

# Conversations with Jackson Heart Study Working Group Co-chairs on: Diabetes, **Hypertension, Chronic Kidney Disease, Heart Failure and Genetics**

Jackson Medical Mall Thad Cochran Center

UMMC Conference Center Auditorium

350 W. Woodrow Wilson Dr.

Jackson, MS

August 12, 2016

1:00 pm - 4:30 pm

# Meeting American Heart Association Goals can Prevent Diabetes in the Jackson Heart Study

- a. Presenters
  - i. Alain Bertoni, MD, MPH, Wake Forest School of Medicine, Winston-Salem, NC
  - ii. Sherita Golden, MD, MPH, Johns Hopkins University School of Medicine, Baltimore, MD

# b. Highlights

- i. Type 2 diabetes is a serious disease and is quite common among African Americans.
- ii. We will describe what is known about diabetes and what the Jackson Heart Study has contributed towards a better understanding of this disease. In particular, we will:
  - Review the American Heart Association recommendations for living healthier to prevent heart disease, including healthier diets, sufficient physical activity, not smoking, and maintaining healthier levels of weight, blood pressure, blood fats (lipids) and glucose.
     Some of these health measures are interrelated. For example, a healthier diet and meeting physical activity targets also help control weight and blood pressure and can improve blood cholesterol levels.
  - 2. Describe how many JHS participants met these recommendations at the first exam; and
  - 3. Describe how meeting more of these recommendations can reduce the risk of developing diabetes.

### 2. Life's Simple 7 and High Blood Pressure

#### a. Presenters

- Marwah Abdalla, MD, MPH, Columbia University Medical Center, New York, NY
- ii. Paul Muntner, PhD, University of Alabama at Birmingham, Birmingham,
- iii. Daichi Schimbo, MD, Columbia University Medical Center, New York, NY

#### b. Highlights

- i. High blood pressure is a very common health problem and it can lead to organ damage and heart disease. African Americans have a high risk for developing high blood pressure and high blood pressure-related complications such as stroke, heart attacks, and kidney disease when compared to other ethnic groups. Because high blood pressure can lead to heart disease, strategies to prevent high blood pressure are needed.
- ii. The American Heart Association has identified 7 health factors and lifestyle behaviors, called "Life's Simple 7" (being physically active, having a healthy diet, not smoking, and controlling your weight, blood pressure, cholesterol, and glucose levels) that can help reduce the risk of heart disease. Individuals with all of these factors in the ideal range have "ideal" cardiovascular health.
- iii. It is currently unclear whether having ideal levels of the Life's Simple 7 factors can also reduce the risk of developing high blood pressure.

#### iv. In our presentation, we will:

- 1. Show data from the Jackson Heart Study about the Life's Simple 7 factors and ideal cardiovascular health among study participants at baseline exam.
- Show data about the association of each of the Life's Simple 7
  factors with high blood pressure and discuss how the Life's Simple
  7 factors can help decrease the risk of developing high blood
  pressure over 8 years among study participants.

#### 3. What Does Kidney Disease Have to Do with Obesity, Smoking, and Heart Failure?

- a. Presenters
  - i. Dr. Bessie Young, VA Puget Sound Health Care System and University of Washington, Seattle, WA.
  - ii. Dr. Ebony Boulware, Duke Medical Center, Durham, NC.

#### b. Highlights

In this session, we will:

- i. Review what kidney disease is and why African Americans are disproportionately affected;
- ii. Share new findings on the impact of obesity in the development of chronic kidney disease;
- iii. Show how cigarette smoking can contribute to the development of kidney disease;
- iv. Review how kidney disease can influence the development of heart disease; and
- v. Outline our plans for new research directions to enable and promote prevention and control of kidney disease among African Americans.

# 4. Risk factors for Heart Failure in African Americans

- a. Presenters
  - i. Robert Mentz, MD, Duke Medical Center, Durham, NC
  - ii. Emily O'Brien, PhD, Duke Medical Center, Durham, NC

# b. Highlights

# We will:

- i. Describe how obesity, heart rate, and electrical changes in the heart may affect how well the heart functions over time.
- ii. Describe how data from JHS participants have benefitted other African American populations.

#### 5. African Ancestry and Its Implications for Health in America

- a. Presenter
  - i. Jim Wilson, MD, University of Mississippi Medical Center, Jackson, MS
- b. Highlights
  - Over thousands of generations the people of sub-Saharan Africa have developed mechanisms that help them resist infection with a variety of parasites.
  - ii. These parasites are not present in North America, but the genetic changes that helped Africans resist them are still carried by many African Americans.
  - iii. We will discuss how these genetic traits affect important diseases in African Americans, will review past efforts by Jackson Heart Study investigators to understand the related disease risks, and will describe current projects in which we are seeking markers that can help predict, prevent, and eventually, treat conditions that are associated with African ancestry.