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ORIGINAL PAPER

Racial Differences Among Supported Housing Clients in Outcomes and Therapeutic Relationships

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Abstract This study examined racial differences between African American and White supported housing clients in clinical outcomes and in their relationships with their landlords, medical and mental health care providers, and religious faith. Housing, mental health, and substance abuse outcomes of 204 White clients and 269 Black clients participating in a national homeless initiative were examined, along with their ratings of their relationships with landlords, health care providers, and religious participation. There were no significant racial differences found on outcomes or on client ratings of the helpfulness of relationships with landlords and health care providers. However, Black participants reported significantly stronger religious faith and religious participation than White participants. Together, these results suggest the religious faith of Black clients should be appreciated as a potential asset in supported housing services and that efforts to maintain racial equality should be continued in the delivery of health services.

Keywords Supported housing · Case management · Religion · Severe mental illness

Introduction

Racial disparities and distrust of health care providers by ethnic minorities have been documented in various clinical settings in the United States, and are thought to stem from a long history of both de jure and de facto racial discrimination [1–3]. There has been substantial research demonstrating racial disparities in the use and quality of both physical

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and mental health care services [4–7] with many showing that Black patients receive poorer quality of care than White patients.

In mental health services, epidemiological and survey studies have also shown that there are differences among different racial subgroups. For example, despite high levels of unmet needs, racial and ethnic minorities are less likely than their white counterparts to use mental health services and have higher rates of dropping out of treatment [8–10]. Data from a national survey of over 14,000 adult respondents found that Hispanics and African Americans reported less access to care, poorer quality of care, and greater unmet need for alcoholism, drug abuse, and mental health treatment compared to Whites [11]. This is consistent with findings that have reported African Americans are less likely to receive appropriate, guideline-consistent care than Whites [12, 13].

The Institute of Medicine has found racial differences in the delivery of medical care for a variety of health problems and traced these disparities to several sources, including differences in the way health care providers treat individuals of different racial/ethnic groups as well as differences in patient preferences, beliefs, and perceived stigma related to health care [14]. These can stem from institutional biases, negative attitudes towards racial minorities among healthcare providers, and/or distrust and alienation among racial minority patients towards healthcare providers as a result of past negative experiences. This is a salient issue in mental health where the provider-client relationship and therapeutic alliance have consistently been found to be the most important determinants of clinical outcomes [15–18] and may be particularly susceptible to the influence of a client's race.

The relationship between minority clients and their providers is especially important among the most disadvantaged clients with numerous complex needs [19]. A few published studies of case management relationships for homeless people with mental illness, a highly vulnerable group, have shown few outcome differences between racial/ethnic groups and little impact of provider-client racial matching [20, 21]. These studies did not examine relationships with providers other than case managers.

In the current study, we examined racial/ethnic differences between Black and White chronically homeless clients on outcomes and in their relationships with four different types of providers: landlords, mental and physical health care providers, and religious institutions. There has been little research on racial disparities in supported housing services, although there is extensive literature on racial discrimination in the general housing market [22, 23]. Based on the health disparities that have been found in other health services, we hypothesized that Black clients in supported housing programs would have poorer outcomes and weaker relationships with providers. In supported housing programs, landlords can be key supports in helping clients stay housed [24] and the relationships supported housing clients have with their health care providers may directly impact their outcomes. Religious institutions may also provide a significant source of strength and coping for many chronically homeless adults and racial differences in this area deserves empirical examination.

Methods

Study Design

This study used longitudinal data from a federal initiative that began in 2004 by the United States Interagency Council on Homeless called the Collaborative Initiative to Help End Chronic Homelessness (CICH; [25]). CICH provided adults who were chronically homeless with permanent housing and supportive primary health care and mental health

services at 11 sites in the United States. The criterion for eligibility was chronic homelessness, defined as "an unaccompanied homeless individual with a disabling condition who has either been continuously homeless for 1 year or more or has had at least four episodes of homelessness in the past 3 years." The 11 communities funded through CICH included Chattanooga, TN; Chicago, IL, Columbus, OH; Denver, CO, Fort Lauderdale, FL; Los Angeles, CA; Martinez, CA; New York, NY; Philadelphia, PA; Portland, OR; and San Francisco, CA.

A total of 756 participants gave informed consent to participate in the national evaluation of CICH. The mean number of participants at each site was 69, ranging from 52 to 98. Homeless adults were recruited by clinical and research staff at each site through a variety of methods, including community outreach and contacts with shelters, hospitals, and other mental health agencies. Among clients who consented to participate in the evaluation, 473 (62.57%) were Black or White and had data at all three time points: baseline, 6, and 12 months. The current study focused on these 473 participants during their first year of program participation.

Measures

Sociodemographic data were collected from participants by CICH staff through a structured form. Mental health and substance abuse diagnoses were self-reported by participants and corroborated by assessing clinicians and administrative data.

Housing

Participants reported the number of nights they spent in their own place (apartment, room, or house), in an institution (halfway house, transitional housing, hospital, or jail), and homeless (shelters, outdoors, in vehicles, or abandoned buildings) in the previous 3 months.

Clinical Status

Established standardized measures were used to assess clinical status, including the Medical Outcomes Study Short Form-12 (SF-12; [26]), the Brief Symptom Inventory (BSI; [27]), the Addiction Severity Index (ASI; [28]), and an observed psychotic behavior rating scale completed by staff [29].

Health Service Use

Participants reported the number of days they used outpatient and inpatient medical services in the past 3 months. They also reported the number of days they used outpatient and inpatient mental health services (including substance abuse services) in the past 3 months.

Landlord Satisfaction

The landlord relationship was assessed with four items from the Housing Environment Survey- Landlord Scale [30], which asked participants to rate on a 5-point scale how often they had talked with their landlords in the past 3 months, how important their relationship with their landlord was, and overall, how satisfied they were with the relationship. The mean response was calculated for a total score with higher scores indicating greater satisfaction.

The 20-item housing satisfaction scale developed from the Substance Abuse and Mental Health Services Administration Supported Housing Initiative [31, 32] was used to measure how satisfied participants were on items such as "how close you live to family and friends" and "the safety of your neighborhood." Participants rated items on a 5-point scale and the mean score of items was calculated for a scale score.

Relationship with Health Care Provider

The relationship between participants and their primary medical care provider was assessed with the 11-item Trust in Physician scale [33], which asked participants to rate on a 5-point scale from 1 (totally disagree) to 5 (totally agree) questions like "my health care provider is usually considerate of my needs and puts them first" and "I trust my health care provider so much that I always true to follow his/her advice." The mean response to items were calculated for a total score.

The strength of the therapeutic relationship between participants and their primary mental health or substance abuse provider was measured with a 7-item scale [34] asking clients questions like "how often does your provider perceive accurately what your goals are?", and "how often are the goals of your work with your provider important to you?". The mean response of all items was calculated for a scale score with higher scores reflecting greater therapeutic alliance.

Choice in mental health treatment was assessed with a 5-item "consumer choice" scale [35]. Participants were asked about their experience of personal choice in selecting mental health or substance abuse services. Statements like "I felt free to do what I wanted about going for treatment" and "It was my idea to obtain treatment" were rated on a 5-point scale from 1(strongly disagree) to 5 (strongly agree).

Religious Faith

Religious faith was assessed with 2-items, adapted from a previous study [36], that asked participants to rate on a 4-point scale from 0 (Not at all) to 3 (Extremely) how important their religious belief/faith has been in their life and how helpful their religious belief/faith has been in dealing with personal problems in the previous 3 months. The mean score of both responses were calculated for a total score.

Religious participation was assessed with an additional item, calculated separately, that asked participants to rate how often they attended a church, synagogue, mosque, temple, or other religious service in the previous 3 months on a 4-point scale from 0 (Not at all) to 3 (Once a week or more).

Data Analysis

Independent *t*-tests and Chi-square tests were used to test baseline differences between Black and White participants. Levene's test was used to test homogeneity of variances and violations were adjusted for appropriately. Mixed linear regression analyses were conducted comparing Black and White participants on housing and clinical outcomes over time. Race and time were entered as the main factors of interest along with the interaction term. Site, baseline differences, and baseline values of dependent variables were entered as covariates.

Then, another set of mixed linear regressions were conducted comparing Black and White participants on their landlord satisfaction, confidence in primary care providers, ratings of therapeutic alliance, perceived choice in mental health services, and reported religiosity. Not only were site and baseline differences entered as covariates, but housing, clinical status, and health service use at 6 and 12 months were also entered as time-varying covariates to control for their possible effects on dependent variables.

Results

Table 1 shows there were several significant baseline differences between Black and White participants on sociodemographics, housing, and clinical status. At baseline, White participants were significantly more educated, were more likely to be diagnosed with bipolar disorder, reported living more nights in an institution, had lower (i.e., poorer) SF-12 Physical Health and SF-12 Mental Health scores, higher (i.e., more symptomatic) Brief Symptom Inventory scores, along with higher observed psychotic behavior ratings, higher ASI-Alcohol scores, and reported more days of inpatient medical service use.

Linear mixed regression found that after controlling for baseline differences and baseline values of dependent variables, there were no significant differences between Black and White participants on any of the housing (e.g., nights in own place) or clinical outcome variables (e.g., ASI-Alcohol, BSI) over time, except that Black participants had slightly higher SF-12 Mental Health scores indicating greater improvement in mental health status, $F(1,447.87) = 4.18$, $P < .05$).

Table 2 shows the least square means of participant ratings of their relationship with their landlords, primary care providers, mental health providers, ability to choose their mental health services, and religious faith after controlling for baseline differences, site, and time-varying housing, clinical, and service use covariates. There were no significant differences on landlord satisfaction, housing satisfaction (not shown in table), therapeutic alliance with mental health providers, or perceived choice of mental health services. There was a significant interaction effect of race × time on participants' confidence in their primary medical care provider over time. White participants reported declining confidence while Black participants reported increased confidence. There were no significant time effects on any other ratings. The strongest effect, and only main effect of race, was that that Black participants consistently reported significantly greater religious faith than White participants and greater religious participation, $F(1,442.19) = 15.73$, $P < .001$.

To examine possible suppression effect of covariates, the above mixed linear regression analyses were repeated with no covariates (i.e., not controlling for baseline differences, site, or time-varying housing, clinical, and service use variables). Results remained the same with no significant race or race × time differences. Again, there was a significant race × time interaction effect on confidence in primary medical care provider, $F(1,221.26) = 5.16$, $P < .05$ and Black participants reporting significantly greater religious faith than White participants, $F(1,471) = 48.58$, $P < .001$ and greater religious participation, $F(1,471) = 39.15$, $P < .001$.

Discussion

This study examined differences in outcomes and in how chronically homeless Black and White participants in supported housing programs rated their relationships with their

Table 1 Baseline differences between Black and White participants

	White participants ($n = 204$)	Black participants ($n = 269$)	Test of difference (*df*)
Sociodemographics			
Age	46.24 (8.29)	45.56 (7.87)	t(471) = 0.91
Gender—male (%)	156 (76.47)	204 (75.84)	$\chi^2(1) = 0.03$
Education	12.24 (2.57)	11.65 (2.23)	t(471) = 2.69**
Marital status—not married (%)	204 (100.00)	267 (99.26)	$\chi^2(1) = 1.52$
Veteran (%)	65 (31.86)	84 (31.23)	$\chi^2(1) = 0.02$
Diagnoses			
Diagnoses			
Schizophrenia (%)	34 (16.67)	64 (23.79)	$\chi^2(1) = 3.59$
Bipolar disorder (%)	56 (27.45)	41 (15.24)	$\chi^2(1) = 10.61$**
Major depressive (%)	61 (29.90)	66 (24.54)	$\chi^2(1) = 1.70$
PTSD (%)	15 (7.35)	13 (4.83)	$\chi^2(1) = 1.32$
Developmental disability (%)	26 (12.75)	22 (8.18)	$\chi^2(1) = 2.67$
Medical problem (%)	147 (72.06)	164 (60.97)	$\chi^2(1) = 6.34$*
Housing			
Nights in own place	4.75 (12.15)	5.93 (15.51)	t(471) = −0.89
Nights in institution	19.28 (30.68)	11.83 (25.65)	t(391.88) = 2.81**
Nights homeless	54.75 (35.62)	58.11 (37.05)	t(471) = −0.99
Clinical status			
SF-12 Physical Health	43.72 (9.69)	45.97 (10.08)	t(471) = −2.44*
SF-12 Mental Health	37.83 (7.47)	39.30 (8.21)	t(471) = −2.00*
Brief Symptom Inventory	1.68 (0.86)	1.37 (0.90)	t(471) = 3.81***
Observed psychotic behavior rating	0.25 (0.27)	0.17 (0.27)	t(471) = 3.03**
ASI-Alcohol	0.14 (0.23)	0.10 (0.16)	t(344.31) = 2.14*
ASI-Drug	0.05 (0.09)	0.05 (0.09)	t(471) = −0.43
Health service use			
Days of outpatient medical service use	2.69 (5.68)	3.19 (8.43)	t(464.97) = −0.77
Days of outpatient mental health service used	8.63 (16.31)	7.58 (17.53)	t(471) = 0.66
Days of inpatient medical service use	0.21 (0.41)	0.12 (0.33)	t(380.92) = 2.42*
Days of inpatient mental health service used	0.23 (0.43)	0.15 (0.42)	t(424.51) = 2.08*

* $P < .05$; ** $P < .01$; *** $P < .001$

landlords, health care providers, and religious faith. Contrary to our hypothesis, there were no racial differences in landlord satisfaction, confidence in primary medical care providers, therapeutic alliance with primary mental health providers, or perceived opportunity to make choices about mental health services. There were also no significant racial differences on housing satisfaction, housing outcomes, or any clinical outcomes over time, except on one measure of mental health indicating Black participants showed slightly greater improvement over time. This is an important finding because it is in contrast to the

Table 2 Least square means of ratings of landlords, primary care providers, mental health providers, and religiosity among Black and White participants

	Group	6 month	12 month	Main group effect	Interaction effect (group × time)
Landlord satisfaction	White (n = 190–191)	2.74 (0.07)[a]	2.71 (0.07)	F(1,435.50) = 0.34	F(1,451.13) = 1.06
	Black (n = 246–252)	2.73 (0.06)	2.80 (0.06)		
Trust in primary medical care provider	White (n = 97–100)	3.95 (0.07)	3.89 (0.07)	F(1,277.53) = 0.01	F(1,208.63) = 5.17*
	Black (n = 141–146)	3.85 (0.06)	3.97 (0.06)		
Therapeutic alliance with primary mental health provider	White (n = 139–145)	4.45 (0.12)	4.29 (0.13)	F(1,328.39) = 2.08	F(1,291.56) = 0.56
	Black (n = 164–181)	4.61 (0.11)	4.57 (0.11)		
Perceived choice of mental health services	White (n = 148–151)	3.94 (0.07)	3.88 (0.07)	F(1,325.89) = 0.63	F(1,306.68) = 0.25
	Black (n = 169–173)	3.98 (0.06)	3.97 (0.06)		
Religious faith	White (n = 204)	1.51 (0.07)	1.47 (0.07)	F(1,448.36) = 27.94***	F(1,464.27) = 0.08
	Black (n = 269)	1.97 (0.06)	1.91 (0.06)		

* $P < .05$; ** $P < .01$; *** $P < .001$

[a] Values shown are mean (standard error)

literature on racial discrimination in housing among the general population [22, 23] and a number of studies in the medical and mental health literature showing racial disparities in access and quality of health care [5, 6, 11]. The finding suggests race is not a determining factor in supported housing services and outcomes for chronically homeless adults.

There was, however, a notable difference in religious faith. Black participants tended to report their religious faith was more important and helped them deal with their problems more than White participants. Black participants also reported they attended worship services more often. This is consistent with previous findings that the church often occupies a central role in the lives of African Americans [37] and that for many African Americans, religious involvement provides greater access to health services, improves health status, and is a source for coping with various stressors [38–40].

There was also a significant, but more modest, race and time interaction effect on confidence in primary medical care providers. Black participants showed increased confidence in their medical care providers over time while White participants showed decreased confidence. This may be related to previous findings that have found many Black patients distrust the medical system [2, 3, 41]. There were no changes in ratings of landlords or mental health providers over time, suggesting these perceptions were established in the first 6 months and remained consistent through the year.

Limitations of this study were that the results were based on subjective report of chronically homeless clients who may have been positively biased in their ratings relative to their prior circumstances. The observational nature of this study precludes any determination about whether relationship ratings were a consequence or a cause of the comparable outcomes found between Black and White participants. In addition, there was no information about the racial identity of landlords and health care providers to examine whether racial matching was a factor. Findings about Black–White racial matching in mental health service delivery are mixed with significant adverse effects observed in some studies [42], but not in others [20]. Also racial groups other than African Americans were not able to be examined in CICH because of small sample sizes.

Nonetheless, the main implications of this study were that there were few differences in service delivery relationships between Blacks and Whites although religious faith may be a more important issue to Blacks and should be considered as a potential asset in delivering supported housing services, particularly among Black clients. There were no racial differences in ratings of landlords and health care providers, which may be due to recent specific efforts to reduce racial disparities in community mental health settings by increasing awareness and cultural competency [43–45]. These efforts should be continued to ensure racial equality in supported housing services.

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