The Relationship Between Race, Patient Activation, and Working Alliance: Implications for Patient Engagement in Mental Health Care

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Abstract

This study explored the relationship between race and two key aspects of patient engagement – patient activation and working alliance – among a sample of African-American and White veterans (N=152) seeking medication management for mental health conditions. After adjusting for demographics, race was significantly associated with patient activation, working alliance, and medication adherence scores. Patient activation was also associated with working alliance. These results provide support for the consideration of race and ethnicity in facilitating patient engagement and patient activation in mental healthcare. Minority patients may benefit from targeted efforts to improve their active engagement in mental healthcare.

Key Words: Patient activation, patient engagement, mental health, African-Americans

Introduction

Mental health conditions are associated with increased health service utilization, risk of chronic conditions, medical costs, and poorer quality of life (Fogarty, Sharma, Chetty, & Culpepper, 2008). Active patient engagement in mental healthcare is important because treatment requires knowledge and skills to follow medication regimens, to practice self-care activities, and to participate in treatment decisions. Patient engagement in healthcare services, including mental health services, has been associated with positive patient health outcomes, higher quality patient-provider communication, better healthcare quality, and decreased costs (Alegria et al., 2014; Dixon, Holoshitz, & Nossel, 2016; Kotwicki, Balzer, & Harvey, 2016).

A frequently cited definition of patient engagement is that of the Center for Advancing Health, (2010), which defines engagement as "actions individuals must take to obtain the greatest benefit from the health care services available to them." Individuals' actions or engagement behaviors are viewed as crucial components of healthcare delivery and management of chronic conditions. However, these behaviors are heavily influenced by individuals' characteristics such as patient's health literacy. Individuals who are limited in their knowledge, skills, or abilities to participate in their care or perform specific health behaviors, such as those with less education or fewer resources, are at greater risk of poor health (Center for Advancing Health, 2010; Hibbard et al., 2008; Hibbard, Stockard, Mahoney, & Tusler, 2004).

To facilitate patient engagement, many healthcare organizations have supported efforts to enhance health delivery services, such as development of technological tools to help patients access health information and improvement in communication with providers (Haslett, McHugo, Bond, & Drake, 2014). Yet, many patients and providers continue to struggle to achieve active and sustained patient engagement in health services. In particular, minority patients are less likely to be engaged and often perform more poorly on healthcare activities linked to patient engagement, such as communicating effectively with providers and participating in treatment decisions (Author, a). Emerging studies also suggest that minority groups demonstrate lower levels of patient activation (i.e., knowledge, skills, and confidence to manage their health and healthcare), which is viewed as requisite to patient engagement (Deen, Lu, Rothstein, Santana, & Gold, 2011; Hibbard et al., 2008; Maranda, Deen, Elshafey, Herrera, & Gold, 2014). Minority patients, particularly African-Americans are less likely to seek health information, ask questions of their providers, and prepare for their healthcare visits. (McGinnis et al., 2003; Patel & Bakken, 2010). They are less likely to seek mental health services (Atdjian & Vega, 2005) and once they are in mental health care, they are more likely to discontinue treatment early (Cook, Reeves, Teufel, & Postolache, 2015; Fortuna, Alegria, & Gao, 2010).

Furthermore, ineffective communication, distrustful interactions, and weak working alliance between minority patients and their providers are implicated as contributing factors to this group's low level of engagement in mental health services (Davis, Ancis, & Ashby, 2015; Dixon et al., 2016; Fortuna et al., 2010). In particular, working alliance, also referred to as therapeutic bond, alliance, or therapeutic alliance, is a collaborative relationship between patient and provider and has been associated with positive psychotherapy outcomes for a wide range of diagnoses and populations, including patient engagement and retention in treatment,

(Castonguay, Constantino, & Holtforth, 2006; Sharf, 2010). It is conceptualized as a key ingredient of therapeutic relationship and a strong mediator of behavioral change by facilitating for patients and providers emotional involvement, trust, partnership, and commitment to the goals and therapeutic process (Bordin, 1979; Castonguay et al., 2006; Horvath, 1991).

Yet, many minority patients when they enter mental health services experience impaired working alliance or challenges in developing strong alliance or positive relationship with their mental health providers, which in turn negatively affect their treatment engagement and outcomes (Alegria et al., 2008; Constantine, 2007). Disparities in minority groups' utilization and experiences of mental health services as well as patient-provider relationships are well-documented (Alegria et al., 2008; DHHS, 2001; McGuire & Miranda, 2008). These inequalities have been attributed to provider's lack of empathy, cultural competence, provider's racial bias, as well as patients' distrust in the health care system (Constantine, 2007; Cooper et al., 2012; DHHS, 2001; L. Thompson & McCabe, 2012).

As efforts to enhance patient engagement accelerate, it is vital that they address the needs of all patients, especially minority groups who experience a disproportionate burden of unmet mental health needs, yet are often less engaged in mental health services. Racial differences in patient engagement may lead to wasted health resources and add to mental health disparities. An important step toward improving engagement among minority patients is to develop a better understanding of the relationship between race and engagement in mental healthcare.

Toward this end, we examined the association between race and two key aspects of patient engagement: patient activation and working alliance. To be engaged, patients must be activated and have a strong working alliance. We explored the relationship between race, patient activation, and working alliance between White and African American veterans with mental

illness to learn how patient activation and working alliance is associated with patient engagement. This preliminary information will aid in the development of targeted interventions to improve patient engagement among minority groups and reduce mental health disparities. Given that race and sociocultural factors can negatively influence patient activation, and healthcare interactions(Williams & Mohammed, 2013), we hypothesized that White veterans would score higher on patient activation, working alliance, and medication adherence. We also hypothesized that patient activation will be positively associated with working alliance and medication adherence for both groups.

Methods

Participants and setting

This study involved participants from two related but independent studies examining mental health communication and shared decision-making. Both studies were completed at the same VA Medical Center. The first study was conducted from 2011 to 2012 (Author, b). The second study, conducted from 2013-2015, exclusively recruited African-American veterans (n=85) (Author c). Fifty-six White veterans and eleven African-American veterans from the first study were used in this analysis. All participants had a mental health diagnosis and were receiving psychiatric treatment.

Recruitment and data collection

In both studies, participants were recruited from outpatient mental health clinics. Study 1 participants were approached in the clinic on their appointment day; For Study 2, we contacted eligible patients by mail, followed by a phone call, within a month of their most recent or upcoming mental health appointment. We also recruited via self-referral participants who were actively receiving care at the clinics. The data collection procedures were similar for both

studies, and included face-to-face interviews with some of the same trained research assistants

who collected demographic data, clinical characteristics (diagnoses, length of time with mental

health prescriber), as well as measures of patient activation, working alliance, and medication

adherence. Patient's racial data were gathered from their medical records and patients' self-

report. The studies used different categories to record patients' diagnoses. Because of the

complexity of patients having multiple diagnoses and differences in data collection processes, we

created 3 new variables (PTSD, Affective disorders, and schizophrenia) and recorded yes/no if

the participant had the diagnosis. Due to these limitations, we did not use diagnosis as a

predictor and only provide descriptive statistics. Research procedures were approved by the

local university institutional review board and VA medical center research committee.

Measures

Patient activation was assessed with the short-form, 13-item mental health version of the

Patient Activation Measure in mental health (PAM-MH). Questions are rated on a 4-point Likert-

type scale; possible scores range from 0, lowest activation, to 100, highest activation. PAM has

strong psychometric properties, which include strong test-retest reliability and good internal

consistency (α =.80) (Hibbard, Mahoney, Stockard, & Tusler, 2005). PAM scores are divided

into 4 stages: Stage 1 (score ≤47.0) reflects people who "do not yet grasp that they must play an

important role in their own health." Scores in stage 2 indicates (scores: 47.1-55.1), and people

who "may lack the basic facts or have not connected the facts into a larger understanding about

their health." In stage 3 (score 55.2-67.0), people "have the key facts and are beginning to take

action but may lack confidence and skills to support new behaviors." In stage 4 (score ≥67.1),

"people have adopted new behaviors but may not be able to maintain them in the face of life

stress or health crises" (Chubak, 2012, Hibbard, Mahoney, Stockard et al., 2005, 2007).

The Working Alliance Inventory-Short form (WAI-SR, 12 -Item) is comprised of three subscales: goals (agreement about goals of therapy), tasks (agreement about the tasks of therapy), and bond (bond between patient and provider). Scores range from 12 to 84. Internal consistency for the total scale and each subscale is good (overall α =.68) (Munder, Wilmers, Leonhart, Linster, & Barth, 2010). Patient-reported medication beliefs, attitudes, and adherence were captured by the 10-item Medication Adherence Rating Scale (MARS), which has been shown to have adequate internal consistency, test-retest reliability, and positive correlations with related measures (α =. 68). Rated on a scale of 0 to 10 and following the Morisky item scoring conventions, lower MARS values indicate higher self-reported adherence (K. Thompson, Kulkarni, & Sergejew, 2000).

Analyses

Race was treated as the independent variable (African-American or White). To compare African-American and White participants on demographic and clinical factors, t-tests were used for continuous variables and chi squares for categorical variables. Step-wise linear regression was used to examine the relationships between race and participants' characteristics on all measures, using the following order for the independent variables, race and covariates: gender, age (continuous), education, employment, and length of time with employer (continuous). We examined the relationship between PAM and WAI-SR using a linear regression model, adjusting for participants' characteristics and length of time with provider. All results with p values of $\leq$.05 were considered statistically significant. SPSS, Version 20, was used for analyses.

Results

Participants

The African-American veterans in Study 1 were similar to the African-American veterans in Study 2, except Study 1 veterans were significantly older (Study 1 M=54.9; Study 2 M=49.7; p=0.04) and had higher WAI (Study 1 M=73.8; Study 2 M=62.3; p=0.01), Task (Study 1 M=24.1; Study 2 M=20.7; p=0.01), Goals (Study 1 M=24.2; Study 2 M=20.3; p=0.01), and Bond (Study 1 M=25.5; Study 2 M=21.3; p<0.001) scores.

Overall, the study included 152 participants (n=96, 63.2% African-American and n=56, 36.8% White veterans). The majority of participants were men (82.9%), with a mean age of 51.0 years ±12.1. Most of the participants had completed some level of higher education (74.9%); 24.3 % were employed. Participants had worked with their mental health prescriber for an average of 28 months (range: 1-180 months). Many participants had multiple mental health diagnoses, for this study we looked at the presences of affective disorders (132, 88.0%), schizophrenia spectrum disorders (23, 15.4%), and PTSD (36, 24.0%).There were no significant differences between African-American and White participants in terms of age ($t(150)=-1.009$, $p=0.315$), education ($\chi(2) = 2.372$, $p = 0.305$), and employment status ($\chi(1) = 0.287$, $p = 0.592$). Length of time with provider was similar: Whites (M=31.6 months, ±27.4) and African-American (M=26.0 months, SD=31.4) ($t(129)=-1.067$, $p=0.288$).

Race and Patient Activation

Mean PAM score was 60.4, (range 29.7-100, ±15). Only race was significantly associated with PAM scores. African American veterans had significantly lower PAM scores (M=56.6, ±14.7) than White veterans (M=65.3, ±15.5). In a stepwise regression analysis, only race and age significantly predicted PAM scores, accounting for 13% of the variance in PAM scores (R^2= 0.134, $F(2,112)= 8.490$, $p<0.001$). Although the mean PAM scores for both groups are within stage 3, African-American veterans scored at the bottom range of stage 3, and many more scored

in stage 1, 34% compared to 11% of White veterans). In contrast, many more White veterans were in stage 4 compared to African-American veterans, (44% vs. 27%). See table 1.

Race and Working Alliance

Participants' WAI average score was 66.8 (±13.1, range: 30-84), indicating a fairly strong alliance with providers (mean item score of 5.6 on a scale of 1 to 7). Only race was associated with WAI scores and the difference between African-American and White participants was significant. African-American participants scored significantly lower on the WAI compared to White participants (t(141.8)= -4.441, p<0.001). African-American veterans scored significantly lower on the task (t(1414.0)=-3.102, p=0.002), bond (t(138.9)=-4.873, p<0.001), and goals (t(135.4)= -3.904, p<0.001) subscales compared to White veterans.

Race and Medication Adherence

Race and length of time with provider were significantly associated with medication adherence. African American veterans had significantly lower medication adherence ratings (M=4.1, ±2.3) than White veterans (M=2.2, SD=1.9) (t(136)= 5.204, p< 0.001).

Patient Activation and Working Alliance

Linear regression was performed to identify the association between patient activation and working alliance. After adjusting for demographics, an additional 16.1% of the variance of the PAM scores could be accounted for by the WAI-SR (R^2= 0.297, F(7,100)= 6.044, p<0.001).

Discussion

In this study, African Americans veterans had lower patient activation, working alliance, and medication adherence scores than White veterans. Other research on the four Morisky items of the MARS indicates that scores greater than or equal to 1 (on a scale from 0 to 4) indicate suboptimal adherence (Montes, Maurino, de Dios, and Medina, 2013). Extrapolated to the full

10 items of the MARS, a 4.4 would indicate suboptimal adherence. Therefore, the difference

between African American and White veterans probably indicates a clinically meaningful

difference (with the mean for African American Veterans nearing suboptimal adherence).

Unfortunately, normative data for the WAI do not exist. However, the racial differences indicate

relatively roughly a full point difference in item means, though all groups showed relatively high

working alliance. Our findings add to previous studies reporting lower patient activation scores

among minority groups, specifically, African-Americans, Hispanics, and non-native English

speakers (Lubetkin, Zabor, Brennessel, Kemeny, & Hay, 2014). Moreover, a recent study

showed that African-American female veterans had significantly lower levels of patient

activation compared to their White counterparts, and their scores correlated with less positive

ratings of mental healthcare experiences (Kimerling, Pavao, & Wong, 2016). Our study provides

additional evidence indicating lower levels of patient activation among minority groups and

demonstrates an association between race, patient activation, and working alliance. Indeed, the

association between patient activation and working alliance persisted after adjusting for

sociodemographic factors and participants' length of time with their providers.

This association is clinically relevant because it suggests that the patient-provider

relationship is related to patient engagement and experiences with mental health services. In fact,

detailed examination of participants' patient activation levels indicate that African-American

veterans scored lower on items related to self-efficacy and patient-provider communication ("*I

am confident that I can tell my mental health clinician concerns I have even when he or she does

not ask.*"). These findings provide insight into aspects of the healthcare experiences of minority

groups--particularly the patient-provider relationship and communication--that may affect their

engagement levels. Moreover, more African-American veterans were in the first 2 stages of

PAM, which also suggests that there is a great need for intervention in this group.

This study is limited in that it is a pilot study with a relatively small sample, from a single

VA Medical Center, limiting its generalizability. Moreover, the design of our study does not

permit causal attributions. Black and White veterans come from different samples, which might

differ in other ways unrelated to race and other key demographics. Also, while the two studies

shared similar methods and procedures, they had some variability that limits the interpretations

of the results.

Future studies are needed to explore these relationships and potential causal factors.

Moreover, data on providers' characteristics, such as race and cultural competence, were not

collected. Given that working alliance involves the dyadic relationship between patient and

provider, providers' characteristics and clinical skills are likely to influence working alliance

scores and patients' engagement.

Relatedly, several studies showed that some minority patients prefer race concordant

providers. However, a systematic review of the literature indicates that evidence for positive

health outcomes for minority patients in race concordant relationships is inconclusive, and that

other factors such as cultural proximity between patient and providers and effective

communication processes rather than race better explain differences in patient-provider

interactions, relationships, and health outcomes (Alegria et al., 2013; Gordon, Street, Sharf, &

Souchek, 2006; Street, Gordon, & Haidet, 2007).

Together, our study findings suggest that African-American patients might benefit from

targeted interventions to improve their activation level and working alliance – two key

components of patient engagement in mental health services. Specifically, they may benefit from

interventions that focus on patient-provider communication and relationship and self-efficacy. Several studies have shown that strong therapeutic alliance contributes to medication adherence (Goldsmith, 2015; McCabe, 2012). Thus, efforts to improve patients' medication adherence, particularly among minority patients, should also include discussions about barriers and facilitators to patient engagement and its related components such as patient-provider communication.

Conclusion

Future studies on patient engagement in minority patients should go beyond simply examining the association between race or minority group status and patient activation. Studies need to investigate the lived experiences of underserved populations in health services, and how these experiences influence engagement. Finding ways to improve patient engagement may play a key role in reducing mental health disparities and improving treatment outcomes and quality of life for minority patients. Intervention efforts should therefore explore the needs of minority groups and invest in how to best culturally and most effectively get these patients engaged in mental health services.

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Table 1. Examination of participants' characteristics, activation, working alliance, and medication adherence by race.

	African- American	White	Test P-value
Total	96 (63.2%)	56 (36.8%)	
Sex			
Female	21 (21.9%)	5 (8.9%)	0.041
Male	75 (78.1%)	51 (91.1%)	
Age	50.3 (±12.2)	52.3 (±12.0)	0.315
Education			
HS/GED	27 (28.1%)	11 (20.0%)	
Some College	43 (44.8%)	23 (41.8%)	0.305
College Degree/Higher	26 (27.1%)	21 (38.2%)	
Employed			
Yes	22 (22.9%)	15 (26.8%)	0.696
No	74 (77.1%)	41 (73.2%)	
Length of Time with Provider (months)	26.0 ±31.4	31.6 (±27.4)	0.288
PAM	56.6 (±14.7)	65.3 (±15.5)	**0.002**
Stage 1	24 (34.3%)	6 (11.1%)	
Stage 2	10 (14.3%)	8 (14.8%)	**0.021**
Stage 3	17 (24.3%)	16 (29.6%)	
Stage 4	19 (27.1%)	24 (44.4%)	
WAI-SR	63.7 (±14.4)	72.1 (±8.2)	**<0.0001**
MARS	4.1 (±2.3)	2.2 (±1.9)	**<0.0001**

1. Patient Activation Measure (PAM-MH) (0-100), Working Alliance Inventory (Short-Form), (12-84), Medication Adherence Rating Scale (MARS) (0-10).