Dr. Jihong Liu, associate professor in the Epidemiology and Biostatistics department and Affiliated Scholar at the Center for Research in Nutrition and Health Disparities at the Arnold School of Public Health, was recently awarded a Social Sciences grant through the USC’s Provost Office. The study will focus on evaluating geographical access to health services and facilities among women who had gestational diabetes during pregnancy and those who did not.

Some pregnant women develop diabetes, usually around the 24th week of pregnancy, according to the American Diabetes Association website. Gestational diabetes causes the body to not make and use enough insulin, which means glucose cannot be changed to energy and is built up in the blood stream. This process causes hyperglycemia. It is important for women for gestational diabetes to receive the proper health care during pregnancy and post-partum.

“We hypothesize that women with gestational diabetes are more likely to live in poor environments versus women without gestational diabetes…we noticed that it is important to examine geographical access to health care among these women,” Dr. Liu said.

Dr. Liu, whose work focuses on maternal and child health, physical activity, nutrition, and obesity, became interested in the topic while doing research on the built environment. The built environment includes factors in healthy living, such as access to healthy food, physical activity, and access to health care.

“This is in line with my previous work on gestational diabetes…I noticed the access to health services was something that fit well with my work in the built environment. The environment is usually broader than people realize,” she said.

In this pilot study, Dr. Liu and her team will validate administrative databases on the distribution of physicians and health facilities in 2 urban counties, Lexington and Richland; and 2 rural counties, Orangeburg and Sumter. The validated database will be linked with vital records. Dr. Liu hopes this study will lead to an application for a larger study that would be expanded to more counties in the S.C. Midlands.

Key Points
- Women with gestational diabetes are more likely to live in poorer environments than women without gestational diabetes.
- The study will focus on the access to health services to women who had gestational diabetes during pregnancy and how they access these health services after giving birth.
- It is especially important for women with gestational diabetes to receive post-partum health care.
“Post-partum care visits are low and we know very little about the risk factors of this…For women, especially women with gestational diabetes, it is more important for them to go back,” Dr. Liu said.

The 1-year study will include a team made up of Dr. Angela Liese, Arnold School professor and director for the Center for Research in Nutrition and Health Disparities; Dr. Janice Probst, Arnold School professor and director for the S.C. Rural Health Research Center; Dr. Andrew Kaczynski, Arnold School assistant professor; and Dr. Bethany Bell, Assistant Professor from the School of Education. All research team members are affiliated scholars with the Center for Research in Nutrition and Health Disparities at the University of South Carolina.