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Commentary: Race and mental health—more questions than answers

David R Williams[1,]* and Tara R Earl[2]

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Research on racial disparities in health has a striking paradox. On almost every indicator of physical health status African-Americans (or blacks) have higher rates of morbidity and mortality than whites,[1] but, surprisingly, blacks have lower rates of commonly occurring, mood, anxiety and substance disorders than whites.[2] However, racial disparities in mental health are complex with the pattern varying for different indicators of mental health status. Compared with whites, African-Americans report lower levels of psychological well being (e.g. life satisfaction and happiness),[3] and more often than not, have higher rates of psychological distress.[4] At the same time, blacks also report higher levels of flourishing (high levels of psychological well-being and being free of current mental disorders) than whites.[5]

The Prenatal Determinants of Schizophrenia (PDS) study highlights an additional dimension of complexity by documenting a 3-fold elevated risk of schizophrenia in a California birth cohort for African-Americans compared with whites.[6] There has long been the suggestion that blacks have higher levels of schizophrenia than whites but serious questions exist about the accuracy of the available mental health data on this topic. Studies of state psychiatric hospitals find that blacks are over-represented with schizophrenia,[7] but these facilities do not provide a comprehensive coverage of schizophrenia cases. Existing data from broad-based population studies also have serious limitations. The Epidemiologic Catchment Area (ECA) study found that while there was little racial variation in the rates of most of the common mental disorders, blacks had rates of schizophrenia that were slightly higher than those of whites, a difference that was reduced to non-significance when adjusted for socio-economic status (SES) and demographic variables.[8] However, while the ECA study provided good population-based data, the absence of clinical judgement raised serious questions about the validity of the diagnoses for psychotic disorders. The National Comorbidity Study Replication (NCS-R) sought to address some of the limitations of the ECA study by having a clinical re-appraisal interview in which clinicians used a structured diagnostic instrument to re-interview respondents who had earlier completed a psychosis screen. This study found higher rates of non-affective psychosis in blacks compared with whites, but with the national estimate of the prevalence of non-affective psychosis based on extrapolations from a mere 73 clinical re-interviews, there was inadequate statistical power to obtain a stable estimate.[9]

The PDS study avoids some of the limitations of prior research and since it sampled persons with health insurance; it likely excludes the extremes of SES. Accordingly, the racial gap documented here is likely to be smaller than in the general population. However, the PDS study does not rule out longstanding concerns that the higher rate of schizophrenia

1 Harvard School of Public Health, 677 Huntington Avenue, Room 615, Boston, MA 02115-6096, USA.

2 Center for Multicultural Mental Health Research, Cambridge Health Alliance/Harvard Medical School, 120 Beacon Street, 4th Floor, Somerville, MA 02143.

* Corresponding author. E-mail: dwilliam@hsph.harvard.edu

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for blacks compared with whites could be an artefact of differential misdiagnosis by race. Prior research has suggested that there is the over-diagnosis of schizophrenia and the under-diagnosis of affective disorders among African-Americans.[10] These errors could be due to the higher incidence of some symptoms in blacks compared with whites, as well as greater attention to atypical symptoms in black patients. The differential interpretation of similar symptoms could arise from socio-cultural distance between clinicians and minority patients as well as from racial stereotyping in the clinical encounter. In the PDS study, the initial diagnosis of schizophrenia came from screening in health care registries. Face-to-face interviews were then completed for almost 60% of these cases by trained clinicians. Misdiagnosis could have occurred in both the initial treatment data as well as in the face-to-face assessments. Some prior research suggests that misdiagnosis related to race occurs even in the face of clear-cut diagnostic criteria.[11]

An important contribution of the PDS study is that it examined the potential contribution of SES to the racial differences in schizophrenia. It found that the association was reduced by a third when adjusted for the SES of the family of origin. A researcher's understanding of what 'race' captures can importantly affect the questions that are asked and the questions that remain unasked. Extant racial categories do not capture biological distinctiveness in human populations and single-gene disorder models are unlikely to account for racial differences in diseases with a complex aetiology. Race is an imprecise variable that captures differential exposure to the resources and rewards in society; and SES is regarded as a proxy for the social and economic inequality that race historically and currently reflects.[1] The assessment of SES in the PDS study was more comprehensive than typically done in mental health research. At the same time, the standard SES indicators are non-equivalent across race. Compared with whites, blacks receive poorer quality education, work in more hazardous jobs, have less income at the same levels of education and less wealth and purchasing power at equivalent income levels.[1]

Moreover, SES needs to be measured not only at the level of the individual and household but also at the level of the neighbourhood. Because of the long history and persistence of marked residential segregation by race in the US, African-Americans live in neighbourhoods that are qualitatively inferior to those of whites with similar SES.[1] Fully characterizing the social inequalities that blacks have experienced compared with whites requires the comprehensive assessment of SES as well as multiple aspects of racism that also contribute to the elevated rates of ill-health among African-Americans. Both interpersonal and institutional discrimination appears to adversely affect African-American health.[1] At the institutional level, residential segregation, a primary mechanism of racism, can restrict SES attainment through differential access to educational and employment opportunities. It can also create pathogenic residential conditions that are fraught with higher levels of psychosocial stress such as unemployment and adverse neighbourhood conditions such as exposure to violence. Discrimination can also lead to reduced access to desirable goods and services in the society including access to high quality medical care. Research continues to find racial differences in the treatment of schizophrenia and other disorders.[12] Other evidence indicates that the subjective experience discrimination is a type of psycho-social stress that can adversely affect mental and physical health.[13] A recent prospective study found that perceived discrimination was associated with the onset of psychotic symptoms.[14]

Future US research on race and schizophrenia should also examine the risks linked to migration. European research has found an elevated risk of schizophrenia in black Caribbean immigrants in the absence of an elevated risk in their countries of origin. Although the population of black immigrants in the US is larger than the number of Japanese, Cubans or American Indians, black immigrants are an understudied group. Recent mental health research suggests that the mental health risk for black immigrants in the US increases with length of stay and generational status.[15] US studies linking migration history and status variables to the risk of schizophrenia among blacks appear to be particularly urgent given the European findings. The extent to which the experience of being black in historically white-dominated societies is associated with an increased risk of schizophrenia should be carefully explored in both European and US studies.

The PDS study focused on racial differences in the risk of schizophrenia. Understanding the burden of mental disorders in the black population requires researchers to go beyond the assessment of racial differences in the incidence and prevalence of disorders. For example, although both African-American and Caribbean Blacks have a lower lifetime risk of depression than whites, this disorder is more likely to be chronic, severe, disabling and untreated among blacks compared with whites.[16]

The findings from the PDS study add to our understanding of racial differences in health but they also highlight how much we have yet to learn about the complex ways in which race, racism, ethnicity, SES and migration status combine to affect mental health risks.

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