Improving Pre-pregnancy Health Is Key to Reducing Infant Mortality

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We could have asked our grandmothers. They would have told us what has otherwise taken at least 30 years, countless studies, and millions of dollars to discover. In order to have a healthy baby, a woman must be healthy, not only during pregnancy, but perhaps more importantly, before she conceives.

Efforts to Reduce Infant Mortality Since 1970

North Carolina's high rate of infant mortality compared with other state and national rates has been a source of puzzlement and embarrassment for years. Blessed with superb medical facilities and a reputation for advanced healthcare planning, our state has perennially ranked among the worst in rates of infant death among all 50 states. In hopes of improving the state's position, state leaders in the mid-1970s began developing a system to provide universal access to high-risk prenatal care and neonatal intensive care. It seemed logical that exposing women with pregnancy complications to the best care available would result in improved pregnancy outcomes.

Fifteen years later, few states had a more remarkably successful regional perinatal system than North Carolina's. During those 15 years, North Carolina's infant mortality rate dropped by a dramatic 36%.[1,2] The other 49 states had similar rates of improvement. Most did so without strong regional programs like North Carolina's. Virtually all of the nation's improvement in infant mortality, including North Carolina's, had come as a result of improvements in birth-weight-specific deaths among premature infants. In 1988, only Georgia had a higher rate of infant mortality than North Carolina's.[3]

In 1988, a task force appointed by the NC Secretary of Health and Human Resources reported that the state's excessive rate of infant mortality resulted from an excessive number of premature births. It made a number of recommendations to address the problem, including recommendations to improve prenatal services, but recognized that prematurity and infant mortality reduction required "social and economic interventions" as well as healthcare approaches.[4]

In the first half of the 1990s, the NC Governor's Commission on the Reduction of Infant Mortality was charged with the task of implementing programs to address the problem of premature birth. It disbursed funds from a variety of sources to enhance prenatal services and to focus on social and emotional issues among poor pregnant women during their pregnancy. Acknowledging the dramatic disparity between white and minority populations, the Commission targeted initiatives to minority women.

Prenatal Care Is Not Enough

By the mid-1990s, prenatal care had not been shown to reduce rates of premature birth, especially among poor and minority women.[5] As attractive and relatively inexpensive as prenatal care is, a medical model directed at a six-to-eight month interval in a woman's life can not erase the influence of years of social, economic, and emotional distress and hardship.

Premature birth is strongly associated with poverty, stress, racism, substance abuse, short inter-birth intervals, previous premature delivery, certain types of work activities, and inadequate nutrition. Lower genital tract infections are strongly associated with premature delivery. However, treatment of such infections does not reduce preterm births.[6] It seems increasingly likely that

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such infections are a manifestation of stress in pregnancy.[7]

It is time to disabuse ourselves of the notion that prenatal care is the key to reducing infant mortality by reducing premature deliveries. It is time now to focus on the health of women of childbearing age before they become pregnant. Such a task will be far more difficult than establishing a regional perinatal network or ensuring access to prenatal care. It will entail enhancing education for minority populations to break the vicious cycle of poverty and the stress that comes from it. Communities must own up to the pervasive and devastating effects of racism and then begin to eliminate racism in our culture. We must address the serious consequences of smoking and illegal substance abuse. Women, especially poor women, must have the right to become pregnant when they want to be pregnant and not to become pregnant when they don't want to be. In a time of job shortages in North Carolina, it will be difficult to ensure that pregnant women can avoid jobs that make it less likely that they will deliver a premature baby. However, the short- and long-term economic and social consequences of not doing so overwhelm the modest expenses of temporary reassignment. The overwhelming nutritional problems that lead to poor pregnancy outcomes have their roots in childhood. We must do a better job teaching our children to eat well, and more importantly, we must provide them with better food choices.

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New Approach to Providing Health Services to Women of Childbearing Age.

In addition to community-based initiatives, we need to develop a new approach to providing health services to women of childbearing age.[8] Such an approach would begin in early adolescence and continue until menopause. The system would combine elements of standard medical care, public health, and social services. It would start with a comprehensive, age-linked, annual assessment. The assessment tool would address traditional medical topics, but also focus on social, economic, and environmental issues. Analysis of such a broad individual assessment would facilitate appropriate referral to clinical, public health, and other community resources.

Each community would identify its available resources and link them to applicable sections of the assessment. Such a linked catalog of services would facilitate timely and appropriate referrals. Community care workers, familiar with available resources, would be assigned to women whose assessments indicated the presence of high-risk factors in order to ensure that such women had ready access to the best available resources.

Implementing such a system, including identification of funding sources, development of culturally-sensitive and specific tools, creation of the best methods for gaining access to women who would benefit from the system, and evaluation of the impact of the system will require considerable effort on the part of community leaders. However, if the system were successful in addressing and correcting the serious health, economic, social, and environmental factors that lead to premature birth and other poor pregnancy outcomes, infant mortality rates would drop. North Carolina could then deserve the reputation it has as a forward-looking southern state. **NCMJ**

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