program (DSME) are examples of programs with evidence-based curriculum taught by healthcare professionals and lay leaders. It is important to note that education and healthcare practitioner support and availability will always be limited and episodic educational knowledge wanes over time (Dineen-Griffin et al., 2019) therefore it is critical for older Black persons and their families to partner with their

community organizations and health-care providers as early as possible since successful disease management outcomes primarily rests with the persons and families. Bearing this in mind, community-based participatory approaches were emphasized in this review and discussed in chapter 4. The benefit of community partnerships is the potential to engage multiple levels of social support for individuals and families. Therefore, it is vital to consider the multidimensional socio ecological model, an excellent framework to organize self-management education programs and interventions. Considering this, I will embed this multi-dimensional model into the conceptual framework for my educational program (described later in chapter 6). Furthermore, In the next section, I will discuss the ecological model as an organizing framework for the content analysis. This framework is used to categorize the qualitative studies that capture the perspectives of patients and families related to their self-care practices.

# Socio Ecological model

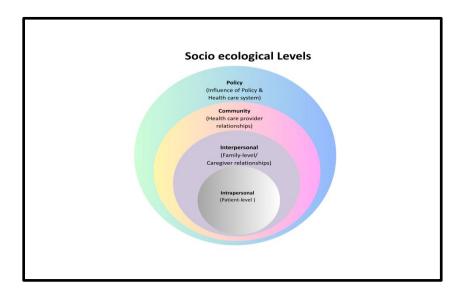
Social ecological models are systems-level interactive approaches that describe the characteristics of individuals and environments that interact to influence health and behavior change (Kilanowski, 2017). The underlying theory is multifaceted and considers intra/interpersonal, institutional, community and policy levels (Golden & Earp, 2012). Originally introduced as a conceptual model to understand human development in the 1970s by Urie Bronfenbrenner, it was formalized as a theory a decade later. McLeroy et al., (1988) built on this foundational work developing five levels of influence based on health behavior, intrapersonal, interpersonal processes and primary group, Institutional, community factors and public policy. In an endeavor to examine how socio ecological models have been applied to health promotion interventions Golden & Earp (2012), conducted a review of 157 papers coding interventions to each level. Of particular importance in this health promotion model was the comprehensive interventions focused on strategies at each level. Golden & Earp, (2012) adapted levels are captured below:

- Intrapersonal-focused on characteristics of persons including attitudes and beliefs.
   Interventions include education training/skills enhancement
- 2. **Interpersonal**-formal and informal network, family and work colleagues; interventions include education training skill enhancement
- Institutional-social institutions and organizational characteristics. Intervention includes education skills enhancement of institutions
- Community factors- relationships among organizations, institutions and informal networks;
   includes education skills enhancement of community
- 5. **Public policy-local**-state(provincial) national laws; interventions include education skills enhancement of the community at large.

The appeal of the socio ecological model described here, is the emphasis on the fluid, dynamic interpersonal, community and societal influence of relationships that impacted health and behavior change for all persons with health needs (Golden & Earp, 2012). The differentiation between this and other behavior change models was the focus on modifying the norms and values of an individual within their social environment and communities (McLeroy et al., 1988). I have integrated this model to organize the data and emphasize the importance of adopting individual, community and system level perspectives. For example, in Brewer et al. (2023), Poon et al. (2022) and Woods et al. (2023) the socio ecological model was incorporated as an organizing framework to understand qualitative themes and explore perceptions about medication management from multiple perspectives. Considering this alignment, I have integrated the socioecological model as an organizing framework. In Figure 7, I illustrate the model I use as a multidimensional organizing framework for content analysis. Furthermore, this model will also be adapted to form the framework for the educational program discussed in chapter 6.

Figure 7

Socio ecological influence



Note: Golden & Earp, (2012) adapted socio ecological levels

# Content Analysis: Person and Family Perspectives on Chronic Disease Self-management

In this section, the original intent was to discuss research sub-question 5, (What are the gaps in the literature, including those identified by researchers, related to the development, implementation, and evaluation of tailored chronic disease management education programs for older Black adults?)

However, rather than exploring gaps in the literature in this chapter, I will review this in Chapter 6.

Instead, I review the qualitative content in the studies describing participant perspectives related to the barriers and facilitators of tailored chronic disease management education programs and daily practices.

In the current review 40% of the studies retrieved are qualitative in nature and almost 20% are mixed method studies. These research designs, coupled with the participatory philosophies embedded into the design of the education programs and interventions, have given rise to the poignant viewpoints

and the 'voices' of study participants describing their lived experiences coping with their chronic conditions. The perspectives of older Black adults, their caregivers/families as well as healthcare providers will be described, capturing the challenges, successes and salient perspectives of the unique groups of individuals. Reflecting this critical insight, in the section below, I use the socio ecological model captured in **Table 8** as an organizing framework to narratively synthesize key qualitative and mixed method findings from the studies.

### Patient/person and family viewpoints

This section of my dissertation Includes the experiences related to the gaps, barriers and facilitators related to self-management education programs and practices of the patient/person of focus in the studies. Of the 21 qualitative studies reviewed for content analysis, challenges and barriers were described by participants in many ways. There are a range of barriers that hindered the adoption of healthy self-care behaviors in AA older adults. In this review, some of the challenges included cultural adjustments, health provider mistrust, stress management and cultural stigma associated with certain chronic conditions. This aligned with Wright et al., (2022) who suggested that there are a range of obstacles that hinder the adoption of healthy self-management behaviors in AA older adults. This included diminished confidence or self-efficacy, limited resources and family support, for example. In this section, I present a summary of the themes and share narratives identified through the content analysis of the qualitative and mixed-method studies.

#### **Content Analysis**

As discussed in Chapter 2 a qualitative content analysis may be warranted in scoping reviews (Hughes et al., 2021). Therefore, I will be using this method of analysis to narratively describe the qualitative content in this scoping review. Content analysis is primarily descriptive in nature and is a

method used to collate findings and common themes from in scoping reviews (Hughes et al., 2021). The results of this content analysis will be captured according to the adapted categories below (i.e., Interpersonal, intrapersonal, community and policy) using the socioecological model as an organizing framework.

**NVivo and AI summaries**. Given the vast amount of qualitative data retrieved from the scoping review, NVivo 15 software for summarizing qualitative research was used to develop a deeper understanding of study participants' experiences with chronic disease self-management education programs and practices. It is important to note here that qualitative synthesis and reinterpretation of results is beyond the scope of the discussion below (Pollock et al., 2023). Alternatively, the goal of this content analysis is to categorize and narratively describe the views of the participants. Here I describe the process I used to generate the content analysis using the NVivo 15 software application below:

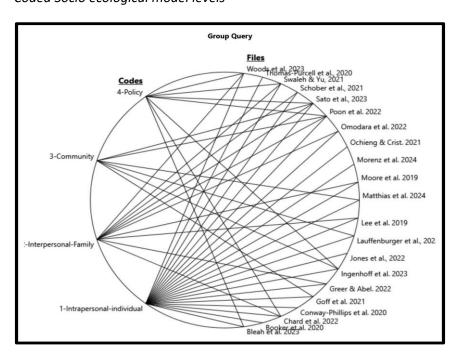
- 1. All Qualitative (19) and mixed method (10) studies were reviewed for inclusion in the qualitative content analysis as they aligned with the research sub-questions (Pollock et al., 2023). Following the review, all the qualitative studies and 2 mixed methods studies were selected for the content analysis (totaling 21). 8 mixed method studies were excluded from the analysis due to a paucity of qualitative data in the form of direct quotes (i.e., in vivo coding). Only studies with direct quotes that were aligned with the research sub questions were selected (Erlingsson & Brysiewicz, 2017).
- 2. 21 studies were uploaded into NVivo 15. NVivo uses codes that serve as containers for the content that must be inductively or deductively identified. For scoping review studies, thematic analysis (inductive) of content is not recommended (Pollock et al., 2023). Therefore, high-level codes were initially used based on the sociological model levels to organize the data. As the data was reviewed iteratively and analyzed, the varied nature and amount of the qualitative content

revealed the need for subcategories or child codes to further delineate nuanced concepts that emerged between themes within each level with increasing frequency. In other words, concepts that appeared within the data more frequently were selected for inclusion in this analysis. In total there were over 382 references coded in NVivo 15.

3. Once I identified the sub-categories, an AI feature built into the software was used to assist with summarizing the qualitative data in each of the more common categories. The summaries were reviewed for accuracy, as recommended by the software and are paraphrased and integrated contextually below. The diagram of the hierarchy of codes assigned to each high-level category is illustrated in **Figure 8** below.

Figure 8

Coded Socio ecological model levels



As noted above, much of the qualitative data coded is concentrated under the interpersonal and intrapersonal categories. Golden & Earp, (2012) suggest this finding is congruent with other studies in

the literature that primarily focus on interventions targeted towards persons and families with less focus on policy and system level interventions. Many of the studies in this review sought to explore patient/person's experiences with chronic conditions such as diabetes (7), hypertension (7) and multiple other chronic conditions (5) as well as pain integrated with chronic conditions (2). Various barriers and facilitators were identified, many overlapped within and between studies and sociological levels described in more depth below. I have captured a high-level snapshot of the codes and the subcodes I created in **Figure 9** below.

Figure 9

NVivo Coding Framework

Codes				
(4)		G-D	Files	References
- O			21	382
	·			
	Barriers	⊕	20	178
	O Facilitators	G-D	18	123
	Cultural practices	⊕	10	40
	Race-racism	⊕	5	13
	Faith-religion-prayer	ಆಾ	4	28
- 0	2-Interpersonal-Family	⇔	10	27
	Facilitators	⊕	9	21
	O Barriers	9	4	6
	Mistrust		0	0
0	4-Policy		7	15
- O	3-Community	G-5	6	61
	O Health providers		5	22
	- O Barriers		4	28
	O Facilitators		3	11

# Intrapersonal/Individual

At the intrapersonal level, I describe participants' attitudes, values and beliefs regarding raceracism, cultural practice, barriers and facilitators related to general self-management coping strategies

(Golden & Earp, 2012; McLeroy et al., 1988). Overall, there were 239 coded references in this category.

This was the largest representation of data of all the levels. I describe the sub-categories further below.

Facilitators. There were 123 coded references discussing facilitators in the form of positive coping methods. Persons described adapting to their chronic condition using medication and stress management strategies. Participants often shared an awareness of the consequences of failing to manage their illness because of negative occurrences with family members. For example, in Woods et al (2023) a participant stated '

...I just buried my father in April, and everything that happened with his health started with his blood pressure...And that's why my brothers and my sisters now, we are very cautious with what we are doing with our own lives, as well as our siblings. Because we saw our father go through that whole journey, beginning with hypertension.'

Another common theme discussed was the importance of routine with dietary practices. A participant in Lee et al. (2019) commented, 'It's hard but I try to eat at the same time every day. That keeps me from getting too hungry'.

Outside of the USA, in a study conducted in Liberia, Bleah et al. (2023) explored how older Black adults live with diabetes. A participant spoke of a key diabetes management self-care practice acknowledging the importance of checking blood sugar if feeling unwell, stating

'...I have my own machine, I bought my machine and I having it. So, in case like, if I am having the symptoms like sweating or weakness, I go and do my test.'.

Similarly, in a focus group of older Black adults with hypertension exploring the adherence to a Dietary Approaches to Stop Hypertension (DASH) diet in Jones et al. (2022), a participant described combining their faith and activity to manage blood pressure stating,

..."We have a route that we've established here at the church that we try to do once a month walk. So we did a prayer walk".

Based on the volume of facilitators and statements of positive adjustment to self-management strategies, participants in the review desired to make positive changes towards managing their chronic conditions.

*Barriers.* In terms of barriers, there were 35 coded references. The most common challenges and barriers described by individuals in this category focused on issues of negative emotions related to stress and forgetfulness with the most common barriers appearing to be mistrust of healthcare advice (including stigma and shame), poor finances and lack of resources. Mistrust of healthcare practices, stigma and shame was a common theme in this review. In a study exploring barriers to medication adherence a participant discussed feelings of mistrust pertaining to the manufacturing of medications stating that

"...Because now, everything's made overseas, mostly. In different countries...but, I read everything and am concerned about that...A small country that doesn't have a law. They'll say, well this, the basic thing that makes me feel like this [is that the] government has stopped, you know, having rules here." (Schober et al., 2021).

Similarly, in a Canadian study (Swaleh & Yu, 2021) diabetes self-management practices in older Black adults a participant shared similar sentiments of mistrust about taking prescribed medications stating

'..."Yes, I don't take most of the medication as well because many of these doctors have shares in the companies (others agree), because I read it in the paper."

Challenges associated with affording and accessing healthcare services and supplies and medications due to financial constraints were described as issues by participants. Individuals often expressed concern about the availability and high cost of the type of healthy foods for example a participant recalls" ...Those people who cannot afford will end up eating the carb more than the vegetables and the sugar goes high. You feel limited." (Swaleh & Yu, 2021).

Similarly, in Woods et al. (2023) persons discussing the availability of healthy foods in their predominantly Black neighborhoods told researchers,

Would you look around in this particular neighborhood? How many health food stores you see? We have to drive 15 to 20 minutes down the freeway to get health foods. So the, the junk food is so convenient...Look at the food, especially in these Black neighborhoods, that are being provided. We have everyone in the world that's selling the worst stuff in the world, concentrated in these neighborhoods...We have to leave the area in order to get healthy food.

Participants also described negative emotions such as resignation and despondency connected to managing their chronic conditions. For example, in a study examining experiences with osteoarthritis pain, a participant in Booker et al. (2020) study stated:

".... There's nothing I can do about it. That's the worst kinda thought...This is something we have to learn to care for, you know. Then, we just get comfortable with it, and don't know that the comfortableness of it can kill us, too, and make us cripple. I think that there are times when we just accept bad things, even if it's about our health. We just accept it. "

These sorrowful expressions of despair connected to having to living with and managing a chronic condition were similarly expressed across other studies (Chard et al., 2022; Lee et al., 2019; Ochieng & Crist, 2021; Omodara et al., 2022; Woods et al., 2023). Many looked to their healthcare providers for support and guidance and were met with disappointment. For example, in a study (Morenz et al., 2024) discussing barriers to hypertension management in older Black adults, a participant recounted:

"I've always been a member of the upper-poor class of society. So my relationship with health providers, or the healthcare system has been... usually a by-product of whatever job I may be having at the time, or some sort of other association that allows me to see a healthcare provider. And short of that, I've had to rely on my community and my peers to provide health care, health information, suggestions, spotting a rash when I didn't even know I had it"

The challenges described above represent the more common themes identified. Other common challenges and issues such as race and racism, cultural practices, faith and religion have been categorized separately and will be discussed below.

Race-Racism. Participants discussed race and racism in various contexts. Some participants admitted being unaware of experiencing racism. In Conway-Phillips et al. (2020) for example, a participant stated, I must've been living in a vacuum because I wasn't aware that all these things that were going on around me were race-related'. Other individuals recounted traumatic experiences with racism within the healthcare system for instance in Chard et al., (2022) a participant stated:

[My old doctor was] nasty to Black people. He'll tell you in a minute, "You want to die? You want to die? If you don't take the medicine, you want to die?" I don't like nobody talk to me in that kind of way, even though I'm sick and stuff but I got feelings, too'.

Identification of race and racism was not often explicitly discussed in the studies in general or in these qualitative studies more specifically. However, participants did discuss race and racism within studies in relation to chronic stress and hypertension (Conway-Phillips et al., 2020), chronic pain (Janevic et al., 2022), resilience and diabetic distress (Jia et al., 2022) treating pain with equity (Matthias et al., 2024) and perspective on living with hypertension (Woods et al., 2023). Nevertheless, as discussed in chapter 3, since most of the studies in this review focused on underserved or disadvantaged AA or Black older adult populations, race and inequities such as poor resources, mistrust of healthcare providers and treatments, stress and poor access to the healthcare demonstrated the environmental conditions associated with evidence of structural racism (Adkins-Jackson et al., 2021). In other words, participants likely experienced the impact or results of racism within these studies without being aware of it. This is a key gap in the discourse of structural racism revealed in these studies that requires further exploration.

Next, I will segue into participants' perspectives about the impact of their cultural/ethnic practices on self-care/self-management.

Cultural Practices. Managing cultural practices and beliefs while dealing with chronic conditions can be challenging for older Black adults. Participants described the difficulties following healthcare advice that contradicts culture practices, creating barriers to successful chronic disease management practices. Participants discussed challenges such as cooking for the family while managing specific dietary needs. For example, in Omodara et al. (2022), a UK study examining cultural practices of sub-Saharan older Black adults with type 2 diabetes, participants discussed difficulties managing family dietary preference and special diabetes dietary restrictions. The participant stated,

"...It is very difficult staying on a diet when I have to cook for others. Most of the times, I have to take out my portion before [sic] seasoning the rest. It is a struggle doing this every day whilst trying to follow recommended doctor's regimens"

In the same study, an individual expressed difficulty cooperating with medical advice that contradicts their cultural beliefs and food preferences stating that:

"GPs tell you some of your traditional food is not the healthiest food, especially when you have been diagnosed with diabetes, but still, you choose to eat them because of cultural values and beliefs. We often have strong family bond and beliefs around some these foods, we see them as natural medications, but could be difficult to change them completely whilst trying to follow the GP's diet regimens"

In this and other studies, individuals openly refused medications acknowledging they may be putting their health at risk but preferring to conform to cultural norms. For example, in Goff et al. (2021) a UK study probing a culturally tailored diabetes self-management education program a participant boldly stated 'Every medicine I was prescribed at the time, I'd just dump it. I'd say, 'Go away."

Contradictions between traditional medicines and prescribed treatment were a common source of conflict where participants preferred to rely on herbs to lower blood pressure and manage blood sugar. For example, Thomas-Purcell et al. (2020) conducted focus groups with African American older adults seeking to understand how spirituality can be incorporated to a culturally tailored mobile health intervention. Individuals offered their perspective on natural remedies stating,

"I get the karela bush, the cerasee bush and I boil it. And I make juice out of it, like mauby. I add my anise essence, and so on, and it takes just like mauby . . . They said it can keep your blood

sugar low, you know, from getting too high. Keep your blood sugar level down. I don't know but since they say it's good, it's good for your blood sugar and high blood pressure and all that.

When I see it around my yard, I boil some"

In the same study, participants openly expressed concerns about potential challenges with the effectiveness of herbal medicines and their chronic condition expressing that...

"it's good we do herbs, I do it but where do we draw the line? How do we know when we drop our blood pressure too low because we are doing the herbs and the medication at the same time?"

Generally, while acknowledging preferences for cultural practices, participants were aware that traditional practices may not align with medical advice. Participants expressed a desire for more guidance from healthcare practitioners on inclusive dietary and medication integration. Because of this, healthcare practitioners need to have in-depth knowledge of cultural practices and partner with persons and families to customize evidence-based recommendations to facilitate a willingness to change potentially harmful cultural practices.

Faith and Religion. As discussed previously, faith, religion and prayer are deemed to be crucial sources of strength and coping for older Black and AA adults with chronic conditions. 28 references from the qualitative studies were captured. Studies in this review emphasized that Faith, religion and religious organizations such as churches were integral sources of social support in Black communities in the USA (Adinkrah et al., 2024; May & George, 2021). Persons often relied on God to cope with chronic pain relief. For example, in Booker et al. (2020) study, a participant described a deep faith sharing the researcher...

"Yep. I pray on a daily basis, ask him to relieve any pain, take these pains away. I still feel it. If I forget about the pain, I know that's his doing 'cause I don't feel the pain anymore. Then I realize that the pain's gone away and the first thing that comes to my mind, "Thank you, Jesus." Thank you, Jesus, that's the prayer that you done answered for me. He's still a prayer answering God"

Not unique to African American adults, participants from the UK shared the depth of their belief in God's ability to heal their pain and health conditions. They turned to prayer to cope with stress and uncertainty using periods of fasting and prayer to establish a deeper connection with God. For instance, in Omodara et al. (2022) Sub-Saharan African Older Black adults shared how they cope with diabetes'...

Most times when I fast and pray, I always feel better with my diabetes'. Furthermore, in the same study another participant emphasized

"... I pray more now and spiritually committed to the things of God. I have gone through difficult phases of life since I have been diagnosed with diabetes. And this has only taught me to be closer to God and be more prayerful"

In Thomas-Purcell et al. (2020) study, African American participants affirmed their dependance of God and religious beliefs and how prayer had a positive impact on their lives. For example, in a study exploring the impact of spiritual beliefs on multiple chronic conditions a participant stated,

"It's a lifestyle that um you choose according to, and I use the Bible as my guide, especially the book of Proverbs. If you were to try to do everything in the book of Proverbs, obey and also the commands that God has already put out there, the ten. The ten commandments, there are many more, but those ten, if you were to follow those ten, everything else will fall into place."

It is clear from this discussion that participants believed in the transformative power of their spiritual beliefs and lean into their spirituality as a positive coping mechanism in the management of their conditions. Therefore, consistently incorporating faith and spirituality ought to be a key strategy to improve acceptance of self-management practice (Harvin et al., 2020; May & George, 2021; Woods et al., 2023).

### Interpersonal-Family

The interpersonal level of the socio ecological model includes formal and informal network, family and work colleagues (Golden & Earp, 2012; McLeroy et al., 1988). In discussing the qualitative content from the studies to the application of this level, I focus on patient caregiver, family relations and experiences. The qualitative content for this section is a significantly smaller percentage than the previous section. There are a total of 27 coded references pertaining to this section.

Facilitators and Barriers. Individuals discussed the importance of strong family support in the management of their chronic condition. Participants in the studies described the level of support their family members and extended family and friends provide. They described support including medication reminders (Greer & Abel, 2022; Sato et al., 2023; Schober et al., 2021; Woods et al., 2023) and support from family with meal preparation (Moore et al., 2019; Woods et al., 2023). Although, there were few total qualitative references addressing the benefit of family support in the management of chronic conditions, the literature is clear about the benefits of family caregiver support in easing the burden of disease management (Ewen et al., 2024; Moore et al., 2019; Presley et al., 2020; Sato et al., 2023; Schober et al., 2021; Woods et al., 2023).

Conversely, fewer barriers or challenges were discussed at this level. Participants primarily discussed the negative impact of a family history of diabetes and the logistics of limited mobility.

Furthermore, a participant discussed concerning medication sharing practices that compensated for financial personal constraints. Next, I will discuss the community/institutional perspectives that address the participatory aspects of qualitative content analysis.

#### **Community**

For this discussion the institution and community level of the socioecological model have been combined and includes relationships among organizations, institutions and informal networks (Golden & Earp, 2012; McLeroy et al., 1988). Some of the entries in this category were from healthcare providers, community health workers or lay-leaders. Discussions pertaining to community organizations were included at this level also. There are a total of 59 coded references pertaining to this section.

Facilitators. Within these narratives, participants primarily discussed the impact of 3 community-based interventions. A culturally-tailored pain management program for Black adults (Matthias et al., 2024), a culturally tailored diabetes self-management community programs for Black British adults (Goff et al., 2021) and community worker-led chronic obstructive pulmonary disease (COPD) screening referral community program. (Ingenhoff et al., 2023). Participants' perspectives were represented by patients, community health workers and healthcare providers in these studies. In Matthias et al. (2024) participants spoke positively about the coaching program with respect to the newly acquired skills such as medical appointment planning and goals-setting attained in the training for example, another participant noted that after learning the skills in COOPERATE, he was able to get his doctor to slow down and answer his questions:

[After coaching], it seemed like [my doctor] was taking his time because ...a lot of times he's in a hurry. So I was able to say, no, no, no, let's slow down here because I want to make sure I have clarity on this situation.

In the same study, participants spoke positively about training and gaining confidence in their ability to approach their doctors to have productive medical appointments (Matthias et al., 2024; Poon et al., 2022). Based on these narratives, individuals were satisfied with the culturally-tailored interventions specifically related to medication management and communication. It is evident from this data that healthcare practitioners recognized the significance of teaching these softer practical skills in favor of the technical disease monitoring skills (e.g., glucose and blood pressure monitoring) that may not typically be emphasized in many education programs on a routine basis.

and spoke of gaps related to training needs. Furthermore, individuals' perspectives were represented by patients, community health workers and healthcare providers in the studies mentioned. In Lauffenburger et al., (2023), the barriers discussed were clinician-related challenges concerning medication prescribing, quality management and treatment adherence issues due to availability of supplies. Similarly, Ingenhoff et al., (2023) and Sato et al., (2023) described patient adherence challenges as often patients do not physically feel unwell for example,

"The COPD screened patients are unbothered by the diagnosis during screening, and they are reluctant to go to the referred health facility for further analysis and management. Only when one feels the pain is out of control is when they turn up at the health facility"

As previously discussed, another common barrier is issues of mistrust and stigma described by healthcare practitioners and patients. Patients spoke of hiding their chronic condition from family members due to the stigma of having diabetes (Goff et al., 2021) and COPD in their community (Ingenhoff et al., 2023). This perspective was pervasive in the review among older Black adults and is an area that requires further research.

Authors recognized that community support for individuals living with chronic conditions is integral to the successful implementation of self-management in older Black adults, as highlighted above, and in this review more broadly. The Inclusion of participatory methods such as engaging community members and developing partnerships with community leaders as intervention strategies was accepted and promising. However, it is not yet clear how these interventions impact disease outcomes in the long term.

#### **Policy**

The policy level includes state(provincial) national laws or policy (Golden & Earp, 2012; McLeroy et al., 1988). In the context of this discussion, the focus is on system-level relationships or issues. There were 15 coded references pertaining to this section primarily describing challenges navigating the healthcare system (Swaleh & Yu, 2021) and accessing healthcare services and supplies (Bleah et al., 2023 and Sato et al., 2023). There was very little focus on interventions within the studies at this level. This is a gap within the review. Since I did not have a system level research question per se, this is a gap and an area of further study. I will explore the gaps in more depth in chapter 6.

### Summary

In this chapter I discussed research sub-questions 4 and 5 (What types of chronic disease self-management assessment tools have been used for older Black adults?) and (What are the gaps in the literature, including those identified by researchers, related to the development, implementation, and evaluation of tailored chronic disease management education programs for older Black adults?). I completed a qualitative content analysis of the included studies describing participant perspectives related to the barriers and facilitators of tailored chronic disease management education programs and daily practices. Participants were generally receptive and accepted self-management practices

emphasizing their dependance on faith, spirituality and family. They did however express sentiments of mistrust and challenges with cost, resources and system navigation and access to healthcare resources. These barriers aligned with findings from the review and are a clear gap in the literature as many of the studies addressed intra and interpersonal interventions with less focus on policy/system level interventions (e.g., access to physicians, healthy foods and community resources). In consideration of these findings, in chapter 6, I will incorporate these results into the summary of research gaps and practice implication which will inform the development of my educational program.

#### **Chapter Six: Summary of Findings, Discussion and Conclusion**

It is a matter of considerable discussion in the literature that the COVID-19 pandemic exposed discrimination and disparities in the healthcare system that affected the disadvantaged, including low-income Black older adults with one or more chronic diseases (Adinkrah et al., 2024; Balasuriya et al., 2023; Booth et al., 2021; Gupta & Aitken, 2022; Hacker, 2021) in North America and other countries. In part, the rationale for this is rooted in the notion that older Black adults with chronic conditions from certain communities are treated differently in healthcare environments and experience health inequities as a result (Fritz et al., 2023). Compounding the often-biased treatment of this population, is the lack of mainstream culturally adapted self-management education programs. The predominant reliance on one-size-fits all self-management education programs has led to the underutilization of self-management practices for their chronic diseases resulting in negative health outcomes. This underutilization appeared to stem predominantly from mistrust, social determinants including racism and inequities mainly in the areas of poor financial resources, lack of social support networks and limited health system access.

The findings from this review have revealed unique cultural and contextual needs that must be considered when developing chronic disease self-management education programs. The present study underscored this by emphasizing what is currently known in the literature about many of the characteristics of culturally-tailored self-management programs for older Black adults. Augmenting the results, the content analysis of the qualitative literature amplified the voices of this vulnerable population by exploring the in-depth perspectives and lived experiences of this group. In this discussion and concluding chapter, I describe the review findings in the context of each research sub-question highlighting practice implications and key research gaps and the limitations of this study. I conclude with the conceptual framework (Hopkin et al., 2025; Hossaini et al., 2023; Lattof et al., 2020; Munn et al.,

2018) for my self-management education program for older Black adults and reflect on the key lessons learned during this research journey.

**Table 5**Research sub-questions and key concepts

	Research sub-questions	Key areas of focus	Legend
1.	What types and key characteristics of chronic disease self-management education programs have been reported in the literature for older Black adults?	<ul> <li>Chronic disease self-management programs</li> <li>Peer leaders, community health workers</li> <li>Health information technology (HIT)</li> <li>Community based participatory methods, Faith-based programs</li> <li>Socio ecological model</li> </ul>	Q1
2.	What links are reported between determinants of health and health inequities and the utilization of self-management practices in older Black adults?	<ul> <li>Racism as a social determinants of health</li> <li>Cultural tailoring</li> <li>Health inequities</li> <li>Racial disparities, marginalization</li> </ul>	Q2
3.	What types of research designs have been used to understand the development, implementation, and evaluation of chronic disease selfmanagement in older Black adults?	<ul> <li>Research methods</li> <li>Quantitative (Randomized control trials (RCTs)</li> <li>Qualitative</li> <li>Mixed methods (pre-post intervention)</li> <li>Quality improvement</li> </ul>	Q3
4.	What types of chronic disease self-management assessment and education tools have been used for older Black adults?	<ul> <li>Validated assessment</li> <li>Healthcare practitioner assessments</li> <li>Culturally tailored tools</li> </ul>	Q4
5.	What are the gaps in the literature, including those identified by researchers, related to the development, implementation, and evaluation	<ul> <li>Patient, family caregiver perspectives</li> <li>Barriers and facilitators of Self-management practices and programs</li> <li>Research gaps</li> </ul>	Q5

Research sub-questions	Key areas of focus	Legend
of tailored chronic disease management education programs for Black older adults?		

### Mapping of the findings in literature

Many of the key concepts highlighted from each research sub-questions in Table 5 above appear to overlap within the included studies in this scoping review. There was a significant body of evidence emphasizing the interrelated social and structural determinants that leads to a higher prevalence in morbidity and mortality of persons with chronic disease in disadvantaged populations, including ethnic and Black adults (Jones et al., 2022; Quiñones et al., 2019). Therefore, it was not surprising that there were a considerable number of retrieved papers to review (4513) that were primarily focused on chronic disease management in disadvantaged populations. A meticulous iterative review process was required to ensure the studies aligned with the inclusion- exclusion criteria described previously. Initially, many of the studies appeared to be relevant. However, through many iterations of reviews, most of the studies were not eligible for inclusion. Most did not focus on older Black adults (mean age greater than 50 years) instead included a higher percentage of persons from other ethnic or racial groups. Other studies were excluded because the interventions did not focus on selfmanagement practices or education programs. Additionally, a search of the Grey Matters database was conducted however, once reviewed, the retrieved content was either outside of the 5 year inclusion parameter or did not align with the population.

In **Table 6** below it can be seen very clearly that most of the studies (39) or 76.4% in this review addressed all 5 of the research sub-questions. It is important to note that the studies answered the research questions in varying degrees. Goff et al. 2021, for example, conducted an intervention study exploring a culturally-tailored diabetes self-management education and support program for Black-British adults. While the program was not evaluated, the study answered research sub-question 3 well (What types of research designs have been used to

understand the development, implementation, and evaluation of chronic disease self-management in older Black adults?). Researchers provided a highly detailed description of the development of culturally-tailored interventions that engaged older Black British adults with diabetes and healthcare providers in a four-phase intervention development program. Based on the perspectives of the participants shared in the study, the focus groups explored the needs of the population in great depth, in a participatory way, with community members involved throughout the development process. Alternatively, the larger quantitative studies (randomized control trials, pre-post intervention) partially answered the research questions despite the rigor and larger sample sizes as the contextual insights were lacking.

In Table 6 below, there are 9 highlighted gaps for research sub-question 1(What types and key characteristics of chronic disease self-management education programs have been reported in the literature for older Black adults?) and 11 highlighted gaps for sub-question 4. (What types of chronic disease self-management assessment and education tools have been used for older Black adults?). Many of the highlighted studies in the review that do not address these sub-questions are qualitative studies that primarily explored participants' perspectives about their self-management practices and do not include a formal self-management education intervention per se. Although these studies may not have evaluated an education intervention, the participant perspectives provided important insights into how they managed their chronic conditions, also illuminating their values, preferences and gaps pertaining to the care they have received. Furthermore, despite there being no sub question directly addressing participants' values and preferences per se, it was imperative that a content analysis describing these review results was conducted to capture these valuable insights. This data augmented the results pertaining to the research sub-questions and supported the development of the conceptual

framework (Hopkin et al., 2025; Hossaini et al., 2023; Lattof et al., 2020; Munn et al., 2018) for the educational program which will be described below.

Next, I will describe how the results of the scoping review answered the research sub questions. The discussion below is supplemented by **Table 6** which captures the degree to which each of the studies in the review address the research sub-questions, the high-level practice implications and key research gaps from the papers. The last column in **Table 6** highlights the levels of the socio ecological model addressed by each study. The discussion of these gaps will be further explored later in the chapter.

What types and key characteristics of chronic disease self-management education programs have been reported in the literature for older Black adults?

The key concepts and topic areas of chronic disease self-management education programs outlined in the review are captured in **Table 5** above. As previously mentioned, most of the included studies that aligned with this sub-question described an existing education program or intervention. In chapter 1 and throughout this discussion, the Chronic Disease Self-management program (CDSMP) continued to be the central program model implemented particularly for participants with diabetes participating in the diabetes self-management education (DSME). Although the program had limited efficacy with older Black adults, the structure and format of the original Stanford University model continued to be integrated into studies and includes the elements highlighted by Garnett et al. (2018) and Velde et al. (2019) related to self-management attributes which include:

- 1. Acquire disease-related education from health professionals.
- 2. Include social support (e.g., family peers).
- 3. Continue engagement with the healthcare system.
- 4. Participate actively in disease management activities.
- 5. Have a positive coping mechanism.

The studies in the review except for (9) (See Table 6) implemented the 5 attributes of the CDSMP including peer or community worker-leaders, disease-specific modular education lasting weeks to months and ongoing coaching or healthcare support and engagement. To address Issues such as limited access to reliable transportation, racism and healthcare mistrust which has had a profound impact on disadvantaged populations (Senteio & Murdock, 2022), researchers adapted the standardized models to include culturally-tailored self-management elements such as race concordant material, facilitators and community health workers and coaches, virtual technology and community based participatory approaches to address these barriers. Furthermore, Senteio and Murdock, (2022) systematic review of culturally-tailored technology and Singh et al. (2023) systematic review of community-based culturallytailored education Programs for Black communities aligned with findings from this review in many areas. Studies in this review emphasize the importance of training and education programs led by culturally and racially aligned peer-leaders and lay-community health workers. It is evident from the review that this presented a challenge for healthcare providers who must build capacity in the community by recruiting and training willing personnel for these roles (Goff et al., 2021). As a result of this finding, it is critical to drive home the need to provide high-quality training for peer leaders and lay CHW who teach patients and families self-management practices.

Improving access to health information technology (HIT) is a critical solution for individuals who may be unable to access in-person self-management programs due to mobility issues, poorer health and lack of transportation (Arévalo Avalos et al., 2024; Senteio & Murdock, 2022; Thomas-Purcell et al., 2020). Despite this emphasis in the literature, the scoping review findings aligned with Senteio and Murdock (2022) who highlighted the need for further research in this area to explore the impact of digital literacy and access to the internet in this demographic. It is important to emphasize that incorporating family support may be effective in bridging the digital divide and resource needs in Black communities (Greer & Abel, 2022; Senteio & Murdock, 2022). Future research and continued

exploration of novel partnership approaches in the design, access and support needs for older Black adults using HIT are fundamental to improving digital literacy and uptake.

Community-based participatory research approaches (CBPR) are a critical component addressed in this sub-question. The present review aligned with the emphasis on these principles that are prevalent and have been implemented widely across disciplines (e.g., nursing, public health, medicine and psychology) combining knowledge and action to improve community health and reduce health disparities (Collins et al., 2018). This approach provided the foundational principles to understand community members' context and lived experiences, informing strategies to create transformative lasting change with and for the community (Collins et al., 2018). Participatory methods engaged community members and leaders in the design and implementation of every aspect of the program (Goff et al., 2021). For this reason, it is not surprising that several studies in this review embedded participatory principles into the design of their studies to explore self-management programs for Black older adults in underserved communities. The importance of integrating participatory approaches into chronic disease self-management education for Black adults cannot be overstated. Given that culturally-tailored programs take place in community-based settings where older Black adults live, attend church and community events, it is prudent to design disease management programs that meet persons and families in the most familiar conveniently accessible locations.

Lastly, faith-based programs and spirituality emerged as key characteristics of culturally-tailored self-management programs and practices. Engagement in faith-based activities was embraced among AA persons (May & George, 2021). Findings from the present study confirm that AA and Black older adults from other countries prioritized religion and leaned on their faith to cope with the demands of their chronic conditions. Since faith played such a key role in the lives of older Black adults, culturally appropriate, faith-enhanced chronic disease risk reduction programs were critical to positive outcomes

in communities of color (May & George, 2021). As a result, faith and spirituality will be strategically integrated into the conceptual model primarily at the community partnership level.

What links are reported between determinants of health and health inequities and the utilization of self-management practices in older Black adults?

The literature is clear, social determinants of health and inequities are linked to the underutilization of self-management practices in older Black adults. Many of the studies in this review focused on underserved or disadvantaged African American, Black older adult populations with one or more chronic conditions in the USA, Canada and Africa describing common challenges with the utilization of self-management practices. Although areas of successful utilization were described, the studies reported inconsistent and unclear results.

Aligned with current evidence, this review confirmed that older Black adults are disproportionately impacted by chronic disease due to inequities such as limited education, low income and poverty and these disparities impact a person's ability to manage their chronic condition(s) effectively. However, the impact of chronic disease on older Black adults who are more advantaged is a gap in the research. Black populations who have more years of education and higher income were not significantly represented in this review. Furthermore, most of the populations within the studies including participants from African countries and the UK are reported to have a degree of disadvantage whether socio economically or educationally (e.g., lower annual household income and fewer years of education). One may surmise that this may be due to researchers studying populations in significantly more disadvantaged communities and neighborhoods with higher rates of disease burden. This may be partially correct however, researchers report that recruitment and retention of ethnic minorities in general is a barrier (Webb et al., 2019) which aligned with findings from this review noted in **Table 6**.

Further research ought to be conducted to engage older Black adults from diverse cultural backgrounds and socioeconomic groups.

Racism as a social determinant of health may be the most impactful finding pertaining to this research sub question, advancing the discourse related to the impact of structural racism on chronic disease management in older Black adults. Although racism may not have been explicitly mentioned or addressed in many of the studies, disparities such as poverty, lack of access to healthcare and healthy foods can be viewed as proxies or evidence that structural racism is likely the latent cause of these disparities (Ramsoondar et al., 2023). Through the lens of the tenets of CRT, in this scoping review, evidence of structural racism exists and is barrier to the successful utilization of self-management practices. Future studies must find methods to explore this explicitly to avoid perpetuating further disadvantage.

What types of research designs have been used to understand the development, implementation, and evaluation of chronic disease self-management in older Black adults?

There were a variety of research designs incorporated into the scoping review studies. Forty percent of the retrieved studies from this review use qualitative research designs. As previously discussed, researchers explored perspectives on day-to-day chronic disease self-management practices describing barriers and facilitators to successful disease management. The qualitative literature provided deep insight into the values, preferences, barriers and facilitators related to the utilization of self-management practices despite seldom focusing on educational interventions.

Mixed method studies also provided significant insights into culturally tailored interventions and education programs detailing the design, educators or peer leads, material and assessments. Some of the mixed methods studies included qualitative data providing a balance of outcome data and qualitative insight. Although outcome assessment and critical appraisal are outside of the scope of this

review, it is important to highlight that the quantitative results reporting disease outcomes (e.g., blood pressure reading, HBa1C levels, diabetic distress etc.) were often statistically insignificant. Researchers often cited limitations such as smaller sample size and recruitment and retention issues as the cause of this.

Many types of research designs have been used to understand the development, implementation and evaluation of chronic disease self-management programs in this review. Given that culturally tailored self-management education programs for older Black and ethnic groups are a novel topic in the literature, within this review, the intervention development studies that integrated community-based participatory methods appear to provide the most valuable insights into the specific requirement needs for culturally-tailored programs (Goff et al., 2021; Moore et al., 2019). These interventions involved multiple phases that included focus group interviews with community leaders, patients and healthcare practitioners. Although these programs will be evaluated in the future, the indepth immersive designs using behavior change frameworks and participatory strategies, material development workshops and focus groups provided critical insights into the type of culturally tailored self-management approaches required for Black and Caribbean persons with chronic conditions. As this research area matures and there is a deeper understanding of the cultural adaptations that are suitable for such education programs, quantitative research designs can more successfully evaluate effectiveness.

What types of chronic disease self-management assessment and education tools have been used for older Black adults?

To develop, implement and evaluate self-management practices and education, tools to assess this area are necessary to demonstrate the effectiveness of programs, policies, and interventions (Lawless et al., 2023). In the field of self-management many assessment tools were used by researchers and healthcare providers in various capacities. A significant number of the assessment tools used by

practitioners within the review studies were disease-specific and implemented to quantify outcomes and various dimensions of self-management behaviours. There were no standardized tools to assess and measure chronic disease self-management practices or culturally tailored practices implemented with older Black adults in this review. This is a significant gap requiring future research exploration. It is necessary to consistently use validated questionnaires and assessment tools to measure successful non-disease specific self-management (Lawless et al., 2023).

Healthcare practitioners play a pivotal role in the assessment of self-management practices. However, healthcare practitioner support and availability will always be limited. Therefore, it is critical for persons and families dealing with chronic diseases to partner with community organizations (Dineen-Griffin et al., 2019). Considering this, community based participatory approaches are emphasized as the solution, since community partnerships are fundamental to successful self-management education programs. The benefit of community partnerships is the potential to engage multiple levels of social support for individuals and families. In conjunction with community partnerships, it is vital to consider the multidimensional socio ecological model, an excellent framework to organize self-management education programs and interventions. For this reason, I will design an educational program based on the socio ecological model and critical elements identified in this study such as the tenets of CRT. This conceptual framework (Hopkin et al., 2025; Hossaini et al., 2023; Lattof et al., 2020; Munn et al., 2018) will be discussed further below.

What are the gaps in the literature, including those identified by researchers, related to the development, implementation, and evaluation of tailored chronic disease management education programs for Black older adults?

For this sub question 5, I reviewed the qualitative literature describing participant perspectives related to the barriers and facilitators of tailored chronic disease management education programs and daily practices (discussed in chapter 5) and identified the key research gaps captured in **Table 6** below. Although participants generally accepted self-management practices, the content analysis revealed there were expressions of mistrust and challenges with cost, resources and system navigation and access to healthcare resources. Strategies addressing mistrust, issues related to healthcare resources and system navigation are gaps in the literature and ought to be addressed in future research studies. In terms of ecological levels, many of the studies in the review addressed intrapersonal and interpersonal interventions with less focus on policy/system level changes (e.g., access to physicians, healthy foods and community resources) (See **Table 6** below) which is another gap in the literature that is discussed within the scoping review studies.

One of the most common research gaps identified within the review studies was a call to refine and further explore culturally-tailored practices and interventions to design studies for longer durations. While researchers do incorporate participatory approaches engaging faith-based organizations such as churches and mosques, further research is needed to develop a deeper understanding of culturally-tailored interventions that are community focused. There are gaps in the literature pertaining to policy or system level interventions such as system navigation and advocacy. These gaps can be seen in **Table 6** below where the socio ecological level of focus for each study is identified. Few studies address policy/system level intervention. It is my hope that my multi-level educational program will help to mitigate this omission. The conceptual framework (Hopkin et al., 2025; Hossaini et al., 2023; Lattof et al., 2020; Munn et al., 2018), based on the ecological levels, will ensure self-management education is addressed at all levels for this population. The program will be used to develop targeted culturally-tailored education for practitioners integrating interventions that target system/policy level approaches.

 Table 6

 Research gaps and practice implications

Author		Resea	rch que	estions	5	Practice implications	Research gaps	Socio ecological levels
Abbott et al. (2022)	Q1	Q2	Q3	Q4	Q5	Assess for social support during clinic visits.	Conduct studies with larger sample sizes.	Interpersonal
Adinkrah et al. (2024)	Q1	Q2	Q3	Q4	Q5	Culturally tailored hybrid programs produce positive outcomes.	Community-centered research innovation is lacking.	Interpersonal/Community
Arévalo Avalos et al. (2024)	Q1	Q2	Q3	Q4	Q5	Assessment and integration of social determinants of health (SDOH).	Address SDOH with digital solutions.	Interpersonal/Community/ Policy
Bleah et al. (2023)	Q1	Q2	Q3	Q4	Q5	Diabetes education center.	Small sample size.	Policy
Booker et al. (2020)	Q1	Q2	Q3	Q4	Q5	Racial disparities and cultural practices, faith and spirituality must be understood.	Transcultural pain management.	Interpersonal/Community
Brewer et al.(2023)	Q1	Q2	Q3	Q4	Q5	Assessment of digital literacy.	Further research on digital literacy in underserved communities.	Interpersonal/Community/ Policy
Chard et al. (2022)	Q1	Q2	Q3	Q4	Q5	Providing care through the lens of intersectionality and social determinants of care	Future research to include participants from diverse educational backgrounds	Interpersonal/Community/ Policy
Conway- Phillips et al. (2020)	Q1	Q2	Q3	Q4	Q5	Assisting individuals on how to cope with the stress of racism.	Future studies that address racism at all levels of society.	Interpersonal/Community/ Policy
Dzikowicz et al. (2024)	Q1	Q2	Q3	Q4	Q5	Assessing cognitive impairment in heart failure patients to prevent readmission.	Future studies on readmission rates for disadvantaged populations on Medicare or Medicaid.	Interpersonal/Community/ Policy
Ellis et al., (2019)	Q1	Q2	Q3	Q4	Q5	Developing cultural and social relevant interventions	Future studies to explore caregiver role strain.	Interpersonal

Author		Resea	rch que	estions	5	Practice implications	Research gaps	Socio ecological levels
Ewen et al., (2024)	Q1	Q2	Q3	Q4	Q5	Train peer leaders to deliver culturally tailored programs.	Incorporate longer follow up periods to assess sustainability of the interventions.	Interpersonal
Feldman et al. (2020)	Q1	Q2	Q3	Q4	Q5	Integrate home care practitioner into chronic disease selfmanagement program.	Future studies that investigate home care programs.	Interpersonal/Community
Goff et al. (2021)	Q1	Q2	Q3	Q4	Q5	Train peer leaders to deliver culturally tailored programs.	Future research can evaluate how tailoring programs to cultural community structures contributes to the effectiveness of interventions.	Interpersonal/Community
Greer & Abel. (2022)	Q1	Q2	Q3	Q4	Q5	Assess patient/family caregivers' digital literacy	Future research to understand the use of mobile and HIT technologies in other populations.	Intrapersonal/Interpersonal
Harvin et al. (2020)	Q1	Q2	Q3	Q4	Q5	Integration of faith and spirituality into self-management education programs	Exploration of the link between spirituality and disease management.	Intrapersonal/Interpersonal
Ingenhoff et al. (2023)	Q1	Q2	Q3	Q4	Q5	Enhanced strategies on managing mistrust and stigma	Funding model to sustain programs and CHW support, access to transportation	Interpersonal/Community/ Policy
Janevic et al. (2022)	Q1	Q2	Q3	Q4	Q5	Continued development of integrated community-based programs.	Long-term follow up to determine sustainability	Intrapersonal/Interpersonal/ Community
Janevic et al. (2022)	Q1	Q2	Q3	Q4	Q5	Incorporate a variety of cultural tailored strategies-not limited to superficial strategies (e.g., language)	Future research in diverse populations.	Intrapersonal/Interpersonal/ Community
Jia et al. (2022)	Q1	Q2	Q3	Q4	Q5	Assessment of resilience in diabetes and other chronic conditions.	Explore the impact of specific policies (incarceration, police violence and structural racism on diabetes)	Interpersonal/Community/ Policy
Jones et al. (2022)	Q1	Q2	Q3	Q4	Q5	Assessment of the impact of co-morbid conditions on self-management practices.	Research engaging more diverse age groups.	Intrapersonal/Interpersonal/ Community
Joseph et al. (2024)	Q1	Q2	Q3	Q4	Q5	Education and uptake of community based participatory approaches for CDSMPs	Future research into participatory studies that incorporate social networks.	Intrapersonal/Interpersonal/ Community

Author		Resear	rch que	estions	6	Practice implications	Research gaps	Socio ecological levels
Lang- Lindsey and Jenkins, (2024)	Q1	Q2	Q3	Q4	Q5	Development of culturally tailored train-the-trainer programs for peerleaders.	Further research is needed to refine interventions.	Intrapersonal/Interpersonal/ Community
Lauffenbur ger et al. (2023)	Q1	Q2	Q3	Q4	Q5	Culturally tailored interventions are critical.	Explore alternate models for hypertension management in this population.	Intrapersonal/Interpersonal/ Community
LeBrón et al. (2022)	Q1	Q2	Q3	Q4	Q5	Engage CHW as community ambassadors when working with disenfranchised communities.	The CHW led model should be further evaluated with varied populations to determine effectiveness.	Intrapersonal/Interpersonal/ Community
Lee et al. (2019)	Q1	Q2	Q3	Q4	Q5	Clinicians must be aware of psychosocial, physiological and environmental barriers of diabetes selfmanagement in AA men with diabetes.	Research with an emphasis on healthy eating behaviors and social support, may be effective in reducing racial inequities related to diabetes.	Intrapersonal/Interpersonal/ Community
Lynch et al. (2019)	Q1	Q2	Q3	Q4	Q5	Adopt culturally tailored programs that address SDOH at all ecological levels.	Future research should focus on developing interventions that address the complex interplay of individual, social, and environmental factors that impact long-term diabetes management in low-income African American populations	Intrapersonal/Interpersonal/ Community
Matthias et al. (2024)	Q1	Q2	Q3	Q4	Q5	It is critical to teach patients how to communicate with healthcare practitioners.	Future research to explore patient provider coaching and communication techniques/skills.	Intrapersonal/Interpersonal
May and George (2021)	Q1	Q2	Q3	Q4	Q5	Incorporate faith and spirituality into self-management programs.	Exploration of recruitment and retention challenges.	Intrapersonal/Interpersonal/ Community
Mitchell et al. (2023)	Q1	Q2	Q3	Q4	Q5	Adults from digitally underserved communities may be able to adopt health technology tools with improved health outcomes.	Further research exploring health information technology use with underserved populations.	Intrapersonal/Interpersonal
Moore et al. (2019)	Q1	Q2	Q3	Q4	Q5	Health provider training to translate	Continued research into culturally tailored self-management programs to refine interventions	Intrapersonal/Interpersonal/ Community

Author		Resea	rch que	estions	5	Practice implications	Research gaps	Socio ecological levels	
						healthcare advice to	j .		
						cultural preferences.			
Morenz et	Q1	Q2	Q3	Q4	Q5	Incorporating race	Increased funding required to	Interpersonal/Community/	
al. (2024)						concordant peer	sustain programs and health	Policy	
						navigators from the AA	outcomes		
						community improves			
						disease management.			
Ochieng	Q1	Q2	Q3	Q4	Q5	Implications for	Replicate the study with a larger	Intrapersonal/Interpersonal	
and Crist.						educating	sample size.		
(2021)						patients/caregivers			
						about the risks of			
						developing diabetes			
						complications.			
Omodara	Q1	Q2	Q3	Q4	Q5	Cultural competence	Future studies to refine knowledge	Intrapersonal/Interpersonal	
et al.						and tailoring is	of cultural practices that have		
(2022)						complex and may not	implications for disease		
						align with the western medicalized health	management.		
						care models.			
						care moders.			
Pemu et al.	Q1	Q2	Q3	Q4	Q5	Race concordant peer	Ongoing research focused on	Intrapersonal/Interpersonal/	
(2019)	QI	Ų2	l US	Ų4	ŲЗ	coaching and social	assessing the skills and training	Community	
(2019)						networks strengthened	needs of the leaders and health	Community	
						this program.	professionals.		
						tilis program.	professionals.		
Peña-	Q1	Q2	Q3	Q4	Q5	Routine assessment of	Longer term intervention follow-up	Intrapersonal/Interpersonal	
Purcell et						psychological distress	may be needed		
al.(2019)						may be warranted for			
						persons with diabetes			
						and other chronic			
				0.4	0.5	conditions.		10.	
Polo et al.	Q1	Q2	Q3	Q4	Q5	Commitment to	Future studies to explore the	Intrapersonal/Interpersonal	
(2023)						understanding barriers	rationale for high attrition rates.		
						such as mistrust and			
						poor treatment adherence.			
Poon et al.	Q1	Q2	Q3	Q4	Q5	Commitment to	Exploration of overprescribing	Intrapersonal/Interpersonal/	
(2022)	Q1	QZ	l Q3	Q4	QJ	integrated approaches	practices, system navigation and	Community/Policy	
(2022)						to person with multiple	medication costs.	Community/Foncy	
						chronic conditions by	medication costs.		
						taking multiple			
						medications.			
Presley et	Q1	Q2	Q3	Q4	Q5	DSME program is	Future studies for larger, more	Intrapersonal/Interpersonal	
al. (2020)						effective at reducing	diverse sample sizes.		
						disease markers.			
	0.1			6.1	0.5	<del>-</del>	F	1/2	
Raman et	Q1	Q2	Q3	Q4	Q5	Telephone outreach	Future studies may refine	Intrapersonal/Interpersonal	
al. (2022)						strategies may	telephone outreach interventions.		
						facilitate consistent			
						patient treatment and			

Author		Resea	rch que	estions	5	Practice implications	Research gaps	Socio ecological levels	
						appointment follow- up.		-	
Reddick and Gray, (2023)	Q1	Q2	Q3	Q4	Q5	Culturally tailored diabetes shared medical appointment programs may be an effective strategy for disease management for older Black adults.	Future studies may refine telephone shared medical appointment interventions.	Intrapersonal/Interpersonal	
Rovner et al. (2023)	Q1	Q2	Q3	Q4	Q5	Healthcare providers ought to be aware of social influences that impact disease management in persons with chronic	Future studies ought to focus on interventions that consider both individual and systemic factors.	Intrapersonal/Interpersonal/ Community	
Safford et al., (2024)	Q1	Q2	Q3	Q4	Q5	Structured intense interventions alone may not have a significant impact on reducing blood pressure.	Future studies need to focus on integrated solutions that address social and environmental contexts.	Intrapersonal/Interpersonal	
Sato et al. (2023)	Q1	Q2	Q3	Q4	Q5	Enhanced strategies on managing mistrust and stigma.	Future studies ought to focus on interventions that consider both individual and systemic factors.	Intrapersonal/Interpersonal	
Schober et al. (2021)	Q1	Q2	Q3	Q4	Q5	It is imperative to conduct in-depth assessment regarding barriers and facilitators to medication management.	Future studies to address underlying issues of race and discrimination as a barrier.	Intrapersonal/Interpersonal	
Senteio and Murdock, (2022)	Q1	Q2	Q3	Q4	Q5	Continued assessment of digital literacy in older Black adults.	Future studies to review inadvertent inequalities caused by technology-based interventions in underserved populations.	Intrapersonal/Interpersonal	
Senteio et al. (2021)	Q1	Q2	Q3	Q4	Q5	Intergenerational technology transfer is a strategy to improve self-efficacy for diabetes self-management among African American older adults.	Future studies ought to refine supportive strategies for technology use.	Intrapersonal/Interpersonal	
Singh et al. (2023)	Q1	Q2	Q3	Q4	Q5	Integration of church, faith and spirituality into self-management education is key in Black communities.	Future studies are conducted to clearly define community members' roles and responsibilities with culturally tailored programs.	Intrapersonal/Interpersonal/ Community	
Swaleh and Yu, (2021)	Q1	Q2	Q3	Q4	Q5	Supporting persons with system navigation.	Future research should explore how to provide culturally tailored healthcare to persons new to the	Intrapersonal/Interpersonal/ Community	

Author	Research questions					Practice implications	Research gaps	Socio ecological levels
							country. Paucity of Canadian studies on this topic.	
Tharakan et al. (2024)	Q1	Q2	Q3	Q4	Q5	Address social and chronic condition disease management issues with individuals simultaneously.	Interventions targeting longer term sustained management.	Intrapersonal/Interpersonal
Thomas- Purcell et al. (2020)	Q1	Q2	Q3	Q4	Q5	Integration of church, faith and spirituality into self-management education is key in Black communities.	Exploration of the link between spirituality and disease management.	Intrapersonal/Interpersonal/ Community
Woods et al. (2023)	Q1	Q2	Q3	Q4	Q5	Culturally tailored interventions are essential for effectively addressing hypertension in AA older adults	Explore the link between race, racism and chronic disease management.	Intrapersonal/Interpersonal/ Community

#### Limitations

It is vitally important when embarking on any research project or dissertation study that the limitations are fully described (Theofanidis & Fountouki, 2019). Theofanidis and Fountouki (2019) describe limitations as 'potential weaknesses that are usually out of the researcher's control, and are closely associated with the chosen research design, statistical model constraints, funding constraints, or other factors' (p. 156). Limitations can be categorized and identified in various ways. Viera (n.d) suggest that common limitations including theoretical which limits the scope, depth, or applicability of a study; methodological which limits the quality, quantity, or diversity of the data; empirical which limits the representativeness, validity, or reliability of the data; analytical which limits the accuracy, completeness, or significance of the findings; and ethical which limits the access, consent, or confidentiality of the data. In this section, I will describe an example of a potential limitation from a theoretical perspective related to the scope of the study in keeping with the quality and diversity of data.

Synthesizing the research evidence on topics such as chronic disease self-management to determine what is known about key concepts or gaps in the literature has become common practice (Munn et al., 2018). However, as previously discussed, authors have emphasized the need to manage common drawbacks of scoping reviews related to the breadth of the evidence. This is due to potentially broad search strategies that require extensive resource support for study selection and accessing reviewers to complete screening based on the volume or yield of literature searches that must be reviewed by the researcher during title and abstract and full-text screening (Munn et al., 2018; Peters et al., 2022). Adequate resources remained a significant concern for me as a doctoral student, due to lack of resources, and completion timelines that were predefined and highly accelerated. Aromataris and Munn (2020) suggest a minimum of 2 reviewers for title and abstract and full-text screening and data extraction of papers to ensure the rigor and quality of the review. In a review of scoping reviews Tricco et. al. (2016) reported the use of verifiers in conjunction with the primary reviewer. While the role and

responsibility of the verifier in comparison to a reviewer is not clear, in this study my plan was to be a reviewer and to engage a colleague who is a researcher as a second reviewer. As I embarked on this study, I recognized the need to consult with a University of Toronto health science librarian who provided me with 5-10 hours of virtual consultation to support the development of my search strategy. She had extensive systematic review and scoping review expertise and was able to support the creation of search strategies using search strings and Boolean operators for each database I searched. Additionally, I was able to benefit from my prior experience conducting scoping reviews and systematic review in my role as a guideline development methodologist with access to my research colleagues throughout the process, if required. Since I conducted the review independently, there may be implications in the interpretation of the results. For the broader study, I consulted my advisor through the process to ensure the review remains within the parameters of the timelines and resource limits of a doctoral dissertation. Furthermore, since I only searched for three databases, (i.e., CINAHL and Medline), relevant perspective may have been omitted. This is also a limitation within this study.

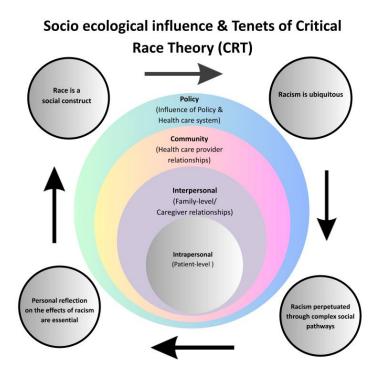
The type and focus of the research sub-questions were a limitation in this study. As the review of the literature progressed, two areas of focus emerged. Participants' values and preferences related to self-management practices emerged in the qualitative literature. These perspectives were captured with the content analysis in chapter 5. However, a question directly addressing this area may have yielded more data and deeper insights into the patient/family perspective. Furthermore, there is a gap within the review regarding healthcare practitioners' perspectives on training, facilitation and education on culturally adapted. Although this topic was outside of the scope of the present study, it is a critical topic for future research that will be required to complete the development of the educational program following this study.

#### Significance

Bearing in mind the findings of the study, the title, and research questions, there are several significant outcomes from this study. There was a great deal of research broadly focused on disadvantaged African American older adults with chronic illness in the USA. However, there are fewer studies being conducted with older Black adults exploring the utilization of culturally-tailored self-management education programs and fewer still conducted in Canada. In this review one Canadian study was included; however, overall, there were very few studies identified during the study selection process. Although there are small variances in the population between Canada and the USA, it has been recognized that in Canada (Swaleh & Yu, 2021) and the UK (Goff et al., 2021) that there are similar challenges among older Black adults as the impact of racism is not confined to the geographical boundaries of the USA. As a Canadian doctoral student, a key strength of this scoping review is the confirmation that more Canadian research is needed on culturally-tailored chronic disease selfmanagement programs and practices in older Black adults. Another key finding from this review, is my proposed conceptual framework (Hopkin et al., 2025; Hossaini et al., 2023; Lattof et al., 2020; Munn et al., 2018) for the design of my educational program that will be implemented by healthcare practitioners in Figure 10 below.

Conceptual Framework: Self-management Education Program

Figure 10



**Note:** Adapted socio ecological framework

### **Conceptual Framework**

The dynamic hierarchical structure of the socio ecological model reinforces the critical role of contextual factors in the success of chronic disease self-management education programs and practices (Golden & Earp, 2012). Interventions that target all ecological levels equally (i.e., the intrapersonal, interpersonal, community and policy/health system) are the key to positive long-term behaviour and health system change in the management of chronic conditions (Golden & Earp, 2012). In Chapter 5, the framework helped to detect contextual gaps in the studies. For example, when applying the model as an organizing framework to the content analysis exploring participants' view in the qualitative studies, important gaps in the focus of the studies were identified. The studies primarily concentrated on the

individual, intrapersonal level and community level intervention. The socio ecological model clearly revealed the gaps due to the limited focus on policy or system-level interventions in this review.

Similarly, this aligned with Senteio and Murdock, (2022) and Singh et al., (2023) systematic reviews.

Future research ought to focus on education programs that integrate all levels of the socioecological model in the care for chronic disease-management.

In response to the critical findings from this study, the conceptual framework provides the foundation for the future design of my education program. Interventions will have a multi-level focus to support integrated community-based education. This education for older Black adults will be based on collaborative partnerships with community-based organizations including faith-based organizations. This is in keeping with the culturally-tailored programs and interventions within the review that were positively received by participants. The additional benefit of adapting the socio ecological model and integrating the tenets of CRT is the ability to target interventions addressing systemic racism at the policy/system level. Within my conceptual framework, (Figure 10) culturally-tailored interventions will be targeted toward all ecological levels.

#### Racism and Critical Race Theory (CRT)

Another important contribution of this study lies in the application of the CRT tenets to illuminate manifestations of racism identified in studies involving older Black adults and other individuals from underserved populations. Although health disparities were acknowledged, they lacked explicit evaluation or quantification of the impact of racism on health outcomes (Adkins-Jackson et al., 2021). Instead, studies discussed social determinants of health such as socioeconomic status, literacy and access to health care (Adkins-Jackson et al., 2021). This is a gap identified from this review that may inadvertently compound disparities and inequities because the root cause of inequities is not being

addressed in the studies. For this reason, I have integrated the tenets of CRT into the design of the framework for my proposed educational program. This will ensure that topics such as racism, discrimination and unconscious bias are explicitly addressed with self-management education. Further research is needed to directly link racism to poor chronic disease self-management uptake. The development of the education program is beyond the scope of this study; however, below I describe the practice implications and provide some examples of interventions that may be included at each level.

#### **Practice Implications**

Collaborative partnerships with primary care professionals providing evidence-based strategies are beneficial for patients and families. Healthcare professionals have a critical role in the success of self-management programs as educators, facilitators, coaches and advocates. Bearing this in mind, it is imperative that healthcare practitioners provide culturally-tailored education and support for older Black adults. Few studies in this scoping review highlighted this important need (Ellis et al., 2019; Ewen et al., 2024; Goff et al., 2021). This competency addresses patient/person mistrust and cultural competence barriers identified in the present studies.

The purpose of this educational program is to provide practitioners with a template to deliver culturally-tailored self-management education to their patients and families. This education can be delivered to practitioners who will intern provide local/contextual education to persons in community settings. The hallmark of this educational program will be the interventions integrated at all ecological levels (Golden & Earp, 2012). Interventions targeting the intrapersonal level will focus on enhancing chronic disease-specific self-management knowledge and skills of the older Black adults. Interventions targeting the interpersonal level will capture interventions directed towards individuals that interact with older Black adults with chronic conditions (e.g., family, friends) and community focused

interventions will target the community in general who support older Black adults with chronic conditions (e.g., Faith-based organizations). Lastly, policy/system interventions will target interventions focused on policy and system-level interventions (e.g., advocacy and policy change). Further research is needed to develop the education program. However, healthcare practitioners would likely build knowledge and skills in culturally-tailored interventions based on concepts in the scoping review (highlighted below):

- 1. Chronic disease self-management
- 2. Dietary practices and cultural preferences
- 3. Faith and spirituality
- 4. Integrating chronic disease self-management and cultural beliefs
- 5. Family and community support and engagement
- 6. Advocacy (interpersonal, intrapersonal, community and system policy level)
- 7. Communication and healthcare access and engagement
- 8. System navigation support

As a healthcare professional, health advocate and older Black adult, I believe my social identity and positionality have strengthened this study. For thirty plus years I have practiced nursing working directly and indirectly with persons and families with chronic and life-limiting conditions. This perspective affords a unique insight into the complexities of this topic. Furthermore, my personal and professional experiences with the intricate nuances of anti-Black racism have provided additional strength and insights into this important work. Adding to this perspective, my current role as a Guideline Development Methodologist (GDM), working on a guideline addressing anti-Black racism in nursing has further strengthened my contribution to this study and my personal passion for this topic. For instance,

the many hours spent reviewing thousands of papers as a GDM, foreshadowed this same exercise for my study.

Through the years of this journey, the line between my personal and professional perspective on this topic has become blurred. Over time, the damaging impact of unchecked unconscious bias on the person/patients we care for is becoming clearer. My plan is to keep learning and push forward the development of this program to mitigate this issue.

Although this has been an extremely long convoluted journey, a multi-year rollercoaster of highs and lows, I am grateful for the trying times because taken together, I have been able to successfully implement a study that is meaningful and has significant value in healthcare. This work will not remain on a shelf because I intend to continue with the development of a unique educational program. In June of this year, I will be presenting my research at the International Council of Nursing (ICN) taking place in Helsinki, Finland. After this, I will endeavor to publish this research. As a Canadian researcher, I believe it will be a significant contribution to Canadian literature.

### Conclusion

The intent of this scoping review study was to determine where the gaps lie in previous studies documented in existing literature in relation to the effectiveness of and success of self-management programs among older Black adults. The characteristics of the review have helped to form the framework for a tailored online chronic disease self-management education program for older Black adults living with one or more chronic diseases (Fritz et al., 2023; Javed et al., 2022). Key findings from the review emphasize that no standardized culturally-tailored chronic disease self-management programs or tools are utilized for older Black adults. Thus, my proposed framework will help fill this identified gap. Once developed, my program will be used by health professionals as a model for self-

management education and day-to-day support to older Black adults with cardiac disease, hypertension and/or diabetes. It is important to note that the development of the entire education program is beyond the scope of this research.

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# **Appendix A: Scoping Review Studies**

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
(Abbott et al., 2022)	USA	To examine correlations among diabetes knowledge, diabetes self-care activities, perceived diabetes self-management, diabetes fatalism, and social support in African American Adults.	<ul> <li>African         American (AA)</li> <li>N=146</li> <li>Mean age 61.7         years</li> <li>Female (75.3%)         Diagnosis</li> <li>Diabetes</li> </ul>	Secondary analysis of a cluster-randomized control trial	Concepts  Community-based participatory research Peer-led Faith-based organizations (FBO) Context Church settings Pastor recruitment SE - half unemployed Race/ethnicity	Intervention  Project Power: a culturally relevant diabetes education program developed by the American Diabetes Association.  Findings  The study found that diabetes knowledge was not significantly related to selfcare activities, perceived selfmanagement, fatalism, or social support.  Rural health disparities are associated with health inequities and risk factors such as limited

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						access to primary and preventative care and fewer health care options Research gaps  Psychosocial Determinants of Glycemic Control Individual Determinants of Self-Care and Management The role of social support
Adinkrah 2024	USA	To evaluate the implementation of the COVID-19 Health Ambassador Program (CHAP) and assess its impact on addressing health disparities among underresourced older African American adults in South Los Angeles during the COVID-19 pandemic	<ul> <li>AA</li> <li>N=152</li> <li>Mean age 69</li> <li>70% female</li> <li>Diagnoses</li> <li>Hypertension</li> <li>Cardiovascular disease</li> <li>COPD</li> <li>Diabetes Mellitus</li> </ul>	Mixed method (Pre- test/post-test)	Concepts  Community-based participatory research  Lay COVID-19 Health Ambassador program(parishi oners)  Context  17 FBOs (Christian)	Intervention:  3-month COVID-19 Health Ambassador program.  A hybrid faith-based community-based approach  Culturally sensitive interventions(e.g., AA dietary preferences, traditional and cultural medicine

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
					<ul> <li>Participants         recruited from         churches</li> <li>Underserved         community</li> </ul>	practices with evidence-based strategies)  Concordant lay health leaders  Findings  High program completion rate  SDOH addresses barriers such as poverty, social isolation, access to health care(transportati on), and inadequate insurance coverage.  Gaps  Self-reported data Pandemic restrictions
Arévalo Avalos et al. (2024)	USA	To evaluate the implementation of a technology-enabled peer coaching intervention to support diabetes selfmanagement among patients with	<ul> <li>N=330</li> <li>African         American;         Hispanic; White;         Other.     </li> <li>Mean age 53.35         years     </li> <li>Diagnosis</li> </ul>	Mixed methods (quasi-experimental)	Concepts  MHealth  peer coaching Context  Remote program	Intervention:  • A 6 month peer coaching program(digital platform)  • Led by patients successfully implementing

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		uncontrolled diabetes.	• Type 1 and 2 Diabetes			their own disease (Coach, consult refer share) Race concordance(pat ient-peer coaches) connect with patients by smartphone or telephone Addresses digital literacy Technology enabled peer coaching Findings Program participants had lower HbA1c and were more likely to complete followup Focus on disparities experienced ty ethnic minorities Racism not explicitly addressed Gaps

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						<ul> <li>To understand generalizability of remote peer coaching</li> <li>Impact of pandemic</li> <li>Integration of SDOH</li> </ul>
Bleah et al. (2023)	Liberia	To explore what it is like to live with diabetes in Liberia	<ul> <li>N=10</li> <li>Black</li> <li>male (4) and female (6)</li> <li>Mean age 51.3 years</li> <li>Diagnosis</li> <li>Diabetes Type 1 &amp; 2</li> </ul>	• Qualitative	Concepts  Critical hermeneutic  Photovoice, Participatory research Context  The Adventist University of West Africa partnership	Intervention  Focus groups.  Monitoring blood sugar and staying active- physical activity  Key Findings  Strength: Participants' commitment to engage in diabetes self- management practices despite the socioeconomic challenges  Challenges: limited access to healthy food, medications, supplies and education

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						<ul> <li>Participants         recommend a             diabetes             education             center.</li> <li>Covid         restrictions</li> </ul>

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
Booker et al.(2020)	JSA	To extend understanding of the experience of life with osteoarthritis pain	<ul> <li>N=18;</li> <li>AA</li> <li>mean 67.94         years         Diagnosis         <ul> <li>Osteoarthritis</li> <li>pain</li> </ul> </li> </ul>	Qualitative	Concepts	Intervention  Semi-structured interviews Key finding/Themes  Bearing the Pain  Adjusting to and sharing Pain  Trusting God  Praying for Relief  SDOH and inequities that contribute to OA pain outcomes in AAs are addressed.  AA culturally lean into faith-based selfmanagement practices to manage pain  Racial disparities and cultural practices must be understood
Brewer et al. (2023)	JSA	This formative study aimed to assess the feasibility of integrating an innovative mHealth	Phase 1  N=13 Age 69% > 50 years	Mixed methods	ncepts  Telemedicine community health workers	Intervention (10 week program)  • FAITH!  Hypertension  App used with

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		intervention into clinical and community settings to improve blood pressure (BP) control among African American patients.	<ul> <li>African     American</li> <li>Phase 2</li> <li>N=16     Meant Age     52.6 years</li> <li>Diagnosis</li> <li>Hypertension</li> </ul>		community-based participatory research     Socio ecological model Context     2 FQHCs	weekly visits from community health workers.  App included a blood pressure dashboard to display patients' readings and trends and to track their medication usage.  10 educational modules covering various topics related to hypertension and cardiovascular health. Key findings  CHW support may improve hypertension self-management among under- resourced AA  individuals receiving care at FQHCs. Federally qualified health centers (FQHCs) are particularly

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						susceptible to poor health outcomes due to the high prevalence of uncontrolled hypertension  Gaps  How best to support patients with varying digital literacy and without CHW support
Chard et al. (2022)	USA	Thematic analysis of diabetes illness narrative interviews with Black Participants in a National Institute on Aging-funded study of diabetes.	<ul> <li>N = 41</li> <li>Mean 62.6 years</li> <li>AA (71% female) Diagnosis</li> <li>Type 2 diabetes</li> </ul>	Qualitative research	Concepts  Health disparities  Self-care  Diabetes care Context  Community dwelling adults	Key finding/Themes  Black older adults describe Diabetes self- care in the context of interconnected struggles across four domains of care: (1) multimorbidity management, (2) financial well-being, (3) family support, and (4) formal health care.

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						Authors discuss systemic racism and SDOHin the context of clinical encounters and collective practices that impact diabetes care.      SDOH-family support, SE, systemic racism, study in an urban setting with a history of redlining and disinvestment

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
Conway-Phillips et al. (2020)	USA	To examine the feasibility and effectiveness of a novel, 8-week, group-based stress reduction program, Resilience, Stress and Ethnicity (RiSE), designed to help Black women at risk for cardiovascular disease (CVD).	<ul> <li>N = 22</li> <li>Mean 62.6 ± 11.1 years</li> <li>AA</li> <li>Diagnosis</li> <li>Chronic stress</li> <li>Cardiovascular risk</li> </ul>	Qualitative research	Concepts  Racism, Perceived discrimination Resilience Mindfulness Women Context Community based program and focus groups	Intervention  Resilience, Stress and Ethnicity (RiSE) program  8-week, group- based intervention designed to reduce chronic stress and build resilience among Black women at risk for cardiovascular disease (CVD)  Designed to help participants become more aware of the different forms of racism they may face.  Culturally adapted cognitive behavioural techniques( e.g., medication, breathing exercises, mindful

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						listening, journaling) Key Findings  Four key categories emerged from the data: (1) Increasing awareness of stressors associated with perceived discrimination and racism; (2) Coping with race-based stressors; (3) Coping with other sources of stress; and (4) Increasing sense of empowerment and emotion regulation.  SDOH racism and discrimination
Dzikowicz et al. (2024)	USA	The objectives of this study were to examine the relationships between insurance type	<ul> <li>N=125 (68% Black)</li> <li>53% male</li> </ul>	Secondary analysis of a RCT	Concepts  Health insurance, Situation specific theory,	Intervention  The study explores situation specific

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		and self-care stratified by race and to assess for differences in time-to-30-day readmission among patients with HF with cognitive impairment.	<ul> <li>Mean age 58.5 years</li> <li>Diagnosis</li> <li>Heart failure</li> </ul>		<ul> <li>Mild cognitive impairment,</li> <li>SDOH</li> <li>Context</li> <li>Academic hospital</li> </ul>	theory of heart failure self-care Key findings  Insurance is viewed as a social determinant of health  Insurance is a predictor of 30-day readmission rates and self care confidence  Patients with medicare hospitalized 12.77 days sooner  Gaps  Cognitive impairment undiagnosed, few guidelines for HF, racial disparities and cognitive impairment, more effective intervention, further exploration of SDOH

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
Ellis et al. (2019)	USA	The current study examined the direct association among caregiver role strain, medical mistrust, the medication regimen, and MSMB and explored whether goal congruence and self-efficacy were mediators among caregiver role strain, medical mistrust, the medication regimen, and MSMB.	<ul> <li>N= 116</li> <li>AA women</li> <li>&gt; age 50 years</li> <li>Diagnosis</li> <li>Diabetes</li> <li>Heart disease</li> <li>Hypertension</li> </ul>	Mixed methods (Correlational cross- sectional)	Concept  Medication Self-efficacy Discrimination. Mistrust Context Community churches Nurse-managed health center	Intervention  Participants engaged in a 60 minute interview  SDOH, poverty, medical mistrust, education 50% had a highschool education  Key findings  The factors found to relate to MSMB were age, goal congruence, and self-efficacy.  Higher levels of mistrust can lead to adverse health outcomes.  Lower caregiver role strain  Need to develop culturally and socioeconomical ly appropriate intervention
Ewen et al. (2024)	USA	The aim of the pilot was to understand the	• N= 116	Randomised controlled trial(RCT)	Concept	Intervention

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		feasibility and acceptability of the Peer-Led Diabetes Self-Management Support (PLDSMS) intervention.	<ul> <li>Black men</li> <li>&gt; age 55 years</li> <li>Diagnosis</li> <li>Type 2 Diabetes</li> </ul>		Peer leaders Context  Conducted virtually at the University of Michigan	12 week     Michigan     diabetes project      Diabetes Self-     Management     Education     Support     (DSMES)      Peer leaders     were trained     with culturally     tailored material  Key findings      Peer-led support     interventions     are effective in     lowering HbA1c     levels and     improving self-     management     behaviors,     particularly     among those     with low     medication     taking and self-     management     support levels      Culturally     tailored     interventions     were imperative     to address

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						challenges experienced by Black men (e.g., mistrust of providers, financial constraints, low health literacy and reduced social support.)
Feldman et al. (2020)	USA	This study is unique in testing a transitional care model aimed at controlling HTN in black and Hispanic poststroke, home health patients, an understudied group.	<ul> <li>N= 495</li> <li>Non-Hispanic Black</li> <li>Hispanic</li> <li>Mean age 66.6 years</li> <li>Diagnosis</li> <li>Hypertension</li> </ul>	• 3-arm RCT	Concepts  Health coach Hypertension Race concordant Nurse Practitioner Chronic Care Model Context Home health care	Intervention  Usual Home Care (All participants)- skilled nursing and/or rehabilitative therapy, patient education, monitoring, and other services  Nurse Practitioner Intervention- included a 30- day transitional care program with in-home visits and phone contacts focusing on reducing SBP

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						Heath Coach Intervention-The UHC+NP+HC arm included the 30-day NP intervention followed by 60 days of coaching/self-management support from a trained home health aide  Key Findings     Significant Blood pressure reduction but no significant difference between groups. Reduction likely attributed to the UHC.     African American NP and Spanish speaking NP
Goff et al. (2021)	United Kingdom (UK)	To develop an evidence-based, culturally tailored, diabetes self-management education	Phase 1  N=41  N=11 (health care practitioners)	Qualitative (Intervention development study)	Concepts  Black-British Caribbean Culturally tailored (DSMES)	Intervention (3 phases).  • Healthy Eating and Active Lifestyles for

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		and support programme for Black- British adults, called Healthy Eating and Active Lifestyles for Diabetes (HEAL-D)	<ul> <li>N=9 community leaders</li> <li>Phase 2</li> <li>N=27 stakeholders</li> <li>N=11 participants</li> <li>British Black adults</li> <li>Mean age 62 years</li> <li>Diagnosis</li> <li>Type 2 diabetes</li> </ul>		<ul> <li>Participatory research</li> <li>Context</li> <li>Community locations(e.g., churches, universities)</li> </ul>	Diabetes (HEAL-D)  Focus group- 8 focus groups with 41 people  Co-development workshops-2 half day workshops  Material development research team develop the curriculum  Key Findings  7 sessions delivered every 2 weeks (groupbased, Black lay educator, flexible attendance, evidence-based guidelines, cooking by Black chefs, behaviour change  Future research can explore how tailoring to these deeper structures contributes to

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						the effectiveness of interventions.
Greer et al. (2022)	USA	The purpose of this study was to explore perceived ease of use, usability, and the feasibility of using mobile health applications to manage hypertension self-care in rural Black older adults with hypertension	<ul> <li>N= 30</li> <li>AA(29 female, 1 male)</li> <li>Mean age 66.3 years</li> <li>Diagnosis</li> <li>Hypertension</li> </ul>	Mixed Methods	Concepts  • mobile health applications Context  • Community based program	Intervention/Focus group  Mhealth app intervention  Key Findings  Smartphone technology and other health-related computer technologies were not preferred by older adults in this study due to limited digital literacy. Simplicity and easy navigation in the design of mHealth apps are needed to improve treatment adherence and blood pressure control in rural older adults with hypertension

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						HTN extend from SDOH caused by complex social level disparities influenced by systemic racism
Harvin et al. (2020)	USA	The purpose of this study was to determine if a faith-based self-management education program would improve self-care activities related to the management of hypertension among African American adults.	<ul> <li>N= 10</li> <li>African         American</li> <li>Church         congregation</li> <li>48-81 years         Diagnosis</li> <li>Hypertension</li> </ul>	Mixed methods/Pre- and posttest quasi- experimental design	Concepts  Faith-based Reed's Self- Transcendence Theory, Context  Community church SDOH (100% of participants report a family hx of HTN). Community support by church 60% HS or less	Intervention  8-week education program focused on strategies for hypertension management  The education program was enhanced with the utilization of spiritual components of prayer, Scripture reading, and journaling Key Findings  Medication adherence improved  No statistically significant improvement in diet, physical activity, weight, smoking or

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						alcohol consumption Positively connected physical and spiritual health Gaps/ Future research Evaluation of spiritual components Future research into the link between religion and disease management
Ingenhoff et al. (2023)	Uganda	To contribute to the growing body of evidence on the effectiveness of Community Health Worker (CHW) interventions, this study aims to understand the facilitators and barriers of implementing a CHW-led COPD screening and referral program in rural Uganda.	<ul> <li>N= 34         (community members)</li> <li>N=8 (CHW)</li> <li>N=10(HCPs)</li> <li>Sub-Saharan African</li> <li>Diagnosis</li> <li>Chronic Obstructive Pulmonary disorder (COPD)</li> </ul>	Qualitative research	Concepts  Community health workers(CHW)  Context  Nakaseke district, a rural area in Central Uganda  SDOH (knowledge/literacy, access to care/services)  94% HS or less	Intervention  Community health worker (CHW)-led COPD screening and referral program  Designed to address the limited availability of COPD screening and diagnosis. Program includes Key Findings/themes Challenges to implementation included a lack of

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						COPD awareness in the community, a perceived lack of utility of COPD screening, lack of community trust and stigma surrounding the diagnostic process.  Gaps/future research  Investigate trust and stigma Funding model to sustain programs and CHW support, access to transportation
Janevic et al. (2022)	USA	To assess the impact of an evidence-based self-management intervention adapted through a community-engaged process for African American midlife and older adults with heart disease and/or cardiovascular risk factors.	<ul> <li>N= 453</li> <li>Non-Hispanic Black</li> <li>Hispanic;</li> <li>Non-Hispanic White</li> <li>Mean age 65.4 Diagnosis</li> <li>Heart disease</li> </ul>	RCT	Concepts  Cardiovascular disease,  Disparities, PROMIS-29  Context  Community based setting	Intervention  Take Heart (adapted based on input from diverse stakeholders)  PROMIS (Patient- Reported Outcomes Measurement Information System)

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						The overarching purpose of Take Heart was to provide information and motivation to support improved life style behaviors and treatment adherence  Key Findings Well received-High participant satisfaction No significant difference in emergency department visits Improvements in sleep, fatigue and cardiac symptom burden were reported  Gaps and future research Longer term follow up Comparison to other interventions and refining

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						interventions in this study
Janevic et al. (2022)	USA	Positive STEPS, delivered by community health workers, is a culturally congruent chronic pain self-management intervention that incorporates positive psychology principles and gives attention to social determinants of pain and pain management	<ul> <li>N= 46</li> <li>African         American</li> <li>Non-Hispanic         White</li> <li>Mean age=72.1 Diagnosis</li> <li>Chronic pain</li> </ul>	RCT pilot trial	Concepts  CHW-led  Community- engaged research  Mobile health Context  Virtual program	Intervention  Positive Steps (7 weeks)  Tailored to local context (e.g., bible reading, jewelry making)  The Positive STEPS intervention is designed to be responsive to older adults in a primarily African American community that is affected by racialized structural disadvantage Key Findings  The study has the potential to enhanced pain related selfmanagement among vulnerable older adults  Gaps

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						<ul> <li>Short duration of the study</li> <li>More diversity in the population</li> <li>Cultural adaptations were superficial(verna cular) and also incorporated spirituality</li> </ul>
Jia et al. (2022)	USA	Resilience is the ability to adapt to adverse life events. Studies that explore diabetes self-management interventions integrating resilience in African-Americans with diabetes include few African-American men, who have higher diabetes-related mortality and complication rates compared to African-American women	<ul> <li>N= 94</li> <li>AA men</li> <li>Mean age= 60.6 years</li> <li>Diagnosis</li> <li>Type 2 diabetes</li> </ul>	Quantitative (Cross sectional)	Concepts  Resilience Incarceration Context Large urban safety net hospital	Intervention  The study focuses on the link between resilience and self-management adherence.  Telephone survey  Key Findings  Tailored interventions that target resilience should be developed for disparate communities( e.g., spirituality)  History of incarceration had a negative

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						association with diabetes self-management.  SDOH or structural racism and mass incarceration must be addressed Gaps/future research Explore the impact of specific policies (incarceration, police violence and structural racism on diabetes)
Jones et al. (2022)	USA	A focus group that was part of a larger parent study was conducted to identify challenges implementing dietary strategies to control high blood pressure.	<ul> <li>N= 19</li> <li>African         American (87.1%         female)</li> <li>Mean age= 71.6         years         Diagnosis</li> <li>Hypertension</li> </ul>	Qualitative research	Concept(s)  DASH Diet Context Senior housing community	Intervention  Focus groups lasting 2 hours.  Study part of a parent study focused on intervention creation to enhance selfcare behaviour.  Investigation of the participants ability to self-

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						manage dietary requirements  DASH diet. Key Findings  Lack of dietary knowledge regarding dietary requirements  Concerns expressed regarding the impact of comorbid conditions and treatment(e.g., cancer, chemotherapy)  Expressed concerns about the high-cost of health foods and lack of financial resources.  Improved patient provider communication  Exploration of more diverse age groups
Joseph et al. (2024)	USA	We examined the effect of a community team- based physical activity,	<ul><li>N= 74</li><li>Black men</li></ul>	Quantitative (Single arm pilot program)	Concept(s)  • Mental health	Intervention

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
		health education and social needs intervention among Black men on mental health over 24 weeks.	<ul> <li>Mean age=51 Diagnosis</li> <li>Cardiovascular status</li> <li>Mental health</li> </ul>		Stress CBPR Health equity. Context Community based Partnership	24-week     community-     based lifestyle     change program     adapted from the     Diabetes     Prevention     Program and     American Heart     Association's     (AHA) - Check,     Change, Control     Blood Pressure     Self-     Management     Program.  Key Findings/Theme  Participants     reported a     decrease in     depressive     symptoms  The social     component of     the program may     have led to     positive effects     due to isolation     of pandemic
Lang-Lindsey and Jenkins, (2024)	USA	This study aimed to assess the effectiveness of a chronic kidney	<ul><li>N= 165</li><li>African American</li></ul>	RCT	Concept(s)  Race concordant Peer education	Intervention (12 months)

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		disease (CKD) peer coach's educational intervention on the quality of life of African-American individuals with CKD.	<ul> <li>Age= 45 and 64 years old</li> <li>Females 56% Diagnosis</li> <li>Chronic kidney disease(CKD)</li> </ul>		quality-of life Context     Renal outpatient clinic in Mississippi	<ul> <li>Regular care (control group)</li> <li>The intervention group received the peer coaching educational intervention,</li> <li>Peer coaches acted as role models</li> <li>Race concordant Peer coaches who had lived experience with chronic conditions such as kidney disease, high blood pressure, or diabetes</li> <li>Key Findings</li> <li>High percentage of low income(&lt;\$10,000) participants in both arms</li> <li>Peer coaching improved quality of life positive results in general</li> </ul>

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						Both     intervention and     control group     experience     general     improvements in     health     perception     Further research     needed to refine     interventions
Lauffenburger et al. (2023)	USA	To examine clinician and patient perspectives on barriers and facilitators to hypertension control within a racially and ethnically diverse health care system.	<ul> <li>N= 15 (patients)</li> <li>60% Black( 1 Hispanic, 1 White)</li> <li>Mean age= 58.6</li> <li>N=15 (clinicians)</li> <li>2 Asian (13%), 2 Hispanic or Latino (13%), and 7 White (47%).</li> <li>Diagnosis</li> <li>Hypertension</li> </ul>	Qualitative research	Concept(s)  Health Information Technology (HIT)  Asynchronous care Context  Large urban US center	<ul> <li>Key Findings</li> <li>Five themes relevant to managing hypertension for racially and ethnically diverse patient populations in primary care were identified:</li> <li>1. difficulty with self-management activities, especially lifestyle modifications</li> <li>2. hesitancy intensifying medications by</li> </ul>

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						both clinicians and patients; (3)  varying the timing and follow-up after changes in medication; (4)  variation in blood pressure selfmonitoring recommendation s and uptake; and (5)  limited specific functionality of current health information technology tools  Black and Hispanic populations are less likely to receive follow up care  Interventions should be tailored to specific needs of this population
LeBrón et al. (2022)	USA	To examine which components of a culturally tailored	• N= 326	Quantitative a nonrandomized, one group pre- post design.	Concept(s)  • CHWs	Intervention (6 months)

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		community health worker (CHW) intervention improved glycemic control and intermediate outcomes among Latina/o and African American participants with diabetes.	<ul> <li>African         American(58.3%         )         <ul> <li>Latino/a (41.7%)</li> </ul> </li> <li>Mean age= 58.6         years         <ul> <li>Diagnosis</li> <li>Type 2 diabetes</li> </ul> </li> </ul>		CBPR Culturally Tailored Interventions Health Disparities Context Community based partnerships	Race/ethnicity concordant     CHWs provided interactive group diabetes self-management classes and home visits, and accompanied clients to a clinic visit.     a randomized design with an immediate intervention group and a delayed intervention group that received the same intervention 6-months after baseline  Key Findings     Group based interventions improved diabetes knowledge, reduced diabetes distress, improved self-

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						efficacy and led to reductions in HbA1c.  CHW are an important ambassador between disenfranchised communities and health systems serving these communities.
Lee et al. (2019)		To provide nurse practitioners with practice strategies we explored African American men's perceived needs for dietary health and diabetes self-management using the Social Cognitive Theory	<ul> <li>N= 25</li> <li>African         American men</li> <li>Mean age= 50 ±         10.7 years</li> <li>Diagnosis</li> <li>Hypertension</li> </ul>	Qualitative research	Nurse practitioner     Social Cognitive Theory Context     Public safety net health system and university of Alabama	<ul> <li>Barriers include         <ul> <li>a lack of</li> <li>diabetes</li> <li>knowledge,</li> <li>ambiguous</li> <li>healthcare</li> <li>provider</li> <li>instructions, lack</li> <li>of social</li> <li>support,</li> <li>financial</li> <li>constraints, food</li> <li>availability, taste</li> <li>preferences, and</li> <li>habits.</li> </ul> </li> <li>NPs must be</li> <li>aware of</li> <li>psychosocial,</li> <li>physiological</li> </ul>

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						and environmental barriers of diabetes self- management in AA men with diabetes  AA men with diabetes may benefit from extra emotional support from their health care team in the absence of informal support from family members  An emphasis on healthy eating behaviors and social support, may be effective in reducing racial inequities related to diabetes.
Lynch et al. (2019)	USA	Our objective was to determine whether a novel, culturally	<ul> <li>N= (n = 211)</li> <li>AA</li> <li>female (70.1%)</li> <li>Mean age= 55</li> <li>Diagnosis</li> </ul>	RCT	Concept(s)  Disparities Diabetes selfmanagement education (DSME)	Intervention  • Two culturally tailored diabetes self-management

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		tailored DSME intervention would result in sustained improvements in glycemic control in low- income African- American patients of public hospital clinics.	• Type 2 diabetes		Ontext  ■ 5 outpatient primary care community clinics	education (DSME) programs: the Lifestyle Improvement through Food and Exercise (LIFE) intervention and a standard of care comparison group  Compared changes in hemoglobin A1c (A1c) at 6, 12, and 18 months between two arms: (1) Lifestyle Improvement through Food and Exercise (LIFE), a culturally tailored, 28- session community- based intervention, focused on diet and physical activity, and (2)

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						a standard of care comparison group receiving two group DSME classes.  The intervention had four main components:  Culturally tailored diabetes nutrition education delivered by a registered dietitian (RD)  A culturally tailored nutrition education curriculum and use of peer supporters who were African American women with diabetes  (Physical activity, Selfmonitoring of blood glucose (SMBG),

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						Social support  Key Findings  The LIFE intervention showed some positive improvement  Further research needed to identify long-term behavior change  future research should focus on developing interventions that are not only culturally tailored and literacy-sensitive, but that also address the complex interplay of individual, social, and environmental factors that impact long-term diabetes management in low-income

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						African American populations
Matthias et al. (2024)		-The COOPERATE (Communication and Activation in Pain to Enhance Relationships and Treat Pain with Equity) intervention was a patient-centered, tailored intervention aimed at improving health equity by targeting patient activation—the knowledge and confidence to manage one's health.	<ul> <li>N= 24</li> <li>African         American male         (70.8%)</li> <li>Mean age= 60.3         years</li> <li>Black veterans         Diagnosis</li> <li>Chronic pain</li> </ul>	Qualitative research	Concept(s)  Health equity; Healthcare disparities Context Veterans receiving care in the primary care clinics.	Key Findings  The COOPERATE intervention was conducted with patients receiving care in the primary care clinics  Black veterans with musculoskeletal pain for at least three months participated in six individual telephone sessions with a coach over 12 weeks. Sessions included; Pain treatment goal setting, Communication skills and roleplayed during coaching sessions.  Coaches tailored the sessions by focusing on

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						individuals' values and working to connect those values to their broader social and cultural contexts  This individually tailored intervention led to significant and sustained increases in patient activation((i.e., having the knowledge, confidence, and skills to manage one's health)
May and George, (2021)	USA	To evaluate a culturally tailored heart disease prevention program, develop selfmanagement strategies for car-diovascular health and hypertension control	<ul> <li>N= 8</li> <li>African         American (both men &amp; women)     </li> <li>Mean age= M = 60.4 years         Diagnosis         hypertension     </li> </ul>	Descriptive-other	Concept(s)  Faith-based community  nursing; Context  Community churches	Intervention (6 weeks)  • With Every Heartbeat is Life (WEHL), a community- based heart health program, was enhanced with Scripture

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						and prayer for this project  Surveys and biometric tools were used to assess the impact of the program  Key Findings  Challenges were encountered with recruitment and retention  The study demonstrated the feasibility of implementing a culturally tailored, faithenhanced health program in an African American church setting.  The program created an important educational tool for hypertension health promotion and risk reduction.

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
Mitchell et al. (2023)	USA	The purpose of this study was to compare the effectiveness of diabetes medical group visits (DMGVs) delivered in an immersive telemedicine platform versus an inperson (IP) setting and establish the noninferiority of the technology-enabled approach for changes in hemoglobin A1c (HbA1c) and physical activity (measured in metabolic equivalent of task [MET]) at 6 months.	<ul> <li>N= 309</li> <li>Black</li> <li>Hispanic</li> <li>Mean age= 55</li> <li>Diagnosis</li> <li>type 2 diabetes mellitus</li> </ul>	Non-inferiority RCT	Concept(s)  Virtual world digital health DSME Shared medical appointment Context Urban safety net health system and a community health center	Intervention Investigated the effectiveness of the culturally adapted Diabetes Medical Group Visits (DMGVs) delivered through an immersive telemedicine platform versus in-person settings The DSME curriculum, adapted from "Power to Prevent," covered topics such as diabetes self-monitoring, preventative care, healthy eating, exercise, and stress management Avatars were used in the virtual world to create interactive

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						learning experiences and practice positive health behaviors.  Participants received individual consultations with clinicians to review blood glucose readings, medication reconciliation, and address concerns. Following the 8- week DMGV sessions, participants entered a 16- week maintenance period where they were encouraged to self-monitor their blood glucose, blood pressure, diet, and exercise Key Findings

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						The study concluded that the immersive telemedicine platform was an effective alternative to inperson group diabetes care, showing comparable improvements in glycemic control Adults from digitally underserved communities robustly adopt health technology tools with improved health outcomes
Moore et al. (2019)	UK	The aim of this study was to apply the Behaviour Change Wheel (BCW) in the design of a culturally sensitive selfmanagement support programme for T2D in UK AfC communities.	<ul> <li>N= 41</li> <li>Black African</li> <li>Caribbean</li> <li>Mean age= 62.4 years</li> <li>Diagnosis</li> <li>Type 2 diabetes</li> </ul>	Qualitative (Intervention development)	Concept(s)  Participatory methods  Behaviour change Context  Community venues(e.g., churches. Mosques, universities)	Intervention/Focus groups  The Healthy Eating and Active Lifestyles for Diabetes (HEAL-D) intervention is a culturally sensitive,

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						theory-driven program  Group-Based Delivery: The intervention is delivered in community-based sessions  Education Curriculum: The program includes an education curriculum covering the principles of diabetes selfmanagement  Key Findings/Theme  Motivation and opportunity to perform healthful diabetes-related selfmanagement behaviours in AfC patients may be limited by specific cultural beliefs and cultural social norms, even in

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						the presence of adequate levels of knowledge.
Morenz et al. (2024)	USA	To elicit from patients and community members their ideas for barriers and facilitators to blood pressure control; and use their input to design and pilot a navigator program for Black patients in our clinic to improve blood pressure management.	<ul> <li>N= 27</li> <li>African         American</li> <li>N=53 (peer         navigation</li> <li>Mean age= 54         (focus group)</li> <li>Mean age= 63.4         (peer         navigation)</li> <li>Diagnosis</li> <li>Hypertension</li> </ul>	Mixed methods	Concept(s)  Peer navigation  Racial equity Context  safety-net primary care clinic	Intervention/Focus group  2 areas of need identified:(1) community-based services and (2) skill development for hypertension self-management.  Peer navigators from the Black community called participants at least monthly for 6–12 months and connected them with medical and social services.  Need for community resources to support healthy habits  Key Findings

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						<ul> <li>High satisfaction with the peer navigation program</li> <li>valued the support and phone follow-up between clinic visits.</li> </ul>
Ochieng and Crist (2021)	USA	The purpose of this study was to describe the perceptions of African American (AA) women with Type 2 diabetes mellitus (T2DM) about developing diabetes mellitus (DM) complications and explore how their perceived risk influenced DM selfmanagement.	<ul> <li>N= 10</li> <li>African         American         women</li> <li>Mean age= 51.2         years         Diagnosis</li> <li>Type 2 diabetes         mellitus</li> </ul>	Qualitative research	Concept(s)  Risk perceptions, Diabetes complications. Context Rural Community	Key Findings  Knowledge of T2DM had a reported profound effect on risk perceptions of developing DM complications in AA women with T2DM.  Higher Knowledge of DM Increases perceptions of risk  Participants with Little Knowledge of Diabetes Reported Lower perceptions of Risk

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
Omodara et al. (2022)	UK	The purpose of this study was to examine cultural beliefs, attitudes, and practices of Black sub-Saharan Africans (BsSAs) in the UK regarding their type 2 diabetes (T2D) selfmanagement using the concepts of the PEN-3 cultural model.	<ul> <li>N= 36</li> <li>Black subsaharan Africans</li> <li>Mean age= 35-65 years</li> <li>Diagnosis</li> <li>Type 2 diabetes mellitus</li> </ul>	Qualitative research	Concept(s)  PEN-3 cultural Model  Cultural beliefs Context  Rural Community	Key Findings/Theme  Semistructured interviews  Cultural beliefs can shape selfmanageme nt behaviours in multiple ways including, limiting knowledge and health literacy,mis conception s about diabetes, lack of adherence to or disengagem ent from prescribed medication s  PEN-3 model - framework used to understand

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						the role of culture in shaping health behaviours( i.e., Cultural identity, cultural empowerm ent, relationship s and expectation s)  Themes: Social stigma, alternative therapies, faith and believes  The narratives of T2D experiences among the BsSA communitie s explains the complex nature of culture and

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						how it does not fit into the 'medicalise d' care model of diabetes manageme nt in the UK.
Pemu et al. (2019)	USA	To describe the implementation, clinical outcomes and participant perspectives for e-Healthystrides	<ul> <li>N= 264</li> <li>Black/African American (70% female)</li> <li>Mean age= 62 years</li> <li>Diagnosis</li> <li>Type 2 Diabetes</li> </ul>	Mixed methods	Concept(s)  Health Information Technology Context  Three independent ambulatory clinics and an historic African American (AA) church.	Intervention  The intervention was a health information technology application called e-Healthystrides© designed to improve diabetes care in high disparity popula tions  The application included a variety of features to help patients with type 2 diabetes manage their condition.

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						Including: Personal health record (PHR), Diabetes self- education, Email contact with clinic staff or a health coach, concordant peer support Key Findings Participants describe the program as empowering Engagement- Participants highlighted the value of health coaches
Peña-Purcell et al. (2019)	USA	The study purposes were to 1) explore the impact of a culturally tailored DSME/S intervention on psychological distress and diabetes-related outcomes among African-American and Hispanic/Latino	<ul> <li>N= 259</li> <li>AA</li> <li>Mean age= 66</li> <li>Hispanic</li> <li>Mean age= 55</li> <li>Diagnosis</li> <li>Type 2 diabetes</li> </ul>	Quantitative (Pre-post test)	Concept(s)  Cultural tailoring Diabetes distress Health disparities Context Community-based interventions	Intervention  Sí, Yo Puedo and Wisdom, Power, Control Intervention  The programs were culturally tailored for their respective populations in terms of dietary food

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		participants and 2) examine differences across groups in self-care, self- efficacy, diabetes knowledge, and psychological distress				preferences, language, and cultural norms and beliefs  Seven weekly sessions of 1.5–2 hours in length  Review of weekly homework activity  Guided discussion on the video novella (i.e., soap opera) messages & Short lecture on weekly topic  Experiential activities reinforcing dietary principles and self-care practices Key Findings  Significant pre- to post-test improvements in self-care, self- efficacy, and psychological

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						distress for both African American and Hispanic/Latino participants.  Longer term follow-up may be needed
Polo et al. (2023)	USA	Pulmonary rehabilitation (PR) decreases rehospitalization for people with COPD. However, less than 2% receive PR, partly due to lack of referral and sparsity of PR facilities. This disparity is particularly pronounced in African American and Hispanic persons with COPD. Telehealth- provided PR could increase access and improve health outcomes	<ul> <li>N= 120</li> <li>African         American</li> <li>N= 89</li> <li>Hispanic</li> <li>Mean age=66.45 Diagnosis</li> <li>Chronic         Obstructive         Pulmonary         Disorder (COPD)</li> </ul>	RCT	Concept(s)  Pulmonary rehabilitation, Quality of life, Telehealth RE-AIM framework Context Participants homes or community centers	Intervention (2 arms TelePR & SPR)  Telehealth-delivered pulmonary rehabilitation program (TelePR) & Standard, office-based pulmonary rehabilitation program (SPR)  Both arms of the study included a referral to PR for 8 weeks, social worker follow-up, and surveys administered at baseline, 8 weeks, 6, and 12 months

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						Participants in the TelePR arm had PR delivered via telehealth in either the participant's home or community center (if preferred and depending on space in their homes). All equipment delivered to the patient home.  In the onsite SPR arm, two SPR sites were made available to participants within the

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						geographic area:  Key Findings  Qualitative interviews were conducted to understand the high attrition rate  Only 51% of those referred to TelePR attended at least one PR session, compared to 28% of those referred to SPR.  There was no statistically significant difference in the primary outcome (6-month COPD readmission/dea th) between the TelePR and SPR groups  Barriers included co-mobid conditions and therapies, social constraints

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						Few participants continued to exercise
Poon et al. (2022)	USA	This report investigates patients' perception of MRP and patient-centered strategies among a cohort of the older adult group in a historically Black urban community. The study design is qualitative using structured open-ended questions in a multidisciplinary patient-centered focus group. Patients (age 65 years or older) taking seven or more medications were recruited	N= 8 (Black patients)     Mean age= 65 or older     N=29 (Caregivers,physician, NP, pharmacist, health educator, social worker) Diagnosis     Multiple chronic conditions	Qualitative research	Concept(s)  Polypharmacy  multiple chronic illnesses  Socio Ecological model  Context  Community base seniors group	Key Findings  Trusting patient-provider relationships strongly influenced medication adherence.  Previous experiences, whether personal or from friends and family, affected medication adherence.  Many participants lacked an updated medication list, despite medication reconciliation efforts in healthcare settings.  Socio Ecological model

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						Patient-level:complexity of medication regimens leading to forgetfulness, adverse drug events, and lack of trust in provider recommendations.      Interpersonal and community-level; medication sharing among neighbors.      Health system-level:excessive prescribing, polypharmacy, and confusion arising from fragmented electronic medical records across different facilities.      Policy-level concerns about insurance coverage and

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						medication costs, leading to medication hoarding or taking less than prescribed to stretch supplies.
Presley et al. (2020)	USA	To compare a community-based diabetes self-management education (DSME) plus mobile health(mHealth)—enhanced peer support intervention to community-based diabetes self-management education (DSME) alone for African American adults with poorly controlled type 2 diabetes.	<ul> <li>N= 97</li> <li>African         American     </li> <li>Mean age= 54.9         years     </li> <li>Diagnosis</li> <li>Type 2 diabetes</li> </ul>	RCT	Concept(s)  Peer support;  Mobile health  Community health worker  DSME Context  Community based setting(churches)  Safety net health care system	Intervention Intervention group received community- based diabetes self- management education (DSME) plus 6 months of mHealth- enhanced peer support, including 12 weekly phone calls, then 3 monthly calls from community health workers, who used a novel web application to communicate with participants'

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						healthcare teams.  In the control group, participants received community-based DSME alone.  Key Findings/Theme  Targeted community-based DSME with and without peer support improved glycemic control among low-income, African American adults with poorly controlled type 2 diabetes
Raman et al. (2022)	USA	This study evaluated the efficacy of a telephone-based strategy for inviting high-risk patients with severe hypertension to weekly self-	<ul> <li>N= 265</li> <li>Black males</li> <li>Mean age= 55.6</li> <li>Diagnosis</li> <li>Hypertension</li> </ul>	Quality improvement	Concept(s)  Patient education, Plan-do-Study Act Racial health disparities telephone outreach Context	Intervention  Plan-Do-Study- Act quality improvement approach in three 3-month cycles from August 2019 to July 2020.

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
		management education classes. Further, the study assessed how the outreach intervention correlated with relevant quality improvement outcomes, including improved blood pressure and primary care follow-up among our clinic population of Black men with severe hypertension			Federally qualified health center	Telephone Outreach, Self- Management Education Classesby health professionals, Telephone outreach conducted by social work students, community health worker or student volunteer (multiple attempts) Key Findings/Theme Being reached by phone was significantly associated with an increased likelihood of attending follow-up appointments at the clinic.
Reddick and Grey (2023)	USA	The aim of this study was to evaluate a diabetes shared	<ul> <li>N= 37</li> <li>African     American (26-     Female; 10</li> </ul>	Mixed methods (Pre/post intervention)	Concept(s)  Cultural tailoring  Shared medical appointment.	Intervention (Shared medical appointments-SMA)

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		medical appointment (SMA) model program that has been culturally tailored to address the unique social determinants of health barriers faced by an inner city African American population in Norfolk, Virginia	male; 1 no answer)  • Mean age= 58.43 years  Diagnosis  • Type 2 diabetes		Context  ● Health living community center	<ul> <li>The program was specifically designed for low-income, underserved, and medically vulnerable African Americans</li> <li>A one-on-one visit with a nurse practitioner or medical doctor to discuss individual treatment plans, concerns, and questions.</li> <li>A diabetesfocused exam and review of lab results.</li> <li>Three hours of group education in a classroom and simulated kitchen setting with 8–12 participants.</li> <li>Instructors who are African American medical</li> </ul>

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						professionals familiar with the social determinants of health barriers  Curriculum that follows the Association of Diabetes Care and Education Specialists (ADCES) 7 Self- Care Behaviors education format.  Teaching methods that acknowledge cultural norms and preferences of participants.  Culturally specific examples and hypothetical scenarios to enhance relatability and impact of the lessons.  A cooking demonstration that features healthier

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						alternatives traditional African American dishes Key Findings/Theme  Culturally tailored diabetes SMA program significantly increased participants' perceived diabetes self- care confidence. participants were highly satisfied with the culturally tailored diabetes SMA model program
Rovner et al.2023	USA	This randomized controlled trial compared the efficacy of a novel intervention called the Diabetes Interprofessional Team to Enhance Adherence to Medical Care (DM I-TEAM) to usual	<ul> <li>N= 200</li> <li>Black (73.0% female)</li> <li>Mean age= 64.9 years</li> <li>Diagnosis</li> <li>Type 2 diabetes</li> </ul>	RCT	Concept(s)  Health Disparities  Social Determinants of Health Context  Emergency departments (EDs) of two urban academic medical	Intervention  Diabetes Interprofessiona I Team to Enhance Adherence to Medical Care (DM I-TEAM) to usual medical care (UMC)

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		medical care (UMC) to prevent return diabetes-related ED visits and hospitalizations over 12 months in 200 Black individuals with diabetes after an ED visit. The trial also identified baseline variables associated with return ED visits and hospitalizations			centers in Philadelphia, PA	<ul> <li>Diabetes         education and         behavioral         activation were         delivered by         race-concordant         research         assistants (RAs)</li> <li>RAs provided six         90-minute in-         home initial         treatment         sessions over 3         months,         followed by         three booster         sessions over         the next 8         months</li> <li>The intervention         also included         telehealth visits         with a diabetes         care and         education         specialist (DCES)         and primary care         physicians         (PCPs)</li> <li>A clinical         pharmacist         made         suggestions to</li> </ul>

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						PCPs to optimize medication plans  Key Findings/Theme  The DM I-TEAM intervention was not more effective than usual medical care in preventing diabetes-related ED visits or hospitalizations over 12 months.  These findings highlight the complexity of addressing health disparities and the need for interventions that consider both individual and systemic factors.
Safford et al. (2024)	USA	Among Black rural adults with persistently uncontrolled hypertension attending primary care clinics, to	<ul> <li>N= 1209 (69 rural primary care practices)</li> <li>Black adults(62% female)</li> </ul>	Cluster RCT	Concept(s)  Chronic Care model  Health disparities	Intervention (Four group randomization)  • Enhanced Usual Care (EUC)

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		determine whether peer coaching (PC), practice facilitation (PF), or both (PCPF) are superior to enhanced usual care (EUC) in improving BP control	<ul> <li>Mean age= 58         years         Diagnosis         <ul> <li>Hypertension</li> </ul> </li> </ul>		Medication adherence Context     Black belt in Alabama	alone: 406 participants  Practice Facilitation (PF) plus EUC: 382 participants.  Peer Coaching (PC) plus EUC: 424 participants.  Peer Coaching plus Practice Facilitation (PCPF) plus EUC: 380 participants  Key Findings  Neither PC nor PF alone, nor in combination (PCPF), improved BP control or BP levels compared to EUC.  There are complex challenges involved with managing hypertension effectively within this high- risk,

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						underserved population
Sato et al. (2023)	Tanzania	The objectives of this study were to identify difficulties and their related contexts non-communicable disease (NCD) patients in rural Tanzania experienced, examine how patients managed the situation by seeking better treatment of the diseases, and propose a realistic approach for optimizing disease management with long-term perspectives in resource-limited settings, based on views of patients (PTs), health-care providers (HPs), and health volunteers (HVs	<ul> <li>N= 56</li> <li>African</li> <li>Mean age= 56-69 years</li> <li>Health care providers</li> <li>Community health workers</li> <li>Diagnosis</li> <li>Hypertension</li> <li>Type 2 diabetes</li> </ul>	Qualitative research	Concept(s)  Non- communicable diseases  trust  positive attitudes, Context  Three district hospitals in the Dodoma region	Key Findings Patient disconted treatment against medical advice Lack of knowledge related to treatment plan Financial hardship Mistrust of medical treatment- preference for traditional medicine Lack of access to medical equipment and services Many patients recognize the need for regular clinic visits and demonstrate self-care behaviours.

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						<ul> <li>Family support plays a significant role</li> <li>Increase patient support needed</li> </ul>
Schober et al. (2021)	USA	In this article, we examine barriers and facilitators of medication adherence among urban African Americans with hypertension.	<ul> <li>N= 24</li> <li>African         American 58.5%         women</li> <li>Mean age= 59.5         Diagnosis</li> <li>Hypertension</li> </ul>	Qualitative research	Concept(s)  • Medication adherence  • Minority health Context  • Seven African American churches	Key Findings  The most common barriers to adherence included undesirable side effects  Forgetting to take medication and delaying until the next dose  Lack of motivation for taking medication s, Costs.  Fatigue, pain, or illness preventing medication adherence

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						Discomfort with putting drugs or chemicals into the body.      Misplacem ent of medication, medical procedures      Lack of motivation      Placement strategy, daily routine, seek assistance, reminders
Senteio et al. (2021)	United States	Our objective was to describe the feasibility of using a community-based health education session that used intergenerational technology transfer to promote use of technology to support self-management. The team designed	<ul> <li>African         American older         adults (aged ≥50         years; n = 39)</li> <li>younger adults         (aged 18–49         years; n = 26</li> <li>Mean age=         49.31 years         Diagnosis</li> </ul>	Pre/post	Concept(s)  Health disparities  Technology self-efficacy  Context  2 urban centers in Detroit	Intervention  The sessions brought together African American older adults with diabetes and younger adults with smartphones and encouraged

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
		a health and technology education session then measured its impact on African American older adults' self-efficacy for using technology to support self-management	• Type 2 diabetes		Community based participatory research	each other to use them for specific tasks, such as downloading a health app focused on nutrition, medication, or exercise.  Key Findings  Improved self- efficacy and confidence for both older and younger.  The potential of using intergenerationa I technology transfer as an effective approach to improve self- efficacy for diabetes self- management among African American older adults.  Authors suggest that such interventions

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						should be considered by health educators and practitioners to address persistent health disparities.
Senteio and Murdock (2022)	USA	This study aims to conduct a systematic review of the literature that describes the efficacy of consumeroriented HIT interventions designed to support self-management involving African American and Hispanic patients with chronic diseases	<ul> <li>N= 640 (SD 209.5)</li> <li>N=27 studies</li> <li>African American</li> <li>Hispanic</li> <li>Mean age= Diagnosis</li> <li>Varied</li> </ul>	Systematic review	cepts  Technology assessment  Mobile phone Context Home settings	Key Findings  Intervention- generated inequality occurs when technology- enabled health informatics approaches disproportionall y benefit most populations. Therefore are less effective for minority populations.
Singh et al. (2023)	USA	We explored (1) the characteristics and outcomes of CBCTE programs and (2) which strategies for culturally appropriate	<ul> <li>N= 27 studies</li> <li>African         American     </li> <li>Mean age= N/A         Diagnosis         Diabetes     </li> </ul>	Systematic review	Concept(s)  Culturally tailored  Community- based  Health equity Context	Key Findings  ● Reported program benefits included physiological,

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
		interventions have been used in Community Based culturally tailored education (CBCTE) programs, and how they have been implemented.	• Hypertension		Community based	medication- related, physical activity, and literacy.  Cultural tailoring strategies included targeted Black communities, constituent- involving (e.g., community informed), evidential (e.g., integrated community resources), linguistic (e.g., delivered in community's dialect/accent), and sociocultural (e.g., integrated community members' religious practices).
Swaleh and Yu (2021)	Canada	To conducted a qualitative study to explore diabetes selfmanagement in the	<ul><li>N= 43</li><li>African American</li></ul>	Qualitative research	Concept(s)      African Canadians     Black Canadians	Key Findings  • Perceived barriers included lack of culturally

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		Black Canadian community using the lens of the Health Belief Model.	<ul> <li>Mean age=         majority over 65         years         Diagnosis         <ul> <li>Type 1 and Type</li> <li>Diabetes</li> </ul> </li> </ul>		<ul> <li>Caribbean         Canadians</li> <li>Health Belief         Model</li> <li>Context</li> <li>Greater Toronto         Area</li> </ul>	appropriate dietary advice, lack of shared decision-making driven by a language barrier and cultural mismatch between patient and provider, socioeconomic status and Difficulty navigating and accessing the Canadian health- care system. Peers, family members, churches and online
Tharakan et al. (2024)	USA	To use the Reach, Effectiveness, Adoption, Implementation, Maintenance (RE-AIM) framework to evaluate an educational model addressing self- management of uncontrolled hypertension	<ul> <li>N= 345</li> <li>African         American     </li> <li>Mean age= 55.4         Diagnosis     </li> <li>Hypertension</li> </ul>	Mixed methods (Pre/post intervention)	Concept(s)  Educational Models  RE-AIM  Minority and Vulnerable Populations  Social & structural determinants of Health Context	Intervention (Closing the Gap (CTG)  • The Closing the Gap (CTG) program is a community-based initiative that aims to reduce health disparities in hypertension

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
					• FQHC	control among Black Americans.  Three pronged educational model  Training on blood pressure cuff use  Health behaviour goal setting Feedback and follow-up. Key Findings  Closing the Gap reduced severe hypertension for patients who completed the program.  Challenges were experienced maintaining contact with some patients Person also discussed social barriers that presented challenges (e.g., food insecurity)

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						that could have impacted patient results.
Thomas-Purcell et al. (2020)		More information is needed to understand the many aspects of spirituality that older Black patients use to manage MCCs	<ul> <li>N= 30</li> <li>Black (men and women)</li> <li>Mean age= 62</li> <li>Diagnosis</li> <li>Multiple chronic conditions</li> </ul>	Qualitative research	Concept(s)	<ul> <li>Key Findings</li> <li>Religion and Spirituality is a Way of Lifemany participants identify as Christian</li> <li>Facilitators to CDSM-participants emphasize prayer, stress management and natural remedies</li> <li>The Challenge of Medication Adherence, Lack of Diet and Exercise,</li> <li>Readiness for Technology Information seeking, mHealth, Barriers to technology use</li> </ul>

Author(s)/ Year of publication	Country	Aims/ Purpose	Study population (and sample size)	Study type /Methodology	Concept & Context	Intervention & Key findings
						<ul> <li>Incorporate scripture(a daily Word)</li> </ul>
Woods et al. (2023)	USA	We aimed to explore the perspectives of African Americans with hypertension and their family members on hypertension, self-management, and reciprocal family-hypertension impacts to inform future intervention design	<ul> <li>N= 23 (patient)</li> <li>N=23 (family)</li> <li>Mean age=         <ul> <li>60.73 years</li> </ul> </li> <li>African             American         <ul> <li>Diagnosis</li> </ul> </li> <li>Hypertension</li> </ul>	Qualitative research	Concept(s)  Culturally tailored Community-based participatory research Socio ecological model Health equity Context Church congregation	<ul> <li>Rey Findings/Theme</li> <li>Participants         strongly         emphasized         racism and         inequality as         significant         contributors to         hypertension         among African         Americans.</li> <li>Participants         vividly described         how the chronic         stress of living in         a racist         environment         takes a toll on         their well-being         and contributes         to high blood         pressure.</li> <li>Family plays a         vital role in         shaping health         behaviors and         supporting self-         management         efforts.</li> </ul>

Author(s)/	Country	Aims/	Study population	Study type	Concept &	Intervention & Key
Year of publication		Purpose	(and sample size)	/Methodology	Context	findings
						Culturally tailored interventions are crucial for effectively addressing hypertension in the African American population