Diabetes and Physical Activity

This month, the “Take Charge of Your Health Today” page focuses on the relationship between diabetes and physical activity. Erricka Harvey talks with her doctor Gail Nunlee-Bland, M.D., about his diabetes. Despite gains in reducing levels of diabetes in people who were getting close to developing the disease, the disease still caused lifestyle changes and the use of prescription drugs like Metformin.

In 2002, the New England Journal of Medicine published findings about a diabetes prevention program that looked at key ways to reduce the risk of developing diabetes in people who were getting close to developing the disease. These included lifestyle changes and the use of prescription drugs like Metformin.

Dr. Venditti says that men and women are at a greater risk of developing diabetes. Lifestyle change is key in reducing diabetes risk.

The 2002 study looked at all groups. Dr. Venditti says, “All racial and ethnic groups, young and old—were able to lower their glucose values, either by taking Metformin or by being in a lifestyle program.”

In the Pittsburgh region, Dr. Venditti knew that finding groups of people who are at risk of getting diabetes and enrolling them in a lifestyle program can result in better health for people in the future. Being at risk for diabetes includes people who have an HbA1c (a common blood test used to diagnose type 1 and type 2 diabetes) between 5.7 and 6.4 percent, sometimes called “prediabetes.” People with an HbA1c higher than 6.4 percent are diagnosed with diabetes.

Dr. Venditti notes that African American communities have high risk for both. The good news is that making small changes in what you eat, being active and losing some weight can reduce this risk.

She is working to better meet folks where they are and to help them learn what is getting in the way of making healthy changes. Dr. Venditti’s Sustain-DPP (Diabetes Prevention Program) research team is working with older adults to improve health, physical functioning and well-being by finding better ways to deliver programs to people who are at high risk of developing heart disease.

People who are 60 years old and older, overweight or obese, and whose doctor has told them they might have prediabetes are eligible to participate in the 24-week Sustain-DPP (Diabetes Prevention Program) Research Study with Dr. Venditti’s team. The first five waves of participants are now enrolled. The next 20 months are visits via telephone. She hopes that this format will make it easier for folks to join and stay in the study.

The study’s lifestyle coaches work with people to talk about the foods that they can access and exercise that they can access. The goal is to be healthy but real. If they can’t join on a gym, can they walk near the neighborhood? Can folks in the study do light chores around the house and yard about every 60 minutes and sit less? Are folks willing to think about 400-600 calories that they could cut out each day, and what would that look like?

On the phone, the study team talks to people about barriers: What is getting in the way of healthy eating and exercise for you and your family?

The behavior-change approach takes the 2002 study and brings it to everyday life where gaps and high risk are present. In particular, Dr. Venditti says people who are 60 and older are often at a point where they want to focus on their own health and want to keep their independence. People 60 years old and older want to look good but also want to feel good. Their goals are not perfection but to take off some weight and change their cardiometabolic outcomes, which refers to your chances of having diabetes, heart disease or stroke. Dr. Venditti says. When a couple of pounds come off, people have an easier time with everyday tasks, like getting up from the floor when playing video games. They have more energy, and their knees do not hurt as much.

Dr. Venditti said a lot has changed in research studies out of the University of Pittsburgh. In general, the biggest difference is the diversity. Studies (like hers) used to be made up of mostly white women, but now participant groups include a broad range of identities thanks to community engagement research. The idea of community engagement research is for researchers and communities to collaborate for the whole research timeline—from thinking about the questions to ask to getting the word out on the results.

Despite gains in research diversity, Dr. Venditti notes that men are still not signing up for research that she is conducting in the way that women engage. In the past when studies were conducted in a larger community, men were less likely to participate without focusing on in-person, or group activities, could be the answer.

Groups are meeting all around the city—from the Vintage Center for Active Adults to the Pennsylvania Hills Senior Center, to the Jewish Community Center in the South Hills, to the Club at Palm Greens, to the Denver Community Center in the South Hills. Dr. Venditti lists a handful of other locations, too, emphasizing that “this works in the real world and recruiting from the community in many, many different types of neighborhoods.”

LIFESTYLE CHANGE IS KEY IN REDUCING DIABETES RISK