

# Reducing infant mortality in Arkansas:

## A grassroots initiative utilizing African-American sororities

BY MICHELLE R SMITH, PHD, MPH;  
RUPA SHARMA, MSPH; and  
DAVID GRIMES, MD, MPH

Infant mortality is a common indicator of a state's health and well-being. Factors affecting the entire population's health can also affect infant mortality. Infant mortality—death before the first birthday—is measured by the infant mortality rate, or number of deaths per 1,000 live births.

Arkansas' mortality rate is higher than the national average: 7.0 per 1,000 live births compared to the 6.1 for the United States.<sup>1</sup> Arkansas' mortality rate for non-Hispanic African-American infants is more than twice (12.2) that of non-Hispanic white infants (6.0). Rates are significantly higher for African-American babies born with <2,500 grams weight or <36 weeks gestational age, compared to white babies born with the same risk factors, due to African-Americans' high preterm-birth rate.<sup>2</sup>

These disparities are longstanding and can be reduced by engaging the African-American community and other partners with targeted education and prevention efforts, as demonstrated by the Sisters United campaign.

### PREVENTING INFANT MORTALITY

According to Centers for Disease Control and Prevention (CDC), the top five causes of infant mortality include: Birth defect, preterm birth (before 37 weeks gestation), Sudden Infant Death Syndrome (SIDS), maternal complication of pregnancy, and injury (e.g., suffocation). These causes account for 57% of all infant deaths in the US.

Mothers can help reduce infant mortality by improving certain health issues before, during and after pregnancy. Pregnant women can take folic acid before and during pregnancy; get influenza and Tdap (tetanus, diphtheria, acellular pertussis) shots during pregnancy; breastfeed; prevent infant injuries; put babies in a safe sleep position; and maintain a healthy diet and exercise during and after pregnancy. It's also important to avoid tobacco, street drugs and alcohol use before, during and after pregnancy, as these are major causes of preventable congenital malformations and preterm births.<sup>3</sup>

### A GRASSROOTS INITIATIVE

Sisters United, a culturally competent grassroots public health campaign, was developed by Arkansas Department of Health's (ADH) Office of Minority Health & Health Disparities

(OMHHD) and the Family Health Branch to increase public awareness and promote healthy behaviors aimed at reducing infant mortality among African-Americans. The campaign goal was to form a partnership with African-American Graduate Sorority chapters in Arkansas to work collaboratively on this health issue. As a result, sorority members of Alpha Kappa Alpha (AKA), Delta Sigma Theta (DST), Zeta Phi Beta (ZPB) and Sigma Gamma Rho (SGR) committed for the first time to address a singular issue with a collaborative approach.<sup>4</sup>

In June 2012, ADH contacted presidents of 42 sorority chapters to determine their interest in the campaign. Information on the chapters' capacity, resources and prior experience with infant mortality was collected from participating chapters. Thirty-one chapter presidents attended a two-hour seminar in June 2012, sponsored by the ADH. As a result, they recruited 58 sorority members from 31 chapters to attend a train-the-trainer conference, held in February 2013. Health professionals from ADH, University of Arkansas for Medical Sciences (UAMS), and the Arkansas Children's Hospital (ACH) trained sorority members on infant mortality preventive measures, including

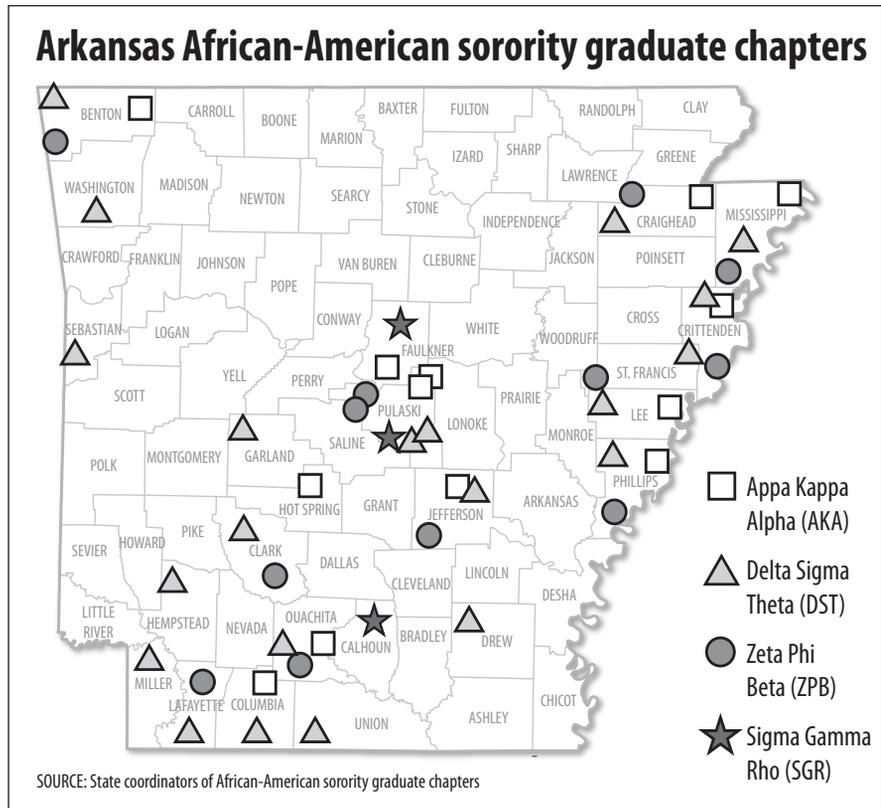
folic acid intake, influenza vaccination, breastfeeding and safe sleep practices. Attendees also practiced mock interviews to deliver more effective media messages during community interventions. They took pre- and post-tests to assess training effectiveness.

**RESULTS OF PARTNERSHIP AND INTERVENTION**

ADH formed a network between health partners and sororities for Sisters United. While initial activities were funded by the CDC through ADH-Office of Performance Improvement and Management, sorority chapters later applied for small grants from the National Institute of Child Health and Human Development (NICHD) to promote safe sleep practices. NICHD committed \$50,000 for the Arkansas initiative. Twenty-one of the 29 organizations funded in Arkansas were sorority chapters involved with Sisters United.

All essential educational materials for the community interventions were compiled in flash drives and distributed by ADH to the trainees. One item provided was YouTube videos featuring prominent African-American health professionals covering these topics: Folic acid (Dr. Estelle Rutledge), influenza vaccinations (Dr. Susan Ward-Jones), breastfeeding (Dr. Katrina Davis) and safe sleep (Dr. Zenobia Harris).

After the training, attendees were responsible for providing mini-trainings to other sorority members at chapter meetings and educating African-American community members during outreach events at schools, health fairs, baby showers and churches. In less than a year, 14 chapters provided video education to almost 1,000 African-American community members. AKA-Beta Pi Omega, AKA-Delta Omega Omega, and DST-Fort



Smith area alumnae conducted almost half the educational events.

The pre- and post-testing of the community interventions showed significant increases in attendees' knowledge in these specific areas: Getting influenza shot during pregnancy can protect unborn baby (63% to 88%); timely folic acid intake reduces some birth defects (56% to 73%); breastfeeding reduces chances of SIDS (49% to 68%); and safest sleep position for babies is on their back (77% to 94%). They scored near 100% on the knowledge that sleeping babies are safest in their own crib.

ADH will continue to expand Sisters United activities to increase participation of sorority chapters and reach a larger target population across the state. Other efforts will include creating an educational environment more conducive to learning and modifying educational materials to match the target population's literacy level. ▲

*Michelle R. Smith, PhD, MPH, is the director of the Office of Minority Health & Health Disparities at the Arkansas Dept. of Health. Ruqa Sharma, MSPG, MSc, is an epidemiologist with the Office of Minority Health & Health Disparities at the Arkansas Dept. of Health. David Grimes, MD, MPH, FACOG, FACPM, is the branch chief of Family Health at the Arkansas Dept. of Health.*

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3. Website: Centers for Disease Control and Prevention, Reproductive Health; <http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/InfantMortality.htm>.
4. National Pan-Hellenic Council, Incorporated; <http://www.nphchq.org/memberorganization.htm>