Video Transcript: Non-Pharmacological Treatments to Control Hypertension
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**Moderator: Stephen Juraschek, MD, PhD, FAHA** - Hello, I'm Stephen Juraschek, I'm an internal medicine physician and researcher at Beth Israel Deaconess Medical Center in Boston. Delighted to moderate this session today with three wonderful speakers, focused on non-pharmacologic interventions and approaches to hypertension and hypertension prevention. We first have Dr. Gabriel, who's talking to us about the importance of physical activity, and its role in preventing hypertension. Her talk is followed by Dr. Anderson, who's speaking about dietary interventions and their roles in lowering blood pressure. And the third presentation is by Dr. Anika Hines, who focuses on alternative and complimentary medicines to prevent hypertension.

**Kelley Pettee Gabriel, MS, Ph.D., FACSM, FAHA** - Hi, I'm Kelley Gabriel, I'm a professor of epidemiology at the University of Alabama at Birmingham. I'm a physical activity epidemiologist, and focus specifically on chronic disease outcomes, like hypertension. So in my presentation, I provided an overview of the evidence to date that was highlighted for the 2018 Physical Activity Guidelines for Americans that provided the evidence to date on the role of physical activity for the prevention and control of hypertension. With this, we found very strong evidence to support the role of physical activity, regardless of whether the individual has normal blood pressure, pre-hypertension or hypertension. In addition, by reviewing this evidence, we highlighted different key areas that are in need of future research. The first is whether or not the association between physical activity and hypertension varies based on participant-level characteristics like age, sex and race-ethnicity. The second is whether or not the role of physical activity and hypertension varies based on how you assess physical activity. In this presentation, I provided preliminary evidence from the National Health and Examination Survey. In their 2011-12 and 2013-14 cycles, they had participants wear a wrist-worn device for 24 hours a day, seven days a week. And with that accelerometer-based methods, we can get a better sense of whether different intensity types matter in terms of the prevention and control of hypertension, as well as if the timing of physical activity over the course of a day matters. And so this highlights again, an area of future research. There are several studies of hypertension now that are including wrist-worn devices, and this is key to answering some of the unanswered questions that the Physical Activity Guidelines Advisory Committee highlighted.

**Cheryl Anderson, PhD, MPH, FAHA** - I'm Cheryl Anderson, and my topic today was Dietary Interventions that Lower blood pressure. We had an interesting discussion about the current guidelines for dietary intake, which include consuming diets that are consistent with the dietary approaches to stop hypertension dietary patterns, and the variety of ways that people in America can get there. They can use exclusionary patterns, or use patterns that are a composite of US recommendations, or patterns that are specific to geography or culture. And there are even patterns now that take into consideration one's socioeconomic status, as well as budgetary constraints. We shifted quite quickly from the efficacy data, that we know are strong, with regards to how dietary interventions lower blood pressure, to talk about our reality in America, a reality that's captured very well in our National Health and Nutrition Examination Survey, that people in America do not achieve healthy dietary intakes. And the reason for this lack of adherence to dietary guidelines is largely our food structure, our food systems, and the structures that we have in this country that do not promote healthy intake. So the big takeaway from this morning session was, in addition to thinking about the individual approach to lowering blood pressure via dietary intervention, we also need to think about a socioecological framework a framework that addresses where people live, where they learn, where they work, where they play, where they pray, and it makes things better in those environments so that the healthy choice for foods can be the default choice for foods.

**Anika Hines, PhD, MPH** - Hi, my name is Anika Hines, I'm an assistant professor in health behavior and policy at the Virginia Commonwealth University School of Medicine. Today, my talk was on complimentary and alternative medicine for hypertension. We started out with an overview of stress and what it is, and also difficulties in managing and diagnosing it in the context of primary care. Then we went over some evidence supporting complimentary and alternative medicine within the context of health equity, specifically in terms of achieving blood pressure control for marginalized groups. And we've walked away with some directions from the AHA, statements on mind-heart-body connection, with regards to what primary care clinicians can do, mainly assessing stress within the context of their encounters with patients with hypertension or at risk for hypertension, as well as taking stress into consideration in their evaluations of patients and steps forward. As a takeaway, there is some evidence supporting some of these methods, there's so much more work to be done, however, with regards to research in this area and connecting these stress outcomes with biological processes and hypertension, as well as with methods that may be used to mitigate those threats.

**Stephen Juraschek, MD, PhD, FAHA** - So thank you all for attending this really engaging series of talks by our presenters. I think we learned quite a bit about physical activity, diet, and alternative and complimentary medications, or approaches, to prevent hypertension and lower blood pressure. I think we can all learn from these patient-centric approaches and strategies to compliment pharmacologic interventions with the goal of preventing cardiovascular disease by lowering blood pressure.