

Black-White Disparities in Mental Health Among New Orleans Residents Four Years After Hurricane Katrina

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This paper uses new data from the Displaced New Orleans Residents Survey (DNORS), fielded in 2009–10, to describe and analyze black-white disparities in mental health among pre-Katrina residents of New Orleans four years after the hurricane.

Background

Hurricane Katrina struck New Orleans, Louisiana, on the morning of August 29, 2005. The devastation, disruption, and despair caused by the hurricane had a significant effect on mental health among the population and revealed large disparities in the prevalence of mental illness between blacks and whites (Kessler et al., 2006; Sastry and VanLandingham, 2009).

This paper extends previous research on this topic by focusing on disparities in mental illness among pre-Katrina New Orleans residents in the medium term—specifically, about four years following the hurricane. This time horizon has the potential to provide two especially important insights. First, the results will reveal whether a natural/environmental disaster such as Hurricane Katrina has a lasting effect of elevating the prevalence of mental illness. Previous research on mental health following disasters (for a brief review, see Sastry and VanLandingham, 2009) suggests that the negative effects are generally short-lived. However, rates of mental illness can remain stable or increase over time when exposure to stress continue.

Second, the findings of this study will indicate whether the major black-white disparity in mental illness that was apparent early-on has narrowed or widened (or remained the same). This finding offers potentially important insights into the nature of black-white health disparities and, in particular, about differences in resilience to and recovery from a major adverse experience. Using rich data from DNORS on economic losses, displacement, and other factors, we will investigate whether the trend in the race disparity in mental health is due to changes in circumstances and other dimensions of well-being for blacks and whites.

Data

Data for this study come from the Displaced New Orleans Residents Survey (DNORS), which was fielded in 2009–2010. The aim of DNORS was to collect information four years after Katrina on a representative sample of individuals who resided in New Orleans prior to the hurricane—regardless of where these individuals resided at the time of the interview. Respondents were interviewed by telephone or in person in New Orleans and throughout the U.S.

DNORS drew a representative sample of pre-Katrina residences in New Orleans. Fieldwork focused on tracing the sampled respondents using mail, telephone, and in-person contacts, and drawing on an extensive array of electronic database searches and state-of-the-art tracing techniques to obtain updated information on respondents' whereabouts. Interviews were completed with 1,743 respondents.

The DNORS questionnaire obtained a roster of all pre-Katrina household residents and collected information on their evacuation and resettlement experience, current location, plans to return to or remain in New Orleans, and health and well-being. Information was also collected on residents' basic demographic and socioeconomic characteristics and on housing characteristics and damage.

Survey respondents were administered three indicators of mental health. The first was the K6 scale of non-specific psychological distress (Kessler et al, 2002; Kessler et al., 2003), which screens for anxiety and mood disorders in the previous 30 days. The K6 is widely used in the U.S. as a screener for mental illness, and has been used previously to examine psychological effects of Hurricane Katrina (Kessler et al., 2006; Sastry and VanLandingham, 2009). The second mental health measure was the PTSD Checklist (PCL), which was used to assess Post-Traumatic Stress Disorder (PTSD) (Weathers et al., 1993). The PCL includes 17 questions that correspond to each of the single items that together comprise the symptoms of PTSD from the *Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition* (DSM-IV). The PCL is focused on respondents' stressful experiences related to Hurricane Katrina. The final mental health measure administered in DNORS was the nine-item Patient Health Questionnaire (PHQ-9), which was used to assess major depression (Kroenke and Spitzer, 2001). The PHQ-9 assesses symptoms and functional impairment, in order to determine the likelihood a respondent has major depression, and also assesses the severity of the respondent's symptoms. The PHQ-9 is based on the diagnostic criteria from the DSM-IV.

Analysis Plan

The analysis will examine all three measures of mental health identified above. We will begin by examining the overall level of mental illness among pre-Katrina residents of New Orleans and by documenting disparities in mental illness between blacks and whites. Next, we will estimate descriptive logistic and multinomial logit models to examine the background factors that may account for the observed disparities. The analysis will be weighted to represent the pre-Katrina population of New Orleans.

Expected Findings

Preliminary analysis reveals continuing high levels of mental illness among displaced New Orleans Residents and major disparities between blacks and whites.

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