Urban versus Rural: The Impact of Environment on Perceived Psychosocial Stressors and Mental Health Symptoms

Cory Wornell, MS, MPH; Candice N. Selwyn, MS; Adrianne C. McCullars, MS & Jennifer Langhinrichsen-Rohling, PhD
University of South Alabama

Background

• On April 20th, 2010, the Deepwater Horizon oil spill occurred in the Gulf of Mexico. This spill affected approximately 181 miles of Gulf Coast shoreline and impacted the residents of Lower Alabama.
• According to the United Health Foundation’s 2013 Report, Alabama ranked #47 of 50 US states in health indicators.
• The Robert Wood Johnson Foundation ranked Mobile County #38 of 67 counties in Alabama in terms of health outcomes based on multiple determinants.
• Officially, Mobile County has a 10.1% unemployment rate; 24% of the adult population lacks health insurance.
• Since Spring 2013, the Gulf Coast Behavioral Health and Resiliency Center has screened over 1,500 adults at multiple clinics of the Federally Qualified Health Centers (FQHCs) of Mobile. Through an on-going integrated health project aimed at boosting mental and behavioral healthcare access through on-site referral, screening, and service delivery systems, we have been able to administer a multiple-instrument assessment tool.

Purpose

Previous studies have shown increased behavioral health symptoms following disasters. The purpose of the current study was to determine the mental and behavioral health needs of the lower-income citizens in more urban vs. rural regions of one county recovering from the Deepwater Horizon Oil Spill and the “Economic Downturn” three years post these events.

Results

• Most clients indicated financial stress.
• Rural residents were significantly more stressed by poor healthcare services than urban residents.
• Urban residents reported almost twice the rate of arrest/incarceration (4.5%) compared to rural residents (2.5%).
• Urban residents reported being affected by the Deepwater Horizon Oil Spill 3x more than their rural counterparts (1.7% v 0.5%).
• 23.5% indicated employment problems; official area rate is 10%.

Limitations

• Clients were referred to mental health professionals because they were determined to be “in need” due to test scores and/or demeanor.
• Furthermore, all clients were patients in low-income primary healthcare settings, limiting generalizability.
• Clients chose from a fixed list of specific stressors.

Methods

• Data collection was from Aug 22, 2013 – Sept 30, 2014
• Clients were seen by a Mental/Behavioral Health Professional in one of two FQHCs on the basis of:
  • Elevated PHQ-2 or PHQ-9 scores
  • Symptomology of being “in-need” (i.e., crying in the exam room, being in crisis)
  • Pre-appointment chart-review indicating need (i.e., due to prescribed medications)
• Initial assessment was completed using a Center-created assessment form of both nationally-recognized screening tools and in-house created tools.
• SPSS analysis was performed on 414 client assessment screeners; clients were selected by zip code.
• Analysis selected clients living in one of the ten most-frequently-seen zip codes from urban (n=247) and rural (n=167) areas of the county, each having five zip codes.