Wisconsin Healthy Birth Outcomes: Minority Health Program Challenges and Contributions

Evelyn Cruz, Patricia Guhleman, and Patrice Mocny Onheiber

For at least 20 years, the probability that an infant born in Wisconsin would die during the first year of life has been approximately three times greater for infants born to African American women than for those born to White women. Over the same period of time, other states have made improvements in African American infant mortality, whereas Wisconsin's ranking has fallen to last place. Various state and local efforts have been made to address the issue; however, it is only in the last 2 to 3 years that Wisconsin's high rate of African American infant mortality has become an agreed-upon health priority. This article discusses the factors that have converged to bring African American infant mortality to the forefront of Wisconsin public health policy and programs. Particular attention is given to the role of Wisconsin's Minority Health Program in relation to public health leadership and coalition building. Key actions currently underway to implement effective, evidence-based solutions are also described.

KEY WORDS: health disparities, infant mortality, minority health, public health policy

Background

The year 2004 proved to be a watershed year for infant mortality in Wisconsin. Wisconsin met the *Healthy People 2010* goal of 4.5 infant deaths per 1 000 live births for White infants. This achievement, however, was countered with a Wisconsin African American infant mortality rate of 19.4 per 1 000—the highest in the nation—resulting in a Black-White infant mortality disparity ratio of 4.3. This statistic was twice the US ratio.[1] If there had been no disparity in 2004, 96 of the 125 African American infant deaths in Wisconsin would not have occurred. African American infants continue to die in Wisconsin at an excessive rate every year.

Wisconsin's geographic and demographic profile facilitated the long-term masking of serious issues related to African American birth outcomes. Of the 5.5 million people in the state, about 5.9 percent self-identify as African American, compared with 12.4 percent nationally.[2] Furthermore, although Wisconsin is a relatively large state in square miles and divided into 72 counties, almost 90 percent of the African American population lives in three counties located in the southeastern part of the state. Although these are relatively large population centers compared with the rest of the state, only about one quarter of the total population lives in these three counties. Thus, statewide statistics often reflect a picture of health that does not extend to Wisconsin's African American population.

Over the years, various efforts have been made to bring public attention, resources, and solutions aimed at reducing disparities in birth outcomes to the forefront. Some of these have provided critical building blocks for the current focus. A recent convergence has occurred that suggests a new statewide paradigm coming into focus.

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Components of a Paradigm Shift

The evolution of a statewide paradigm shift to focus on reducing disparities in birth outcomes has occurred within the context of a strong Wisconsin 2010 state health plan built on a model that emphasizes the underlying determinants of health. The Wisconsin state health plan, which is essentially a statewide community health improvement plan, draws from the body of ecological theory in which health is an outcome of multiple social, economic, environmental, and individual (biological and social characteristics) determinants, such as the Evans and Stoddart model.[3] The connection between health improvement plans and a model focused on multiple, underlying determinants emphasizes mutipronged interventions.[3–5]

Many studies suggest that an effective strategy to address racial disparities in birth outcomes must be broad-based. Research has not been successful in isolating single risk factors such as maternal age, education, or income to fully account for racial differences in birth outcomes.[6–8] An extensive review of the scientific literature by the Institute of Medicine examined behavioral, psychological, sociodemographic, and community factors contributing to preterm birth.[9] The report concluded an integrative approach is needed that takes into account the interactions of protective and risk factors across the life course. Research points to the role that community-level factors (eg, crowding, poverty, racial segregation) may have on health outcomes. Stress, racism, and inequality, operating at both the individual and the societal levels, can affect health and may have cumulative effects over the life course.[9–13]

Medical interventions and the healthcare system represent one of the several domains affecting birth outcomes. In 2003, the Institute of Medicine published its review of disparities in access to and quality of healthcare; it concluded that causes for unequal access and treatment exist at many levels. It recommended that effective change would require increased awareness and involvement from multiple, broad sectors including patients, providers, and payers of healthcare, as well as systemic change in the health system.[14]

The multiple determinants or ecologic model provides a useful framework for understanding the evolution of Wisconsin's statewide strategy to address birth outcome disparities. The model points to multiple levels as well as the interaction of systems on one another. Directing the model more specifically at a statewide strategy focused on disparate birth outcomes, Aronson[15] suggests that successful state initiatives to lower African American infant mortality encompass at least the following characteristics: (1) address the health needs of African American women and their families not only during pregnancy but over the life course, (2) promote cultural and linguistic competence in healthcare that takes into account the social construct of racism, (3) maximize cooperation and coordination of efforts among diverse agencies and stakeholders, (4) support and strengthen existing infrastructure, and (5) advance education and research (translational and community-based) to address disparities. Evidence that the groundwork has been laid for Wisconsin to lower its African American infant mortality may be seen in the extent to which current efforts reflect the components identified by Aronson.

Initial Mobilization

The literature on community interventions suggests that their effectiveness depends on the stage of readiness of each component of the system.[5] In the mid- to late 1990s, Wisconsin public health officials and Maternal and Child Health advocates became increasingly concerned about the lack of improvement in African American infant mortality. They joined with other state and local leaders, including those funded by the federal Title V MCH and Healthy Start programs, and the Black Health Coalition of Wisconsin, to organize and plan for a perinatal summit entitled *Healthy Babies in Wisconsin: A Call to Action.*[16] The *Healthy Babies in Wisconsin* summit, held in the summer of 2003, represented the start of a new focus on infant mortality disparities. It introduced the life-course perspective and the need to recognize the ill effects that racism can have on health outcomes; the state health department stepped up to assume a strong leadership role in promoting new initiatives and bring diverse stakeholders to the table.

Featured speakers at the 2003 summit, Michael C. Lu, MD, MS, MPH, of the University of California at Los Angeles, and Dianne L. Rowley, MD, MPH, from Morehouse College, addressed a broad-based audience of 240. Dr Lu, who had recently published a seminal article defining the life-course perspective, explained how 9 months of prenatal care cannot undo effects of intergenerational physiologic stress.[11] Dr Rowley presented statistics on the exceptionally high incarceration rate of Black men in Wisconsin to demonstrate the role of structural racism in shaping health.

With the summit, the Wisconsin Department of Health and Family Services (now the Department of Health Services), home to the state Division of Public Health, the Maternal and Child Health Program, Wisconsin Medicaid, and the Minority Health Program, assumed a strong leadership role and made elimination of racial and ethnic disparities in birth outcomes one of its top priorities.

Strong leadership from the department has taken several forms. The definition of roles and responsibilities by upper-level management has been crucial. The department has also played a critical role in bringing together the stakeholders who represent the "whole system," which includes those with authority, resources, expertise, information, and need.[15]

As a follow-up to the 2003 statewide summit, in May 2004 the department sponsored a gathering of nearly 200 key stakeholders in Milwaukee to focus on the southeastern and southern areas of the state, which have the highest numbers of African American infant deaths. The Mayor of Milwaukee welcomed the participants. The department secretary and executive management staff from the Wisconsin Medicaid Program attended and helped facilitate round-table discussions, eliciting suggestions from participants on the steps the department and its partners should take. These suggestions included leadership, funding, information dissemination, developing a plan of action, and support for follow-up collaboration and education.

Establishing Organizational Structure

In July 2005, Sheri Johnson, PhD, State Health Officer and Administrator of the Division of Public Health and an African American health professional from Milwaukee, was appointed executive sponsor for the initiative, *Healthy Birth Outcomes: Eliminating Racial/Ethnic Disparities*.[17] This initiative, functioning as an umbrella for many diverse activities, is continuing the principle of bringing together those who represent the "whole system" so that people can do the work for themselves. Leadership throughout the Department, including the Minority Health Program, supports the promotion of culturally appropriate and effective healthcare as well as building on community strengths already in place.

Building Capacity and Implementation

The third and fourth components for a successful statewide strategy identified by Aronson[15] are, respectively, to maximize cooperation and coordination of efforts among diverse agencies and stakeholders and support and strengthen existing infrastructure. In selecting the strategies for implementation of its statewide initiative, Wisconsin drew on the experience of other states that had taken measures to address birth outcomes. An overview by the Association of State and Territorial Health Officials[18] indicated that states with successful strategies in improving birth outcomes were characterized as multifaceted and community-based, included public awareness, collaboration with partners, engaged the community, and provided multidisciplinary services, such as home visits.[19] Lack of sustained funding is cited as the most frequent program barrier.

Characteristics of "best practice" interventions targeted toward more specific protective and risk factors are beginning to emerge.[20] Jackson includes among the characteristics of "best practices" those programs that emphasize cultural, racial, and gender sensitivity.[10] Aronson[15] reviewed initiatives and interventions that represent "best practices" from approximately 20 states. He identified those that focus on the health and safety of African American women and their families over the life span (eg, the Interpregnancy program in Atlanta[21]), those that promote cultural and linguistic competence and address racism (eg, the Genesee County, Michigan, initiative[22]), and those that emphasize cooperation among diverse agencies and stakeholders (eg, the Boston Public Health Commission's Disparities Project[23]).

Corresponding with the ecological approach, Wisconsin's *Healthy Birth Outcome*s initiative includes multilevel strategies. In 2006 Wisconsin formed a broad-based statewide advisory committee, with diverse stakeholders from hospitals, governmental and community-based health and social service agencies, academia, business, and consumer advocacy organizations, to provide a forum for building public will and forming partnerships. Annual town hall meetings advance knowledge on the social and economic determinants of poor birth outcomes, and public input is solicited on strategies for outreach, evidence-based and best practices, indicators of progress, and policy and funding priorities. A Web site has been established, enabling access to Wisconsin data on disparities in birth outcomes, along with links to programs and partners.

Temporary Assistance to Needy Families funds ($4.5 million) were awarded to the City of Milwaukee Health Department in 2005 for a 5-year comprehensive home-visiting program in six central city zip codes with high infant mortality. Preliminary program outcomes suggest promising results, with decreases in low birthweight and preterm births. Beginning in 2007, $250 000 of state funds were budgeted annually to fund a comprehensive program, including home visits, to reduce fetal and infant deaths in the city of Racine. (During the 5-year period 2001–2005, Racine's African American infant mortality rate was 28.3 per 1 000 live births.[24])

Given that the majority of African American births in Wisconsin are covered by the Medicaid Program, we looked to other state Medicaid programs that have

developed specific strategies to reduce racial and ethnic disparities in birth outcomes.[25,26] The Wisconsin Medicaid Program has allocated $1.3 million for a pay-for-performance program to improve birth outcomes for Wisconsin Medicaid's managed care population. New on-line Medicaid eligibility services will allow providers to offer express enrollment for pregnant women in BadgerCare Plus (the state's Medicaid Program and State Children's Health Insurance Program) into managed care services and for newborn eligibility in 2009.

The structure of Wisconsin's *Healthy Birth Outcomes* initiative includes an evidence-based work group. This group focuses specifically on review of scientific literature to identify specific interventions that meet criteria of evidence-based effectiveness, as described by the Community Guide.[27] Recommendations from the evidence-based work group have guided the choices for supporting specific interventions in the counties with the highest numbers and rates of African American infant deaths (Kenosha, Milwaukee, Racine, and Rock). These include (1) conducting community focus groups with Tobacco Control and Minority Health state funds to develop culturally appropriate messages for public information campaigns, (2) promoting early enrollment and breast-feeding for participants of the Women, Infants, and Children program, (3) supporting fetal and infant mortality reviews and infant mortality coalitions, (4) expanding tobacco cessation services for women of color, and (5) supporting fatherhood initiatives and "sister-friend" programs modeled after the Birthing Project USA.[28]

Education and research constitute the fourth component identified by Aronson[15] in a paradigm shift to eliminate racial and ethnic disparities in birth outcomes. Wisconsin's steps in this direction include the following: (1) Funds from the Wisconsin Blue Cross & Blue Shield conversion were given to the state's two medical schools, the University of Wisconsin School of Medicine and Public Health and the Medical College of Wisconsin, to establish funding mechanisms to improve health in Wisconsin. These major granting programs adopted the Wisconsin 2010 State Health Plan with its overarching goal of eliminating disparities as the framework for awarding funds. (2) The *Health of Wisconsin Report Card*, published by the University of Wisconsin School of Medicine and Public Health, gave Wisconsin a grade of "F" for African American infant mortality[29]; Wisconsin also received a grade of "F" for African American health in every other major stage of the life course. (3) The University of Wisconsin School of Medicine and Public Health announced its intention to invest special funding in a long-term initiative aimed at reducing disparities in birth outcomes in Wisconsin.

These examples of strong state leadership, broad-based collaboration, focus on a life-course perspective, involvement of affected populations, and support from educational/research institutions all point to Wisconsin being ready for real change. Challenges remain, however, including how to create more widespread acknowledgment of racial discrimination and its effects on unequal healthcare access and treatment for African Americans, limited public resources, enforcement of equal rights, multisector responsibility for redress, changes in institutional cultures to inclusiveness and equity, and commitment to continuous engagement of the African American community for meaningful solutions.[10,12,30]

Wisconsin Minority Health Program Challenges and Contributions

The Minority Health Program is challenged with a broad and complex mission accompanied by limited staffing and financial resources. Minority Health Program strengths include a strong emphasis on partnership development, focusing on the social and cultural issues related to the complex underlying determinants of health disparities. The challenges of the Minority Health Program similarly constitute challenges for the department and for the statewide *Healthy Birth Outcomes* initiative. By bringing its strengths and resources to the table, the Minority Health Program has played a critical role in developing a dynamic initiative.

Minority health program challenges

Although considerable variation exists between the state-specific Minority Health Programs, most face the challenges of having very large and complex missions but relatively low levels of human and financial resources. The federal Office of Minority Health identifies 39 states with Minority Health Programs that receive funding through federal State Partnership Grants. The size and capacity of these state programs differ ranging from 11 states with six or more full-time-equivalent (FTE) employees to 10 states with only one or two FTE employees.[31]

Wisconsin's Minority Health Program faces similar challenges independent from the additional responsibilities involved in its initiative to eliminate racial disparities in birth outcomes. Until late 2005, Wisconsin had just one-and-a-half FTE for its minority health program. With an award from the federal State Partnership Grant, the Wisconsin program was able to expand its infrastructure capacity to include the addition of one-and-a-half FTE. Wisconsin's state funding for the Minority

Health Program consists of $150 000 annually, which is for dissemination in the form of grants.

The scope of mission challenge for the Minority Health Program can be illustrated along several dimensions. These include the extent to which health disparities exist, the social and cultural barriers to implementing programs, and the complexity of issues that underlie the determinants of health disparities. Infant mortality is just one of many concerns to the Minority Health Program. Disparities exist in underlying health determinants and/or selected health conditions for other racial and ethnic groups in Wisconsin. A relative lack of diversity in the state's workforce hampers the ability to address social and cultural barriers when developing partnerships and implementing programs.

In addition to the challenges of mission breadth, scope of the problems, and limited resources, the Minority Health Program also faces challenges of maintaining its identity when partnering with others. The Wisconsin Minority Health Program has a longstanding commitment to honoring and recognizing its partners. However, if the contributions of the Program are not recognized, the risk exists that a critical component (the program itself) may be missed when trying to replicate successes or avoid future failures.

Minority health program contributions

Although the Wisconsin Minority Health Program has had relatively few staff, it has maintained consistency over the years in a number of critical areas. First, it has maintained a primary focus on building trust with communities around Wisconsin and with other department programs. Second, it has served as a linguistic and cultural resource for others in developing their programs. Finally, the Minority Health Program has provided technical expertise in the form of disseminating key data that provide the quantitative evidence to identify and track health disparities.

The Minority Health Program's dedicated work with communities has helped build trust between the communities and the program. Cultural awareness, community trust, and responsiveness to community feedback give Minority Health Program staff more ease and familiarity in addressing health issues from a multifaceted perspective. In many instances, staff working in the Minority Health Program are members of, and reflect the cultural values of, the communities they engage. These factors facilitate the building of trust and credibility for developing partnerships.

Staffing for the *Healthy Birth Outcomes* initiative began with a request, within the Division of Public Health, from the executive sponsor for resource support. The minority health officer stepped forward to serve as codirector for the project and dedicate half of her work time to this effort. As an African American woman, she could speak to the community about issues of African American infant mortality from a shared understanding of cultural and racial issues and experiences that enhanced credibility and trust.

Minority health programs often serve as a resource for technical competence and for language and cultural access because of their population focus and, in many programs, the racial and ethnic background of staff. A 2001 report, under the auspices of the federal Office of Minority Health, recommended national standards for culturally and linguistically appropriate services in healthcare.[31] The Wisconsin Minority Health Program has promoted use of culturally and linguistically appropriate services in the *Healthy Birth Outcomes* initiative.

The *Healthy Birth Outcomes* marketing campaign illustrates one way of addressing social and cultural barriers for program implementation. With $50 000 from the Minority Health Program, the initiative contracted with a Milwaukee-based, minority-owned firm to conduct a series of focus groups within the African American community to identify their concerns and issues related to improving birth outcomes. The initial response to the call for participants has been extremely positive. On the basis of these groups, culturally relevant and best-practices social marketing messages will be developed, using the language of the participants, to reduce low birth-weight, educate on the signs of preterm labor, and promote safe sleeping practices for infants. This focused cultural approach corresponds with recommended approaches to achieve success in improving African American infant mortality and is needed in many other areas of high racial and ethnic health disparities.

In correspondence with objectives identified by the federal Office of Minority Health State Partnership Grant, the Wisconsin Minority Health Program includes activities to increase the availability, analysis, and dissemination of racial/ethnic health data to monitor and evaluate progress toward eliminating health disparities through systematic and standardized health indicator data reports and evaluation tools. The Wisconsin program has provided staff support to the *Healthy Birth Outcomes* data workgroup through its contracted minority health researcher. The data workgroup, which includes community members and reports to a diverse statewide *Healthy Birth Outcomes* advisory committee, is charged with identification and dissemination of indicators to measure progress. Community members and the statewide advisory committee have recommended including community-based indicators in addition to the more traditional tracking measures. The knowledge gained in this endeavor is transferable and will enhance future Minority

Health Program work with other public health data systems.

Implementation of the Wisconsin *Healthy Birth Outcomes* initiative has been accompanied by modest increases in the capacity of the state Minority Health Program. In 2007, the Wisconsin Department of Health Services approved formation of the Wisconsin Minority Health Leadership Council, which has strengthened and formalized linkages with minority communities. Additional staff has resulted in increased communication and coordination with other programs within the Division of Public Health. For example, the Minority Health Program meets bimonthly with the Division of Public Health Program Integration Workgroup composed of directors representing a broad range of public health programs. The Program Integration Workgroup has been an effective means of coordinating individual program issues related to minority health with the priorities of the Minority Health Program. This workgroup represents an important avenue for developing shared understanding and approaches by policy staff that helped lay the groundwork for coordination across program areas for the *Healthy Birth Outcomes* initiative.

Conclusion

Success of the Wisconsin *Healthy Birth Outcomes* initiative will be recognized when the race or ethnicity of newborns no longer differentiates their health or chances for survival. Wisconsin's Minority Health Program has played an important role in helping build and sustain focus on eliminating health disparities in birth outcomes. The Program represents one of many partners contributing to the initiative, which includes strong department and division leadership, federal support, sustained advocacy from community and maternal and child health interest groups, and collaborative efforts with major educational institutions. Precisely because the Minority Health Program accomplishes its work through partnerships, it is important to explicitly recognize how Program support, in the form of staff, resources, and partnership development, can help mobilize and support the work of others on critical state issues.

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