

News Release
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**UAMS College of Public Health Researcher to Study
Ways to Reduce Adverse Infant, Maternal Outcomes
for Arkansas Racial/Ethnic Minority Populations**

LITTLE ROCK — Clare Brown, Ph.D., MPH, assistant professor in the University of Arkansas for Medical Sciences (UAMS) Fay W. Boozman College of Public Health, has received a K01 grant from the National Institute on Minority Health and Health Disparities.

Brown will use the prestigious award, which is worth \$496,000 over four years, to conduct the study, “Algorithmic fairness in predictive models to eliminate disparities in adverse infant outcomes: A case for race.”

“Getting this award is a major honor for a researcher because you must convince a panel of peer researchers that you’re worthy of receiving the award,” she said.

“For the next four years, this grant will allow me to focus my research specifically on disparities in adverse infant and maternal outcomes in relation to race. Because this is a training grant, a portion of my time will also include training and learning more about the cultures of Black, Hispanic and Marshallese women and ways to reduce adverse infant outcomes.”

Brown’s study will have two primary aims.

The initial aim will focus on creating predictive algorithms for low birthweight births using the [Arkansas All-Payers Claim Database](#), which has insurance claims and birth certificates for infants in Arkansas.

“I’ll create algorithms to predict low birthweight and will run tests to see if using racial and ethnic information helps with algorithmic fairness,” she said.

Brown’s second aim will address when — and how — insurance companies collect race and ethnicity data. That effort will include interviewing women from three racial/ethnic subgroups in Arkansas.

“We’ll have focus groups of Black, Hispanic and Marshallese women,” Brown said.

“The info from the focus groups will help us determine when race and ethnicity data should be collected and what the supportive data should be used for.”

Brown noted that most insurance companies do not collect racial and ethnic information, which makes it difficult for the industry to recommend methods that can reduce racial and ethnic health disparities in infant and maternal outcomes.

“Insurance companies may be hesitant to collect race data because of fears of being blamed for redlining or charging higher premiums to populations of minority race and ethnicity,” she said. “Meanwhile, minority populations might be fearful of providing racial and ethnic information to insurance companies because many populations may be fearful of racial targeting.”

In Arkansas, adverse infant and maternal outcomes are abnormally high for Black infants and their mothers. However, this race-related health outcome is not a new development. In fact, Brown’s interest in addressing the issue dates back to 2014 when she was a student in the college pursuing a Master’s in Public Health.

For that reason, not only is Brown excited about the K01 grant — but she’s also enthusiastic about the chance to focus on creating the most predictive and fair algorithms for predicting low birthweight birth. Meanwhile, she’ll also create guidelines for insurance companies about the best and most respectful ways to collect race and ethnicity information.

“By identifying who’s at risk, we can help reduce those outcomes,” she said. “The United States and Arkansas specifically have large health disparities in infant and maternal outcomes — and this is the only way I know to help. I’m not a clinician. However, by doing this research I can help provide data to clinicians, health policy makers and to program officials that can help reduce adverse outcomes and disparities. This is a truly great opportunity.”

UAMS is the state's only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; a hospital; a main campus in Little Rock; a Northwest Arkansas regional campus in Fayetteville; a statewide network of regional campuses; and seven institutes: the Winthrop P. Rockefeller Cancer Institute, Jackson T. Stephens Spine & Neurosciences Institute, Harvey & Bernice Jones Eye Institute, Psychiatric Research Institute, Donald W. Reynolds Institute on Aging, Translational Research Institute and Institute for Digital Health & Innovation. UAMS includes UAMS Health, a statewide health system that encompasses all of UAMS' clinical enterprise. UAMS is the only adult Level 1 trauma center in the state. UAMS has 3,240 students, 913 medical residents and fellows, and five dental residents. It is the state's largest public employer with more than 11,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children's, the VA Medical Center and Baptist Health. . Visit www.uams.edu or www.uamshealth.com. Find us on Facebook, Twitter, YouTube or Instagram.

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