Understanding and Addressing Health Disparities in North Carolina

Ronny A. Bell

Health disparities—differences in the provision and outcomes of health care in 2 distinct populations—are pervasive and long-standing in North Carolina. Although some strategies for closing these gaps have been effective, many disparities have resisted attempts to eliminate them. Future efforts should focus on policy implementation and the translation of research findings into effective interventions.

With the recent passage of the Affordable Care Act, there has been a focused effort to address many of the health disparities that exist in our country. Investments in research on disparities are being made by the National Institute on Minority Health and Health Disparities, which is now 1 of the 27 institutes within the National Institutes of Health (NIH). Policy initiatives are being implemented through the Office of Minority Health within the US Department of Health and Human Services and the Office of Health Equity within the Health Resources and Services Administration. Grassroots efforts are being organized through the National Partnership for Action to End Health Disparities.

What are health disparities? The NIH defines them as “the difference in the incidence, prevalence, mortality, and burden of disease and other adverse health conditions that exists among specific population groups in the United States” [1]. Similarly, the North Carolina Office of Minority Health and Health Disparities defines health disparities as “significant differences or inequalities in health that exist between whites and racial/ethnic minorities” [2].

Most of the focus over the past few decades has been on documenting the health differences—differences in mortality, morbidity, quality of life, health behaviors, access to health care, and the like—that exist among racial and ethnic minority groups. Numerous reports assessing these disparities have been published. As early as 1985, the Secretary of the US Department of Health and Human Services commissioned a task force to document the health of African American and other US minority populations [3]. The National Healthcare Disparities Report, published in 2003 by the Agency for Health Care Research and Quality (AHRQ), was the earliest national comprehensive effort to measure disparities in quality of and access to health care services across various populations [4]. The book Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, published by the Institute of Medicine at the behest of the US Congress, extended the work of documenting disparities in health care by offering policy recommendations to address these gaps [5].

North Carolina has a rich racial and ethnic diversity. In 2011, 22% of the population was black, 1.5% was American Indian or Alaska native, and 8.6% was of Hispanic or Latino origin. The state has one of the largest concentrations of American Indians in the United States, has recently had the fastest-growing Hispanic population in the nation [6-8, 10, 12]. Documenting health disparities in our state’s racial and ethnic populations is therefore critical.

Fortunately, the North Carolina Office of Minority Health and the State Center for Health Statistics have been working to do just that. In 2010, these organizations released the second edition of the Racial and Ethnic Disparities Report Card [9], as well as Minority Health Fact Sheets for the 3 major racial/ethnic groups in the our state, African Americans, American Indians and Hispanics/Latinos [10-12]. Health disparities can be thought of in terms of both relative and absolute differences in rates relating to health conditions. The relative rate difference refers to the relative difference in the gap versus the total population difference. For instance, the death rate from HIV infection in African Americans from 2004-2008 was 16.5 per 100,000 population, compared with 1.2 per 100,000 in non-Hispanic whites, a relative rate difference of 13.8 per 100,000. Or said another way, African Americans are 13.8 times more likely to die from HIV than non-Hispanic whites. During that same time period, the death rate from diabetes in African Americans was 163.8 per 100,000, compared with 80.2 per 100,000 in non-Hispanic whites, an absolute difference of 83.6 per 100,000. In other words, for every 100,000 persons, about 84 more African Americans die of conditions related to diabetes than non-Hispanic whites do. Since HIV is a much less common disease, the absolute (total population) difference is not as

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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 Youse 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 Youse in 2002.

Yousey 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-
lican Office of Minority Health was used to provide education and resources. In 2002, GlaxoSmithKline presented the task force with a monetary award in recognition of its outstanding achievements.

A plan was developed by the task force to make minorities aware of programs that can assist them during their pregnancies. The plan includes having maternity care coordinators involved in the care of minority women during pregnancy; in addition, minority expectant mothers are encouraged to seek prenatal care in the first 3 months of pregnancy and to use food supplements provided by the WIC program. Other strategies have included offering a parenting class, holding health fairs, and providing babysitting services for single moms so they can go to doctor’s appointments or to the department of social services, attend support groups or community events, or address other needs. Participating agencies have adopted a policy of providing water and at least 1 healthy food choice at all events and meetings. Walking trails have been developed in minority neighborhoods to encourage physical activity.

To increase access to care, qualified minority staff members have been promoted, with a goal of attracting more minorities to the health department clinic. “We wanted to make minorities feel welcome coming here,” said McMillan. “People tend to trust people they identify with.” The lobby has been remodeled to make women feel more comfortable, and a new fleet of clinical vehicles has been purchased for home visits.

Since 1999, when the program went into effect, the overall minority infant mortality rate declined 32%, from 12.9 per 1,000 live births between 1995-1999 [5], to 8.8 for African-American, non-Hispanic and Hispanics between 2006-2010 [6].

As Stanley has observed, “This is an excellent example of what can happen when the whole community becomes engaged.”

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, Auchincloss 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

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Lay Health Advisors Make Connections for Better Health
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In many communities across North Carolina, the use of lay health advisors (LHAs) has been an important method of promoting health for decades. North Carolina has been a hub for research on the effectiveness of LHA programs in improving health [1, 2] and for studies of what LHAs do and how they do it [3-5]. Findings from these research initiatives often are incorporated into newer LHA programs.

Lay health advisor is one of several terms used to describe community members who receive specialized training that prepares them to promote wellness through outreach and education; other titles include community health educators, peer health educators, and promotores de salud [6]. Training levels and topics vary by program purpose. In some places, LHAs are viewed primarily as the health system’s volunteer ambassadors to a surrounding community, but in North Carolina many community-based LHA networks also work toward social change. LHAs are recruited on the basis of their local reputations for providing trustworthy, culturally relevant information and for managing confidential information with care and compassion. Working as volunteers or for modest stipends, they share information about disease risk and explain how to access an array of services. LHAs are known for interceding when cost, transportation, language, mistrust, fear, or the relatively simple problem of incomplete information has barred the way for a group of people to receive high-quality health care. LHA programs vary significantly in the scope of duties and span of control they delegate to LHAs, but all programs share a mission of bridging the gaps between community residents and health care providers or delivery systems.

Rural Health Group (RHG) provides primary care and dental care across the rural northeastern North Carolina counties of Halifax, Northampton, Vance, Edgecombe, and Warren. Since 2005, more than 60 women, most of them African American women, have graduated from RHG’s annual 8-hour LHA training program. The LHAs coordinate with RHG’s Case Management and Patient Navigator programs to guide women to mammography screening and, if need be, help them make successful transitions to diagnostic and treatment services.

RHG recruits people on the basis of personal recommendations. For example, a woman sought for recruitment and training may have solid ties to a community not yet reached or a reputation for effectively nurturing a wide circle of friends. Using targeted recruitment, RHG has developed an LHA program that spans several counties and penetrates senior citizen clubs, support groups, public housing, the large paper mill in Roanoke Rapids, and the local community college. Each year, a high school student is selected for LHA training and begins advising the families of fellow students and school faculty about breast cancer. Through regularly scheduled group meetings, LHAs participate in ongoing professional development, program evaluation, and information exchange with the clinical practice team.

Although many LHAs work in rural African American neighborhoods, the Líderes de Salud trained by the organization El Pueblo live and volunteer in Spanish-speaking communities in Chatham, Wake and other nearby eastern Piedmont counties. Líderes support others in managing asthma and diabetes, reducing obesity, immunizing their children, and seeking appropriate dental care and health care. Rural farm workers housed in remote enclaves could theoretically benefit from contact with coworkers trained as LHAs; however, El Pueblo’s promotores program focuses on settled residents. Like the African American treatment of diabetes and its many comorbidities, providing resources at the local level to enhance the built environment to promote healthy behaviors might prove to be cost-efficient and would have a broad impact. Providing opportunities to enhance the availability and cultural competency of health care providers, another recommendation of the Institute of Medicine and a key element of the Affordable Care Act, is also a critical piece in addressing health disparities.

Finally, effective interventions need to be adapted for and disseminated to those communities with the greatest disparities. The Diabetes Prevention Program study [15] confirmed that for nondiabetic overweight people at high risk, lifestyle interventions focused on weight loss through physical activity and healthy eating significantly reduce the incidence of type 2 diabetes. A recent systematic review [16] demonstrated that the Diabetes Prevention Program can be effectively put into practice at the community level using nonmedical personnel, and a subsequent report [17] showed that major health care cost-savings would result if such a strategy were implemented nationwide. A national program focused on bringing the Diabetes Prevention Program to communities has been launched by the Centers for Disease Control and Prevention [18].

The sad reality is that racial and ethnic minority groups in North Carolina generally do not experience optimal health. If we are to achieve health equity, defined as the attainment of the highest level of health for all people [19], we must be creative and have “all hands on deck.” We also must be willing to provide the resources necessary to fully address these injustices.

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programs that came before it, this Spanish-speaking LHA program relies on relationships that are based on trust and develop over time.

The 140 graduates of the Líderes training program are women and men, who are sometimes spouses. In addition to learning new health information, they gain practice in public speaking and learn how to write public service announcements and design flyers for Spanish-speaking audiences. Adult volunteers grapple with increasing complex barriers to health care access, particularly transportation. Under a recently enacted state law requiring a valid social security number or an unexpired visa to obtain a driver’s license, undocumented residents have lost their ability to drive legally, register their cars, and buy automobile insurance. As a result of this policy change, some promoters, like the residents they are trying to help, find themselves increasingly isolated and limited in their ability to bridge the gaps between members of their community and the health care system.

LHA programs strive to find common ground between a community’s health concerns and the mission of evidence-based health care. For example, a growing number of men are being trained as LHAs to help other men navigate conflicting information about screening for prostate cancer. As breast cancer survivorship statistics improve, LHAs are considering how to support adherence to treatment regimens for breast cancer. In addition to advising others one-on-one, some LHAs are now discussing how to introduce exercise breaks, healthy snacks, and stress reduction activities into their meetings and outreach events. Enduring LHA programs are founded on sound processes for recruiting and training new members and sustaining their efforts; many of these processes are research-tested. The programs also adapt to changing demographics, emerging evidence about the effects of policy and the environment on health, and new evidence-based recommendations for the prevention, early detection, and management of cancer and other chronic diseases.

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