

Differences in Clinician Anxiety and Bipolar Disorder Diagnoses According to Client Race

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Abstract

Prior research indicates that African Americans are more often assigned severe mental disorder diagnoses (e.g., schizophrenia) compared to Euro-Americans. Mental disorder diagnoses can impact personal perceptions (e.g., self-stigma), social interactions (e.g., prejudice and discrimination), intimate relationships, and occupational opportunities, and treatment-related decisions. However, little research has investigated racial disparities among anxiety and bipolar disorder diagnoses. This study evaluated whether licensed diagnosticians disproportionately diagnosed Euro-Americans or African Americans with anxiety and bipolar disorders. Chi square analyses of a community mental health center's initial diagnoses over a continuous 12-month period ($N=1,648$) revealed that Euro-American clients were more often diagnosed with an anxiety disorder ($p < .05$). No differences in bipolar disorder diagnoses were found ($p = .08$). These results support the contention that specific mental disorder diagnoses are assigned disproportionately to persons of certain races. Implications of these findings are discussed, including recommendations for reducing potential diagnostician bias and increasing assessment-related objectivity.

Keywords

Bipolar Disorder, Anxiety Disorder, Race, Diagnosis, Mental Disorder

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1. Introduction

Racial disparity in the mental health treatment of clients has been well documented (Brown and Keith, 2003). Over a decade ago the Surgeon General's Report (U.S. Department of Health and Human Services, 2001) on mental health explained that racial minorities have less access to mental health services, are less likely to receive appropriate mental health care, and face mental health inequality more often than Euro-Americans. A recent review of the literature by Haeri et al. (2011) concurs that sociocultural barriers to mental health resources for minority groups is still a reality, resulting in the need to explore the influence of race on clinical judgments; because such factors directly impact self and other stigma in addition to the prognosis of mental health outcomes for ethnic minority clients, the importance of accurate clinical diagnosis is paramount.

Four decades ago Thomas and Sillen (1972) suggested that historically, African Americans have borne the brunt of overdiagnoses in the mental health professions. A plethora of recent studies continue to support this claim. It is well known that although Euro-Americans are more likely to be diagnosed with depressive disorders (currently a less stigmatized category of disorders) (Breslau et al., 2006; Himle et al., 2009), African Americans are more likely to be diagnosed with psychotic disorders (Barnes, 2008; Schwartz and Feisthamel, 2009; Strakowski et al., 2003). In general initial evidence suggests that African Americans may also receive disproportionately fewer diagnoses of anxiety disorders (Asnaani et al., 2010; Breslau et al., 2006) and bipolar disorders (Haeri et al., 2011) compared to Euro-Americans. However, due to methodological limitations and inconsistent findings in prior research, further investigation is warranted.

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For example, Asnaani et al. (2010) examined data from three nationally representative surveys in the Collaborative Psychiatric Epidemiology Studies in order to investigate the lifetime prevalence rates of anxiety disorders. They found that Euro-Americans had higher prevalence rates of generalized anxiety disorder (GAD) and panic disorder (PD), and African Americans had higher rates of post-traumatic stress disorder (PTSD). However, Breslau et al. (2006) found that African Americans had lower lifetime risk for GAD, PD, PTSD, and obsessive compulsive disorder (OCD). In another study Euro-Americans were at a higher risk for GAD and PD but not for PTSD when compared to African Americans (Himle et al., 2009). In this sample Himle et al. (2009) found that Euro-Americans were more likely to be diagnosed with mood disorders when compared to African Americans.

Similarly, Haeri et al. (2011) showed that for the last three decades Euro-Americans have been diagnosed more often with mood disorders such as bipolar disorder (BPD). Their review suggests that race influences both the manifestation of symptoms for BPD as well as the interpretation of symptoms by clinicians. Relatedly, Euro-Americans are admitted to psychiatric units more often with a BPD diagnosis (compared to a more stigmatizing diagnosis, such as Schizophrenia, for African Americans) (Barnes, 2008). For example, Kupfer et al. (2005) found that African Americans with severe mood symptoms were more likely to be given a diagnosis of Schizoaffective Disorder than BPD with psychotic features. These results are not entirely consistent across studies however, as Kilbourne et al. (2005) suggested African Americans with BPD showed no increased severity or frequency of symptoms compared with Euro-Americans.

2. Research Significance

Racial diagnostic disparities among mental health professionals may play a significant part in differential resources devoted to, and treatment outcomes noted in, African Americans versus Euro-Americans (U.S. Surgeon General Report, 2003). Our literature review sufficiently documented the issue of disproportionate diagnoses among Euro-American and African American clients, and the perception that clinical judgment affects these diagnoses. However, empirical evidence for racial disparities among anxiety and bipolar disorders is scanty and not fully consistent. Among the few empirical studies that do exist, methodological weaknesses included small sample sizes (e.g., under 100 participants) limiting generalizability and statistical power, older (e.g., pre-DSM-IV-TR) diagnostic criteria, ill-defined diagnostic interviewing procedures, and use of unlicensed clinicians (Asnaani et al., 2010; Barnes, 2008; Himle et al., 2009).

Accurate diagnosis of mental disorders is a vital component of the mental health treatment process (Engels, 2004), misdiagnosis could stem from clinicians' own judgments of what is pathological (Cook, Warnke, and Dupuy, 1993), and client race seems to influence mental disorder diagnoses (Lewis et al., 1990). Therefore, the phenomenon of differential diagnosis according to race clearly warrants additional investigation. The purpose of this study was to further investigate proportionate diagnoses of anxiety and bipolar disorders among African Americans versus Euro-Americans using a large representative sample of participants diagnosed by licensed therapists trained in structured diagnostic interviewing. This study attempted to replicate the methodology of Feisthmel and Schwartz (2009) using the understudied DSM-IV-TR (American Psychiatric Association [APA], 2000) diagnoses of GAD, PD, PTSD, OCD and BPD.

3. Procedures and Methods

3.1. Participants

Participants included all clients presenting over a 12-month period for initial assessment to a community mental health agency in a Southeastern state ($N = 1,648$). Participants lived in rural and semi-urban areas, and ranged in age from 4 to 78 years ($M = 30.2$, $SD = 14.5$). 840 (52%) were male and 788 (48%) were female. 1,214 were Euro-American (75%) and 414 (25%) were African American. These racial statistics are proportionate to the racial diversity of the broader 10-county population from which the sample was drawn (U.S. Census Bureau, 2010). Among the full sample participants with anxiety disorders ($n = 45$) ranged in age from 10 to 70 years ($Mean = 30.7$, $SD = 14.6$). 56% were female and 44% were male. The vast majority of these participants (87%) were Euro-American. Participants with anxiety disorders included those diagnosed with GAD, PTSD, OCD and PD based on DSM-IV-TR (APA, 2000) criteria. Among the full sample participants with bipolar disorders ($n = 152$) ranged in age from 12 to 69 years; the average age was 34.6 years ($SD = 13.3$). 54% were female and 46% were male. The majority of these clients (80%) were Euro-American. Participants with bipolar disorders (BPD) included those diagnosed with bipolar I disorder and bipolar disorder not otherwise specified based on DSM-IV-TR (APA, 2000) criteria. Participants were not delimited in terms of age, socio-economic status, severity of symptoms, physical disabilities, prior treatment history, or living status (i.e., homeless, supported living). The only inclusion factor was an anxiety or bipolar disorder diagnosis. Archival data were part of a larger analysis of gender-related diagnoses (e.g., Schwartz et al., 2011).

3.2. Procedures

The treatment setting was a comprehensive state-supported community mental health triage center including inpatient crisis stabilization, outpatient counseling, partial hospitalization and case management services for clients in a 10-county area. All clients presenting at the treatment setting participated in a psychosocial evaluation, including a medical history, a treatment history, and a social history. Then, all clients were diagnosed using DSM-IV-TR (APA, 2000) criteria. In order to help ensure more objective clinical diagnoses, participants were interviewed using the Structured Clinical Interview for DSM-IV (SCID; First *et al.*, 1995). Total duration of the interview process was approximately 60-90 minutes. After a continuous twelve-month period had elapsed, archival data from a convenience sample of all clients diagnosed with anxiety and bipolar disorders were obtained. Demographic, diagnostic, and treatment-related information were coded for data analyses. Diagnoses were determined by licensed master's and doctoral-level mental health counselors working at the triage center and specifically trained in the assessment of mental disorders and SCID. All clinicians were blind to the purpose and protocol of this study.

4. Data Analysis and Ethical Approval

The null hypothesis for this study was that no relationship exists between clients' race and how frequently they are diagnosed with an anxiety or bipolar disorder. Two 2 X 2 chi square tests for independent samples were used to test the null hypothesis. One 2 X 2 chi square analysis for independent samples tested race (African American or Euro-American) and anxiety disorder diagnosis (anxiety disorder diagnosis versus no anxiety disorder diagnosis); a second 2 X 2 chi square analysis for independent samples tested race (African American or Euro-American) and bipolar disorder diagnosis (BPD versus no BPD). Because the variables analyzed were nominal, there were two groups (those who were diagnosed with a particular mental disorder and those who were not), and participants in each category were mutually exclusive (*i.e.*, of one race or the other), chi square tests for independent groups was deemed the appropriate type of data analysis (Siegel and Castellan, 1988). Therefore, two-sided Pearson chi square (χ^2) tests were used to interpret results of statistical analyses. An alpha level of $p < .05$ was used to determine statistical significance of results. Lower and upper 95% confidence intervals were also calculated around the population parameters (Smithson, 2003). The study research design was approved by The University of Akron Institutional Review Board prior to collection of data.

5. Results

Results showed that Euro-Americans were significantly more likely than African Americans to receive an anxiety disorder diagnosis, $\chi^2(1, n = 45) = 3.6, p < .05$, 95% CI = 0.00 to 14.82. Thus, clinicians assigned Euro-Americans with an anxiety disorder diagnosis at a disproportionately higher rate than was predicted by chance. The effect size for this model (nominal by nominal scale) was Phi (Φ) = .047 (Trusty *et al.*, 2004). According to Cohen (1992), this is considered a small effect size. Chi square tests revealed no statistically significant differences regarding the assignment of a BPD according to race, $\chi^2(1, n = 152) = 2.24, p = .08$.

6. Discussion

Results of the present study showed that Euro-American clients were significantly more likely than African American clients to receive an anxiety disorder diagnosis of GAD, PTSD, OCD and PD. These results are congruent with findings from some other studies demonstrating more frequent diagnoses of anxiety disorders in Euro-Americans compared to African Americans (Asnaani *et al.*, 2010; Himle *et al.*, 2009; Hunter *et al.*, 2010). By including the particular diagnosis of OCD, for which literature is particularly scarce, our results added further validity to earlier findings of disproportionate diagnoses of anxiety disorders. Findings were incongruent, however, with the results of several earlier studies that found the diagnosis of PTSD to be more common among African American clients than Euro-American clients (Asnaani *et al.*, 2010; Himle *et al.*, 2009; Lewis *et al.*, 2012; Roberts *et al.*, 2011).

With the exception of PTSD, Hunter *et al.* (2010) proposed that lower rates of anxiety disorders for African Americans may be explained by sociocultural processes such as awareness of racism, stigma of mental illness, and salience of physical illness that impact the presentation and interpretation of anxiety symptoms not accounted for in the diagnostic criteria. For example, Asnaani *et al.* (2009) found that African American clients with PD were more likely to experience heart racing symptoms and attribute anxiety to heart disease, a physical risk factor prevalent in many African American families. Himle *et al.* (2009) found that when African American clients did meet diagnostic criteria for anxiety disorders, they experienced higher levels of overall severity, which may result in the overdiagnosis of PTSD. Types of trauma exposure (Roberts *et al.*, 2011) as well as a lower likelihood to seek treatment (Woodward *et al.*, 2009) may also account for the presentation of more severe symptoms of anxiety disorders.

Concerning bipolar disorders, the present study found that there was no difference in diagnoses between Euro-American

and African American clients. This finding is incongruent with that of other researchers who found bipolar disorders to be diagnosed more often in Euro-American clients than in African American clients (Barnes, 2008; Neighbors et al., 2003). A review of the literature on disparities in diagnosis of bipolar disorders among persons of African and European descent (Haeri et al., 2011) found that African Americans were more likely to be diagnosed with schizophrenia than bipolar disorders. One explanation was offered by Kennedy et al. (2004), who found that persons of African descent tend to present with more psychotic symptoms during their first manic episode, which may lead to an over-diagnosis of psychosis than mood disorders.

7. Summary and Conclusion

The primary implication for mental health clinicians includes being aware of potential racial bias during the assessment process (Hunter et al., 2010). For example, Sohler and Bromet (2003) reported that clinical diagnoses are likely to be driven somewhat by bias. That is, clinicians may rely in part on their own perceptions of what defines maladaptive behavior, therefore allowing personal biases to compromise the efficacy of diagnostic criteria. Bromet and Sohler (2003) explained that diagnosticians' assessments of African Americans may be biased toward perceiving more severe symptomatology because of perceptions that African Americans are more likely to have severe mental illnesses. Research literature showing higher prevalence rates of psychotic and other more stigmatizing disorders among African Americans reinforces this hypothesis (Schwartz and Blankenship, 2014). That is, African Americans from the same sample population may have been disproportionately diagnosed with more severe disorders, as reported in previous literature (Feisthmel and Schwartz, 2006; Schwartz and Feisthmel, 2009).

Furthermore, many African Americans present symptoms differently from Euro-Americans (Snowden, 1999), affecting the way in which counselors interpret mental illness (Dixon and Vaz, 2005). It is possible that the perceptual biases described above may be more pronounced when Euro-American counselors are diagnosing African American clients (as was largely the case in this study). In the present study, perhaps because none of the diagnosticians were African American, it was 'easier' or 'safer' to diagnose clients from the majority culture with anxiety disorders. Clinicians must also be willing to use multiple tools to support diagnoses given that there is a theory that criteria for making diagnoses are inherently biased. Therefore, studies that produce similar results may imply that clinicians are making reliable diagnoses but with invalid measures (Ritsher et al., 2002; Chapman et al., 2009). As an aid to culturally sensitive

diagnosis the DSM-5 (APA, 2013) provides a newly constructed cultural formulation interview guideline. We encourage all diagnosticians to become familiar with this resource.

Clinicians should also be more cognizant of symptomatology that overlaps in comorbid diagnoses and can be misinterpreted by non-cautious clinicians. For instance, in a study on ethnicity and first-rank symptoms in persons with psychosis, Arnold et al. (2004) found that African American men generally presented with more first-rank symptoms than Euro-American men and women. Despite the greater presentation of first-rank symptoms, ethnically blinded experts did not see higher rates of schizophrenia in African American clients while un-blinded experts were more likely to diagnose Schizophrenia than BPD. Future research should include conducting similar studies with additional inclusion factors such as participants' severity of symptoms, prior treatment history, and comorbid diagnoses. In addition, assessing intragroup differences that may affect frequencies of diagnoses may be warranted. For example, regarding anxiety disorders Himle et al. (2009) found that there were significant group differences between African Americans and Black clients of Caribbean descent. Clearly more research is needed to discover why these phenomena occur. However, it is apparent from the present results and those of prior investigations that diagnostic disparities exist based in part on clients' race.

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