

The Road Home: Predictors of Health Care Utilization Among Older Returning African American Men

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Abstract

Black or African American men face disproportionate rates of incarceration and poor health outcomes. Recent changes in sentencing policy have allowed individuals to return to communities after substantial periods of incarceration. Returning citizens often reenter with numerous challenges: housing, employment, medical assistance, and transportation. Analyses were conducted using multivariable logistic regression to examine the relationship between health care utilization for returning men and need (chronic health conditions), predisposing (age, race, marital status, education, and housing situation), enabling (income, health coverage, employment status, and education) factors. Findings indicated that men 50 and above years (odds ratio [OR] = 1.83, 95% confidence interval [CI] = [1.04, 3.24]), Black or African American men (OR = 4.66, 95% CI = [2.35, 9.22]), those with college education (OR = 1.97, CI [1.07, 3.63]) and those having health coverage (OR = 3.34, CI [2.18, 5.11]) were more likely to utilize health care. These findings suggest the need for a greater need to establish linkages to community-based care during reentry planning. This is particularly relevant for reentering citizens who are not eligible for Medicare due to age or whose linkage to employer bases insurance is limited due to work history, employment discrimination, or education.

Keywords

reentry, aging, reintegration, older adults, health care utilization

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Since the strengthening of prison sentencing policies in the 1970s and 1980s, the number of American citizens facing confinement and receiving lengthier sentences has exceeded previous eras (Alexander, 2012; Drug Policy Alliance, 2012). Equally alarming is the disproportionate incarceration rates among Black or African American men (Neal & Rick, 2014; Page & Whetstone, 2014). According to the American Civil Liberties Union, almost 250,000 individuals more than the age of 50 are held at the federal and state prison levels (Inimai et al., 2012). Similarly, McKillop and Boucher (2018) documented a substantial increase (280%) in the number of adults age 55 or older in state and federal prisons between 1999 and 2016. Austin et al. (2001) estimated that the number of prisoners aged 50 and older would increase to more than 400,000 by 2030. This increase in incarcerated individuals will simultaneously affect the number of older returning citizens that are reentering communities. Consequently, as the nation revises its policies to address calls from prison reform advocates, many Black or African American men and older men are reentering their communities with histories of incarceration (Rikard & Rosenberg, 2007; Spohn, 2014).

Reentry refers to formerly incarcerated individuals returning to their communities (Maschi et al., 2014; Jansson, 1975; Petersilia, 2001). This transition occurs with the expectation that these individuals pose no threat to public safety and have completed rehabilitation while incarcerated (Morani et al., 2011). Reentering citizens return to the community eager to become self-sufficient, contributing members to society (Trimbur, 2009). However, they also often reenter communities in need of social services such as housing, employment, medical assistance, and transportation (Richards et al., 2011). These challenges are all the more arduous for older individuals attempting to reenter.

Although extensive literature on older adults focuses on those 65 years and older, research examining the lives of incarcerated individuals suggests reducing the age to 50 years due to accelerated aging (R. H. Aday, 2003; Nowotny et al., 2016; Rikard & Rosenberg, 2007). These authors posit that the conditions of incarceration exacerbate chronic illness and disability common among disadvantaged communities. In addition to the effects of accelerated aging, many reentering citizens experience poor labor force attachment due to histories of incarceration, associated discrimination, and lack of education and training. Being detached from the labor force and its health insurance benefits and not qualifying for Medicare challenges access to health care in ways that differ from the traditional age group 65 and above. Thus, while institutions may define older populations as those 65 and older, for this project, the older population is defined as those 50 years or older.

Accordingly, given the racially uneven incarceration rates, the number of older incarcerated individuals, and the recent emphasis on decarceration, this project focuses on older Black or African American men reentering their communities after incarceration. It is not our intent to dismiss the equally alarming proportion of Black and African American women whose incarceration rate is twice that of their White female counterparts (Cowan, 2018). However, that discussion lies outside the scope of this project. Older adult Americans, in general, face service gaps regarding physical and medical challenges; adding reentry as a status creates even greater hurdles to wellness for this

population, their family members, service providers, and advocates challenging health care professionals and advocates to fulfill the principles of social justice as demanded by many professional codes of ethics. This project seeks to answer the following research questions:

Research Question 1 (RQ1): What is the probability of health care utilization for older returning Black or African American men when considering the need (chronic health conditions), predisposing (age, race, marital status, education, and housing situation), and enabling factors (income, health coverage, employment status, and education)?

Research Question 2 (RQ2): Do age and race predict health care utilization for older returning men?

Literature Review

Multiple researchers have defined reentry (Farkas & Miller, 2007; Jansson, 1975; Neal & Rick, 2014; Page & Whetstone, 2014; Petersilia, 2001; Shinkfield & Graffam, 2009), it is often used interchangeably with reintegration. Much of the literature on reentry services and outcomes employs a psychological or public health lens (Bonhomme & Kingsbury, 2012; Becker et al., 2012). Nevertheless, common themes include education, practice, research, and policy. These are critical areas for social work, allied health care professions, and advocates for reentering citizens (Becker et al., 2012).

Access to services for older adult populations reduces health concerns, such as hypertension and diabetes, and promotes greater well-being for these individuals (Kinner et al., 2012). However, older adults often experience obstacles such as lack of adequate transportation, income, and living conditions (Bacsu et al., 2012; Pastalan, 1990) while attempting to utilize health care. In fact, policies designed to protect underserved American citizens that include, employment, housing, and medical assistance, may discriminate against the older returning citizen (Randolph, 2014; Schnittker et al., 2011; Williams et al., 2010). Such discrimination limits quality of life and accessibility to services (Gaskin et al., 2006; Maschi & Aday, 2014; Richards et al., 2011), though these services exist.

The additional burden of incarceration and reentry and their association with access to reentry services (Van Dooren et al., 2011) requires that health care utilization systems consider the needs of older incarcerated individuals' and older reentering citizens' (Brown et al., 2009; Warburton et al., 2006). Such consideration is particularly true for older Black or African American men reentering their communities and health service utilization, given their disproportionate incarceration rates. Numerous scholars assert that race is a social construct, having no meaningful biological bases for its construction, however, in the United States and arguably elsewhere, race continues to be a central organizing element of American life. The construction of race as racial categories has served to grant and limit access to numerous opportunities, including but not limited to economic, political, and social capital and differential treatment

(Jemal et al., 2019; Schulz et al., 2002). Routine production and enactment of race within our society through economic, political, or socially sanctioned behaviors, make it “amenable to scientific analysis” (Krieger, 2000, p. 212). Thus, more in-depth examinations of the challenges this population faces offer opportunities to improve social welfare and public policies.

Health Care and the Older Population

Americans face increased expenditures for illnesses that require expensive treatment procedures (Berwick & Hackbarth, 2012; Kongstvedt, 2012). Health care costs in the United States are studied in relation to out-of-pocket costs (Mosqueda & Dong, 2011; Shi & Singh, 2014). Many older adults neglect medical recommendations for their care due to their inability to afford prescriptions or specialist treatments (Gaskin & Richard, 2012; McCluskey et al., 2013). As a result, preventive practices are sometimes neglected, leading to avoidable chronic illnesses and further health care costs (Mendis et al., 2011). Furthermore, Black or African American returning citizens face adverse conditions before and after incarceration that contribute to poor health outcomes. Specifically, the older Black or African American reentering population faces many of the same challenges as other older adults in their communities. These challenges include the disproportionate rates of hypertension, arthritis, diabetes, and dementia (Gaskin & Richard, 2012; Goldstein et al., 2011; Shi & Singh, 2014).

Multiple researchers have found that incarcerated individuals age physiologically faster than nonincarcerated individuals (Rikard & Rosenberg, 2007) due to poor preventive health care habits (R. Aday & Farney, 2014) and socioeconomic factors that contribute to high-risk behaviors before incarceration (Maschi & Aday, 2014). Nevertheless, little empirical literature exists concerning medical care conditions in prison systems and health service utilization during reentry (Bretschneider et al., 2012). In addition, upon release, pressing needs for housing and employment (Liem & Kunst, 2013; von Lengerke et al., 2014) may be given priority over routine medical checkups and screening (Morozova et al., 2013). Therefore, exploration of factors that enhance or hinder access to service and service utilization for reentering returning citizens must be examined (Contreras et al., 2014; Warburton et al., 2006). For these and other unexplored reasons, health care-seeking behavior during the reentry process may be at odds with health care utilization factors identified and described in standard models such as the Andersen’s Behavioral Model of Health Services Use (Gildengers et al., 2013).

Health Care Utilization

Within the last 25 years, many authors have examined health care utilization with emphasis placed on the importance of usage and the gaps in treatment (Andersen, 2008). The literature on health care utilization suggests that vulnerable populations of people, such as older returning citizens, suffer from health disparities

and discrimination resulting in poor health practices (Schnittker et al., 2015). In addition, compared with the general population, those living with histories of incarceration have higher rates of chronic diseases such as asthma, heart disease, stroke, diabetes, and angina (Kinner & Wang, 2014). Before their release, unsafe sexual practice, overcrowding, and lack of treatment for health issues place those in the prison population at higher risk for unhealthy behavior and vulnerable to reduced health utilization (Malavé, 2014).

Factors That Influence Service Use

Factors that influence health service utilization affect reentering citizens' lives. Lack of housing, family support, and employment take precedence over health service use for many returning citizens. Individuals with histories of incarceration are less likely to have consistent and routine medical care (Kulkarni et al., 2010). Chronic physical illness often goes untreated upon release because of the factors that limit health care utilization (Gaskin & Richard, 2012). These factors include inadequate family and social support services (Maschi and Koskinen (2015), income (Elkin et al., 2008), and level of care that differs from what they received during incarceration (Azbel et al., 2013). Still, another factor includes health literacy "the degree to which an individual can obtain, communicate, process and understand basic health services and make proper health decisions" (Rasu et al., 2015, p. 748). Literacy levels were related to frequent hospital visits frequency and amounts of medication prescribed than those without lower levels. Similarly, Levy et al. (2015) indicated that electronic medical practice, such as filling out medical forms or using the internet to search for health information, may challenge the older adults who find navigating technology and the internet difficult.

Factors that challenge returning citizens' capacity to access and utilize health care must be understood within the context of the individual's ecosocial environment. Social-ecological theory offers a holistic view of individuals' functioning within the environment and incorporates the different aspects that affect the individual (Robbins et al., 2011). The individual's ability to live with and negotiate environmental factors successfully supports healthy functioning. As such, the Anderson Model of Healthcare Utilization provides a holistic approach in understanding the direct influence of the environment on an individual—comprising three components: predisposed, enabling, and need factors.

Andersen (1995) posited that predisposing, enabling, and need factors are critical factors in examining access to health care among returning citizens who identify as Black or African American. According to Diala et al. (2000), although race is a social construct, disparities in health have fallen disproportionately on Black or African Americans communities. African Americans communities despite many in these communities having positive attitudes toward and valuing health services utilization (Mortensen & Chen, 2013). Nonetheless, health care utilization remains a challenge for Black or African Americans, particularly among Black Americans or African American men (Ravenell et al., 2006). Displacement from the labor force, a

significant health insurance provider, for the older returning citizens due to histories of incarceration and associated discrimination further complicate disparities in health outcomes and treatment of chronic and preventable illnesses. For many who have not reached the qualifying age of 65 years, for Medicare, examining the factors that enhance or deter from access to health care is critical to enhancing the well-being of an aging population.

Availability and access may increase the likelihood of health care utilization among incarcerated individuals, though the quality of care may differ regarding follow-up and continuity of care. The literature demonstrates that factors that influence service use are critical in promoting healthy living habits for underserved populations—illuminating the argument that health care utilization must be examined from multiple lenses to address disparities in health and access to care. When combined with the disproportional disease burden that Black or African American men disproportionately face, the older returning Black or African American man has an increased need for advocacy and access to preventive care and overall health services (Kinner & Wang, 2014). Housing, income, community support, and employment may be both enhancers or barriers to health care utilization. This study explores the significance of factors that enhance or act as barriers to health care utilization for older returning Black or African American men than their White and non-Black or African American male counterparts.

Method

Participants and Procedures

This study utilizes secondary data analysis to answer the research questions. The analysis employed data measuring the utilization of health care for men after release from prison and factors that enhance or act as barriers to service use from the Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System (BRFSS) data from the year 2015. The BRFSS is a national telephone survey that examines health-related risk behavior, chronic medical conditions, and preventive care utilization by U.S. residents. Multiple agencies sponsor this data collection, including the Centers for Disease Control and Prevention, Health Resources, and Service Administration, Administration on Older and Substance Abuse and Mental Health Service Administration. The probability sample comprised an estimated 500,000 participants interviewed by phone from all 50 states in America, the District of Columbia, Guam, and Puerto Rico. The survey also covers a wide range of demographic characteristics, including age, race, and gender, strengthening the generalizability of the information. The project collected information from the database examining the enabling, predisposing, and need factors in health care utilization and prospective health disparities for the returning older man. Incarceration history was determined using survey question,

Where did you have your last HIV test—at a private doctor or HMO office, at a counseling and testing site, in the emergency room, as an inpatient in a hospital, at a clinic, in a jail or prison, at a drug treatment facility, at home, or somewhere else?

Respondents ($N = 628$) identified were male and selected "Jail or prison (or other correctional facility)" as their answer.

Measures

Health care utilization was measured using a composite score of six items recoded (i.e., "Adult flu shot/spray past 12 months?," "Had a test for high blood sugar or diabetes in the past three years?," "Pneumonia shot ever?" "Are you now taking insulin?" "Currently Taking Blood Pressure Medication," and "Have you discussed your confusion or memory loss with a health care professional?"). Each item is scored, 1 = yes, 2 = no, 7 = don't know/not sure, 9 = refused, and Blank = missing, every single time. For analysis, the items were recoded and dichotomized into 1 = yes, 0 = no every time. In addition, two items, "Length of time since last routine checkup" and "How long since cholesterol checked" were recoded into dichotomous variable measuring whether cholesterol was checked in the last 5 years and routine checkup in the last 2 years, 1 = yes and 0 = no. The eight items were then recoded and again dichotomized into 0 = no health care utilization versus 1 \geq existing health service utilization.

Health need factors were derived from a composite score of 14 items identified in the BRFSS: measuring hypertension, vision impairment, diabetes, prediabetes, kidney disease, cancer, high cholesterol, obesity, stroke, arthritis, and cardiovascular conditions. The BRFSS asks specific questions regarding chronic health conditions: "Ever told you had a stroke?" Each item was scored 1 = yes, 2 = no, 7 = don't know/not sure, 9 = refused, and Blank = not asked/missing. During the analysis, these items were recoded and dichotomized items into 1 = yes, 0 = no, in each section. All 14 items were summed to produce a scale ranging from $<$ or 1 = low-need level while 2 or above = high need level.

Predisposing factors in the data examined by the BRFSS are that of age, race, marital status, education, and housing situation. For age, items were recoded into three categories as the following: 0 = *ages 25–39 years*, 1 = *ages 40–49 years*, and 2 = *ages 50 years and above*. For race items from 1 (*White*), 2 (*Black or African American*), 3 (*American Indian or Alaskan Native*), 4 (*Asian*), 5 (*Native Hawaiian or other Pacific Islander*), 6 (*Other race only*), 7 (*no preferred race*), 8 (*multiracial but preferred race not answered*), 77 = *don't know/not sure*, and 99 = *refused*. Race was recoded as follows: 0 = *White*, 1 = *Black*, and 2 = *Other*. For marital status, respondents selecting from 1 (*married*), 2 (*divorced*), 3 (*widowed*), 4 (*separated*), 5 (*never married*), 6 (*a member of an unmarried couple*), and 9 (*refused*). Marital status was recoded as follows: 0 = *married*, 1 = *no longer married*, and 2 = *never married*.

Enabling factors comprised of income, health coverage, employment status, and education. Income comprised of 10 items asking respondents for the income of the household from all sources (i.e., "What is your income level from all sources?") Items were recoded as follows: 0 = $<$ US\$15,000, 1 = US\$15,000 to US\$34,999, and 2 = US\$35,000 $<$. The scale for Health care coverage comprised variables asking, "Do you have any kind of health coverage including health insurance, prepaid plans such as HMOs or government plans such as Medicare or Indian Health Service?"). These

variables were recoded to create a dichotomized item in which having health coverage was answered by identified as 0 = no health coverage and 1 = having health coverage. Employment history refers to the current employment status of respondents examined (e.g., full-time, part-time, unemployed, retired, or unable to work). This item was recoded as follows: 0 = *unemployed* (out of work for less than 1 year, out of work for less than 1 year, and unable to work), 1 = *employed* (employed for wages and self-employed) and 2 = *other* (homemaker student, retired). Education was recoded as follows: 0 = *non-high school graduate*, 1 = *high school graduate*, and 2 = *attended college*. This writer will compare high levels of education (college) to low levels of education (high school graduates and non-high school graduates), examining whether it serves as a protective factor or barrier to health service use. Housing comprised participants' response to, "Do you rent or own your home?" using five categories: "1 (own)," "2 (rent)," "3 (other arrangement)," "7 (don't know/not sure) and "9 (refused)." The study recoded each into 0 = *own home*, 1 = *rent*, and 2 = *other*. During this study, a logistic regression analysis was conducted to determine the relationships between health care utilization and the need, predisposing, and enabling factors, as described by Andersen (1995). The dependent variable *health utilization* is identified as binary data. Health utilization was recoded into a dichotomous variable of 0 = no health utilization and 1 = existing health utilization.

Data Analysis

The analysis was limited to respondents who identified as being more than age of 25 years and having a previous incarceration history. Analyses were carried out using the statistical software IBM SPSS Statistics 26. The statistical analyses of data included univariate analysis to measure the distribution of all the variables used in this study within the sample population and bivariate correlations and chi-square tests. Logistic regression analysis was then performed to examine the association between predisposing, enabling and needs factors with health care utilization (dependent variable), separately and combined controlling for demographics and HIV status; *p*-values below .05 were considered to indicate statistical significance.

Results

Table 1 includes all respondents having an incarceration history 25 years old and greater. Almost 40% of the population were between the ages of 25 and 39 years, 29.62% were between 40 and 49 years, and 30.89% aged 50+ years (Table 1). White participants represented the majority of the sample (67.2%), followed by Black (18.3%) and other non-White participants (11.5%). Most reported completing high school (48.2). Of all respondents, 59.9% identified as being employed, 32.5% are identified as unemployed, and 7.6% identified as other. Almost 23 (22.8%) reported annual incomes of less than US\$15,000. Nearly one third (32.6%) of the population identified as married, and 64.8% of the respondents reported having health insurance, while 35.0% did not have health insurance.

Table I. Demographic Statistics Comprehensive and Health Utilization and Non-Utilization.

Variables	Comprehensive		Existing utilization		Non-utilization	
	N	n	%	n	%	
Age						
25–39 years	248	166	66.9	82	33.1	
40–49 years	186	143	76.9	43	23.1	
50+ years	194	165	85.1	29	14.9	
Employment status						
Unemployed	204	165	80.9	39	19.1	
Employed	376	269	71.5	107	28.5	
Missing/unk.	48					
Education level	580					
Non-high school graduate	142	100	70.4	42	29.6	
High school graduate	303	222	73.3	81	26.7	
College	182	151	83	31	17	
Missing/unk.	1					
Rent or own home						
Home	185	246	78.9	39	21.1	
Rent	379	280	73	99	26.1	
Other	62	46	74.2	16	25.8	
Missing/unk.	2					
Race						
White	422	305	72.3	117	27.7	
Black	115	101	87.8	14	12.2	
Other	72	55	76.4	17	23.6	
Missing/unk.	19					
Level of income						
Less than US\$15,000	143	108	75.5	35	24.5	
US\$15,000 to US\$34,999	232	180	77.3	52	22.7	
US\$35,000 and above	167	127	76	40	24	
Missing/unk.	86					
Marital status						
Married	205	164	80	41	20	
No longer married	159	127	79.9	32	20.1	
Never married	257	179	69.6	78	30.4	
Missing/unk.	7					
Health coverage						
Yes	407	341	83.8	66	16.2	
No	220	132	60	88	40	
Missing/unk.	1					
Health condition						
Low need level	312	210	67.3	102	32.7	
High need level	316	264	83.5	52	16.5	

Among respondents who reported health care utilization (Table 2), men 50 years old or above (35%), or married (35%), utilized health services at rates close to younger (35%) and never married respondents (38%). Those with college educations (32%) reported greater health service utilization than non-high school completing (21%) respondents. Those who were employed, had health coverage, or reported high health condition needs levels utilized health care utilized health services at higher rates than those who reported being unemployed, having no health coverage, or low health condition needs level in the bivariate analysis. However, upon close examination, differences arise. In alignment with the Andersen Health Care Utilization Model, factors were grouped according to predisposing, enabling, and need category and analyzed separately. Among predisposing factors, the respondent's race was a significant predictor of increased odds of health care utilization. Black men had greater odds of utilizing health care (odds ratio [OR] = 1.51, 95% confidence interval [CI] = [0.96, 2.39]), than other men. Men between the ages of 40 and 49 years were almost 2 times, and men 50 years and above were almost 3 times, more likely to utilize health care than men 29 to 39 years (OR = 1.51, 95% CI = [0.96, 2.39]) and (OR = 2.89, 95% CI = [1.66, 5.03]), respectively.

Among enabling factors, possessing a college education and having health coverage were significant predictors of health care utilization. Respondents who reported having some college education reported health care utilization almost twice the rate of those who did not graduate from high school. (OR = 1.96, 95% CI = [1.04, 3.66]). Respondents who reported having health coverage reported health care utilization 3 times the rate of those who did not (OR = 3.00, 95% CI = [2.00, 4.76]).

Analysis of the need factor found that respondents who reported having high need level that is, those reporting two or more chronic health care condition, for example, diabetes, high cholesterol, arthritis reported health care utilization 3 times the rate of those who did not (OR = 2.46, 95% CI = [1.68, 3.60]).

In the multivariate-adjusted model, predisposing, enabling factors, and need factors were entered, controlling for employment. Age, race, education, having health coverage, and high need level were all significantly associated with greater odds of health care utilization. Men 50 years and older, Black or African American, reported having some college education and health coverage, and health conditions with high needs level, had greater odds of utilizing health care. Younger participants, those who are White, less well educated, did not have health coverage, or health conditions with high need levels had lower odds of health care utilization.

Discussion

This study aimed to explicate the factors that influence health care utilization for older Black or African American returning citizens. We examined men with histories of incarceration to answer the following questions: (a) What is the probability of health care utilization for older returning men when considering the need (chronic health conditions), predisposing (age, race, marital status, education, and housing situation), and enabling factors (income, health coverage, employment status, and education)?

Table 2. Estimates of the Relationship Between Health Care Utilization and Predisposing, Enabling, and Need Factors Among Returning Citizens, and Multivariate Results.

	%	Predisposing factors			Enabling factors			Need factors			Adjusted ^a		
		OR	95% CI	p	OR	95% CI	p	OR	95% CI	p	OR	95% CI	p
<i>Predisposing factors</i>													
<i>The percentage reporting health care utilization</i>													
Age													
29–39 years	35.0												
40–49 years	30.2	1.51	0.97, 2.39	.08							1.29	0.801, 2.10	.29
50 and above years	34.8	2.89	1.66, 5.03	.35							1.83	1.04, 3.24	.04
Race													
White	66.2												
Black or African American	21.9	3.73	1.96, 7.10	.00							4.66	2.35, 9.22	.00
Non-White	11.9	1.44	0.79, 2.63	.23							1.42	0.75, 2.71	.28
Marital status													
Married	34.9												
Never married	27.0	0.76	0.44, 1.32	.33									
No longer married	38.1	0.54	0.33, 0.87	.11									
<i>Enabling factors</i>													
<i>Education level</i>													
Non-high school graduate	21.1												
High school graduate	46.9				1.18	0.696, 1.98	.55				1.15	0.69, 1.92	.58
College	31.9				1.96	1.04, 3.66	.04				1.97	1.07, 3.63	.03
Rent or own home													
Own home	43.0												
Rent	49.0				0.92	0.555, 1.52	.75						
Other	8.0				1.16	0.469, 2.91	.74						

(continued)

Table 2. (continued)

	%	Predisposing factors			Enabling factors			Need factors			Adjusted ^a			
		OR	95% CI	p	OR	95% CI	p	OR	95% CI	p	OR	95% CI	p	
The percentage reporting health care utilization														
Health coverage														
No coverage	72.1													
Having health coverage	27.9				3	2.00, 4.76	.00					3.34	2.18, 5.11	.00
Level of income														
Less than US\$15,000	26.0													
US\$15,000 to US\$34,999	43.4				1	0.61, 1.86	.81							
US\$35,000 and above	30.6				0.99	0.527, 1.86	.98							
Employment status														
Unemployed	38.0													
Employed	62.0				0.77	0.464, 1.27	.30							
Need factors														
Low need level	44.3													
High need level	55.7				2.46	1.68, 3.60	.001	1.7	1.10, 2.62	.02				

Note. Controlling for employment^a in adjusted model.

(b) Do age and race predict health care utilization for older returning men? Our findings support the hypothesis that need, predisposing, and enabling factors act as facilitators of health care utilization. Similarly, we also found that both age and race are significant determinants of health care utilization. Findings from this study indicate that even though socioeconomic challenges (e.g., education, income) exist, Black or African American men and those who are older tend to utilize health services.

The project found that respondents 50 years of age and older utilized health services at higher rates than younger men. We also found that Black or African American participants with histories of incarceration utilized health services at higher rates than their White counterparts (87.8% and 73.3%, respectively). The significantly higher health service use by Black or African Americans may support previous findings that older returning Black or African Americans have a higher level of need for services than their counterparts due to disproportionate chronic disease burden and declines in health among Black or African American men in general (National Center for Health Statistics, 2017). It may also point to the importance of points of access. Due to limitations in the study, these men may have received health care as a mandated part of their incarceration. Our finding also confirmed that an increase in educational level attainment increased the odds of accessing health care, as did income and access to health insurance. While confirming that a pathway exists for health care services among men with histories of incarceration, this pathway is deeply entrenched in history discrimination and access to health care, education, and employment among Black or African Americans population in general.

As Americans age and place a higher demand on health care systems (Sullivan, 2016), so will those incarcerated or live with histories of incarceration. Older Black or African American returning citizens are an emergent population concern for public health and gerontology. This study reports that Black or African American men with incarceration histories utilize health services more than any other group of men in the study with histories of incarceration. However, we face several limitations. First, while the data lend itself to the project's analytic strategies, due to its size and availability, there are losses in "complexities, subtleties, and nuances" (Murphy & Schlaerth, 2010, p. 385). This project selected only those men who reported being tested for HIV while incarcerated. Thus, there may have been other respondents whose histories of incarceration are unreported by not being tested while incarcerated within the primary sample. The primary data did not report when the respondent had sought health care—before, during, or after incarceration. Thus, the nature of their utilization, whether voluntary or mandated, could not be ascertained. Next, the level of engagement with a health care professional or comprehensive nature of the interaction could not be ascertained.

Furthermore, the nature of the utilization of primary care or emergency care was also not reported. Exploring these factors could further elucidate effective strategies for early interventions and effective methods to reduce costs associated with emergency department visits. Another limitation is our inability to deeply examine the impact of the passage of the Affordable Care Act (ACA) and subsequent implementation rollbacks. The passing of the ACA has increased many low-income community

members' access to health care (Islam, 2017; Vakkai & Jindori, 2015). However, approximately 15 million people in the United States do not have health coverage (Goldson, 2017). This number is particularly relevant to the lives of those men who are less than 65 years old who do not qualify for Medicare.

Current legislation, such as The Fair Sentencing Act of 2010, which resulted in the release of many who have completed lengthy sentences, called for an exploration of future reentry service needs (Sessions, 2012). Black or African American men, who have been imprisoned, face many challenges upon reentering (Alexander, 2012; Levy-Pounds, 2013). Several key factors impede individuals' attempts to provide for themselves, their families, and communities. They include unemployment, lack of education, and lack of family and community support (Redcross et al., 2010; Shivy et al., 2007). In each area, policies limiting the rights of ex-offenders, such as affordable housing, confound the reentry process (Kuziemko, 2013; Liem & Kunst, 2013; Richards et al., 2011).

In many cases, returning citizens may be unaware of their health status when returning to the community. Although discharge planners administer assessments before release, gaps in service continue to exist for this population. Discharge planners frequently overlook the importance of medical transition for reintegrating prisoners (Maschi & Aday, 2014). Thus, lack of preventive care leads to the emergence of chronic illnesses for reentering citizens. While dealing with the immediate stressors of reintegration, other medical challenges continue to emerge (Gildengers et al., 2013; Kuwert et al., 2013). High-stress levels may further complicate the interaction of predisposing, enabling, and needs factors associated with the Andersen Model of Health Service Use.

Thus, providers and advocates for this population are at the forefront of work with marginalized communities experiencing poverty, oppression, and discrimination of services. Returning citizens, particularly those who lack the resources or skills to obtain services, represent a vulnerable population. Thus, attending a three-pronged approach—education, practice, and policy/advocacy is essential. Education ensures that future practitioners and mental health professionals graduate from institutions equipped with the competence to work with vulnerable populations (Thyer, 2015). Practice stresses the profession's importance as providers' capacity to deliver services to enhance the wellbeing of the consumer in need. Policy and advocacy stress the importance of professionals participating in advocacy with and for vulnerable populations by influencing laws and regulations that protect rights and legislate program development to meet the need of under-resourced communities (Pittaro, 2008).

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