

The (Mis)Diagnosis of Mental Disorder in African Americans

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Introduction

No psychiatric epidemiologic study has had more impact on African American mental health research than the NIMH Epidemiologic Catchment Area (ECA) Program (Robins, & Regier, 1991). Before this ground-breaking investigation, most psychiatric epidemiologic studies of African American mental health were focused on psychological distress with very little interest in the distribution of discrete mental disorders (Neighbors, 1984; Williams, 1995). Very soon after the dissemination of the ECA results, it was no longer enough to focus on group differences in average levels of distress in community surveys. Rather, the task became one of calculating the prevalence of discrete disorders like depression, schizophrenia and anxiety disorders.

As a result of psychiatric epidemiology's methodological attempts to translate the clinical diagnostic process to the community survey, the amount of research on the distribution of specific DSM-III disorders among African Americans increased tremendously (Williams, Takeuchi & Adair, 1992a; Williams, Takeuchi & Adair, 1992b; Brown, Eaton, & Sussman, 1990; Kessler, McGonagle, Zhao et al., 1994). This trend has, in turn, increased interest in ethnic and cultural influences on the psychiatric diagnostic process (Friedman & Paradis, 1991; Kirk & Kutchins, 1988; Kirk & Kutchins, 1992; Lawson, Hepler, Holladay & Cuffel, 1994; Lu, Lim & Mezzich, 1995; Neighbors, Jackson, Campbell & Williams, 1989). Historically, numerous studies of diagnosis among patient samples has shown that whites were more likely than blacks to be diagnosed with a mood disorder and, conversely, African Americans were more likely than whites to be diagnosed with schizophrenia (Adebimpe, 1981; Cannon & Locke, 1977; Ruiz, 1983; Simon, Fleiss, Gurland et al., 1973; Snowden & Cheung, 1990; Taube, 1971; Thomas & Sillen, 1972). There was much discussion, however, about how to interpret the meaning of this

relationship. Many scholars rejected the notion that African Americans did, in reality, have higher rates of schizophrenia. Neither did they accept the alternative finding of lower rates of mood disorder among blacks compared to whites. Rather, many argued that African Americans were routinely misdiagnosed (Bell & Mehta, 1980; Bell & Mehta, 1981; Cannon & Locke, 1977; Jones & Gray, 1986; Lawson, 1986).

The notion that African American psychiatric inpatients are at higher risk of misdiagnosis than white patients has been a major topic of discussion since the publication of a series of highly influential papers in the early-to-middle 1980's (Bell & Mehta, 1980; Bell & Mehta, 1981; Adebimpe, 1981, 1982; Jones & Gray, 1986). Although the misdiagnosis argument is varied and complex, the fundamental premise espoused by most scholars working in this area is that traditional mental health services have not been sensitive enough to ethnic differences in the ways that patients recognize, define and express symptoms of emotional distress (Finn, 1994; Flaskerud, 1986; Lefley & Bestman, 1991; Neighbors, Bashshur, Price, Selig, Donabedian & Shannon, 1992; Snowden, Ulvang & Rezentes, 1989; Sue, 1992; Sue, Fujino, Hu, Takeuchi & Zane, 1991). Clarification of how ethnicity and culture influence psychiatric diagnosis is important because mental health policy and service delivery planning are based on reported rates of disorders. These statistics are, in turn, based on the outcome of a diagnostic process that is assumed to have an acceptable level of accuracy. If the misdiagnosis of African Americans is widespread, patient counts by diagnostic group and resulting mental health policy decisions will be based upon faulty data.

Much has been written about the misdiagnosis of African American psychiatric inpatients over the past 20 years. A casual reading of this literature leaves one with the impression that the routine misdiagnosis of African Americans is a well-documented fact (Friedman & Paradis, 1991; Kirk & Kutchins, 1988; Mukherjee, Shukla, Woodle, Rosen & Olarte, 19983; Pavkov, Lewis & Lyons, 1989; Ruiz, 1983; Wade, 1993; Worthington, 1992). A careful review of the empirical research literature reveals, however, that the data bearing on this topic are neither clear

nor definitive (Adebimpe, 1981; Good, 1993; Snowden & Cheung, 1990). The ambiguity in the misdiagnosis literature is due to the lack of a comprehensive, coordinated research effort on the part of scholars interested in this topic. Among the studies that have investigated diagnostic practices with black patients, comparisons are difficult because the studies are distributed over a wide time period and an assortment of research methodologies (Neighbors, Jackson, Campbell & Williams, 1989). Adebimpe (1981) made this point many years ago when he criticized the research community for not doing more to investigate the possible misdiagnosis of African Americans.

•It is therefore, remarkable that these allegations (of misdiagnosis) have not been extensively and rigorously examined. Almost a decade after they were first made, there exists only a modicum of data by which they can be evaluated • (Adebimpe, 1981, p. 279).

Adebimpe's statement is as accurate today as it was 15 years ago. Based on our review of the misdiagnosis literature, not much has changed in the ensuing years. While there has been no shortage of articles written about the topic of misdiagnosis, most of the articles published in the 1990s were secondary analyses of existing data. Those that did conduct primary data collections tended to rely on analogue studies (e.g., vignettes and case descriptions) or retrospective chart reviews (e.g., Littlewood, 1992; Friedman & Paradis, 1991). The majority of publications were literature reviews written for various disciplines such as nursing (Worthington, 1992), sociology (Killian & Killian, 1990), anthropology (Good, 1993; Gaines, 1992), psychology (Snowden & Cheung, 1990), community mental health (Cheung & Snowden, 1990; Neighbors, Jackson, Campbell & Williams, 1989) and psychiatry (Lu, Lim & Mezzich, 1995; Wade, 1993). Most of these reviews drew upon the very same articles cited by Adebimpe in 1981. Below we provide a selective review of a few of the more important recent empirical investigations of misdiagnosis among African Americans.

Recent Studies of Misdiagnosis Among African Americans

Littlewood (1992) presented two forms of a case description written to reflect an equal

likelihood of six common diagnoses to 342 health professionals. One described the patient as •born locally• and the other described him as •born locally to Jamaican parents.• This manipulation did not affect the diagnostic outcome. Loring and Powell (1988) employed a similar methodology in a study of 290 psychiatrists (stratified by sex and race) who were asked to make a diagnosis for a clear schizophrenic case description (Axis I) and a clear dependent personality disorder (Axis II). The sex and race of the patient depicted was manipulated. Correct diagnoses were most often given when no identifying information on the patients was included. Black patients were given more severe diagnoses, regardless of the race of the psychiatrist. Loring and Powell (1988) found that paranoid schizophrenia was diagnosed more frequently in black patients by both black and white psychiatrists.

Lawson, Hepler, Holladay and Cuffel (1994) brought more precision in measurement to the concept of •over-diagnosis• by comparing percentages of minority inpatients and outpatients to the percentage of minority patients in the entire mental health system. The authors found that while blacks were only 16% of the population, they made up almost half of the diagnosed schizophrenics among inpatients and 37% of outpatients. African Americans were 30% of the inpatients but 48% of the schizophrenics and 18% of mood disorders; among outpatients they were 18% of the patient population, 37% of the schizophrenics and 14% of the mood disorders. These statistical patterns are consistent with prior studies showing a significant relationship between ethnicity and diagnosis and, as such, they remain provocative and in need of a more definitive explanation.

Three recent articles conducted retrospective chart reviews to investigate allegations of misdiagnosis of African American patients. Strakowski, Shelton and Kolbrener•s (1993) investigation was motivated by their assumption that adoption of standardized criteria published in DSM-III and DSM-III-R would have an influence on the often-observed relationship between race and schizophrenia. An ethnically diverse clinical staff, instructed to use DSM-III-R criteria reviewed the charts of 173 psychotic patients. Results indicated, however, that African American

patients were still significantly more likely to be diagnosed as schizophrenic. Strakowski, Lonczak, Sax, West, Crist, Mehta, and Thienhaus (1995) investigated the charts of 490 patients randomly selected from a psychiatric emergency service patient base. Black patients were significantly more likely to have received a diagnosis of schizophrenia, as well as the comorbid classification of substance abuse with a principal diagnosis of schizophrenia. Friedman and Paradis (1991) compared 15 black and white female patients with panic disorder and agoraphobia. The authors noted that retrospective analysis of clinical material from patient charts revealed psychiatric hospitalizations for black patients that seemed clinically unnecessary. Despite similar symptom severity, African Americans with panic disorder had poorer treatment outcomes, which the authors attributed to the possibility of misdiagnosis. They hypothesized that black patients presenting with panic and agoraphobia may be unrecognized as such. A more extensive investigation of anxiety disorders among ethnic minorities conducted by Friedman and his colleagues (Paradis, Friedman, Lazar, Grubea & Kessleman, 1992) combining a structured interview schedule with careful clinical review, found that none of the cases of panic disorder identified by the research group was detected by the hospital staff.

This review indicates that while the data suggest that schizophrenia may be overdiagnosed in African Americans, there remains a need for more in-depth explorations of black-white differences in presenting symptoms and their impact on the diagnostic inference process. One problem with the misdiagnosis literature is that some of the most thought-provoking articles on this topic were written in the mid-1970's to mid-1980's. While these papers were useful in compiling secondary statistics and raising useful hypotheses about why African Americans might be misdiagnosed, they were not always primary data collections (e.g., Adebimpe, 1981; Adebimpe, 1982; Cannon & Locke, 1977; Jones & Gray, 1986; Kramer, Rosen & Willis, 1973; Lawson, 1986; Thomas & Sillen, 1972). As a result, they were unable to empirically address the hypotheses they were raising (for notable exceptions, see Adebimpe, Klein & Fried, 1981; Bell & Mehta, 1981; Hendricks, Bayton, Collins et al., 1983). The more

recent articles that have focused on the misdiagnosis of African American patients have not added substantially to our knowledge of whether blacks are routinely misdiagnosed. Many of the interesting ideas and important hypotheses raised over 15-20 years ago by Bell, Jones, Adebimpe and others have not been empirically investigated by research designs that have taken advantage of developments in the specificity of diagnostic criteria nor semi-structured clinical instruments.

Explicit Diagnostic Criteria and Semi-structured Instruments

Interestingly, there were a few early studies that employed structured diagnostic methods within a comparative framework. These studies were particularly provocative because they presented a set of findings that were consistent with the misdiagnosis hypothesis. In fact, these studies are mentioned in practically every review article that has been written between 1981 and the present. Specifically, these studies found significant differences in the diagnosis of African Americans when comparing diagnoses arrived at using structured clinical decision-making and explicit symptom criteria to diagnoses made using typical hospital or clinic practices (Crook and Herman, 1975; Lipton & Simon, 1985; Liss, Welner, Robins & Richardson, 1973; Mukherjee, Shukla, Woodle, Rosen & Olarte, 1983; Raskin, Tonks, Paykel & Klerman, 1970; Simon, Fleiss, Gurland, Stiller & Sharpe, 1973; Tonks, Paykel & Klerman, 1970; Welner, Liss & Robins 1973). The main point to be taken from these investigations is that research clinicians were more likely to arrive at a *different* diagnostic conclusion for African American schizophrenics when either semi-structured research instruments or explicit diagnostic criteria were employed. This pattern is consistent with the misdiagnosis hypothesis, if one is willing to accept the assumption that clinicians using semi-structured instruments and explicit criteria are less influenced by racial stereotypes. These data patterns represent the best evidence suggesting that errors are being made in the diagnosis of African American psychiatric inpatients. While some scholars are willing to assume that the structured interviewing procedures are more likely to lead to the "correct" diagnosis, Adebimpe cautions that,

- ...the alleged superiority of one diagnostic method over another is always open to debate. However, a structured mental status examination is much more likely to

extract complete information, presumably with a consequent increase in diagnostic accuracy • (Adebimpe, 1981, p. 280).

There have not been enough studies that have taken advantage of the promising developments that were predicted with the advent of DSM-III and DSM-III-R (Adebimpe, 1981; Good, 1993; Jones & Gray, 1986; Strakowski et al., 1995; Williams, 1986). While it cannot be concluded that structured instruments necessarily provide more "accurate" diagnoses, it is true that an unstructured interviewing procedure is more susceptible to influence by biased clinical impressions than a more structured approach. If nothing else, such findings point to the structured interview as an important research tool for studying black-white differences in the diagnostic process (see Welner et al., 1973, p. 487). Hopefully, more primary data collections employing structured instruments along with explicit diagnostic criteria sets, focusing explicitly on diagnostic challenges presented by African American patients, will appear in the coming years.

A Concluding Statement

Psychiatric diagnosis is centrally important to the quality care of patients precisely because it predicts and informs treatment. Diagnosis is, however, an extremely difficult process (Frances, 1994; Mechanic, 1978). It is particularly difficult for psychiatry because the diagnosis of mental disorders depends disproportionately on symptoms and behaviors observed and reported by the patient or family, as well as upon complicated inferences made by clinicians on the basis of these complex interpersonal communications. All of this has to be processed and interpreted by the clinician before arriving at a diagnostic decision. It is within this rich social milieu that the issue of ethnic influences on psychiatric diagnosis must be addressed. Investigating ethnic differences in diagnostic process and outcomes should be more aggressively pursued precisely because it is a specific example of the more typical, everyday difficulties of doing psychiatric diagnosis. It may be that the usual interpersonal communication problems and inferences are merely *heightened* in the cross-ethnic diagnostic situation. Thus, the study and

clarification of the processes by which clinicians deal with the diagnostic challenges presented by African Americans will continue to be a useful, important and clinically relevant research endeavor.

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