Heart disease risk profiles differ widely among African-Americans, blacks from the Caribbean and Africa

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African immigrants have significantly lower rates of risk factors for heart attacks, strokes and other cardiovascular diseases compared to

blacks from the Caribbean and African Americans, according to preliminary research presented at the American Heart Association's Epidemiology and Prevention | Lifestyle and Cardiometabolic Health Scientific Sessions 2020. The EPI Scientific Sessions is a premier global exchange of the latest advances in population based cardiovascular science for researchers and clinicians.

Black Americans experience more heart attacks, strokes and other cardiovascular diseases compared to white Americans, which is likely due to higher prevalence of risk factors, such as high blood pressure, obesity, diabetes and others. However, this might not be true for black Americans who have more diverse ethnic backgrounds or who have emigrated from Africa or the Caribbean.

"Prior research into heart disease racial disparities typically has studied only African Americans or has grouped U.S. and foreign-born blacks without considering ethnicity, birthplace or other factors," said lead study author Diana Baptiste, D.N.P., R.N., C.N.E., assistant professor at The Johns Hopkins University School of Nursing in Baltimore, Maryland.

Researchers studied 82,000 non-Hispanic blacks and 370,000 whites who took part from 2010 through 2018 in the National Health Interview Survey, a nationally representative, in-person survey conducted yearly in Spanish and English. The researchers found differences among the three different ethnic classifications for black Americans and compared them to whites for all four heart disease risk factors studied: high blood pressure, diabetes, excess weight and smoking.

"The study shows that race alone doesn't account for risk factor differences between blacks and whites," said Baptiste. "Among all the groups, African immigrants, who have the highest degree of African ancestry, had the lowest burden of risk factors."

Using statistics from 2018, the study found the prevalence of:

- High blood pressure was 17% for African immigrants; 32% for Afro-Caribbeans; 42% for African Americans and 34% for whites;
- Smoking was 5% for African immigrants; 8% for Afro-Caribbeans; 18% for African Americans and 16% for whites.
- Diabetes was 9% for African immigrants; 19% for Afro-Caribbeans; 15% for African Americans and 10% for whites; and
- Overweight/obesity was 60% for African immigrants; 68% for Afro-Caribbeans; 76% for African Americans and 66% for whites.

The study also accounted for socio-economic factors and found that African immigrants were the most likely to be college educated, yet the least likely to have health insurance:

- 40% of African immigrants had a college education, compared to 26% of Afro-Caribbeans, 21% of African Americans and 36% of white Americans.
- However, only 76% of African immigrants had health insurance, compared to 81%, 83% and 91% of Afro-Caribbeans, African Americans and white Americans respectively.

The findings suggest that environmental, psychological and social differences could help account for differences in cardiovascular risk factors. "We were quite surprised by the stark differences in socioeconomic factors among the black ethnic groups," Baptiste said.

Baptiste and her colleagues have been advocating that subgroups of U.S. blacks be defined separately in medical research. "Cultural and genetic influences, along with social factors such as wealth and employment,

marital status, how people are educated and where they live and work, can affect risk and how it is managed, and ultimately health outcomes," she said.

The number of black immigrants in the U.S. has roughly doubled in the past 40 years, according to the Pew Research Center. "Much of the diversification of the black population has occurred in and around major metropolitan cities. We need to account for these shifts in our research and care for our patients, and in our training of health care professionals," Baptiste said.

"Our results suggest that although racial disparities in heart disease risk factors exist, ethnic disparities among blacks need to be addressed to ensure that health care delivery and public health strategies are properly tailored to these populations," Baptiste said.

"The strength of the study was the amount of data available for a large group of people. However, only 5% of the study group were African immigrants and only 8% were Afro- Caribbeans, so it is not possible to extrapolate these findings to the U.S. population of black Americans or people of African ancestry in general. For example, African immigrants in this study tended to be younger and better educated, which correlates with better heart health. That doesn't mean it would be true for the hundreds of millions of people living in Africa or in the Caribbean, " said Ivor Benjamin, M.D., FAHA, immediate past-president of the American Heart Association and director of the Cardiovascular Center at the Medical College of Wisconsin in Milwaukee.

"The findings from this study are intriguing, but African Americans still make up the vast majority of black Americans in the U.S., and we need to do a better job of making sure all Americans have access to health insurance, healthier food and safe places to be physically active," said Benjamin.

Cardiovascular disease kills more than 100,000 U.S. black Americans each year. An estimated 90% of heart attacks, strokes or other cardiovascular events in blacks are due to elevated or borderline cardiovascular disease risk factors, including high blood pressure, diabetes, excess weight/obesity and smoking, compared with a rate of about 65% in whites.

Provided by American Heart Association