

association with weight gain may be more susceptible to cardiovascular and metabolic disease risks.

“While it is widely believed that obesity and inflammation are linked to cardiovascular disease, this study shows not all obese individuals exhibit inflammation that can lead to cardiovascular disease, type 2 diabetes, and cancer,” says Gokce, the study’s senior author. “Once we identify what harmful product adipose tissue is producing that is linked to causing systemic inflammation, we can explore treatments against it that could potentially combat the development of several debilitating obesity-related disorders.”

This study was funded by the National Institutes of Health.

■ New Genetic Risk Factors of Systemic Lupus Erythematosus Found in Study of African American Women

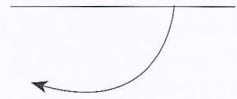
Researchers from Boston University’s Slone Epidemiology Center have found four new genetic variants in the major histocompatibility complex (MHC) that confer a higher risk of systemic lupus erythematosus (“lupus”) in African American women. The study, which appears online in *Human Genetics*, is believed to be the first to comprehensively assess the association between genetic variants in the MHC region and risk of lupus in African American women.



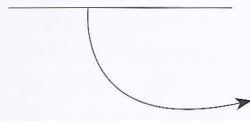
The findings were based on the ongoing Black Women’s Health Study, a prospective study of the health of 59,000 African American women conducted by the researchers since 1995.

African American women have a higher risk of lupus compared with white U.S. women. It has been known that the MHC region in chromosome 6 carries genetic factors associated with several autoimmune diseases, and recent studies have reported several genetic variants

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in the MHC region associated with risk of lupus. However, these previous studies were carried out in populations with European and Asian ancestry.

The researchers genotyped more than 1,500 genetic variants of single nucleotide polymorphisms (SNPs) in 400 lupus cases and 800 controls. They found four independent SNPs associated with higher risk of lupus. Through the construction of a genetic score consisting of those four SNPs, the researchers found that risk of lupus increased by almost 70 percent for each extra high-risk allele. One of the SNPs reported in the present study was also found in a study in Chinese women, and the researchers were also able to replicate some previous findings from a study in women of European ancestry.

“Taken together, our results and previous genome-wide association studies in European and east Asian ancestry populations show that women of different ancestral origins may share some genetic components for the risk of lupus,” says lead author Edward A. Ruiz-Narvaez, ScD, BUSM assistant professor of epidemiology.

The researchers point out that the identified genetic variants are not necessarily the ones directly involved in the pathogenesis of lupus, and further research is needed to identify the true causal genetic variants. Identification of the true causal genetic variants should lead to a better understanding of the biology of lupus.

This study was supported by grants from the National Institute of Allergy and Infectious Diseases, the National Cancer Institute, and the National Center for Research Resources.

■ Gout Prevalence Swells in U.S. Over Last Two Decades

A new study shows the prevalence of gout in the United States has risen over the last 20 years, and the condition now affects 8.3 million Americans (4 percent). Prevalence of increased uric acid levels (hyperuricemia) also rose, affecting 43.3 million adults in the United States (21 percent). Greater frequency of obesity and hypertension may be associated with the

The narcology system of care, however, works largely independent of other medical care systems and hence has not adopted strategies to link HIV-infected patients to HIV care.

The research will be conducted under the direction of Jeffrey H. Samet, MD, professor of medicine and community health sciences at BUSM and BUSPH and chief of the Section of General Internal Medicine at BMC. Samet was recently selected as a NIDA International Program 2011 Awards of Excellence winner.

As in the United States in the 1990s, delayed or non-receipt of HIV medical care, particularly among IDUs, is common in Russia. According to Samet, the principal investigator of the study, this is a missed opportunity since up to 45 percent of Russian IDUs in narcology treatment are infected with HIV, yet as few as 20 percent of those are in care.

"The objective of this study is to implement and assess a behavioral and structural intervention in Russia designed to support and motivate HIV-infected heroin-dependent narcology patients to engage in HIV medical care and ultimately improve their HIV outcomes," says Samet.

LINC is a clinical model designed to coordinate narcology and HIV systems of care using an intervention inclusive of staff from both systems and composed of elements shown to facilitate engagement in medical care: HIV case management and nurse home visits. The central hypothesis is that an intervention that involves coordination between the narcology and HIV systems will lead to increased engagement in HIV medical care. "Coordination will involve HIV case management delivered by a peer to help motivate and reduce barriers to HIV care engagement and enhanced outpatient narcology treatment delivered by an addiction nurse with communication between these providers," Samet adds.

The project will be undertaken by an international research team experienced in addressing HIV, substance use, and clinical interventions in Russia.



AETNA FOUNDATION SUPPORTS STUDY OF OBESITY AMONG AFRICAN AMERICAN WOMEN


As part of a \$1 million funding program, the Aetna Foundation has provided a \$233,000

grant to Boston University's Slone Epidemiology Center for a two-year study of factors that influence obesity among African American women—including both individual and neighborhood-level factors—and the identification of the most effective small changes

individuals can make to decrease obesity rates among African American women. Researchers will examine data from more than 20,000 participants in

the ongoing Black Women's Health Study, including diet and exercise patterns, psychosocial stressors, and the neighborhood environment in which the women live.

Researchers led by Julie Palmer, PhD, professor of epidemiology, senior epidemiologist at the Slone Epidemiology Center, and principal investigator for the Black Women's Health Study, hope to identify small, actionable changes women can take to reduce weight gain. They also hope to acquire evidence that will lead to policy and institutional-level changes that can impact weight gain and obesity, such as neighborhood safety and walkability and grocery store accessibility. ■

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