

Traditional assessments like the PHQ-9 may underestimate depression for Black women and overlook other pathways through which distress may be expressed. Black women are more likely to experience physical weathering, or premature biological aging, and increasing BMI is one measurable response to stress and adverse environmental conditions.

Work by the Mental Health Research Network (MHRN) has and is addressing disparities following diagnosis and initiation of depression treatment. This proposed supplemental work will extend and deepen MHRN research in this area by examining relationships that happen further upstream, employing new quantitative data and employing qualitative methods to increase understanding of the experience and expression of stress and depression among Black women.

Aim 1: Examine the role of place and reciprocity between depression outcomes on health for a sample of insured Black women.

Leveraging the MHRN's mature data infrastructure, a set of retrospective data-only analyses will be conducted to examine the longitudinal relationships among place-based social determinants of health, obesity, and depression. The longitudinal nature of the data allows for constructing a multi-level, structural equation model to measure reciprocal relationships (cross-lagged effects) between BMI and expressed depression as captured by the PHQ-9. Place indicators include components of Area Deprivation Index (ADI) such as neighborhood median income, safety features of neighborhoods (like crime statistics), distance to and/or number of local grocery stores, availability and distance to types of other food establishments, the distance to environmental hazards (e.g., landfills, abandoned buildings, and transportation depots), along with other measures that describe geographic attributes. Proximity measures (e.g., to grocery stores and types of restaurants) not attained from existing data will be calculated using GIS mapping. The SEM approach proposed will use an exploratory model in which place will be treated as latent concepts that describe environments patient members reside. Moreover, this research will allow further testing of hypotheses on whether place factors, e.g., proximity to health clinics, grocery stores, different types of restaurants, and hazards like landfills, either have absolute positive or negative influences on mental health for Black women. Data for the past 12 years is available for use in analyses.

Aim 2: Explore pathways for understanding black women's health holistically by analyzing narratives.

Using a grounded theory approach, 20 semi-structured interviews with a subsample of Aim I's patients will be conducted and analyzed to capture how lived experiences of Black women affect the experience and expression of depression. A stratified sample of black women with diagnoses of depression without follow-up treatment based on geographic characteristics and BMI categories will be constructed to recruit participants. Selected participants will participate in a 1 to 1 ½ hour long, semi-structured interview on topics including 1.) stress exposure over the life course, 2.) current (self-reported) mental and physical health status, 3.) decision-making about food and nutrition choices, 4.) past and current interactions with the health system, including mental health professionals, 5.) coping behaviors, and 6.) values and beliefs about health. Results from Aim II will better inform future measurement and treatment strategies for measuring Black women's health outcomes. After transcription, Wilson will analyze data using NVivo, for which KP currently holds licenses for use in qualitative analyses.