

University of Massachusetts Medical School

eScholarship@UMMS

UMass Center for Clinical and Translational
Science Research Retreat

2016 UMass Center for Clinical and
Translational Science Research Retreat

May 20th, 12:30 PM


Race/Sex Group Modification of the Association between Allostatic Load and Depression: Findings from the National Health and Nutrition Examination Survey, 2005-2010

Ganga Bey
University of Massachusetts Medical School

Et al.

Let us know how access to this document benefits you.

Follow this and additional works at: https://escholarship.umassmed.edu/cts_retreat

 Part of the Biochemical Phenomena, Metabolism, and Nutrition Commons, Dietetics and Clinical Nutrition Commons, Epidemiology Commons, Health Services Administration Commons, Medical Physiology Commons, and the Mental Disorders Commons

Bey G, Person SD. (2016). Race/Sex Group Modification of the Association between Allostatic Load and Depression: Findings from the National Health and Nutrition Examination Survey, 2005-2010. UMass Center for Clinical and Translational Science Research Retreat. Retrieved from https://escholarship.umassmed.edu/cts_retreat/2016/posters/13

Creative Commons License



This work is licensed under a [Creative Commons Attribution-NonCommercial-Share Alike 3.0 License](https://creativecommons.org/licenses/by-nc-sa/3.0/). This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in UMass Center for Clinical and Translational Science Research Retreat by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.

Race/Sex Group Modification of the Association between Allostatic Load and Depression: Findings from the National Health and Nutrition Examination Survey, 2005-2010

Ganga Bey, MPH¹, Sharina Person, PhD¹

¹Department of Quantitative Health Sciences, University of Massachusetts Medical School

Abstract

Objective: We assessed whether the relationship between depression and chronic stress as measured in allostatic load (AL) differs by race and sex among US black and white adults.

Methods: Using data from the National Health and Nutrition Examination Survey (NHANES) 2005-2010, we examined race/sex modification of the relationship between AL and depression in black and white women and men aged 18-64 years (n=6431). AL scores, ranging from 0-9, were calculated using 9 cardiovascular, metabolic, and immunologic biomarkers; scores ≥ 4 were considered "high-risk". Depression was assessed using the PHQ-9; scores ≥ 10 indicate clinical depression. Logistic regression models estimated odds of elevated depressive symptoms as a function of AL for each race/sex group; age and socioeconomic status were included as covariates in each model. All analyses were weighted to represent U.S. adults.

Results: The association between AL and depression was strongest among white women (OR=2.1, 95% CI: 1.5, 3.0), followed by black men (OR=1.7 95% CI: 1.0, 2.9), and not statistically significant among black women (OR=1.1 95% CI: .60, 2.0) or white men (OR=1.4 95% CI: .82, 2.5).

Conclusions: Our findings that the association between AL and depression was strongest and statistically significant only among white women and black men despite black women having the highest mean AL and depression scores suggests a measure of psychological resistance to chronic stress among those coping with intersecting pressures of systemic race and gender-based discrimination. These results also suggest that social inequality may shape the manner in which chronic stress is expressed. Further research should explore other potential racialized and gendered manifestations of chronic stress in order to better understand social factors influencing health inequity.

Contact:

Ganga Bey, MPH

PhD candidate, Clinical and Population Health Research

Graduate School of Biomedical Sciences

University of Massachusetts Medical School

ganga.bey@umassmed.edu

646-285-5225