Addressing Infant Mortality Disparity Rates in a Small Rural County

Fred H. Michael

“Two babies dying in a county this size is not that statistically significant unless it is your baby; then it is devastating,” said Brunswick County Health Director Don Yousev in 1999. That year, in response to alarming statistics showing high rates of pregnancies among minority women, the Brunswick County Minority Infant Mortality Task Force was formed with a single goal in mind, to reduce the rate of minority infant mortality. It was a goal that some considered unattainable. In 1997, there were 2 infant deaths and 120 live births among minorities in Brunswick County, which translates into a minority infant mortality rate of 16.7 per 1,000 live births, compared with 8.0 per 1,000 live births for whites (who had 5 infant deaths and 628 live births that year) [1].

The task force was made up of members of the faith community, civic leaders, and medical providers, who all tried to help get the word out about existing services in the community. Jere McMillan, task force chair and North Carolina Public Health Association Public Health Social Worker of the Year in 2000, said that the first objective was to reach out to minority women, informing them about clinic services for prenatal care. “We knew all the services were in place to reduce infant mortality,” said McMillan. “We just had to connect the services to the people who needed them.”

In 2000, only 1 year after the task force was formed, the minority infant mortality rate was 0.0; there were no infant deaths and 149 live births among minorities [2]. Although in 2001 the rate jumped to 19 per 1,000 live births (there were 3 infant deaths and 158 live births that year) [3], in 2002 a rate of 0.0 was once again achieved; there were no deaths and 127 live births [4]. In comparison, the infant mortality rates for whites during the same years was 4.3 deaths per 1,000 live births (2000, 2001), and 5.8 deaths per live birth in 2002 [2-4]. “Lowering the rate to zero for 1 year may involve some luck, but twice in 3 years is a sign that something is indeed working,” said Yousev in 2002.

Yousev has retired, but the task force continues to work on eliminating health disparities. David Stanley, current Brunswick County health director, says, “We support the task force and remain committed to closing the health disparities gap. A good start in life depends on providing proper care for mothers and young children.”

Cyndi Simmons, director of nursing for Brunswick County, reaffirms the clinical aspects of the importance of prenatal care. “The foundations of adult health are laid before birth and in early childhood,” she notes. “Public health has always focused on prenatal care and childhood immunizations.”

The target population is women of childbearing age. Members of the task force have known that the success of the program requires that the whole community be empowered to change the underlying economic and social conditions that influence the health of individuals and their communities.

The task force was initially formed based on the results of the 1997 Community Health Assessment, which led the Brunswick County Board of Health to make reducing the minority infant mortality rate its No. 1 priority. A grant was received from the Kate B. Reynolds Charitable Trust to hire a minority outreach worker. A grant from the North Caro-
effective and sustainable interventions that reach the greatest number of people.

So, what to do? Recently, efforts have focused on understanding the social determinants of health. As the World Health Organization explains [13],

The social determinants of health are the conditions in which people are born, grow, live, work and age, including the health system. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. The social determinants of health are mostly responsible for health inequities—the unfair and avoidable differences in health status seen within and between countries.

If we were to consider the social determinants that shape the life and health of communities, we might come to more fully understand the circumstances that have contributed to persistent health disparities. For example, consider the hypothetical case of a middle-aged African American man with high blood pressure. He might have this condition because he has an elevated stress level as a result of living in a dangerous neighborhood, or because he experiences discrimination from his employer or other people he interacts with on a regular basis. He may fail to keep follow-up appointments because he has difficulty taking time off from work or because he had an adverse experience with a provider on his last visit. He may have not have filled his prescription because he couldn’t afford the medication and has no health insurance that would cover its cost. His diet may be unhealthy because there are no places to purchase healthy foods in his neighborhood. He may not be exercising because he is unable to afford a gym membership and there are no safe parks or recreation areas in his neighborhood.

Recent research has found strong associations between the social determinants of health and various health outcomes. For example, Auchtinloss and colleagues [14] have demonstrated that the incidence of type 2 diabetes is significantly lower in neighborhoods with better resources for physical activity and healthy eating. Given the high costs associated with the