Title

The Influence of Multiple Chronic Health Conditions on the Health of Older African Americans Living with Serious Mental Illness

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The Influence of Multiple Chronic Health Conditions on the Health of Older African Americans Living with Serious Mental Illness

A dissertation submitted in partial satisfaction of the

requirements for the degree of Doctor of Philosophy

in Nursing

by

Sharon Fay Cobb

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ABSTRACT OF THE DISSERTATION

The Influence of Multiple Chronic Health Conditions on the Health of Older African Americans Living with Serious Mental Illness

by

Sharon Fay Cobb

Doctor of Philosophy in Nursing

University of California, Los Angeles, 2017

Professor Janet C Mentes, Chair

Managing a serious mental illness (SMI) is a precursor for multiple comorbidities, geriatric syndromes and premature mortality. The purpose of this dissertation was to examine the health status of 150 older African Americans diagnosed with SMI. The first manuscript examined chronic illnesses and geriatric syndromes among two age cohorts ($\leq$ 55 years of age and 56 and older years of age). Utilizing descriptive, correlational, and bivariate analyses, the most prevalent medical conditions in this sample were hypertension (64%), chronic pain (60%), and arthritis (44%). The most frequently reported geriatric syndromes were sleeping problems (65%), vision issues (58%), and dizziness (47%). Psychiatric illnesses and geriatric syndromes were more found to be higher in the younger age cohort as compared to the older cohort.

The second manuscript focused on understanding the intersection of quality of life (QOL), self-perceived health and chronic health conditions. Almost two-thirds of the sample population rated their health as “fair” or “poor”. Lower scores of QOL was associated with

multiple chronic health illnesses and geriatric syndromes, including major depression (p=.021), pain (p=.002), lung disease (p=.042).

The third manuscript investigated functional status and chronic health conditions in this population. The majority of the subjects (N=66, 44%) reported that their health is the same, while 31% stated that their health is worse than one year ago. Lower physical functioning was associated with panic disorder (p=.018), seizures (p=.039), pain (p=.03), and falls (p=.011).

The fourth manuscript focused on substance use among this population. Findings showed that less than half (42%) consumed alcohol, 46% are tobacco smokers, and half (50%) have either a current or former history of illicit drug use. Cigarette smoking was associated with asthma (p=.018), bladder control problems (p=.015), and schizophrenia (p=.004). Illicit drug use was associated with falls (p=.05) and vision problems (p=.046). Alcohol use was significantly associated with major depression (p=.026), kidney disease (p=.019), stomach disease (p=.05) and bladder control issues (p=.038).

These findings contribute to a growing body of literature regarding the health of minority populations diagnosed with SMI. Overall, the results can lead to the creation and implementation of nurse-driven interventions for populations of color.

The dissertation of Sharon Fay Cobb is approved.

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Cobb, S., Phillips, L.R., Mentes, J., McNeal, G., & Evers-Manly, S. The Literature Review of the Black-White Mortality Crossover. UCLA Research Day 2013. Westwood, CA. April 2013.

Introduction to Dissertation

Serious mental illness (SMI) is a risk factor for premature morbidity and mortality costing the American health care system $193 billion annually (Insel, 2008). Individuals diagnosed with a SMI experience premature mortality 25 years earlier than individuals in the general population due to undetected and poorly managed chronic health diseases, such as cardiovascular or respiratory illnesses (Parks, Swendsen, Singer, & Foti, 2006).

SMI includes chronic mental disorders, such as schizophrenia, bipolar disorder, major depressive disorder, and schizoaffective disorder, with symptoms consisting of paranoid ideation, disorganized thinking, delusions, and impulsivity (American Psychiatric Association, 2013; Corrigan et al., 2017; Record et al., 2016). Symptoms of SMI can mask medical symptoms, resulting in a delay of detection, care, and treatment of chronic illnesses (Bonguli, Lesson, & Escandon, 2013).

The health-related needs and cost of multiple comorbidities and increased disability are on the rise (Heslin, Elixhauser, & Steiner, 2017). Adults with SMI are less likely to receive adequate care and attention to their health needs (Kilbourne et al., 2011; Poremski, Whitley, & Latimer, 2014). In 2009, the Federal government reduced the mental health budget by $4.35 billion dollars, which was one of the largest reductions in the history of mental health funding in the United States (U.S) (Glover, Miller, & Sadowski, 2012). This loss of funding will likely lead to years of increased homelessness due to a lack of available housing and other resources (Teplin, McClelland, Abram, & Weiner, 2005). Not surprisingly, over one quarter of the homeless population are living with a mental illness (National Coalition for the Homeless, 2009). Adults with SMI are more likely to find themselves in poverty (Wilton, 2004), be involved in the criminal justice system (Al-Rousan, Rubenstein, Sieleni, Deol, & Wallace, 2017), lives in high-

crime areas (Townley, Brusilovskiy, & Salzer, 2017), and have inadequate public transportation (Bellamy et al., 2016) when compared to their non-SMI peers. For example, in one study among adults with SMI (n=5,774), over half (67%) reported a history of incarceration and 32% had a long period of incarceration (> 6 months) (McGuire & Rosenheck, 2004).

Sparse data exists for minority adults with SMI, specifically older adults. Older adults with SMI are at a high risk for multiple chronic health conditions due to age and factors related to their mental illness (Sylevestre et al., 2015). People with SMI are more likely to have poor physical health and their risk of death is five times greater than older adults without SMI, which averages 25-30 years of life lost (Ehrlich et al., 2015). Explanations for this disparity include longer periods of unemployment (Bryant-Bedell & Waite, 2010), poorer nutritional intake and diet (Shen, Sambamoorthi, & Rust, 2008), substance abuse (Gibbs et al., 2013), side effects of psychotropic medication (Nazer, Shankar, Ali, & Al-Najjar, 2012; Serrettie et al., 2013; Bakk, Woodward, & Dunkle, 2013), financial distress (Starkey et al., 2012), and poor living conditions (Corrigan et al., 2015). Among the older adult population, 2 percent have a serious mental illness (Cummings & Kropf, 2011). Older adults with SMI have to manage their psychiatric illness, in addition to their medical, functional, social issues and challenges.

Among community dwelling older adults, almost one in five individuals with SMI are reported to have a mental illness or substance abuse disorder (Lin, Zhang, Leung, & Clark, 2011). Many individuals with SMI are diagnosed in their early life, resulting in the loss of economic and social resources throughout adulthood, causing further vulnerability and loss of support in older age. SMI can affect an individual in multiple ways, affecting nutrient intake, energy levels, and sleeping patterns (Bryant-Bedell & Waite, 2010). They may also face interruptions in employment and social relationships over their life course due to psychiatric

hospitalizations and symptoms from their mental illness, such as depression or hallucinations (Cummings & Kropf, 2011). In addition, they are more likely to be less educated, live alone, and live in poverty (Pratt, 2012). However, literature existing on older adults with SMI is very scant.

Former U.S. Surgeon General David Satcher reported that minorities suffer a larger burden of mental illness due to poverty, stigma, and discrimination (United States Department of Health and Human Services [U.S. DHHS], 2001). Although it is known that older minorities with mental illness are disproportionately affected with multiple chronic conditions, there is little information documenting the health status among older African Americans (OAAs) with SMI. OAAs represent 2.9% of the population with SMI (Park-Lee, Lipari, Hedden, Copello, & Kroutil, 2016). Yet, they experience factors related to mental health problems, such as poverty, homelessness, institutionalization, incarceration, stigma, and racial discrimination at higher rates when compared to other racial groups (U.S. DHHS, 2001).

Research is critically needed that addresses how aging and physical and mental chronic illness has affected this subpopulation and their health outcomes (DeLilly, 2012). OAAs living with mental illnesses experience the threat of triple jeopardy which include older age, diagnosis of a mental health problem, and are part of a minority group. In addition, African Americans are 20 percent more likely to report psychological distress as compared with Whites (U.S. DHHS, 2009). In fact, OAAs report more mental distress than age-matched Whites, Asian-Americans, and Hispanics (Sorkin, Pham, & Ngo-Metzger, 2009). Hypothesized barriers for OAAs with SMI include a mistrust of health care providers, lack of culturally competent programs and services, and resource barriers, such as income and transportation (Cruz, Pincus, Harman, Reynolds, & Post, 2008). There are many gaps in the literature about the health of individuals with SMI affected with multiple chronic health conditions. Physical health problems may be overlooked by

the individual themselves and health care providers who may not screen for physical problems due to existing mental problems (Kennedy, Salsberry, Nickel, Hunt, Chipps, 2005). These individuals may initially present to health care providers with symptoms, such as decreased appetite or weight changes, that may be mistakenly attributed as side effects of psychiatric medication, as opposed to new medical problems (Gimblett, 2015; Robson & Gray, 2007).

Many barriers exist for treatment of their SMI, which include mistrust of their healthcare provider, limited knowledge of the etiology of their SMI, the stigma attached to their SMI, and financial strain (Waite & Killian, 2008). Various stressors for SMI identified by the African American population include past use of drugs and alcohol, dysfunctional family, child abuse, divorce/breakup, the economy, unemployment, and homelessness (Bryant-Bedell & Waite, 2010). In addition, OAAs adults may have experienced stigma and discrimination over their lifetime because of their mental illness (Pratt, 2012). Many OAAs believe that they are not susceptible to SMIs, even after they have been diagnosed (Waite & Killian, 2008). This has resulted in lower quality of care and a growing gap between services needed and those that are provided.

To address these knowledge gaps, this dissertation focused on quality of life, self-perceived health, functional status, and substance use and its relation to their health status for this descriptive and exploratory study. All manuscripts were guided by the Ethnocultural Gerontological Nursing (EGCN; Phillips et al., 2015). The ECGN model highlights the experience of aging of transcultural groups with bringing sensitivity and awareness to the issues that they face, such as SMI. The first manuscript focused on analyzing the frequency of chronic health illnesses and geriatric illness across age cohorts. The second manuscript investigated the relationship between self-perceived quality of life and multiple chronic illness and geriatric

syndromes. The third manuscript examined functional status and potential correlations with health issues for this population and the fourth manuscript analyzed substance use practices with their chronic health illnesses. All four manuscripts will be submitted for independent publication.

The population sample consisted on 150 older African American adults, ages 45 to 78, who self-reported an SMI diagnosis (e.g., major depression, schizophrenia, bipolar disorder, panic disorder, schizoaffective disorder, obsessive-compulsive disorder, and post traumatic disorder) and spoke English. The participants were recruited from a mid-size wellness clinic located in a low socioeconomic community of South Los Angeles.

Chapter one, the first manuscript, which is entitled, "Age Cohort Differences in Chronic Health Conditions among Older Africans Americans with Serious Mental Illness" analyzed the rates of various medical and psychiatric chronic illnesses and geriatric syndromes by age cohorts (ages 45-55 and ages 56+) using frequencies, independent t-tests, Chi-square analyses, and correlational tests. A structured questionnaire assessed the diagnosis of 22 psychiatric and medical conditions and 10 geriatric syndromes.

Chapter two, the second manuscript, entitled "Quality of Life among Older African Americans with a Serious Mental Illness" investigated the quality of life (QOL) and self-perceived health of this population using the 16-item Quality of Life Scale and a single-item global health-related quality of life. Associations were examined between QOL and self-perceived health and chronic health illnesses and geriatric syndromes.

Chapter three, the third manuscript, entitled "Functional Status among Older Africans Americans with Serious Mental Illness" measured the following components in this population using the *Short-Form 36* instrument: physical function, physical and emotional role limitation, bodily pain, general health, social functioning, and mental health. Geriatric syndromes and

medical illnesses were studied for any potential associations with various areas of functional status.

Chapter four, the fourth manuscript, entitled "Substance among Older Africans Americans with Serious Mental Illness" focused on substance use practices among this population. The structured questionnaire measured the lifetime use of cigarette smoking, alcohol intake, and illicit drug use (cocaine, marijuana, methamphetamine, and heroin). Any associations between chronic health conditions and substance use practices were analyzed.

Overall, these papers assist in contributing knowledge on the health issues of older African Americans managing an SMI and can lead to future nurse-driven interventions to improve their health status. Nurses can uncover knowledge that will assist in understanding the biological, psychological, environmental, and social risks for adverse health outcomes among those suffering with SMI. Nurses need to advocate for the development of culturally appropriate evidenced-based interventions for ethnic minorities. Findings from this study can assist in preparing culturally specific interventions that will advance the science and improve the wellness of older African Americans with SMI.

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Chapter I

Age Cohort Differences in Chronic Health Conditions among Older Africans Americans with Serious Mental Illness (SMI)

Older African Americans (OAAs) with a serious mental illness (SMI) are currently managing a chronic health condition and are at risk for additional comorbidities, poor health outcomes, and premature mortality. The purpose of this cross sectional study (N=150) was to explore age differences between younger (45-55 years) and older (≥ 56 and older) with various mental, physical illness and geriatric syndromes. A structured questionnaire was administered to OAAs with SMI (mean= 55.8 years, SD 7.4 years) seeking services in a community-based, health clinic in South Los Angeles (SLA). Using a cross sectional research design, frequencies and independent t-test and Chi-square tests were performed using SPSS v22. Results revealed that our older cohort (≥ 56 and older years) had higher rates of medical conditions (e.g., heart disease, diabetes, cancer), but the younger cohort (45-55 years) reported more geriatric syndromes (e.g., dizziness, sleeping issues, confusion). Hypertension ($p<.001$) and arthritis ($p<.001$) were significantly associated with OAAs. These findings suggest that tailored interventions to help manage multiple chronic conditions are needed for both older and younger subgroups of the OAAs to improve their health outcomes.

Keywords: Older African American adults, serious mental illness, age, chronic illness

Introduction

Approximately six percent of all adults adults in the United States (U.S.) are diagnosed with a serious mental illness (SMI), which is a prevalent cause of disability and functional impairment (National Alliance on Mental Illness [NIMH], 2017). While there is wide variation in the estimates of the various types of SMIs, at least 4 percent of older adults in the U.S. are diagnosed with SMI (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). The rate of SMIs is higher in the African American population as compared to Whites (Williams et al., 2007). For example, chronic depression has been found in 56 percent of African Americans as compared to Whites with 38 percent (Williams et al., 2007). Factors that contribute to this health disparity include a mistrust of their healthcare provider, limited knowledge of the etiology of their SMI, the stigma attached to their SMI, and financial strain (Waite & Killian, 2008).

SMI commonly refers to a range of mental health illnesses (e.g., paranoid schizophrenia, psychotic and bipolar disorder, major depressive disorders, schizoaffective disorders, obsessive-compulsive disorders, panic disorder, and post-traumatic stress disorders (National Alliance of Mental Illness, 2015). A growing body of research literature shows that individuals diagnosed with SMI die earlier compared with their same age counterparts without SMI (Lutterman et al., 2003), which may be attributed to a higher risk of medical conditions (McGinty et al., 2012; Whaley, 2010). As our aging population increases (Ortman, Velkoff, & Hogan, 2014), knowledge regarding older adults managing SMI is becoming more urgent.

Racial and ethnic minority older adults are among the most vulnerable populations in need of mental and physical health care (Chow, Jaffee, & Snowden, 2003; Ng et al., 2014; Oh et al., 2010). Several antecedent risk factors, such as incarceration, homelessness, poverty, trauma,

and institutionalization (DHHS, 2001a), place this group at greater risk for SMI. For instance, the U.S. Census Bureau reports that the current rate of SMI among African Americans, over 50 years of age, is 2.4 percent (SAMHSA, 2015). OAAs managing SMI faces multiple health disparities (e.g. lower access to and utilization of health care (Samnaliev, McGovern, & Clark, 2009) and poor health outcomes (Eack & Newhill, 2012) due to various environmental, biological, and psychological factors. Before these health disparities can be addressed, a better understanding of the illnesses they experience should be investigated among this subgroup of the African American population.

To obtain a complete health profile of OAAs with SMI, research efforts must focus on the physical health characteristics (e.g. major health diseases, chronic conditions) of the population. Mental health can greatly impact the overall health of an individual, leading to physical decline and a premature aging (Chafetz, White, Collins-Bride, Nickens, & Cooper, 2006). To understand the health of the OAA population with SMI, individuals younger than the chronological age criterion of 65 years must be included (WHO, 2000). Due to mental illness affecting both functional and social status, focusing on those who are at least 45 years old incorporates a multidimensional definition of older persons in this group (Essali & Ali, 2012; Wynn Own & Castle, 1999).

Serious Mental Illness among Older African Americans

Few studies have been conducted with OAAs diagnosed with various SMIs with the majority focusing on depressive symptoms (Bryant-Bedell & Waite, 2010; Lincoln, Abdou, & Lloyd, 2014; Torres, 2013). The rate of depression ranges from 10 percent to 33 percent among OAAs (Kurlowicz. Outlaw, Ratcliffe, & Evans, 2005), which has been found to be more chronic and severe as compared with White Americans (Williams et al., 2007). More recent evidence

indicates that African Americans have higher prevalence rates of anxiety, mood, depressive, and psychotic disorders as compared with White Americans (Banerjea, Findley, Smith, Findley, & Sambamoorthi, 2009; Gibbs et al., 2013; Sorkin, Pham, & Ngo-Metzger, 2009; Woodward et al., 2012).

Disparities in health outcomes across subpopulations of individuals with mental illness may be attributed to the individual's membership with a specific ethnic/racial group (Lukyanova, Balcazar, Oberoi, & Suarez-Balcazar, 2014). OAAs have suffered more mental distress than White Americans due to a lifetime exposure of racism, prejudice, poverty, and violence and have fewer psychological, social, and financial resources as compared with White Americans (Brown, 2003; Choi & Gonzalez, 2005; Conner, et. al, 2010; DHHS, 2001; Outlaw, 1993; Williams, Neighbors, & Jackson, 2003). These factors may precipitate further risk for SMI. OAAs also report lower life satisfaction, more exposure to major lifetime discrimination, and a greater number of discriminatory events as compared with White Americans and Latinos (Ayalon & Gum, 2011).

Low socioeconomic status can be considered a chronic stressor, which has been linked to poor social and environmental conditions (Colman & Ataullahjan, 2010). OAAs experience higher rates of life-course financial strain, which is significantly associated with depression, cognition, and disability, leading to poor health outcomes (Szanton, Thorpe, and Whitfield, 2010). African Americans with mental illness face lower employment outcomes when compared with White Americans with mental illness (Lukyanova, Balcazar, Oberoi, & Suarez-Balcazar, 2014).

Due to multiple disparities, African Americans with mental illness experience socioeconomic inequality, traumatic and stressful environments, lower levels of education, and

the inability to afford health services (Conner et al. 2010; Keenan et al., 2013; Lo, Cheng, & Howell, 2014). These social disadvantages can lead to chronic physical debilitation and mental stress. As a result, OAAs with SMI are more susceptible to physical and mental ailments (Cook et al., 2016), contributing to a decline overall health. While previous research studies have examined the health status of adults with serious mental illness, very few have focused specifically on the health OAAs managing an SMI, prompting the need for this study.

SMI and Multiple Chronic Health Conditions

Adults with SMI are more likely to manage multiple chronic conditions compared to those who do not have SMI (Schwartz, Bradley, Sexton, Sherry, & Ressler, 2009). For example, they have higher rates of Human Immunodeficiency Virus (HIV) infection (4% to 22%) compared with the U.S. population (0.3% to 0.8%) (Encandela et al., 2003) and higher rates of lung, breast, and colon cancer (McGinty et al., 2012). Furthermore, they have an increased rate of hospitalization and mortality compared to their same-aged peers (Durbin et al., 2013).

Older adults with SMI have more consequences from multiple chronic health conditions, due to physiological aging-related changes, which complicate treatment. For example, metabolic changes lead to more cardiovascular events in older adults and increased progression of metabolic syndrome (Konz et al., 2014). Elderly individuals with SMI are at high risk for cerebrovascular disease, due to the high glucose levels and comorbid metabolic diseases (Huang et al., 2012). SMI results in the activation of an inflammatory response during acute crises; thus, individuals are predisposed to atherosclerosis, which may lead to other circulatory disorders, resulting in premature death (Huang et al., 2012). Long-term antipsychotic medication use is a potential contributing factors to chronic illnesses among older individuals with SMI through their

link to weight gain and metabolic abnormalities which result in obesity, diabetes, or thyroid complications (Konz et al., 2014).

Older adults with SMI experience higher rates of chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), thyroid disease, and falls (Hendrie et al., 2013). Likewise, older adults with SMI report a higher prevalence of chronic pain, heart disease, cancer, diabetes, and respiratory, neurological, gastrointestinal conditions when compared to older adults without SMI (Wetherell et al., 2010). Older adults with SMI experience high rates of cardiac, endocrine, gastrointestinal, and pulmonary diseases (Brenes et al, 2009; Manetti et al., 2014). In one study, a putative link was found between major depressive disorder (MDD) and the risk of developing metabolic syndrome in African American and White American women (Goldbacher & Bromberg, 2009). Further research is needed to uncover potential associations with other SMIs and metabolic syndrome and its risk factors. All of these findings suggest that more exploration among OAAs is needed to identify the chronic health conditions they are managing.

Another significant issue is geriatric syndromes, which can be defined as clinical conditions that do not fit into discrete illness categories, but rather have many causative factors, such as dizziness or falls (Simmons et al., 2016). Geriatric syndromes usually involve many organ systems and physiological injuries, leading to a poorer quality of life and functional status (Inouye, Studenski, Tinetti, & Kuchel, 2007). Persons with geriatric syndromes have at least one of the four hallmark risk factors: older age, baseline cognitive impairment, baseline functional impairment, and impaired mobility (Inouye, Studenski, Tinetti, & Kuchel, 2007). The rate and various types of geriatric syndromes affecting the OAA population with SMI is also unknown. However, these individuals may have high rates of geriatric syndromes, which are usually highly

prevalent in older adults, but may also appear in younger populations managing multiple chronic conditions (Greene et al., 2015).

Even though older adults with SMI use more inpatient and outpatient health services, they receive lower quality of care due to their income levels and lack of insurance coverage (Swartz & Jantz, 2014). Missed opportunities for preventive care are common in individuals with SMI related to them having fewer resources and reliance on public assistance for mental health care (Beard et al., 2009). For example, women with SMI were less likely to receive mammograms, pelvic examination, Pap smear tests, or hormone replacement therapy, as compared with the general population of women (Woodhead et al., 2016; Lindamer et al., 2003).

Serious Mental Illness and Age among Racial and Ethnic Minorities

Limited attention has been given to examining the health conditions of minorities managing SMI across age cohorts. The SMI population is a heterogeneous group marked by multiple comorbidities, cognitive impairments, and decreased functional status throughout their aging process (Montilla Padilla, Martin-Asenjo, & Bueno, 2017). However, public health efforts to promote mental health among older adults through increased awareness and knowledge are impeded by stigma regarding psychiatric disorders and treatment as well as ageism (Zanjani, Davis, Krueger, and Murray, 2012). Mental illness can be harmful to an aging adult's health and may go untreated due to falsely being attributed to normal aging. Older adults with SMI have longer lengths of hospital stays and emergency department wait times and higher readmission rates (Adams, Koop, Quan, & Norris, 2014). Repeated events can lead to higher rates of mortality, poor functioning and morbidity.

As the percentage of older Americans who identify as non-Latino White shrinks dramatically over the next decade (Ortman & Valkoff, 2014), it is critical that the scientific

community understand the health profile of individuals aging with SMI across cultural and ethnic groups. In comparison to White Americans, African Americans are more likely to be diagnosed at a younger age with chronic illnesses and are more incapacitated from these diseases (Baker & Green, 2005). However, very little literature describes the health profiles of OAAs with SMI or the chronic conditions they face as they age.

Purpose

The purpose of this study was to examine the relationship between younger (45-55 years) and older ($\geq$ 56 and older) African Americans with SMI. Understanding the associations among these variables may shed light on the type and number of chronic conditions these individuals may develop as they age.

Methods

Design

A cross sectional study was undertaken to assess OAAs with a SMI were recruited from South Los Angeles (SLA). A structured questionnaire which addressed chronic health conditions and health status was administered. The study was approved by the University Human Subjects Protection Committee, with data collection occurring between June to September 2016.

Sample

In total, 150 participants were enrolled in the study, self-identified as Black or African American, and were at least 45 years of age or older. In addition, they reported having been diagnosed with SMI for at least one year, were able to speak English, and provided informed consent.

Site

Participants were recruited from a mid-size community clinic in South Los Angeles area, which has a high density of African Americans. The clinic provides primary health care services for low-income and uninsured individuals, specifically focusing on those with incomes below 200% of the federal poverty line.

Procedures

Flyers were posted throughout our recruitment site and participants were approached during random times of the week and all hours of clinic operation to prevent bias in the timing of survey completion. At the recruitment site, the principal investigator (PI) answered questions and administered questionnaires to interested participants who met the eligibility criteria and provided consent. The PI administered all study measures face-to-face to all participants in the field, which lasted approximately 30-60 minutes. All participants were provided with a $15 gift card as compensation for their time. All data and personal information was decoded and names of participants were replaced with a numerical code to ensure confidentiality.

Theoretical Framework

To fully understand the factors affecting the health of OAAs with SMI, the Ethno-Cultural Gerontological Nursing (ECGN) model was utilized to inform the selection of measures. Developed and proposed by Phillips et al. (2015), the model aims to describe the health outcomes of older adults who belong to various ethnic and cultural groups. The application of the ECGN guided this study through its critical assessment of experiences and influences that describe the biological, psychological, and social conditions faced by this vulnerable population managing SMI. This study focuses on the health dimension of the ECGN model which incorporates the frequency and type of multiple chronic health conditions. The ECGN model posits that these components may be influenced by the following factors: political

and economic climate, cultural traditions, gender experiences, cohort influences, and perceptions of discrimination, aging, and wellness.

Measures

Sociodemographic characteristics assessed age, gender, education, marital status, income, current employment status, and years of work history were assessed.

Multiple Chronic Health Conditions were guided by the Self-Administered Comorbidity Questionnaire (SCQ) (Sangha et al., 2003) which assessed mental and physical illnesses (e.g. depression, schizophrenia, asthma) and the duration of these conditions (as measured in years). All questions regarding chronic health conditions were derived from the SCQ has well-established validity and reliability (Brunner et al., 2008; Wong et al., 2017) and its scores are correlated with the Charlson Index, a chart review-based instrument (r = .55) (Sangha et al., 2003).

Geriatric syndromes were assessed using the Fulmer SPICES: An Overall Assessment Tool for Older Adults questionnaire (Fulmer, 2012) and the Comprehensive Geriatric Assessment (Pilkington, Boland, & Dickson, 2017; Ward & Reuben, 2016). Participants were asked if they had any of the following: falls, dizziness, sleep problems, confusion, difficulty swallowing, bladder control problems, vision problems, hearing problems, difficulty walking, or skin breakdown.

Age Cohort was defined using the chronological age provided (in years). Participants 45-55 were defined as younger (45-55 years) and older ($\geq$ 56 and older).

Analysis Strategy

Descriptive statistics were generated for all demographic characteristics, chronic illnesses and geriatric syndromes. Chi-square and t-test analyses (Mann-Whitney U tests for non-

parametric variables) comparing younger and older cohorts were performed for demographic variables and chronic illnesses and geriatric syndromes. Analyses conducted separately for younger and older adolescent groups explored associations between all study variables.

Results

Demographics of Sample Population

The age of participants ranged from 45 to 78 years old (mean = 55.8 years, SD = 7.4 years), 61% were female and 81.3% were single (Table 1). In the entire sample, almost 30% of our sample reported having an educational level below the 12th grade, yet 20% held at least an associate's degree or higher. More than half (69.3%) earned below $10,800 a year. Likewise, less than half (40%) were unemployed, whereas 16.7% are retired. Over one third (34%) worked for over 21 years in their lifetime, compared to 35.3% who had less than 10 years of work experience.

Demographics Stratified by Age Cohort

Seventy-seven participants were in the younger cohort (range: 45-55 years old); 73 (range: 56-78 years old) in the older cohort. In the younger cohort, 72.7% were female and 61.6% identified as female in the older cohort. In regards to educational level, 31.2% in the younger cohort had an education level below the 12th grade compared to 26% in the older cohort. Focusing on degree attainment, 15.6% in the younger cohort had at least an associate's degree versus 26% in the older cohort. 76% of the older cohort reported being single compared to 85% in the younger cohort, which was similar in both age cohorts.

Over half (67.5%) of the younger cohort had a yearly income below $10,800 as opposed to 71.2% in the older cohort. Half of the younger cohort (51.9%) stated that they were unemployed as compared to 27.4% of the older cohort.

Psychiatric Illnesses

Table 3 reports the descriptive information in regards to psychiatric illnesses. The most common psychiatric diagnoses were major depressive disorder (78%), bipolar disorder (45%), and panic disorder (41%). The average length of years of managing these psychiatric illnesses was as follows: major depressive disorder (13 years), bipolar disorder (13 years), and panic disorder (14 years).

There was a higher frequency of all psychiatric illnesses in the younger age cohort compared to the older age cohort, with the exception of paranoid disorder (Table 3). The three most common psychiatric illnesses (major depressive disorder, bipolar disorder, and panic disorder) were found for both the younger cohort and older cohort (Table 4).

Medical Conditions

Table 4 reports the various medical illnesses faced among this population. In the entire sample population, the most common diagnosis was hypertension (64%), with an average illness duration of almost 13 years since diagnosis. The second most prevalent medical diagnosis was chronic pain (60%), which had an average of 11 years for illness diagnosis. Forty-four percent of the sample reported having arthritis, with an average duration of 9 years.

Hypertension was more prevalent in the older cohort (76%) as compared to the younger cohort (53%). Chronic pain was higher in the older cohort (70%) as opposed to the younger cohort (50%). Almost all medical diagnoses were higher in the older cohort except for stomach and blood diseases. Compared to those in the younger cohort, individuals in the older cohort were significantly more likely to be diagnosed with hypertension (X^2=9.03, p<.001) and arthritis (X^2=8.54, p<.001) (Table 3).

Geriatric Syndromes

The three most reported geriatric syndromes were sleeping problems (65%), vision issues (58%), and dizziness (47%) (Table 5). The average duration for geriatric syndrome management is as follows: sleeping problems was 10 years, vision issues was almost 12 years, and dizziness was 7 years. Focusing on sleeping issues, 45% reported daily sleeping problems in the older cohort compared to 24% in the younger cohort. Higher rates of geriatric syndromes were found in the younger age cohort with the exception of falls, vision issues, and difficulty walking.

Discussion

The purpose of this study was to examine the chronic health conditions among OAAs with SMI. Even though we did not find any significant differences of psychiatric illnesses between the age cohorts, the number of psychiatric illnesses reported by those in the older cohort was lower than the number in the younger cohort. This finding is similar to previous research that older adults report fewer depressive symptoms, psychosis, and psychiatric symptoms, including suicidal ideation when compared to middle aged (ages 35-54 years) adults (Gordon, Rosenheck, Zweig, & Harpaz-Rotem, 2012). Surprisingly, post-traumatic stress disorder was one of the most common diagnoses among the entire sample. It is interesting to note that compared to White Americans, AA elders have suffered more mental distress due to a lifetime exposure of racism, prejudice, poverty, and violence and have fewer psychological, social, and financial resources. Both mental distress and lack of resources represent risk factors for PTSD (Brown, 2003; Choi & Gonzalez, 2005; Conner, et. al, 2010; U.S. DHHS, 2001; Williams, Neighbors, & Jackson, 2003). Results of the present study suggest that to better understand the high prevalent rates of PTSD to potentially improve overall functioning, the causes of PTSD among OAAs should be more fully explored, especially with regard to social determinants of health.

Our findings indicate that the most common medical diagnoses (e.g., hypertension and chronic pain) in this population of OAAs are consistent with the high prevalence among the OAA population in general. At all ages, hypertension disproportionately affects the African American community compared to other ethnic groups in addition to high rates of hypertension-related complications, such as myocardial infarction or stroke (Still, Ferdinand, Ogedegbe, & Wright, 2015). Several studies have shown that African Americans report higher levels of pain than White Americans (Meghani, Thompson, Chittams, Bruner, & Riegel, 2015; Nguyen et al., 2004; Park, Engstrom, Tappen, & Ouslander, 2015; Taneja, So, Stewart, Evans, & Jason, 2015). Pain can also be a risk factor for sleeping problems, depression, cognitive impairment, and lower quality of life (American Pain Foundation, 2006). Therefore, chronic pain is a medical condition that may affect OAAs at high rates regardless of a diagnosis of SMI.

In this sample, with the exception of falls, vision issues, and difficulty walking, geriatric syndromes were more prevalent in the younger cohort compared to the older cohort. Although the differences were not statistically significant, this is still a very important finding that suggests younger individuals with SMI may be managing multiple geriatric syndromes, which may lead to worse clinical outcomes and more rapid functional decline as they age. Geriatric syndromes are very prevalent, multifactorial, and associated with a higher incidence of morbidity and mortality (McRae et al., 2014; Yang et al., 2015), The average number of geriatric syndromes in our sample, even in the younger cohort, was similar to the current average of three geriatric syndromes among older adults in a skilled nursing facility (SNF) (Bell et al., 2016), which may suggest an accelerated aging process in these adults with SMI. Younger older adults with SMI may require close monitoring to prevent the occurrence or reduce the effect of geriatric syndromes (Yang al., 2015). Even though geriatric syndromes are not considered chronic

illnesses, the high prevalence and untoward outcomes make them a high priority for assessment (Lee, Cigolle, & Blaum, 2009).

Limitations

There are several notable limitations to discuss; first, all measures were based on self-report which are prone to concerns over reliability and validity. Likewise, underreporting of chronic health conditions may have also have been a factor given that some individuals may not have known all their physical and mental healthcare diagnoses. However, obtaining information from medical records was not feasible since at least some participants were receiving care in multiple settings and providers. Although strides have been made with human research subjects ethics approval, seeking permission to examine medical records in the AA community may be poorly received given the historical issues related to ethics research violations (e.g., Tuskegee, Henrietta Lacks) (Mauffey, et al., 2017; Mays, 2012). These examples have contributed to mistrust of researchers and reluctance to participate in biomedical and social research in the AA community. Therefore, asking permission to obtain information from medical records may have created suspicion among participants and unwillingness to participate in the study. Last, the use of a convenience sample from a health care center in SLA may limit the external validity of this study and results may not be generalizable to other populations who live in rural or suburban areas. Despite these limitations, this study provides valuable insight into the lives of OAAs managing SMI.

Implications for Practice and Policy

There is a paucity of research which focuses on the health problems across older age cohorts for OAAs managing SMI. Several themes that emerged from the findings have implications for research, policy, and practice. Health providers should implement

comprehensive screenings to detect chronic illness and geriatric syndromes among aging individuals with SMI, even those who are in late middle age (e.g., 45 and older) (Brown-O'Hara, 2014). Routine clinical evaluations for geriatric syndromes should occur at least yearly for these individuals managing SMI since geriatric syndromes are associated with rapid aging of middle aged and older adults (Montilla Padilla, Martin-Asenjo, & Bueno, 2016). Healthcare providers should also screen for multiple syndromes at one time (Bell et al., 2016). For example, if an individual who report falls should be screened for difficulty walking, confusion, and dizziness. Geriatric syndromes have been found to a better indicator at predicting health outcomes than chronic conditions (Koroukian et al., 2016). Identifying individuals at younger ages who are risk for multiple geriatric syndromes may result in better health outcomes and reduction in long-term costs (May et al., 2014).

Conclusion

To our knowledge, this study is the first study to examine chronic conditions among OAAs with SMI focusing on chronological age cohort differences. The advantage of using this exploratory approach was to analyze the health profile of these community dwelling adults which have not been previously explored in the literature. This information is helpful in identifying younger individuals managing SMI who are at high risk for specific chronic conditions that may jeopardize their health. Likewise, any analysis of health among young older people should include geriatric syndromes. Future studies should analyze health outcomes such as quality of life and activities of daily living limitations as well as health care utilization and access to care in this population.

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Table 1

Sociodemographic Characteristics among Older African Americans (OAAs) (N= 150) with SMI

Demographic Variable	Entire Sample (N=150)		Younger Cohort (N=77) 45-55 years old		Older Cohort (N= 73) (56-78 years old)	
	Mean or N	(*SD* or %)	*Mean* or N	(*SD* or %)	*Mean* or N	(*SD* or %)
Age						
≤55	55.8	7.4	49	3.7	61.9	4.8
Gender						
Male	49	32.7	21	27.3%	28	38.4%
Female	101	67.3	56	72.7%	45	61.6
Education						
≤ 8th Grade	9	6.0	4	5.2%	5	6.8%
9th-11th Grade	34	22.7	20	26%	14	19.2%
12th Grade	76	50.7	41	53.2%	35	47.9%
Associate Degree	27	18.0	11	14.3%	16	21.9
Bachelor's Degree or Higher	4	2.7	1	1.3%	3	4.1%
Marital Status						
Single	122	81.3	66	85.7%	56	76.7%
Married	17	11.3	10	13%	6	8.2%
Divorced/Widowed	7	4.7				

Table 1 (continued)

Sociodemographic Characteristics among Older African Americans (OAAs) (N= 150) with SMI

Demographic Variable	Entire Sample (N=150)		Younger Cohort (N=77) 45-55 years old		Older Cohort (N= 73) (56-78 years old)	
	Mean or N	(*SD* or %)	*Mean* or N	(*SD* or %)	*Mean* or N	(*SD* or %)
Current Monthly Income						
$0-500/month	44	29.3%	25	32.5%	19	26%
$600-900/month	60	40.0%	27	35.1%	33	45.2%
$1000-1400/month	20	13.3%	9	11.7%	11	15.1%
$1500-1900/month	14	9.3%	9	11.7%	5	6.8%
$2,000-2,400/month	3	2.0%	2	2.6%	1	1.4%
$2,500-2,900/month	2	1.3%	2	2.6	-	-
$3000+/month	7	4.7%	3	3.9%	4	5.5%
Current Employment Status						
Employed	19	12.7%	13	16.9%	6	8.2%
Homemaker	15	10.0%	10	13%	5	6.8%
Retired	25	16.7%	1	1.3%	24	32.9%
Unemployed	60	40.0%	40	51.9%	20	27.4%
Other	31	20.7%	13	16.9%	18	24.7%

Table 1 (continued)

Sociodemographic Characteristics among Older African Americans (OAAs) (N= 150) with SMI

Demographic Variable	Entire Sample (N=150)		Younger Cohort (N=77) 45-55 years old		Older Cohort (N= 73) (56-78 years old)	
	Mean or N	(*SD* or %)	*Mean* or N	(*SD* or %)	*Mean* or N	(*SD* or %)
Years of Work History						
0-5 years	30	20.0%	19	24.7%	11	15.1%
6-10 years	23	15.3%	16	20.8%	7	9.6%
11-15 years	22	14.7%	9	11.7%	13	17.8%
16-20 years	24	16.0%	14	18.2%	10	13.7%
21+ years	51	34.0%	19	24.7%	32	43.8%

Table 2

Illness Characteristics among Older African Americans (OAAs) (N= 150) with SMI

Illness Characteristic	Entire Sample (N=150)		Younger Cohort (N=77) (45-55 years old)		Older Cohort (N= 73) (56-78 years old)	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*
Psychiatric Illnesses	2.7	1.9	2.9	2.0	2.5	1.7
Medical Illnesses	3.1	2.2	2.6	2.1	3.7	2.2
Geriatric Syndromes	2.7	2.1	2.9	2.2	2.6	2.1
Psychiatric and Medical Illnesses and Geriatric Syndromes	9.4	5.0	9.2	5.3	9.6	4.5

Table 3

Psychiatric Illnesses among Older African Americans (OAA) (N= 150) with SMI

Psychiatric Illness	Entire Sample (N=150)		Younger Cohort (N=77) (45-55 years old)		Older Cohort (N= 73) (56-78 years old)	
	N	*%*	*N*	*%*	*N*	*%*
Major Depressive Disorder	118	78.7	62	81	56	76.7
Bipolar Disorder	65	45.3	39	50.6	26	35.6
Paranoid Disorder	41	27.3	20	26	21	28.8
Panic Disorder	62	41.3	37	48	25	34.2
Schizophrenia	37	24.7	20	26	17	23.3
Obsessive-Compulsive Disorder	30	20	17	22.1	13	17.8
Post-Traumatic Stress Disorder	55	36.7	31	40.3	24	32.9

Table 4

Medical Illnesses among Older African Americans (OAA) (N= 150) with SMI

Medical Illness	Entire Sample (N=150)		Younger Cohort (N=77) (45-55 years old)		Older Cohort (N= 73) (56-78 years old)		Test Statistic
	N	*%*	*N*	*%*	*N*	*%*	
Heart Disease	28	18.7	10	13	18	24.7	3.1
Hypertension	97	64.7	41	53.2	56	76.7	9.03**
Diabetes	38	25.3	14	18.2	24	32.9	4.3
Lung Disease	15	10	5	6.5	10	13.7	2.2
Kidney Disease	7	4.7	3	3.9	4	5.5	0.2
Stomach Disease	15	10	10	13	5	6.8	1.6
Cancer	4	2.7	0	-	4	5.5	4.3
Anemia or other Blood Disease	22	14.7	13	17	9	12.3	0.6
Arthritis	66	44	25	32.5	41	56.2	8.5**
Chronic Pain	90	60	39	50.6	51	70	5.7
Stroke or other Neurological Disease	12	8	4	5.2	8	11	1.7
Asthma	43	28.7	19	24.7	24	32.9	1.2
Seizures	17	11.3	8	10.4	9	12.3	0.1

Table 4 (continued)

Medical Illnesses among Older African Americans (OAA) (N= 150) with SMI

Medical Illness	Entire Sample (N=150)		Younger Cohort (N=77) (45-55 years old)		Older Cohort (N= 73) (56-78 years old)		Test Statistic
	N	*%*	*N*	*%*	*N*	*%*	
Thyroid Disease	11	7.3	5	6.5	6	8.2	0.2

Note. *p≤ .05, **p≤ .01. Test statistics analyzed between age cohorts and diagnosis of chronic illness.

Table 5

Geriatric Syndromes among Older African Americans (OAA) (N= 150) with SMI

Geriatric Syndromes	Entire Sample (N=150)		Younger Cohort (N=77) (45-55 years old)		Older Cohort (N= 73) (56-78 years old)		Test Statistic
	N	*%*	*N*	*%*	*N*	*%*	
Falls	50	33.3	23	30	27	37	1.0
Daily	18	12	11	14.3	7	9.6	
Weekly	11	7.3	7	9.1	4	5.5	
Bi-Weekly	1	0.7	-	-	1	1.4	
Monthly	1	9.3	3	3.9	11	15.1	
Quarterly	3	2	-	-	3	4.1	
Dizziness	71	47.3	41	53.2	30	41.1	2.2
Daily	30	20	19	24.7	11	15.1	
Weekly	24	16	13	16.9	11	15.1	
Bi-Weekly	4	2.7	2	2.6	2	2.7	
Monthly	11	7.3	5	6.5	6	8.2	
Quarterly	-	-	-	-	-	-	
Sleep Problems	98	65.3	53	68.8	45	61.6	0.7
Daily	70	46.7	12	15.6	33	45.2	
Weekly	19	12.7	2	2.6	7	9.6	

Table 5 (continued)

Geriatric Syndromes among Older African Americans (OAA) (N= 150) with SMI

Geriatric Syndromes	Entire Sample (N=150)		Younger Cohort (N=77) (45-55 years old)		Older Cohort (N= 73) (56-78 years old)		Test Statistic
	N	*%*	*N*	*%*	*N*	*%*	
Sleep Problems							
Bi-Weekly	1	0.7	-	-	1	1.4	
Monthly	6	4	2	2.6	4	5.5	
Quarterly	1	0.7	-	-	1	1.4	
Confusion	52	34.7	33	42.9	19	26	5.5
Daily	29	19.3	18	23.4	11	15.1	
Weekly	17	11.3	12	15.6	5	6.8	
Bi-Weekly	1	0.7	-	-	1	1.4	
Monthly	2	1.3	-	-	2	2.7	
Quarterly	1	0.7	1	1.3	-	-	
Difficulty	18	12	12	15.6	6	8.2	1.8
Swallowing							
Daily	12	8	8	10.4	4	5.5	
Weekly	2	1.3	2	2.6	-	-	
Bi-Weekly	1	0.7	-	-	1	1.4	
Monthly	1	0.7	-	-	1	1.4	

Table 5 (continued)

Geriatric Syndromes among Older African Americans (OAA) (N= 150) with SMI

Geriatric Syndromes	Entire Sample (N=150)		Younger Cohort (N=77) (45-55 years old)		Older Cohort (N= 73) (56-78 years old)		Test Statistic
	N	*%*	*N*	*%*	*N*	*%*	
Difficulty Swallowing							
Quarterly	-	-	-	-	-	-	
Bladder Control Problems	39	26	21	27.3	18	24.7	0.9
Daily	28	18.7	14	18.2	14	19.2	
Weekly	5	3.3	4	5.2	1	1.4	
Bi-Weekly	-	-	-	-	-	-	
Monthly	4	2.7	1	1.3	3	4.1	
Quarterly	-	-	-	-	-	-	
Vision Issues	88	58.7	45	58.4	43	58.9	0.003
Daily	75	50	36	46.8	39	53.4	
Weekly	6	4	5	6.5	1	1.4	
Bi-Weekly	1	0.7	1	1.3	-	-	
Monthly	3	2	1	1.3	2	2.7	

Table 5 (continued)

Geriatric Syndromes among Older African Americans (OAA) (N= 150) with SMI

Geriatric Syndromes	Entire Sample (N=150)		Younger Cohort (N=77) (45-55 years old)		Older Cohort (N= 73) (56-78 years old)		Test Statistic
	N	*%*	*N*	*%*	*N*	*%*	
Vision Issues							
Quarterly	-	-	-	-	-	-	
Hearing Issues	31	20.7	16	20.8	15	20.5	0.001
Daily	28	18.7	16	20.8	14	19.2	
Weekly	-	-	-	-	-	-	
Bi-Weekly	-	-	-	-	-	-	
Monthly	1	0.7	-	-	1	1.4	
Quarterly	-	-	-	-	-	-	
Difficulty	67	44.7	33	42.9	34	46.6	1.8
Walking							
Daily	53	35.3	24	31.2	29	39.7	
Weekly	7	4.7	5	6.5	2	2.7	
Bi-Weekly	1	0.7	-	-	1	1.4	
Monthly	3	2	2	2.6	1	1.4	
Quarterly	-	-	-	-	-	-	

Table 5 (continued)

Geriatric Syndromes among Older African Americans (OAA) (N= 150) with SMI

Geriatric Syndromes	Entire Sample (N=150)		Younger Cohort (N=77) (45-55 years old)		Older Cohort (N= 73) (56-78 years old)		Test Statistic
	N	*%*	*N*	*%*	*N*	*%*	
Skin Breakdown	18	12	7	9.1	12	16.4	1.3
Daily	9	6	3	3.9	6	8.2	
Weekly	1	0.7	2	2.4	-	-	
Bi-Weekly	4	2.7	-	-	-	-	
Monthly	1	0.7	2	2.4	3	4.1	
Quarterly	2	1.3	-	-	3	4.1	

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Chapter II

Quality of Life among Older African Americans (OAAs) with a Serious Mental Illness (SMI)

Older African Americans (OAAs) who are managing serious mental illnesses (SMI) may be predisposed to poor physical and mental health outcomes. Although quality of life (QOL) and self-rated health (SRH) have been well-studied, few studies have focused on older adults in racial and ethnic minorities who may be managing chronic physical and mental health illnesses, along with geriatric syndromes. The present study examined the intersection of multiple chronic health conditions (e.g., physical and mental health, geriatric syndromes) and QOL and SRH. The sample included 150 OAAs who were at least 45 years of age and reported managing a SMI for at least one year. Analyses included chi-square tests, ANOVA calculations, and independent sample t-tests between QOL and SRH with related variables. Results showed that OAAs had an average of three chronic illnesses and two geriatric syndromes. Sixty-four percent of the sample rated their health as either fair or poor. Overall, lower QOL scores and poorer SRH scores were correlated with multiple chronic illnesses and geriatric syndromes, such as arthritis (p=.009), falls (p= .008), confusion (p =.007), bladder control issues (p =.014), and difficulty walking (p<.001). The results underscore the importance of understanding the impact of multiple chronic health conditions on QOL and SRH among OAAs with SMI.

Keywords: Older African American adults, serious mental illness, quality of life, self-rated health

Introduction

A growing body of research demonstrates that individuals diagnosed with serious mental illnesses (SMI) die at younger ages as compared with their non-SMI counterparts (Lutterman et al., 2003; Olfson, Gerhard, Huang, Crystal, & Stroup, 2015; Thornicoft, 2013). This may be influenced by the relationship between poor mental health and negative health outcomes, marked by a lower quality of life status (QOL) and self-rated health (SRH) (Domino et al., 2014). According to the National Institute of Mental Health (NIMH), approximately 10 million adults, or 4.2% of the population in the U.S. are living with SMI, with approximately 3.2% of older adults (ages 50 and older) diagnosed with SMI (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). SMI commonly refers to a range of mental health illnesses (*e.g., paranoid schizophrenia, psychotic and bipolar disorder, major depressive disorders, schizoaffective disorders, obsessive-compulsive disorders, panic disorder, and post-traumatic stress disorders*) (National Alliance of Mental Illness, 2015).

Premature mortality and poor health outcomes among those with SMI can be attributed to physical health conditions occurring at earlier ages as compared with age matched peers without SMI (McGinty et al., 2012; Whaley, 2010). Among older adults, physical health conditions can take the form of chronic illnesses such as heart disease or arthritis and geriatric syndromes. Geriatric syndromes are recognized as clinical conditions commonly experienced by older individuals that are not included in specific disease categories (Koroukian et al., 2016). They can be exacerbated by acute care episodes and hospitalizations and are associated with adverse outcomes such as functional decline (Saraf et al, 2010; Simmons et al., 2016). Geriatric syndromes, such as falls, confusion, dizziness, and incontinence, involve shared risk factors and multiple bodily systems (Inouye, Studenski, Tinetti, & Kuchel, 2007). Unlike chronic illnesses,

geriatric syndromes do not fit into specific disease categories, but can lead to substantial impairment and diminished quality of life.

In addition, some older adults with SMI disproportionally experience poor health outcomes. Among these are minority elders who are also at risk for poor health outcomes due to mismanaged care, distrust in the health care system, and higher morbidity rates for non-communicable diseases (Byrd, Fletcher, & Menifield, 2007). Of particular concern are older African American (OAAs) adults who are not only underrepresented in research, but also significantly affected by SMI. The purpose of this paper is to describe the relationship among chronic illnesses, geriatric syndromes, QOL and SRH in a sample of community-dwelling OAAs with SMI.

SMI among OAAs

Despite the vast literature related to racial/ethnic disparities with health outcomes, little attention has been given to the health of OAAs with SMI (Kim et al., 2011). The United States Census Bureau reports that the current rate of SMI among African Americans is 3.1 percent as compared with White Americans at 4.4 percent (SAMHSA, 2015). Despite lower prevalence rates of SMI, African Americans have a higher risk of a chronic and disabling mental illness when compared with White Americans (Lo, Cheng, & Howell, 2014). This can be attributed to their experience of chronic stressors in their lives, which become risk factors for poor mental health (Copeland & Snyder, 2010). As compared to White Americans, African Americans with SMI have decreased favorable employment outcomes (85% vs 56%) after psychiatric hospitalization (Eack & Newhill, 2012).

Due to the intersection of race and mental illness, OAAs with SMI may have an increased risk of poverty and traumatic events, which affects their QOL and SRH. African Americans with

SMI are more likely to report crime and drug use occurring in their neighborhoods, which can lead to socioeconomic stress (Simming et al., 2012). One study among African Americans (N=617) found the lifetime prevalence of Post Traumatic Stress Disorder (PTSD) was 33 percent, with almost 90 percent experiencing traumatic events, such as rape and abuse, homelessness, or a violent attack (Alim et al., 2006). Furthermore, African Americans with lower socioeconomic status are at very high risk of being subjected to violence and severe trauma in their lifetime (Schwartz, Bradley, Sexton, Sherry, & Ressler, 2005).

OAAs are also at risk for SMI because of racial and non-racial discrimination which has been found to worsen the mental health status of OAAs (Mouzon, Taylor, Keith, Nicklett, & Chatters, 2016). OAAs who reported everyday discriminatory events are more likely to report mood and anxiety disorders, multiple mental disorders, and psychological distress (Ayalon & Gum, 2011). Many stereotypes of mental illness existing in the African American community lead to discrimination and rejection from society, especially for OAAs (Mishra, Lucksted, Gioia, Barnet, & Baquet, 2009). The effects of stigma have created many barriers, such as delays in accessing appropriate mental health therapies (Jimenez, Cook, Bartels, & Alegria, 2012), fewer resources for pharmacological treatment (Cook et al., 2013), and receiving poorer quality of mental healthcare (McGuire & Miranda, 2008). Considering the effect of these social factors among on OAAs with SMI, more research is greatly needed to understand their QOL and SRH.

Serious Mental Illness & Quality of Life

The World Health Organization defines QOL as "a broad ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs" (WHO, 1997, pg. 1). Quality of life (QOL) can be described as 'the general well-being of a person or society, defined in terms of health and happiness, rather

than wealth' (Collins, 2016, para. 2; Davidson, 2016). Studies that have explored QOL in populations with SMI have found that their QOL is significantly lower than those without SMI (Bonsaksen & Lerdal, 2012; Kilbourne et al., 2009; Williams, Sands, Elsom, & Prematunga, 2015). Older adults with SMI had poorer health and lower quality of well-being (Depp et al., 2006), dissatisfaction with life activities (Cummings & Cassie McClure, 2008; Wetherell et al., 2010), and had lower monthly incomes (<$1000) supplemented with assistance from Social Security and/or Medicare (Cummings & Cassie, 2008).

There is also considerable information on QOL among OAAs with SMI. African Americans with SMIs rate their QOL lower as compared with Whites (Nejtek, Allison, & Hilburn, 2012). Poorer QOL in this population is affected by increased years of mental illness management and adverse effects with psychotropic medications (Nejtek et al., 2012). Other life events faced by African Americans can affect their QOL, such as lifelong poverty, sadness and grief, and poor relationships with family and friends (Black, White, & Hannum, 2007). It is important to understand that QOL can be affected by the combination of physical and mental chronic health conditions, pharmacological and alternative treatments, and other social factors; yet, this data has not been evidenced among OAAs with SMI.

Serious Mental Illness & Self-Rated Health

SRH is the subjective perception and evaluation of an individual's health, which may include their biological, psychological and social dimensions (Martins, Barreto, Silveira, Santa-Rosa, & Pereira, 2010). Evidence has shown that adults with SMI have a strong likelihood of rating their health as either fair or poor (Fok et al., 2014; Perrusio, Katz, & Losino, 2012; Walker & Druss, 2017). Factors such as lower socioeconomic status, decreased functional status, and multiple comorbidities are associated with poorer self perceived health among adults with SMI

(Cook et al., 2016; Wolinsky et al., 2008). In addition, older adults with SMI believe that their symptoms of mental illness hinder their social connections with others and negatively affect their physical health (Leutwygler, Chafetz, & Wallhagen, 2010).

Research findings about SRH among AAs are contradictory. Baruth and colleagues (2014) and Landrine and colleagues (2016) showed a majority of AAs diagnosed with multiple chronic diseases rated their health as good, very good, or excellent. However, other studies have found that AAs rate their SRH lower than age-matched Whites, with values of fair or poor health (Benjamins, Hirschman, Hischtick, & Whitman, 2012; Roth et al., 2016; Santos-Lozada, 2016). SRH, commonly used as a measure of health status, remains as a strong predictor for early mortality and morbidity. Lower SRH is associated with multiple chronic illnesses, such as cardiovascular disease, endocrine disorders, and gastrointestinal illnesses (Wu et al., 2013). However, there is little data that provides insight on the SRH of OAAs with SMI. Understanding the SRH of OAAs with SMI will not only lend insight to their quality of life but gain knowledge about a population with a life course of disability and functional impairment.

Purpose

To date, most research on QOL and SRH has focused on community samples managing chronic physical health conditions, which may exclude those diagnosed with SMI. It is important to focus on QOL and SRH because they provide an insight to an individual's physical, emotional, and social health. The goal of this study was to examine the relationship between multiple chronic health conditions (e.g., chronic illnesses and geriatric syndromes), QOL and SRH experienced in a sample of AAs managing SMI. Understanding the associations among these variables will gain a greater understanding of how managing SMI throughout the life course may have differential effects on an individual's health status and QOL.

Methods

Design and Sample

In total, 150 OAAs with SMI were enrolled in a cross sectional study and administered a questionnaire that addressed physical and mental health status, geriatric conditions including QOL and SRH. Individuals were eligible if they met the following criteria: a) 45 years of age or older, b) identified themselves as a person of African descent, c) able to understand English, d) provide their own consent, and e) self-reported SMI diagnosis for at least one year. SMI was operationally defined as an individual who had reported one of the following illnesses for at least one year: Bipolar Disorder, Major Depressive Disorder, Schizoaffective Disorder, Post-Traumatic Stress Disorder, Paranoid Disorder, Panic Disorder, and Obsessive-Compulsive Disorder (American Psychiatric Association, 2013; Corrigan et al., 2017; Record et al., 2016). Participants were recruited from a mid-size clinic located in the South Los Angeles area which provides physical and mental health treatment for its clients. The study was approved by the University Human Subjects Protection Committee, with data collection occurring from June to September 2016.

Procedures

At the recruitment site, flyers were posted in the main lobby and other areas of the mid-size clinic. Weekly announcements were presented by the clinic staff to all individuals. The principal investigator (PI) was stationed in the main lobby at least three times a week for several hours to provide information and answer questions about the study. If a potential participant showed interest, a brief screening questionnaire was administered by the PI that inquired about race/ethnicity, presence and length of SMI diagnosis, spoken language, and age. If determined eligible, the PI obtained verbal informed consent from the participants. The PI continued to

administer the questionnaire to the participant, which took approximately 30-60 minutes. At the completion of the survey, each participant was compensated with a $15 gift card that could be utilized at a neighboring department store.

Theoretical Framework

The Ethno-Cultural Gerontological Nursing (ECGN) model provides a framework that considers both the biopsychosocial and political influences among this cohort as they age with a mental illness (Phillips et al., 2015). This study focuses on the health dimension of the ECGN model which incorporates multiple chronic health conditions, functional status, QOL, and SRH. The ECGN model posits that these components may be influenced by the following factors: political and economic climate, cultural traditions, gender experiences, cohort influences, and perceptions of discrimination, aging, and wellness.

Measures

Sociodemographic Characteristics. Participants were asked to provide the following: age, gender, level of education, marital status, employment status, years of work history, income, number of people supported on income, history of homelessness and incarceration, and self-perceived social and neighborhood class.

Multiple Chronic Health Conditions. Chronic health conditions were divided into two classes: medical illnesses and psychiatric illnesses. Psychiatric illnesses included the following: major depression, schizophrenia, bipolar disorder, panic disorder, schizoaffective disorder, obsessive-compulsive disorder, and post traumatic disorder (Corrigan et al., 2017; Record et al., 2016).

Medical illnesses were assessed by the following: heart disease, hypertension, stroke, diabetes, asthma, lung disease, osteoarthritis, degenerative arthritis, or rheumatoid arthritis, ulcer

or stomach disease, kidney disease, anemia or blood disease, cancer, epilepsy, or thyroid disorders. All questions regarding chronic health illnesses were guided by the Self-Administered Comorbidity Questionnaire (SCQ). The SCQ has been established with high validity and reliability (Brunner et al., 2008; Wong et al., 2017) and correlated with the Charlson Comorbidity Index, a chart review-based instrument (r = .55) (Sangha et al., 2003).

Geriatric Syndromes. Participants were asked if they have any of the following: falls, dizziness, sleep problems, confusion, difficulty swallowing, bladder control problems, vision problems, hearing problems, difficulty walking, or skin breakdown. Questions focused on geriatric syndromes were influenced by Fulmer SPICES: An Overall Assessment Tool for Older Adults questionnaire (Fulmer, 2012) and the Comprehensive Geriatric Assessment (Pilkington, Boland, & Dickson, 2017; Ward & Reuben, 2016).

Each of the chronic health conditions and geriatric syndromes were dichotomized as either *yes* = diagnosed with condition or *no* = not having the condition.

Quality of Life was assessed using the Quality of Life Scale (QOLS) which is a 16-item questionnaire that assesses life satisfaction in several domains: 1) material and physical well-being, 2) relationships with other people, 3) social, community and civic activities, 4) independence, 5) personal development and fulfillment, and 6) recreation (Burckhardt & Anderson, 2003). Each question was measured on a 7-point Likert scale which ranged from "terrible" (1) to "delighted" (7). Previous studies have utilized this measure with adequate divergent and discriminant validity being evidenced (Burckhardt & Anderson, 2003; Heitmann, Nordeng, Havnen, Solheimsnes, & Holst, 2017; Rod, 2016). QOLS satisfaction scale has been established as being internally consistent (α = .82 to .92) and having high test-retest reliability in chronic illness groups (Burckhardt & Anderson, 2003; Wahl et al., 2009). Scores range from 16

to 112, with higher scores indicating higher life satisfaction. In this study, the Cronbach's α for the total QOL scale .95.

Self-Rated Health Status was measured by the administration of a single-item global health-related quality of life question to determine each individual's perception of SRH: "How would you rate your overall health?" The question was measured on 5-point Likert scale which ranged from excellent (1) to poor (5). Higher scores indicated lower SRH. This question was administered as part of the 36-item Short Form (SF-36) instrument. The SF-36 is a widely used instrument to understand the physical and mental health of individuals (Konerman et al., 2010). This question has been used multiple times and has high construct validity (Eng, Clough-Gorr, Cabral, & Silliman, 2015; Ibrahim et al., 2003).

Data Analysis

All analyses were conducted using SPSS Version 22 (IBM SPSS, Armonk, New York, USA). Descriptive information for all demographics and frequencies of medical illnesses and geriatric syndromes were calculated. Independent *t*-tests (Mann-Whitney U tests for non-parametric variables) were calculated to identify the relationship among sociodemographic characteristics (age, gender, marital status, monthly income, chronic health conditions (medical illnesses and geriatric syndromes), QOL, and SRH. Chi-Square analyses and ANOVA (Kruskal Wallis for non-parametric variables) were computed to examine associations between SRH and demographic information and chronic health conditions. Pairwise comparisons were performed using Dunn's (1964) procedure with a Bonferroni correction for multiple comparisons.

Results

Participant Demographics

Table 6 shows the demographic characteristics for this sample population of 150 OAAs with SMI. The mean age of the participants was 55 years (SD = 7.4 years; range: 45-78 years). The majority (81%) were single, while over half (67%) identified as female. Over seventy percent have at least a 12th grade education level. Almost 70% of the sample had a monthly household income of less than $900/month. Less than half (40%) reported that they are unemployed, but 50% had over fifteen years of work experience. Of the 150 participants, 40% viewed themselves as being apart of the struggling lower middle class and one third 33% believed that their neighborhood's social class was either in the working poor or working class status.

Chronic Health Conditions

The average number of conditions for the population was 2.7 for psychiatric illnesses, 3.1 for medical illnesses, and 2.7 for geriatric syndromes. The most frequently reported psychiatric diagnoses were major depressive disorder (MDD) (78.7%), followed by bipolar disorder (45.3%) and panic disorder (41.3%). As for medical diagnoses, hypertension was the most common (64.7%), followed by chronic pain (60%), arthritis (44%), asthma (28.7%), and diabetes (25.3%). Issues with sleeping (65.3%), vision (58.7%), difficulty walking (44.7%), dizziness (47.3%), and confusion (34.7%) were among the most common reported geriatric syndromes.

Overall Quality of Life (QOL)

Table 7 reports the average QOL scores for the demographics. The average score on the QOLS was 71.1. Males reported a higher average QOL score (73.0) compared to females (70.2). Those with an education level below 12th grade had a lower average QOL score (64.0) compared to those with a 12th grade education (72.9) or associate's degree (76.1). Individuals who were employed had a higher average QOL score (85.5) than those were unemployed (69.2) or retired

(72.7). For monthly incomes below $500/month, the average QOL score was 62.4. This is in comparison to the average QOL score of 85.1 for individuals who earn over $3000/month.

QOL & Chronic Health Conditions

Table 8 reports all significant QOL scores with relation to the various chronic health illnesses. Lower QOL scores were correlated with an increased frequency of medical illnesses (r=-.137, p=.032) and geriatric syndromes (r=-.129, p=.049). Focusing on specific medical illnesses, significant decreased scores of QOL were found with chronic pain (U=1388, z= -3.11, p=.002), and lung disease (U= 688, z=-2.03, p=.042). Significant lower QOL scores were in relation with the following geriatric syndromes: difficulty walking (U=2012, z=-2.96, p=.004), confusion (U=1679, z= -3.49, p<.001), sleep problems (U=1899, z= -2.4, p=.016), dizziness (U=2139, z= -2.51, p=.012), and falls (U=1959, z= -2.1, p=.038).

Self-Rated Health (SRH)

For SRH, 5.3% rated their health as excellent, 7.3% stated it was very good, 23.3% as good, 48.7% as fair, and 15.3% as poor. Almost two-thirds of the sample rated their health as fair or poor. Table 4 lists the percentages of demographics according to SRH. The highest SRH category reported by both females (49.5%) and males (46.9%) was fair health. Over 52% of single individuals rated their health as fair. With regards to education level, 21% with a 12th grade education level rated their health as good compared to 55% who rated it as fair. Over 50% of those unemployed rated their health as fair or poor. Lower monthly income was also associated with poorer SRH (X^2= 37.4, p = .042). In relation to QOL, there was a statistically significant difference in QOL between the SRH status of good (Mdn = 75.4) and poor (Mdn = 59.2) (p =.034).

SRH & Chronic Health Conditions

Table 10 lists all significant SRH scores with relation to the various chronic health illnesses. Poorer SRH was associated with increases in geriatric syndromes (r=.358, $p\leq$.001) and medical illnesses (r=.195, p=.003). There were statistically significant differences in the overall total number of geriatric syndromes between the very good status (Mdn = 1) and fair status (Mdn = 3) (p = .023), very good and poor (Mdn=4) (p<.001), good (Mdn=1) and fair (p=.028), and good and poor (p<.001).

In regards to psychiatric and medical illnesses, those with major depressive disorder (X^2= 13.5, p = .009), arthritis, (X^2= 13.59, $p \leq$ .001), and chronic pain (X^2= 11.5, p = .022) rated their health much lower compared to those without the illness. In regards to geriatric syndromes, more individuals significantly reported poorer SRH if they had the following: falls, (X^2= 13.8, p = .008); dizziness, (X^2= 11.9, p=.017); sleep problems (X^2= 16.1, p = .003); confusion, (X^2= 14.2, p = .007); difficulty swallowing (X^2= 12.1, p=.017); bladder control problems (X^2= 12.5, p = .014); vision problems (X^2= 10.2, p = .037), hearing problems (X^2= 14.5, p = .006); and difficulty walking (X^2= 20.1, p < .001).

Discussion

To our knowledge, this was the first study to investigate associations with multiple chronic health conditions, SRH and QOL among OAAs with SMI. As expected, we found the most reported psychiatric diagnosis was MDD. This is supported by the NIMH's report of major depression being one of the most common mental disorders in the U.S. (Center for Behavioral Health Statistics & Quality, 2016). In our sample, 64.7% of reported hypertension, which is currently the most prevalent disease among all African Americans (American Heart Association, 2016). The prevalence of hypertension in the African American community is a considerably higher as compared with other ethnicities (Nwankwo, Yoon, Burt, & Gu, 2012).

In the current study, there were a number of significant differences in the prevalence of chronic illness and geriatric syndromes based on QOL. Major depression was related to lower QOL, which has been strongly evidenced by research literature (Jia & Lubetkin, 2017; Skarsater, Baigi, & Haglund, 2006). Focusing on poor QOL, there are a myriad of factors over the life course of OAAs that can affect their quality of life, such as racial discrimination, traumatic events, or childhood experiences. These factors could greatly influence their health, social, and economic pathways. Interestingly, several geriatric syndromes were strongly associated with lower QOL. For individuals who have untreated geriatric syndromes, they may utilize more resources, experience increasing agitation and frustration, and have multiple hospitalizations (Brown-O'Hara, 2014).

Increased monthly household income was found to be associated with higher QOL. Currently, the yearly median income for AA households in the U.S. is $35,398 (DeNavas-Walt & Proctor, 2015). In our sample population, almost 70% received a yearly income of $36,000 or less, which is similar to the national median income for AA households. However, our population resides in Los Angeles, which is a concentrated and urban city with a higher cost of living with a yearly median household income of $50,205 (United States Census Bureau, 2016). The recruitment site, located in a lower socioeconomic community of South Los Angeles, has a yearly average annual income of $33,934 (United States Census Bureau, 2016). This stark disparity in income has contributed to a myriad of factors, such as lower education levels or health status. As individuals age, they are at increased risk for dependence due to social and economic limitations. For example, only half of our sample population had at least 15 years of work history. This subpopulation within the OAA community are at a higher risk for poor quality of life, due to other risk factors of homelessness, incarceration, and lower education rates. OAAs

with SMI may be unable to access health care services or receive adequate quality of care due to their poor socioeconomic status which eventually affects their quality of life.

Additionally, our findings indicate that OAAs with SMI are more likely to perceive their health as fair or poor. We found that 64% rated their health as fair or poor. Also, the worse an individual reported their health, the more likely they were to have a higher number of chronic illnesses and geriatric syndromes. The results of our analyses are supported by previous studies of SRH that show that AAs are more likely to rate their health as good, fair, or poor, even when compared to age matched Whites (Roth et al., 2016). As hypothesized, the higher the number of psychiatric and medical illnesses that an individual manages, we found their SRH to be lower. This finding is consistent with other studies who report that an overlap of comorbidities and lower SRH (Lau, Kwan, & Cheung, 2016; Perruccio, Katz, & Losino, 2010). Managing multiple chronic illnesses can greatly affect health outcomes. It can lead to increased disability and worsen psychological and emotional capabilities (Wen, Hu, & Lu, 2015). Moreover, our findings also included the relationship of poor SRH and increases in the number of geriatric syndromes. Even though the literature is sparse in regards to SRH and geriatric syndromes, functional limitations and geriatric syndromes are more likely to predict health outcomes as opposed to chronic health conditions (Koroukian et al., 2016). We found many geriatric syndromes (falls, sleeping issues, bladder control problems, etc.) to be significantly linked to SRH.

Limitations

Several limitations should be noted. This study utilized a cross-sectional design, which excludes any inferences toward causal assumptions. It important to note that this study focuses on a vulnerable population that has not been well studied in literature. These participants were community-dwelling OAAs who have managed SMI and visiting a health center in a low-income

area. Because this sample represents a subset of both of the OAA population and those diagnosed with SMI, the results may not generalize to the larger OAA population or to anyone diagnosed with a mental illness. Due to other influences, there may be substantive differences among individuals who belong to other cultural groups who have a mental illness or OAAs with SMI who are younger and apart of a different generation, such as the millennial generation. In addition, we used a single item to measure SRH. Even though the single item has been shown to be a strong indicator of health in the literature (Domino et al., 2014), there may have been different results if a SRH scale with multiple items had been used.

Implications for Research

Due to the dearth of research on the health profile of this population, these results can provide direction for future research. Even though there are other multiple factors that impact their shortened life expectancy, our results of poor SRH and QOL may help to explain their high morbidity and mortality rates. Mixed-method studies are needed that could identify the perceived needs of this population and insight on the factors that contribute to their SRH. The issues affecting the OAA population is complex and multifaceted. Yet, understanding the intersection of their health profile and SRH and QOL will eventually result in greater resources and wellness with the implementation of specialized health policies. Given the results of this study, further research is warranted.

Conclusion

Despite our limitations, this study advances the literature by highlighting the quality of and self-perceived of a vulnerable population. New studies that use more robust QOL and SRH scales are needed to verify our findings and to compare with other ethnicities managing SMI. Our findings only consider the SRH of these individuals at the time of measurement, yet more

studies examining the SRH and QOL over time are needed. In addition, further research can focus on other demographic and social factors that affect these areas and how it may vary across multiple ethnicities. Further investigation with these factors, especially with a national sample population, can ultimately reduce health disparities for this population.

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Table 6

Sociodemographic Characteristics among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	N	%
Age		
45-55	77	51.3
>55	73	48.7
Gender		
Male	49	32.7
Female	101	67.3
Education		
$\leq 8^{th}$ Grade	9	6.0
9^{th}-11^{th} Grade	34	22.7
12^{th} Grade	76	50.7
Associate's Degree	27	18.0
Bachelor's Degree or Higher	4	2.7
Marital Status		
Single	122	81.3
Married	17	11.3
Divorced	7	4.7
Widowed	4	2.7
Current Job Status		
Employed	19	12.7
Homemaker	15	10.0

Table 6 (continued)

Sociodemographic Characteristics among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	N	%
Current Job Status		
Retired	25	16.7
Unemployed	60	40.0
Other	31	20.7
Years of Work History		
0-5 years	30	20.0
6-10 years	23	15.3
11-15 years	22	14.7
16-20 years	24	16.0
21+ years	51	34.0
Current Monthly Income		
$0-500/month	44	29.3
$600-900/month	60	40.0
$1000-1400/month	20	13.3
$1500-1900/month	14	9.3
$2,000-2,400/month	3	2.0
$2,500-2,900/month	2	1.3
$3,000+ / month	7	4.7

Table 6 (continued)

Sociodemographic Characteristics among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	N	%
Number of People Supported on Monthly Income		
1 person	96	64.0
2-4 people	51	34.0
5-7 people	3	2.0
History of Homelessness		
Yes	94	62.7
No	56	37.3
History of Incarceration		
Yes	75	50.0
No	75	50.0
Self-Perception of Social Class		
Upper Class	9	6.0
Middle Class	26	17.3
Satisfied Lower Middle Class	21	14.0
Struggling Lower Middle Class	61	40.7
Working Class	14	9.3
Working Poor	19	12.7

Table 6 (continued)

Sociodemographic Characteristics among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	N	%
Self-Perception of Neighborhood's Social Class		
Upper Class	10	6.7
Middle Class	28	18.7
Satisfied Lower Middle Class	24	16.0
Struggling Lower Middle Class	38	25.3
Working Class	21	14.0
Working Poor	29	19.3

Table 7

Average Quality of Life Score among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	*M*	*SD*
Age		
45-55	72.3	22.3
>55	69.9	19.7
Gender		
Male	73.0	19.2
Female	70.2	21.9
Education		
$\leq 8^{th}$ Grade	59.1	25.0
9^{th}-11^{th} Grade	65.7	20.5
12^{th} Grade	72.9	21.1
Associate's Degree	76.1	19.0
Bachelor's Degree or Higher	62.3	26.0
Marital Status		
Single	71.7	21.5
Married	71.4	16.8
Divorced	59.6	24.8
Widowed	72.0	12.8
Current Job Status		
Employed	85.4	13.8
Homemaker	70.2	17.3

Table 7 (continued)

Average Quality of Life Score among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	*M*	*SD*
Current Job Status		
Retired	72.7	16.8
Unemployed	69.2	22.5
Other	65.4	23.0
Years of Work History		
0-5 years	71.0	24.5
6-10 years	73.0	22.1
11-15 years	70.5	19.6
16-20 years	73.1	19.0
21+ years	69.8	21.0
Current Monthly Income		
$0-500/month	62.5	20.7
$600-900/month	73.5	22.3
$1000-1400/month	77.3	16.7
$1500-1900/month	69.7	17.6
$2,000-2,400/month	71.0	10.1
$2,500-2,900/month	90.5	3.5
$3,000+ / month	85.1	11.1
Number of People Supported on Monthly Income		
1 person	69.4	22.0

Table 7 (continued)

Average Quality of Life Score among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	*M*	*SD*
# of People Supported on Monthly Income		
2-4 people	75.6	21.5
5-7 people	56.0	14.1
History of Homelessness		
Yes	71.7	20.6
No	70.1	21.9
History of Incarceration		
Yes	70.9	21.5
No	71.3	20.7
Self-Perception of Social Class		
Upper Class	72.1	21.9
Middle Class	80.2	16.6
Satisfied Lower Middle Class	71.7	22.4
Struggling Lower Middle Class	68.3	19.4
Working Class	80.4	16.2
Working Poor	60.0	26.7
Self-Perception of Neighborhood's Social Class		
Upper Class	69.3	21.1
Middle Class	78.7	22.3
Satisfied Lower Middle Class	70.6	18.9

Table 7 (continued)

Average Quality of Life Score among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	*M*	*SD*
Self-Perception of Neighborhood's Social Class		
Struggling Lower Middle Class	71.4	19.5
Working Class	78.1	15.7
Working Poor	59.5	22.9

Table 8

Chronic Health Conditions & QOL among Older African Americans (OAAs) (N= 150) with SMI

Chronic Condition	Average QOL Score	*p*
Chronic Pain		.002
Yes	77.5	
No	66.9	
Lung Disease		.042
Yes	60.0	
No	72.4	
Difficulty Walking		.004
Yes	65.8	
No	75.6	
Confusion		<.001
Yes	62.5	
No	75.9	
Sleep Problems		.016
Yes	68.2	
No	76.9	
Dizziness		.012
Yes	66.2	
No	75.8	

Table 8 (continued)

Chronic Health Conditions & QOL among Older African Americans (OAAs) (N= 150) with SMI

Chronic Condition	Average QOL Score	*p*
Falls		.038
Yes	65.6	
No	74.1	

Table 9

Self-Rated Health Status (SRH) among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	SRH Category (%)				
	Excellent	Very Good	Good	Fair	Poor
Age					
45-55	6.5	7.8	19.5	51.9	14.3
>55	4.1	6.8	27.4	45.2	16.4
Gender					
Male	4.1	6.1	26.5	46.9	16.3
Female	5.9	7.9	21.8	49.9	14.9
Education					
$\leq 8^{th}$ Grade	-	22.2	-	33.3	44.4
9^{th}-11^{th} Grade	0.8	5.8	23.5	44.1	17.6
12^{th} Grade	5.3	5.3	21.1	55.3	13.2
Associate's Degree	3.7	7.4	37.0	40.7	11.1
Bachelor's Degree or Higher	-	33.3	-	66.7	-
Marital Status					
Single	4.9	7.4	20.5	52.5	14.8
Married	11.8	5.9	35.3	29.4	17.6
Divorced	-	14.3	14.3	57.1	14.3
Widowed	-	-	75.0	-	25.0

Table 9 (continued)

Self-Rated Health Status (SRH) among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	SRH Category (%)				
	Excellent	Very Good	Good	Fair	Poor
Current Job Status					
Employed	5.2	10.5	42.1	31.6	10.5
Homemaker	13.3	13.3	6.7	53.3	13.3
Retired	4.0	8.0	16.0	60.0	12.0
Unemployed	3.3	5.0	23.3	48.3	20.0
Other	6.5	6.5	25.8	48.4	12.9
Years of Work History					
0-5 years	6.7	3.3	16.7	50.0	23.3
6-10 years	13.0	8.7	4.3	60.9	13.0
11-15 years	9.1	-	40.9	36.4	13.6
16-20 years	-	4.2	20.8	58.3	16.7
21+ years	2.0	13.7	29.4	43.1	11.8
Current Monthly Income					
$0-500/month	-	6.8	20.5	54.5	18.2
$600-900/month	8.3	3.3	20.0	48.3	20.0
$1000-1400/month	-	10.0	40.0	40.0	10.0
$1500-1900/month	14.3	7.1	14.3	57.1	7.1

Table 9 (continued)

Self-Rated Health Status (SRH) among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	SRH Category (%)				
	Excellent	Very Good	Good	Fair	Poor
Current Monthly Income					
$2,000-2,400/month	-	33.3	66.7	-	-
$2,500-2,900/month	50.0	50.0	-	-	-
$3,000+ / month	-	28.6	14.3	57.1	-
# of People Supported on Monthly Income					
1 person	4.2	6.3	22.9	47.9	18.8
2-4 people	7.8	7.8	25.4	50.9	7.8
5-7 people	-	33.3	-	33.3	33.3
History of Homelessness					
Yes	5.3	6.4	23.4	47.9	17.0
No	5.4	8.9	23.2	50.0	12.5
History of Incarceration					
Yes	8.0	4.0	24.0	48.0	16.0
No	2.7	10.7	22.7	49.3	14.7
Self-Perception of Social Class					
Upper Class	11.1	-	22.2	44.4	22.2
Middle Class	3.8	11.5	23.1	46.2	15.4

Table 9 (continued)

Self-Rated Health Status (SRH) among Older African Americans (OAAs) (N= 150) with SMI

Characteristic	SRH Category (%)				
	Excellent	Very Good	Good	Fair	Poor
Self-Perception of Social Class					
Satisfied Lower Middle Class	-	4.8	33.3	42.9	19.0
Struggling Lower Middle Class	6.6	4.9	19.7	55.7	13.1
Working Class	14.3	14.3	21.4	35.7	14.3
Working Poor	-	10.5	26.3	47.4	15.8
Self-Perception of Neighborhood's Social Class					
Upper Class	10.0	10.0	20.0	50.0	10.0
Middle Class	-	10.7	25.0	46.4	17.9
Satisfied Lower Middle Class	4.2	8.3	20.8	54.2	12.5
Struggling Lower Middle Class	2.6	-	26.3	55.3	15.8
Working Class	4.8	9.5	28.6	47.6	9.5
Working Poor	13.8	10.3	17.2	37.9	20.7

Table 10

Chronic Health Conditions & QOL among Older African Americans (OAAs) (N= 150) with SMI

Chronic Condition	SRH Category (%)					*p*
	Excellent	Very Good	Good	Fair	Poor	
Major Depressive Disorder						.009
Yes	2.5	7.6	20.3	51.7	17.8	
No	15.6	6.3	34.4	37.5	6.3	
Arthritis						<.001
Yes	4.5	3.0	12.1	62.1	18.2	
No	6.0	10.7	32.1	38.1	13.1	
Chronic Pain						.022
Yes	7.8	3.3	18.9	51.1	18.9	
No	1.7	13.3	30.0	45.0	10.0	
Falls						.008
Yes	2.0	2.0	16.0	52.0	28.0	
No	6.1	10.1	27.3	47.5	9.1	

Table 10 (continued)

Chronic Health Conditions & QOL among Older African Americans (OAAs) (N= 150) with SMI

Chronic Condition	SRH Category (%)					*p*
	Excellent	Very Good	Good	Fair	Poor	
Dizziness						.017
Yes	4.2	5.6	12.7	56.3	21.1	
No	6.3	8.9	32.9	41.8	10.1	
Sleep Problems						.003
Yes	4.1	3.1	19.4	53.1	20.4	
No	7.8	15.7	31.4	39.2	5.9	
Confusion						.007
Yes	3.8	1.9	13.5	53.8	26.9	
No	6.1	10.2	28.6	45.9	9.2	
Difficulty Swallowing						.017
Yes	5.6	5.6	-	50.0	38.9	
No	5.3	7.6	26.0	48.9	12.2	

Table 10 (continued)

Chronic Health Conditions & QOL among Older African Americans (OAAs) (N= 150) with SMI

Chronic Condition	SRH Category (%)					*p*
	Excellent	Very Good	Good	Fair	Poor	
Bladder Control Problems						.014
Yes	5.1	-	10.3	59.0	25.6	
No	5.4	9.9	27.9	45.0	11.7	
Vision Problems						.037
Yes	5.7	4.5	18.2	50.0	21.6	
No	4.8	11.3	30.6	46.8	6.5	
Hearing Problems						.006
Yes	3.2	9.7	9.7	41.9	35.5	
No	5.9	6.7	26.9	50.4	10.1	
Difficulty Walking						<.001
Yes	3.2	9.7	9.7	41.9	35.5	
No	5.9	6.7	26.9	50.4	10.1	

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Chapter III

Functional Status among Older Africans Americans (OAAs) with Serious Mental Illness

Lower functional status can lead to deterioration of health status and poor health outcomes. The aim of this study was to determine the physical and psychosocial functional status as measured by the Short Form (*SF-36*) Health Survey and coexisting 1) psychiatric illnesses, 2) medical illnesses and 3) geriatric syndromes and among older African Americans (OAAs) with serious mental illnesses (SMI). A total of 150 African Americans, ages 45 and older, were recruited from a mid-size clinic in South Los Angeles. Using descriptive analyses, including independent t-test and chi-square tests, results showed that almost 30 percent believed their health would decline. Decreased physical functioning was significantly related to seizures (p=.039), chronic pain (p=.03), and falls (p=.011). Chronic pain (p=.015) and sleeping difficulties (p=.05) were significantly associated with lower social functioning. Overall, the results suggest that this sample of OAAs had low levels of both physical and psychosocial functioning that can contribute to poorer health outcomes. The SF-36 can serve as a useful tool to explore biopsychosocial limitations of health and contribute knowledge about the health profile of this vulnerable population.

Keywords: Older African American adults, serious mental illness, functional status,

Introduction

The World Health Organization (WHO) reports that mental illness is the leading cause of disability worldwide and a risk factor for various chronic illnesses, such as hypertension or diabetes (WHO, 2015). Furthermore, half of all lifetime cases of mental illness begin by age 14, with 75% experiencing symptoms by age 24 (Kessler et al., 2005). On average, individuals diagnosed with serious mental illness (SMI) die 25 years earlier than individuals in the general population from causes, such as respiratory disease, cardiovascular disease, and infectious disease (Parks, Swendsen, Singer, & Foti, 2006). These high death rates can be attributed to multiple factors faced by this vulnerable population (e.g. trauma and homelessness) and modifiable risk factors (e.g. substance abuse, poor nutrition, unsafe sexual practices).

SMI is also a major contributor to functional disability, which can lead to diminished productivity and increased use of health services (Kilbourne et al., 2009). *SMI* includes a range of mental health illnesses (e.g., paranoid schizophrenia, psychotic and bipolar disorder, major depressive disorders, schizoaffective disorders, obsessive-compulsive disorders, panic disorder, and post-traumatic stress disorders (National Alliance of Mental Illness, 2015). Older adults with SMI have usually spent several years managing at least one psychiatric illness. Some have managed their illness over a lifetime. Managing psychiatric illness can affect their identity and roles in various facets of their life. Even among individuals receiving treatment for mental illness, SMI is associated with poorer functioning (Pettit et al., 2009). To date, few studies have explored the intersection of functional status and multiple chronic health conditions faced by older minority adults with serious mental illness. Consequently, little is known about the health profile of older African Americans (OAAs) living with SMI. Lack of attention to SMI among OAAs is especially troublesome since many OAAs have experienced decades of racism,

discrimination, prejudice, and poverty, which contribute to their psychological distress and psychiatric symptoms (Conner et al., 2010; United States Department of Health and Human Services, 2001). This vulnerable population is not only more likely to report stress, sadness, and hopelessness than Whites, but to have worse health outcomes and increased barriers to care due to sociocultural and environmental factors (Conner et al., 2010; U.S. DHHS, 2001; Ward, Wilshire, Detry, & Brown, 2013). This paper focuses on the physiological and mental functional status of OAAs living with SMI and other chronic health conditions.

SMI - A Significant Issue

SMI affects 4 percent of older adults in the U.S. (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014) and 450 million individuals globally (Hunt, 2015), which is expected to double by 2030 (WHO, 2015). Individuals living with an SMI are more likely to have more chronic health conditions than their non-SMI cohort (Lawrence, Hancock, & Kisely, 2013). For instance, the SMI population have higher prevalence rates of cardiovascular and respiratory diseases. With older adults, living with multiple comorbidities can increase mortality risk, disability, and functional decline (Tinetti et al., 2011; Phillips et al., 2015). However, adults with SMI may have been diagnosed early in their lifetime with a mental disorder and may have had to manage a chronic illness for multiple years (Villena & Chelsa, 2010). People with co-existing physical and mental conditions require more disease management and treatment, yet older individuals who belong to a minority group may be at a greater risk for complications from chronic conditions. These older adults with SMI must not only manage their mental illness and symptoms, but process through age-related changes with physical health, functioning, and resources (Cummings & Cassie McClure, 2008).

These older adults with SMI face psychosocial and clinical needs that require consistent care, including physical illness, activities of daily living, and social contact. These older adults with SMI do not pose a risk to others and society (Cummings & Cassie, 2008), but may be at high risk for neglect due to age and race bias. Not surprisingly, one quarter of homeless individuals are living with a mental illness (National Coalition for the Homeless, 2009). With increased rates of harmful behaviors, such as physical inactivity, poor diet, and substance use, this population is at risk for a diminished length and quality of life (Laursen, Musliner, Benros, Vestergaard, & MunkOlsen, 2016; Laursen, Nordentoft, & Mortensen, 2014).

OAAs with SMI & Functional Status

An individual's functional status is an indicator of their physical, mental, emotional and social health status. Individuals diagnosed with SMI may suffer with serious and long-term physical and psychosocial disabilities which can affect their daily activities (Kilbourne et al., 2009). Both medical and psychiatric chronic health conditions affect assessment, treatment, and functional status and other factors, resulting in less favorable outcomes (Dols et al., 2014). Literature shows that OAAs with SMI have lower improvement in symptom and functional status following psychiatric hospitalizations when compared to Whites (Eack & Newhill, 2012). Older adults with SMI, including OAA have difficulty with at least four independent activities of daily living (IADLs), requiring assistance with housekeeping, transportation and obtaining groceries (Cummings & Cassie, 2008). They have higher levels of impairment, lower levels of cognitive functioning, low levels of life satisfaction and are less likely to live independently (Gupta et al., 2007).

Strikingly, OAAs have experienced stigma, discrimination, homelessness, unemployment attributed to symptoms of mental illness, such as anxiety, hallucinations, or delusions (Bryant-

Bedell & Waite, 2010; Gibbs et al., 2013; Starkey et al., 2012). Many report their symptoms of mental illness as hindering their connections with others and impeding their physical health. OAAs with SMI that manage multiple comorbidities report frequent stressful life events, triggered by lifelong poverty, sadness and grief, and poor relationships with family and friends (Black, White, & Hammum, 2007).

Functional Status and Multiple Chronic Health Conditions

Many studies have addressed the impact of medical chronic diseases and its effect on functional status, yet we know very little of SMI's impact on aging ethnic populations, specifically those diagnosed with both psychiatric and medical illnesses. Older SMI adults, including OAAs and White Americans had higher rates of COPD, CHF, thyroid disease, and falls (Hendrie et al., 2013) and were more likely to report chronic pain, heart disease, cancer, diabetes, and respiratory, neurological, gastrointestinal conditions when compared to older adults without SMI (Wetherell et al., 2010).

Managing multiple chronic health conditions can be challenging and contribute to a loss in overall well-being and function in everyday life. These individuals may also have geriatric syndromes, which are common health conditions that involve many physiological systems and may have more than one cause, such as gait imbalance or difficulty swallowing. Geriatric syndromes are multifactorial conditions that arise from clinical, psychosocial, and environmental vulnerabilities (Greene et al., 2015) that aren't specific diseases but impair life satisfaction and functionality (Brown-O'Hara, 2013). The syndromes are usually linked to one of more of the following: older age, baseline cognitive impairment, baseline functional impairment, and impaired mobility (Inouye, Studenski, Tinetti, & Kuchel, 2007). These syndromes can co-exist, making care for these individuals difficult. Even though geriatric syndromes are more prevalent

in older populations, they can appear in younger ages in adults living with chronic conditions or experiencing psychosocial issues, such as those with SMI (Greene et al., 2015).

Both medical and psychiatric chronic health conditions affect assessment, treatment, and functional status and other factors, resulting in less favorable outcomes (Dols et al., 2014). Yet, older individuals who belong to a minority group may be at a greater risk for complications from chronic conditions. Because of barriers, such as stigma or low access to care, OAAs may not seek assistance for their severe physical and mental health issues, which can lead to poor functional status.

Purpose

Our aim was to examine the relationship between multiple chronic health conditions (both co-existing psychiatric and medical illnesses and geriatric syndromes) and functional status among OAAs managing SMI.

Methods

Design

This descriptive cross-sectional study recruited OAAs diagnosed with SMI living in South Los Angeles. All 150 participants were administered a questionnaire that assessed their chronic health conditions and health status, including functional status. The study was approved by the University Human Subjects Protection Committee, with data collection occurring from June to September 2016.

Sample

The sample included OAAs living in the South Los Angeles Metro area. The inclusion criteria were: a) 45 years of age or older, b) diagnosed with a SMI for at least one year, c)

English-speaking, and d) able to provide consent. Participants were recruited from a mid-size clinic for lower income adults.

Theoretical Framework

For the proposed study, the Ethnocultural Gerontological Nursing (ECGN) model will be utilized. Developed and proposed by Phillips et al. (2014), the model aims to describe the health outcomes of older adults who belong to various ethnic and cultural groups. The ECGN model postulates that there are multiple dimensions of health, specifically among gerontological populations (Phillips et al., 2015). The ECGN model places emphasis on the variance of measuring multiple chronic health conditions by examining three concepts: density, breadth, and depth. These concepts include functional status, self-perceived health, and beliefs regarding health and quality of life. These variables interact with one another forming strong relationship to construct a view of health. The ECGN model highlights the experience of aging of transcultural groups with bringing sensitivity and awareness to the issues that they face.The ECGN model will guide this study to understand the functional status of OAAs with SMI.

Measures

Sociodemographic data. Age, gender, marital status, level of education, income, and current employment status were measured by self-report.

Multiple Chronic Health Conditions. Chronic health conditions were split into medical illnesses, psychiatric illnesses, and geriatric syndromes. SMI was measured by participants reporting any of the following diagnoses: major depression, schizophrenia, bipolar disorder, panic disorder, schizoaffective disorder, obsessive-compulsive disorder, and post traumatic disorder (Corrigan et al., 2017; Record et al., 2016).

Medical illnesses were measured by asking if the individual had any of the following: heart disease, hypertension, stroke, diabetes, asthma, lung disease, osteoarthritis, degenerative or rheumatoid arthritis, ulcer or stomach disease, kidney disease, anemia or blood disease, cancer, epilepsy, or thyroid disorders. These questions were guided by the Self-Administered Comorbidity Questionnaire (SCQ), which is a brief easily understandable measure, that can be completed by individuals without a medical background (Sangha et al., 2003). The SCQ has been established with high validity and reliability (Brunner et al., 2008; Wong et al., 2017) and correlated with the Charlson Comorbidity Index, a chart review-based instrument (r = .55) (Sangha et al., 2003).

Geriatric Syndromes. Participants were asked if they had any of the following: falls, dizziness, sleep problems, confusion, difficulty swallowing, bladder control problems, vision problems, hearing problems, difficulty walking, or skin breakdown. These syndromes were selected from the Fulmer SPICES: An Overall Assessment Tool for Older Adults questionnaire (Fulmer, 2012) and the Comprehensive Geriatric Assessment (Ward & Reuben, 2016).

Functional Status was assessed using the RAND Medical Outcomes Study Short Form 36-Item Health Status Questionnaire (*SF-36*) (Ware & Sherbourne, 1992). The *SF-36* measures eight dimensions of functional status: 1) physical function, 2) physical role limitations, 3) bodily pain, 4) general health, 5) vitality, 6) social functioning, 7) emotional well-being, and 8) emotional role limitations. The questions under each dimension are combined and calculated to produce an average, which is the score for the dimension. Each dimension score range from 0 (worst functioning) to 100 (best functional status), with higher scores indicating better function. This measure has been widely used and demonstrated internal consistency and discriminant construct validity with multiple studies (Hooten, Knight-Brown, Townsend & Laures, 2012;

Poleshuck, Giles, & Tu, 2006; Staton et al., 2007). In this study, the Cronbach's α for the total *SF-36* survey is .75.

Data Analysis

All analyses were conducted using SPSS v22 (IBM SPSS, Armonk, New York, USA). Frequencies and means were calculated for all demographic data and *SF-36* questions. Chi-Square analyses examined bivariate associations with sociodemographic data (age, gender, education, and marital status) and the various *SF-36* dimensions. T-tests (Mann-Whitney U tests for non-parametric variables) and Pearson's correlational tests (Kendall's Tau for nonparametric variables) were performed to analyze relationships between chronic health conditions (psychiatric and medical conditions and geriatric syndromes) and the eight SF-36 functional status dimensions.

Results

For 150 participants included in our study, 67% were female and 81% were single. The average age was 55.8 years. Fifty percent of the sample had high school diplomas, whereas 20% had associate's degrees or higher. Table 11 presents the descriptive information for health status. The average number of geriatric syndromes was 2.7 *(SD*= 2.1) and the average number of medical illnesses was 3.1 (*SD*= 2.2).

In regards to the *SF-36* survey, the majority of the subjects (N=66, 44%) reported that their health was the same, while 31% stated that their health was worse than last year. Only 24% feel that their health was better than last year. In regards to health perceptions, 46% believe that they seemed to get sick a little easier than other people. Almost 60% reported that they were as "healthy as anybody they know", yet 27% believed that their health would get worse.

Dimensions of Functional Status

Table 12 presents the mean scores for the *SF-36* dimensions. Possible scores ranged from 0 to 100, with higher scores equating to higher functioning. The average scores of the SF-36: 1) physical functioning (*M*=40.3; *SD* = 34.1), 2) physical role limitations (*M*=29.2; *SD* = 41.8), 3) bodily pain (*M*=30.7; *SD* = 29.2), 4) general health (*M*=45.7; *SD* = 21.9), 5) vitality (*M*=43; *SD* = 19.5), 6) social functioning (*M*=33.3; *SD* = 23.8), 7) emotional well being (*M*=49.6; *SD* = 21.3), and 8) emotional role limitations (*M*=29.1; *SD* = 45.3).

Demographic variables were correlated with SF-36 dimensions. Age and vitality (energy/fatigue) were correlated (r=.203, p=.013), indicating that older individuals perceived a greater well-being. Vitality scores were also statistically significantly higher in males (Mdn = 47.6) than in females (Mdn = 40.7) (U = 1985, z = -1.98, p = .048). The SF-36 dimension of bodily pain was significantly higher in males (Mdn = 38.1) than in females (Mdn = 27) (U = 1927, z = -2.25, p = .024).

Functional Status & Chronic Health Conditions

Associations between *SF-36* dimensions and medical and psychiatric diagnoses were examined. Lower physical functioning was significantly associated with panic disorder (*z*=-2.4, *p*=.018), seizures (*Z*=2.1, *p*=.039), and chronic pain (*Z*= -2.2, *p*=.03). Bipolar disorder was associated with lower vitality (*z*=-2.5, *p* =.01). Chronic pain was related to lower social functioning (*z*= -2.4, *p*=.015). Seizures was related to higher role limitations attributed to physical health (*z*=-1.9, *p* =.048).

For geriatric syndromes, lower physical functioning was related to the presence of falls (*t*=-2.5, *p*=.011). Decreased social functioning was associated with sleeping issues (*t*=-2.0, *p*=.05).

A correlation was found between *SF-36* dimension of social functioning and the number of medical conditions (r=.172; p=.036). Specifically, for every increase in the number of medical condition, the individual's social functioning would increase.

Discussion

To our knowledge, this is the first study to assess functional status among AAs with SMIs. Almost one-third of our sample stated their health was worse compared to the previous year and believed it would get worse. Individuals with a chronic trajectory of SMI are more likely to have high recurrences of psychiatric symptoms and poorer outcomes (Colman & Ataullahjan, 2010). Some dimensions of the *SF-36* were related to chronic health conditions such as seizures, pain, and bipolar disorder. Some of these conditions have also been found to be related to lower quality of life and functioning (Ackali, Altindag, Geyik, & Cansel, 2009; Vries et al., 2015; Geriatric syndromes such as sleeping issues and falls were also correlated with *SF-36* dimensions. Living with SMI can lead to developing chronic illnesses, geriatric syndromes, and maladaptive behaviors, which could explain how SMI can act as a correlated risk factor for unhealthy aging and poor health. SMI that is linked to another chronic health analyzes can lead to a worsening symptomatology, increased disability, and chronic trajectories (Colman & Ataullahjan, 2010).

We were unable to find any relationships between the *SF-36* dimensions and the number of psychiatric and geriatric syndromes. We were able to show that with every increase in the number of medical conditions, the individual's social functioning increased. This finding has also been evidenced in the literature (Rosso et al., 2011). Individuals with multiple chronic health conditions have an increased social need (Sanchez et al., 2011). It is important to consider the social evaluation of this population and eventually provide a framework that provides

therapeutic approaches to meet their social need. Because chronic illnesses predict increased dependence and morbidity, individuals with more conditions require an intact social care system, which may explain why social functioning increases.

On the basis of all eight *SF-36* dimensions, the dimensions with the highest average score were emotional well-being, general health, and vitality. Even though the *SF-36* dimensions' maximum score is 100, none of our *SF-36* dimensions had an average score that was higher than 50. Other populations have had low scores for *SF-36* dimensions, including cancer patients (Bostrom, Sandh, Lundberg, & Fridlund, 2003), obese individuals (Glintborg et al., 2014), and people with coronary diseases (dos Santos et al., 2012). Former trauma patients also have decreased scores in both physical and mental dimensions of the *SF-36* (Orwelius et al., 2012). These traumas refer to accidental injuries, but there is debate on whether other certain life events have a greater influence on mental illness than others (Colman & Ataullahjan, 2010). For example, traumatic events that plague the low income AA community include rape, homelessness, exposure to violence and murder, and discrimination. The compounding of these traumatic events throughout the life course will greatly affect the various *SF-36* dimensions of this population and lead to a decreased functional status. Having lifetime SMI and experiencing traumatic events may also lead to maladaptive behaviors that could have a damaging effect on physical and mental health.

Limitations and Strengths

There are several limitations to our analyses. First, the data is cross-sectional, which indicates no temporal ordering between functional status and mental health status. Second, the assessment of chronic health conditions is self-reported, which may be affected by the participant's memory recall. However, gaining information about chronic illness from medical

or administrative data may also present limitations, such as low quality of documentation or poor data. In addition, individuals that have visited various medical facilities may have incomplete data on their health histories. In some cases individual may actually provide more accurate data than that collected from charts. (Kennedy, Mathis, & Woods, 2007). A strength of this study was the use of standardized measures with established psychometric properties to assess functional status (O'Neal et al., 2008). Still, the validity of the *SF-36* may be limited because it has not been used extensively with those who have SMI.

Implications for Practice and Policy

The study suggests opportunities for changes in policy and practice, benefitting community-dwelling aging adults, mental health centers, and Medicare and Medicaid programs. By focusing on the functional status of OAAs, health care providers, researchers, and policy makers can address the barriers and needs associated with SMI and older age. This is crucial as the older population increases, reinforcing that health care providers and members need to become familiar and routinely assess older adults for conditions associated with age or SMI that may pose a negative effect on the individual's quality of life and functioning (Cummings & Cassie McClure, 2008). Overall, this population shows a degree of functional impairment as evidenced by the low *SF-36* dimension scores. These findings are clinically significant may encourage health professionals to regularly assess the physiological and mental functioning of older adults with SMI with multiple chronic health conditions.

Conclusion

The present study is unique in that it is the first to investigate the functional status among this population of older community-dwelling AAs managing an SMI in an urban city in western United States. Unlike other studies, our analyses linked multiple chronic health conditions,

geriatric syndromes, and functional status for a vulnerable population of OAAs with a SMI. Aging may start earlier in the AA population, related to lifetime factors of racism, poverty, and life events, and leading to unhealthy outcomes.

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Table 11

Descriptive Statistics on Comorbidity Status among Older African Americans with Serious Mental Illness (N=150)

Comorbidity Status	M	SD	Range
Psychiatric Comorbidities	2.7	1.9	2-7
Medical Comorbidities	3.1	2.2	2-12
Geriatric Syndromes	2.74	2.1	2-8
Psychiatric & Medical Comorbidities	5.8	3.1	2-18
Psychiatric Comorbidities & Geriatric Syndromes	6.2	3.7	2-17
Psychiatric Comorbidities, Medical Comorbidities, & Geriatric Syndromes	9.3	5.0	2-25

Table 12

Descriptive Statistics for SF-36 Dimensions (N=150 Older African Americans with SMI)

Dimension	*M*	*SD*
Physical functioning	40.3	34.1
Role limitations due to physical health	29.2	41.8
Bodily pain	30.7	29.2
General health	45.7	21.9
Vitality (Energy/Fatigue)	43.0	19.5
Social functioning	33.3	23.8
Emotional well-being	49.6	21.3
Role limitations due to emotional problems	29.1	45.3

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Chapter IV

Substance Use among Older Africans Americans (OAAs) with Serious Mental Illness (SMI)

The co-occurrence of serious mental illness (SMI) and substance use poses multiple health challenges and increase The goal of the study was to examine relationships between substance use, chronic health illnesses, and geriatric syndromes among 150 older African Americans (OAAs) with a SMI living in South Los Angeles (SLA). Correlational analyses and independent t-tests were analyzed to determine the specific chronic illnesses and geriatric syndromes associated with substance use. Findings revealed that 42% of our participants currently consume alcohol, 46% are cigarette smokers, and 50% have either a current or former history of illicit drug use. History of homelessness was correlated with alcohol use (p=.004), cigarette smoking (p=.007), and illicit drug use (p=.011). Cigarette smoking was associated with asthma (p=.018), bladder control problems (p=.015), schizophrenia (p=.004), and other chronic conditions. Illicit drug use was associated with falls (p=.05) and vision problems (p=.046). Alcohol use was significantly associated with major depression (p=.026), kidney disease (p=.019), stomach disease (p=.05) and bladder control issues (p=.038). These findings demonstrate that OAAs with SMI who are substance users are vulnerable to multiple chronic health illnesses and geriatric syndromes.

Keywords: Older African American adults, serious mental illness, substance use, pharmacy visits

Introduction

Serious mental illness (SMI) affects approximately 10 million adults in the United States (US) (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). SMI commonly refers to a range of mental health illnesses (e.g., paranoid schizophrenia, psychotic and bipolar disorder, major depressive disorders, schizoaffective disorders, obsessive-compulsive disorders, panic disorder, and post-traumatic stress disorders (American Psychiatric Association, 2013; National Alliance of Mental Illness, 2015). SMI is linked to increased morbidity, disability, and suicide risk (Fiske, Wetherell, & Gatz, 2010). Currently, older adults with SMI have health costs that are 50% as compared with their peers with no SMI, signifying emerging concerns for mental health (Katon, Lin, Russo, & Unutzer, 2003). In addition to their psychiatric illness, older adults with SMI are more likely to have physical health conditions, which include cancer, kidney disease, cardiovascular disease and stroke (Dols et al., 2014; Huang et al., 2012; Janssen et al., 2014). As a result, this leads receive substandard levels of care and fewer resources of care among this population (Swartz & Jantz, 2014).

Individuals with SMI have a shorter life expectancy than the general population, and substance use may be a major contributing factor to higher morbidity and mortality from chronic illnesses, such as cardiovascular disease (Hartz et al., 2014). Older African Americans (OAAs), undergo more psychological distress due to chronic stressors, such as poverty, racism, and violence as compared with White Americans (Conner et al, 2010; Phillips, 2008). SMI symptoms are more detrimental for OAAs compared to age-matched White Americans, signifying a health disparity (Breslau et al., 2005). Burdened with chronic stressors and substance use highlight the need to improve the understanding of the association between substance use and SMI among OAAs.

Severe Mental Illness and Substance Use

In the United States (U.S.), an estimated 7.9 million adults are diagnosed with a co-occurring mental and substance disorder (Center for Behavioral Health Statistics and Quality, 2015). Individuals with SMI are more likely to be heavy alcohol users; in particular, data reveals that they are 3.5 times more likely to use marijuana regularly, 4.6 times more likely to use other drugs at least 10 times in their lives, and 5.1 times more likely to be daily smokers (Hartz et al., 2014). Cigarette smoking is more prevalent among SMI individuals when compared with the general population of adult smokers (Young-Wolff et al., 2015). Illicit drug use has been associated with lower mental health related quality of life (HRQOL) (Kilbourne et al., 2009) and in individuals diagnosed with SMI (Schwartz, Bradley, Sexton, Sherry, & Ressler, 2009). For example, in a study of 1460 participants with schizophrenia, 60% used various substances (alcohol and illicit drugs) and 37% had a diagnosable substance use disorder (Swartz et al., 2006).

Substance Use and Older Adults with Severe Mental Illness

Domestically, older adults are the fasting growing population; in 2060, 98 million adults will be living in the U.S. (United States Department of Health and Human Services, 2016). Older adults face many challenges, including the management of both chronic medical illnesses and geriatric syndromes. Due to the aging process, older adults are likely to have gradual changes with physical and mental health, which may lead to the development of geriatric syndromes, such as falls and urinary incontinence. There are four shared risk factors for geriatric syndromes: older age, baseline cognitive impairment, baseline functional impairment, and impaired mobility (Inouye, Studenski, Tinetti, & Kuchel, 2007). Geriatric syndromes are associated with alcohol and drug use in addition to the presence of medical comorbidities

(Brown, Kiely, Bharel, & Mitchell, 2014). In 2014, the percentage of older adults (ages 50 and older) with co-occurring SMI and SUD was 15.1 percent (Center for Behavioral Health Statistics and Quality, 2015). Substance use is also linked to lower educational attainment, childhood physical and sexual abuse, homelessness, and chronic illness (Swartz et al., 2006).

Older African Americans and Substance Use

As life expectancy increases, there are improved conditions of living and advanced technology to improve quality of life for older adults (Cunningham et al., 2017). Yet, these benefits may not be shared among all cultural groups. OAAs have lower levels of educational attainment, have higher rates of unemployment, and are more likely to live in segregated poverty-stricken neighborhoods (Barnes et al, 2011). Overall, they experience lower life satisfaction, more depressive symptoms, more exposure to major lifetime discrimination, and a greater number of discriminatory events as compared with Whites and Latinos (Ayalon & Gum, 2011). This can be attributed to external life stressors, such as unemployment, homelessness, death in family, chronic illnesses, dysfunctional family issues, child abuse, and divorce (Bryant-Bedell & Waite, 2010). The health and wellness of the OAA community is suboptimal, which may lead to risky and harmful behaviors, such as substance use. Heavy alcohol use is consumed by 5.2 percent of the African American population (SAMHSA, 2015). Among African Americans with SMI, the prevalence of cigarette smoking exceeded 70 percent (Young-Wolff et al., 2015). Although the literature on SMI among OAAs is limited, findings have consistently indicated that they are more likely to have substance abuse issues (Swartz et al., 2006).

Purpose

Our aim was to examine the relationships between substance use, chronic health illnesses, and geriatric syndromes among OAAs with SMI.

Methods

Design

In this cross-sectional study, OAAs diagnosed with SMI who consented to participate were administered a questionnaire that assessed their chronic health conditions and health behaviors. The study was approved by the University Human Subjects Protection Committee, with data collection occurring from June to September 2016.

Sample

The sample recruited for this study included 150 OAAs living in the South Los Angeles Metro area. The inclusion criteria were follows: a) 45 years of age or older, b) diagnosed with SMI for at least one year, c) English-speaking, and d) able to provide their own consent. Participants were recruited from a mid-size wellness clinic in South Los Angeles.

Theoretical Framework

Guided by the Ethnocultural Gerontological Nursing (ECGN) model (Phillips et al. 2015), the ECGN provides a critical assessment of experiences and influences that describe the biological, psychological, and social conditions experienced by OAAs. The ECGN model places emphasis on the contribution of a life course perspective in relationship to gerontological nursing concepts and the aging experience (Phillips et al., 2015). The model posits that different mechanisms are significant in explaining the behaviors and attitudes of ethnic elder groups (Anakwenze & Zuberi, 2013). The population of interest, OAAs may have been stigmatized in their community and families because of their diagnosis of SMI across the life course. The ECGN recognizes that OAAs may have poorer health outcomes as compared to those who are culturally different and/or are not mentally ill (Phillips et al., 2015).

Measures

Sociodemographic data were assessed which included age, marital status, level of education, country of birth, monthly income, years of work history, and perceived neighborhood poverty level and economic class was assessed. Participants were also asked if they had a history of homelessness or incarceration.

Multiple Chronic Health Conditions. Chronic health conditions were divided into two classes: medical illnesses and psychiatric illnesses. Psychiatric illnesses included the following: major depression, schizophrenia, bipolar disorder, panic disorder, schizoaffective disorder, obsessive-compulsive disorder, and post traumatic disorder (Corrigan et al., 2017; Record et al., 2016).

Medical illnesses were assessed by the following: heart disease, hypertension, stroke, diabetes, asthma, lung disease, osteoarthritis, degenerative arthritis, or rheumatoid arthritis, ulcer or stomach disease, kidney disease, anemia or blood disease, cancer, epilepsy, or thyroid disorders. All questions regarding chronic health illnesses were guided by the Self-Administered Comorbidity Questionnaire (SCQ). The SCQ has been established with high validity and reliability (Brunner et al., 2008; Wong et al., 2017) and correlated with the Charlson Comorbidity Index, a chart review-based instrument ($r = .55$) (Sangha et al., 2003).

Geriatric Syndromes. Participants were asked if they have any of the following: falls, dizziness, sleep problems, confusion, difficulty swallowing, bladder control problems, vision problems, hearing problems, difficulty walking, or skin breakdown. Questions focused on geriatric syndromes were influenced by Fulmer SPICES: An Overall Assessment Tool for Older Adults questionnaire (Fulmer, 2012) and the Comprehensive Geriatric Assessment (Pilkington, Boland, & Dickson, 2017; Ward & Reuben, 2016).

Each of the chronic health conditions and geriatric syndromes were dichotomized as either *yes* = diagnosed with condition or *no* = not having the condition.

Substance Use was assessed by 10 items which asked about cigarette smoking, alcohol intake, and illicit drug use (*e.g., cocaine, marijuana, methamphetamine, and heroin*) in the last twelve months and in their entire lifetime.

Data Analysis

All analyses were conducted using SPSS version 22 statistical software (IBM SPSS, Armonk, New York, USA). Frequencies and means were calculated for all demographic data. Chi-Square analyses are presented to illustrate relationships between sociodemographic data, multiple chronic health illnesses, and various types of substance use. T-tests (Mann-Whitney U tests for non-parametric variables) were performed to analyze differences between the number of medical comorbidities, geriatric syndromes and substance use.

Results

Sociodemographic Data

In the sample, over half (67.3%) were female and less than three quarters (71.3%) had at least a high school diploma or a higher degree. Eighty-one percent reported their marital status as single. In addition, 69.3% of participants reported monthly household income below $900/month. Fifty percent of the sample had high school diplomas, whereas 28% had an education level below the 12^{th} grade. Fifty percent had a history of incarceration and 62% had a history of homelessness. The most common medical diagnosis was hypertension (64.7%) and sleeping problems (65.3%). The average number of geriatric syndromes was 2.7 and the average number of medical illnesses was 3.1.

Substance Use Characteristics

Table 13 reports substance use practices in this sample. Over half (57%) were current alcohol users, with 16% drinking at least 3 times a week. Fifty-five percent had smoked cigarette in the past year, yet only 46% were current cigarette users. Likewise, 50% reported using illicit drugs within their lifetime, but only 32% had used these drugs within the past year. Illicit drug use (e.g., marijuana, heroin, cocaine, etc) was associated with the male gender (X^2=6.82, p=.014).

Table 14-16 provides demographic information stratified by substance use. A significant relationship was found between history of homelessness and smoking use (X^2=7.57, p=.007), illicit drug use (X^2=7.3, p=.011), and alcohol use (X^2=8.85, p=.004). A history of incarceration was also related to illicit drug use (X^2=9.63, p=.003).

Multiple Chronic Health Conditions & Substance Use

Those who reported a history of illicit drug use had a higher number of medical illnesses (M=3.4) compared to those who did not (M=2.8, U=3330, z=1.97, p=.048). In addition, cigarette users had more medical comorbidities (M=3.6), compared with those who did not smoke (M=2.7, U=3252, z=1.99, p=.047). Geriatric syndromes were also higher among cigarette smokers (M=3.2) compared with those who did not smoke (M=2.4, U=3351, z=2.37, p=.018).

Table 17-19 reports all significant chronic health illnesses in relation to various substances. Cigarette smoking use was associated with the following illnesses: paranoid disorder (X^2=8.13, p=.017), schizophrenia (X^2=8.62, p=.004), OCD (X^2=8.2, p=.007), asthma (X^2=6.3, p=.018) and seizures (X^2=4.41, p=.036). Confusion (X^2=7.68, p=.021) and bladder control problems (X^2=6.44, p=.015) were the two geriatric syndromes associated with smoking use.

Illicit drug use was associated with falls (X^2=4.1, p=.05) and vision problems (X^2=12.83, p=.046). Alcohol use was significantly associated with major depressive disorder (X^2=5.67,

p=.026), kidney disease (X^2=5.62, p=.019), stomach disease (X^2=7.44, p=.05) and bladder control issues (X^2=4.91, p=.038).

Discussion

Our aim was to examine the relationships between substance use patterns, chronic health illnesses, and geriatric syndromes among OAAs with SMI.The association of major depression (Mowbray, Washington, Purser, & O'Shields, 2017) and kidney disease (Shankar, Klein, & Klein, 2006) to alcohol use reported in this study parallel findings in the literature.

Over half (52%) of this sample reported cigarette use, alcohol use, and/or illicit drug use. Drug misuse among this population can be affected by numerous factors, such as perceived health status, health knowledge, and lack of communication with their primary health care provider (Lee, 2011). Paranoid disorder, schizophrenia, and seizures were significantly related to substance use. Literature demonstrates that cigarette smoking is higher (36%) among those who have an SMI compared with those who do not have a SMI (21%) (Center for Disease Control & Prevention, 2013). Furthermore, this national study found that smoking prevalence was higher among adults with SMI who were 45 years and older or lived below poverty level. In addition, cigarette smoking has been found to be associated with asthma (McLeish, Cougle, & Zvolensky, 2011), comparable to our results. These findings relate closely to other research that has found that older adults with multiple chronic conditions and SMI are more likely to be heavy alcohol users (Mowbray, Washington, Purser, & O'Shields, 2017). Healthcare providers should be assessing the substance use patterns of these individuals with brief screening instruments, such as the CAGE questionnaire designed to screen for alcohol misuse (Ewing, 1984). By detecting substance use disorders, healthcare providers can refer individuals to effective

addiction treatment as well as closely monitor their pharmaceutical treatment with regards to interactions with alcohol, cigarette, or other illicit drugs.

Overall, increased awareness of high prevalence rates for both alcohol and cigarette smoking in this population is needed to increase awareness and encourage efforts to reduce these behaviors. Health care providers should promote alcohol and cigarette cessation in this sample to lower morbidity and mortality risk. History of homelessness was significantly associated with cigarette smoking, alcohol use, and illicit substance use. This finding is supported by other studies that have found individuals with recurrent homelessness have a high likelihood of alcohol and substance use (McQuistion, Gorroochurn, Hsu, & Caton, 2014). Overall, more research is needed among the substance use practices of OAAs with SMI.

Limitations and Strengths

This study presents with several notable limitations. First, this is a cross-sectional study so we are unable to infer any causal relationships. Second, this study relies on the self-reported data; while it is difficult to rely on self-report, participants may not divulge their health history to health care providers, especially regarding substance use. Therefore, participating in an anonymous research study may encourage participants to share more of their substance practices. It is important to note that these results are not generalizable to all OAAs managing an SMI. Further research is needed to determine if substance use varies in regional areas (Eastern U.S. versus Western U.S.) or urban versus rural areas among OAAs.

Implications for Practice and Policy

Treatment of substance use for individuals with SMI merit critical attention because they are more likely to have multiple chronic health illnesses (Garrido et al., 2017), sensitivity to psychotropic medication (Schneeberger, Muenzenmaier, Castille, Battaglia, & Link, 2014), and

participate in harmful or risky behaviors (Bardi & Moorley, 2016). Healthcare providers, including nurses have a significant role in identifying issues for those reporting heavy substance use. The individual's SMI can affect their physical, social, and emotional status, which may be exacerbated by various substances, such as alcohol and illicit drug use.

Conclusion

The results of this study add to the previous research on OAAs and their substance use practices. Given these findings, OAAs with SMI are faced with risk factors for poorer health outcomes, high rates of homelessness and incarceration. Very few studies have documented associations between risky or unhealthy behaviors and managing multiple chronic health conditions among older minority adults with SMI. Understanding the relationship between substance use practices and lifestyle factors, such as homelessness, may be an important link to their health and the management of multiple chronic health conditions.

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Table 13

Profile of Substance Use among Older African Americans with Serious Mental Illness (SMI; N = 150)

Characteristic	N	%
Frequency of Current Alcohol Use		
None	64	42.7
Monthly or Less	45	30.0
Up to 4 times a month	16	10.7
Up to 3 times a week	13	8.7
4 or more times a week	12	8.0
Number of Alcoholic Drinks Consumed on a Typical Day		
None	63	42.0
1-2	46	30.7
3-4	23	15.3
5-6	7	4.7
7-9	2	1.3
10 or more	9	6.0
Frequency of Current Daily Cigarette Use		
None	81	54.0
1-2 cigarettes/day	18	12.0
¼ pack / day	13	8.7
½ pack / day	13	8.7
¾ pack/ day	23	15.3

Table 13 (continued)

Substance Use among Older African Americans (OAAs) with Serious Mental Illness (SMI; N = 150)

Characteristic	N	%
1 pack / day	8	5.3
More than 1 pack / day	5	3.3
Cigarette Use in the Last 12 months		
Yes	66	44.0
No	83	55.3
Any Use of Illicit Drugs		
Yes	75	50.0
No	75	50.0
Illicit Drug Use during the last 12 months		
Not in the last 12 months	101	67.4
Once a year	7	4.7
Twice a year	2	1.3
Every 3-4 months	4	2.7
Once a month	8	5.3
Once a week	7	4.7
Daily	21	14.0

Note. Illicit drug use referred to use of the following drugs: marijuana, cocaine, heroin, and/or methamphetamine.

Table 14

Sociodemographic Characteristics among (OAAs) with SMI Reporting Use of Cigarette Smoking (N=70)

Characteristic	N	%
Age		
45-55	77	51.3
>55	73	48.7
Gender		
Male	43	61
Female	27	39
Education		
$\leq 8^{th}$ Grade	6	9
9^{th}-11^{th} Grade	16	23
12^{th} Grade	37	53
Associate's Degree	10	14
Bachelor's Degree or Higher	1	1
Marital Status		
Single	58	83
Married	9	13
Divorced	1	1
Widowed	2	3

Table 14 (continued)

Sociodemographic Characteristics among (OAAs) with SMI Reporting Use of Cigarette Smoking (N=70)

Characteristic	N	%
Current Job Status		
Employed	6	9
Homemaker	6	9
Retired	13	19
Unemployed	29	41
Other	16	23
Years of Work History		
0-5 years	18	26
6-10 years	12	17
11-15 years	9	13
16-20 years	14	20
21+ years	17	24
Current Monthly Income		
$0-500/month	19	27
$600-900/month	29	41
$1000-1400/month	11	16
$1500-1900/month	6	9
$2,000-2,400/month	1	1
$2,500-2,900/month	0	-

Table 14 (continued)

Sociodemographic Characteristics among (OAAs) with SMI Reporting Use of Cigarette Smoking (N=70)

Characteristic	N	%
Current Monthly Income		
$3,000+ / month	4	6
# of People Supported on Monthly Income		
1 person	42	60
2-4 people	26	37
5-7 people	2	3
History of Homelessness		
Yes	52	74
No	18	26
History of Incarceration		
Yes	40	57
No	30	43
Self-Perception of Social Class		
Upper Class	7	11
Middle Class	14	20
Satisfied Lower Middle Class	9	13
Struggling Lower Middle Class	27	39
Working Class	4	6
Working Poor	9	13

Table 14 (continued)

Sociodemographic Characteristics among (OAAs) with SMI Reporting Use of Cigarette Smoking (N=70)

Characteristic	N	%
Self-Perception of Neighborhood's Social Class		
Upper Class	7	10
Middle Class	16	23
Satisfied Lower Middle Class	11	16
Struggling Lower Middle Class	21	30
Working Class	6	9
Working Poor	9	13

Table 15

Sociodemographic Characteristics among OAAs with SMI Reporting Use of Illicit Drug Use (N=75)

Characteristic	N	%
Age		
45-55	36	48
>55	39	52
Gender		
Male	32	43
Female	43	57
Education		
$\leq 8^{th}$ Grade	4	5
9^{th}-11^{th} Grade	21	28
12^{th} Grade	38	51
Associate's Degree	12	16
Bachelor's Degree or Higher	0	-
Marital Status		
Single	60	80
Married	11	15
Divorced	1	1
Widowed	3	4
Current Job Status		
Employed	8	11

Table 15 (continued)

Sociodemographic Characteristics among OAAs with SMI Reporting Use of Illicit Drug Use (N=75)

Characteristic	N	%
Current Job Status		
Homemaker	5	7
Retired	15	20
Unemployed	31	41
Other	16	23
Years of Work History		
0-5 years	17	23
6-10 years	7	9
11-15 years	15	20
16-20 years	14	19
21+ years	22	24
Current Monthly Income		
$0-500/month	20	27
$600-900/month	34	45
$1000-1400/month	10	13
$1500-1900/month	6	8
$2,000-2,400/month	1	1
$2,500-2,900/month	0	-
$3,000+ / month	4	5

Table 15 (continued)

Sociodemographic Characteristics among OAAs with SMI Reporting Use of Illicit Drug Use (N=75)

Characteristic	N	%
# of People Supported on Monthly Income		
1 person	45	60
2-4 people	28	37
5-7 people	2	3
History of Homelessness		
Yes	55	73
No	20	27
History of Incarceration		
Yes	47	63
No	28	37
Self-Perception of Social Class		
Upper Class	7	9
Middle Class	13	17
Satisfied Lower Middle Class	10	13
Struggling Lower Middle Class	36	48
Working Class	3	4
Working Poor	6	13

Table 15 (continued)

Sociodemographic Characteristics among OAAs with SMI Reporting Use of Illicit Drug Use (N=75)

Characteristic	N	%
Self-Perception of Neighborhood's Social Class		
Upper Class	7	9
Middle Class	13	17
Satisfied Lower Middle Class	13	17
Struggling Lower Middle Class	18	24
Working Class	10	13
Working Poor	14	19

Table 16

Sociodemographic Characteristics among OAAs with SMI Reporting Use of Alcohol (N=85)

Characteristic	N	%
Age		
45-55	44	52
>55	41	48
Gender		
Male	53	62
Female	32	38
Education		
$\leq 8^{th}$ Grade	6	7
9^{th}-11^{th} Grade	20	24
12^{th} Grade	42	49
Associate's Degree	14	17
Bachelor's Degree or Higher	2	2
Marital Status		
Single	69	81
Married	13	15
Divorced	1	1
Widowed	2	2
Current Job Status		
Employed	13	15

Table 16 (continued)

Sociodemographic Characteristics among OAAs with SMI Reporting Use of Alcohol (N=85)

Characteristic	N	%
Current Job Status		
Homemaker	8	9
Retired	13	15
Unemployed	35	41
Other	16	19
Years of Work History		
0-5 years	17	20
6-10 years	14	17
11-15 years	13	15
16-20 years	14	17
21+ years	27	32
Current Monthly Income		
$0-500/month	25	29
$600-900/month	35	41
$1000-1400/month	8	9
$1500-1900/month	8	9
$2,000-2,400/month	1	1
$2,500-2,900/month	2	2
$3,000+ / month	6	6

Table 16 (continued)

Sociodemographic Characteristics among OAAs with SMI Reporting Use of Alcohol (N=85)

Characteristic	N	%
# of People Supported on Monthly Income		
1 person	53	62
2-4 people	30	35
5-7 people	2	2
History of Homelessness		
Yes	62	73
No	23	27
History of Incarceration		
Yes	45	53
No	40	47
Self-Perception of Social Class		
Upper Class	8	9
Middle Class	13	15
Satisfied Lower Middle Class	15	18
Struggling Lower Middle Class	31	37
Working Class	8	9
Working Poor	10	12
Self-Perception of Neighborhood's Social Class		
Upper Class	7	8

Table 16 (continued)

Sociodemographic Characteristics among OAAs with SMI Reporting Use of Alcohol (N=85)

Characteristic	N	%
Self-Perception of Neighborhood's Social Class		
Middle Class	18	21
Satisfied Lower Middle Class	18	21
Struggling Lower Middle Class	14	17
Working Class	10	12
Working Poor	18	21

Table 17

Chronic Health Conditions & Cigarette Smoking among Older African Americans (OAAs) (N= 150) with SMI

Chronic Condition	Cigarette Smoking (%)		*p*
	Yes	No	
Paranoid Disorder			.017
Yes	64	36	
No	39	61	
Schizophrenia			.004
Yes	68	32	
No	40	60	
OCD			.007
Yes	70	30	
No	41	59	
Asthma			.018
Yes	63	37	
No	40	60	

Table 17 (continued)

Chronic Health Conditions & Cigarette Smoking among Older African Americans (OAAs) (N= 150) with SMI

Chronic Condition	Cigarette Use		*p*
	Yes	No	
Seizures			.036
Yes	71	29	
No	44	56	
Confusion			.021
Yes	61	39	
No	39	61	
Bladder Control Problems			.015
Yes	64	36	
No	40	60	

Table 18

Chronic Health Conditions & Illicit Drug Use among Older African Americans (OAAs) (N= 150) with SMI

Chronic Condition	Illicit Drug Use (%)		*p*
	Yes	No	
Falls			.05
Yes	62	38	
No	44	56	
Vision Problems			.046
Yes	52	48	
No	47	53	

Table 19

Chronic Health Conditions & Alcohol Use among Older African Americans (OAAs) (N= 150) with SMI

Chronic Condition	Alcohol Use		*p*
	Yes	No	
Major Depressive Disorder			.009
Yes	52	48	
No	75	25	
Arthritis			<.001
Yes	50	50	
No	62	38	
Chronic Pain			.022
Yes	53	47	
No	62	38	
Falls			.008
Yes	64	36	
No	54	47	

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Conclusion to Dissertation

The findings of chapter one examined the multiple chronic health conditions faced among this sample population of 150 older African Americans managing a serious mental illness (SMI). The three highest reported illnesses were MDD (78%), bipolar disorder (45%), and PTSD (36%). The three most common medical diagnoses were hypertension (64%), pain (60%), and arthritis (44%). The three most reported geriatric syndromes are sleeping problems (65%), vision issues (58%), and dizziness (47%). The average number of psychiatric comorbidities was 2.7, geriatric syndromes was shown to be 2.7, and the average number of medical comorbidities was 3.1. The average number of psychiatric comorbidities and geriatric syndromes was 6.2 and for psychiatric and medical comorbidities was 5.8. Using Chi-Square analyses, there was a significant difference between the younger and older cohorts for hypertension (Older: 77%; Younger: 53%, $p<.01$), diabetes (Older: 33%; Younger: 18%, $p<.01$), cancer (Older: 6%; Younger: 0%, $p<.01$), arthritis (Older: 33%; Younger: 56%, $p<.01$), and pain (Older: 51%; Younger: 70%, $p<.01$).

Chapter two focused on the associations between QOL and self-perceived health and health conditions in this population. Almost 70% of the sample had a monthly household income of less than $900/month. In regards to social class perception, 40% viewed themselves as being apart of the struggling lower middle class. For self-rated health, 5.3% rated their health as excellent, 7.3% stated it was very good, 23.3% as good, 48.7% as fair, and 15.3% as poor. Correlational analyses revealed that an individual were likely to have more psychiatric and medical conditions if they rated their health poorer. Also, the higher the education level of the participant, the higher their monthly income (r=.199, p=.004) and their QOL (r=.127, p=.04), but inversely correlated with the number of geriatric syndromes (r=-.129, p=.049) and psychiatric and medical conditions (r=-.137, p=.032). The poorer the participant rated their health, the

number of geriatric symptoms (r=.358, $p\leq$.001) and psychiatric and medical conditions (r=.195, p=.003) increased, but QOL decreased (r=-.205, p=.001). The lower the QOL, the increase in geriatric syndromes (r=-.178, p=.003) and psychiatric and medical conditions (r=-.176, p=.002). In regards to the overall QOL scale and its association with chronic illnesses, lower scores of quality of life was associated with major depression (Z= -2.1, p=.021), pain (Z= -3.11, p=.002), and lung disease (Z= -2.03, p=.042). For geriatric syndromes, difficulty walking (Z=-2.96, p=.004), confusion (Z= -3.49, p<.001), sleep problems (Z= -2.4, p=.016), dizziness (Z= -2.51, p=.012), and falls (Z= -2.1, p=.038) all were found to be correlated with a lower overall QOL score.

Chapter three investigated the functional status of this population and its association with their chronic health illnesses. Less than one third (31%) stated that their health is worse than one year ago, while 24% feel that their health is better than last year. Almost 60% report that they are as "healthy as anybody they know", yet 27% believe that their health will get worse. Using the *Short-Form 36* (*SF-36*) dimensions, lower physical functioning was correlated with panic disorder (t=-2.4, p=.018), seizures (t=2.1, p=.039), and pain (t= -2.2, p=.03). Bipolar disorder was correlated with vitality (t=-2.5, p =.01). Presence of pain was related to lower social functioning (t= -2.4, p=.015). Seizures was related to higher role limitations attributed to physical health (t=-1.9, p =.048). For geriatric syndromes, lower physical functioning was related to the presence of falls (t=-2.5, p=.011). Decreased social functioning was correlated with sleeping issues (t=-2.0, p=.05).

The last chapter focused on substance use and its relation with chronic health illnesses and geriatric syndromes. Findings revealed that 42% of our participants currently consume alcohol, 46% are tobacco smokers, and 50% have either a current or former history of illicit drug

use. History of homelessness was correlated with alcohol use (p=.004), tobacco smoking (p=.007), and illicit drug use (p=.011). Cigarette smoking was associated with asthma (p=.018), bladder control problems (p=.015), schizophrenia (p=.004), paranoid disorder (p=.017), and obsessive compulsive disorder (p=.007). Illicit drug use was associated with falls (p=.05) and vision problems (p=.046). Alcohol use was significantly associated with major depression (p=.026), kidney disease (p=.019), stomach disease (p=.05) and bladder control issues (p=.038).

Overall, the findings suggest that, even in the context of SMI, which is characterized by psychological deficits, the overall health status of these individuals is important to understand, including their chronic health conditions, functional status, quality of life, and substance use practices. These findings provide a comprehensive evaluation of the multiple facets of health status for OAAs. More broadly, the knowledge gained from this dissertation can inform future policy initiatives, research and improve access and delivery of healthcare for this specialized group of OAAs managing an SMI.