Development, Ethics, and Prenatal Health Outcomes

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Introduction

The state of a nation's development refers to an official portrait of a country's level of progress. As a concept, "development" normally represents a nation's economic worth, often measured in numerical terms such as "growth in the gross domestic product," "improvement in the index of leading economic indicators," or "balance of trade." These terms have functioned almost exclusively as a means for comparing the level of development in the United States with the level of trade and industry of other "developed" or "developing" nations.[1] In essence, economic development is usually considered a proxy for most aspects of a country's level of "progress."

Economic development does not, however, necessarily equate with human progress. Human progress, as opposed to economic progress alone, encompasses a broad appraisal of a nation's "social health."[2] Observable indicators of social health include the well-being of children and youth, accessibility of health care, quality of education, adequacy of housing, security and satisfaction in work or labor, and the sense of community, citizenship, and diversity experienced in everyday life. The underlying thread connecting these indicators is a concern for the health and security of vulnerable groups in a nation's population. One way to gauge the level of health and security of a nation is by examining the level of equal opportunity, access, and social justice in work, health care, and education. Such conditions also often underlie the potential for future economic growth, stability, and prosperity. Thus, from an ethical standpoint, social indicators of national progress are at least as important as, if not more important than, economic measures.[3]

As a result, an increasing need exists for ways to evaluate and monitor the human development of a country.[4] Measures of medical, cognitive, and emotional well-being of vulnerable groups, particularly infants and children, are more sensitive indicators of national progress in basic human areas such as health and environmental conditions. Such conditions often underlie the potential for future economic growth, stability, and prosperity. The infant mortality rate, for example, has been viewed as one of the most sensitive indicators "of social welfare and of sanitary improvements which

JOURNAL of SOCIAL PHILOSOPHY, Vol. 31 No. 4, Winter 2000, 376–381.

we possess"[5] and of "the general socioeconomic level of a nation," particularly socioeconomic status.[6]

As a so-called developed nation by economic standards, the United States prospers and is able to create, support, and control some of the most advanced health care technology and scientific knowledge in the world. In turn, it is a global leader in promoting methods for growth and development in poorer countries. Paradoxically, in terms of human progress, as measured by social health standards, the United States lags behind many so-called industrialized, developed nations.[7] For example, the United States is home to disturbing and persistent racial disparities in health care access, utilization, and outcomes. These inequalities are profoundly evident among low-income African American pregnant women and young children.[8] In fact, serious problems in maternal and child health outcomes for disadvantaged groups in the U.S. population have persisted for decades, leaving unanswered the question "What is progress?"

Health in the United States and Other Developed Nations

The United States has one of the highest overall infant mortality rates of the thirty developed nations, surpassed only by the Czech Republic, Greece, and Cuba.[9] The infant mortality rate represents the number of infants, per 1,000 live births, who die before their first birthday. Since 1980, African American babies have been dying at more than twice the annual rate of white babies (14.2 percent versus 6 percent per 1,000 live births).[10] Even among extremely low-risk (that is, healthy) mothers ("low risk" defined as married, under age thirty-five, thirteen or more years of education, adequate prenatal care, and abstinence from alcohol, tobacco, and drugs) the infant mortality rate is still 1.61 times higher for African Americans than for whites.[11] Racial disparities in maternal death rates also exist. Nationally, the maternal mortality rate for black women is more than three times the rate for whites (20.8 black women versus 5.8 white women per 100,000 live births in 1997).[12]

Areas of inequality in access to health care also characterize the United States health care system. White women are more likely than black women to receive early prenatal care (during the first trimester of pregnancy) and to obtain at least some prenatal care during their pregnancy. Lack of prenatal care or inadequate care increases the risk of pregnancy-related deaths for black mothers. Surveillance data confirm this association, showing that among women with poor care, maternal mortality rates for black women exceed those for whites.[13]

Health, as an indicator of development or relative underdevelopment, exposes not only race disparities in national trends, but also more dramatic disparities in particular regions of the United States. Although the United States is considered an economically developed nation, health outcomes for black infants in certain states (such as Indiana) are disproportionately worse than those for white infants and are in fact comparable to the health outcomes for babies in Tanzania, one of the poorest, least economically developed nations in the world. For example, the low birth weight (LBW) rate for

infants born in Tanzania in 1990–96 was approximately 14 percent of all live births. Comparatively, the LBW rate for black infants born in Indiana was 13.6 percent of all live births (versus 7 percent for whites) in 1997. The percentage of births to women under age 18 in Tanzania was 12.4 percent (per 1,000 females); the percentage of births to underage black women in Indiana was 11.4 (versus 4.5 percent for white women). Nationally, the rates were 9.7 percent for underage black women and 4.1 percent for underage white women.[14]

Underdevelopment and Causes of Infant Mortality

The medical causes of infant mortality in the United States (specifically, neonatal mortality, babies less than twenty-eight days old) include congenital anomalies (primary causes for deaths of white babies) and short gestation and low birth weight (primary causes for deaths of black babies). Unlike the internal, congenital factors linked to white infant neonatal mortality, the leading causes of black neonatal mortality are short gestation periods (resulting from preterm delivery and premature babies) and low birth weight, both of which can be triggered by external, environmental variations. For example, impoverished, unstable living environments and lack of reliable social support relationships are linked to maternal suffering and hopelessness. These factors are, in turn, associated with fetal distress and mortality.[15] In addition, health providers are less likely to inform pregnant black women about behavioral risks (smoking, diet, alcohol, injury) and less likely to provide other helpful information that could reduce the chance of a problematic pregnancy outcome.[16] And black women report fewer prenatal clinic visits than white women during the eighth and ninth months of pregnancy, for reasons often as simple as persistent problems with health care providers and access to fewer resources (such as transportation and social support).[17]

Addressing the Problem: The Role of Ethics

Normative ethics are increasingly invoked as a warrant to improve the quality of health care delivery to underserved populations in the United States. Until recently, women's health was a less well-defined issue on the national health care agenda. Women's rights advocates have sharpened the focus on women's health, and current strategies are underway that link prenatal care to broader initiatives to improve women's health regardless of pregnancy status.[18] In 1998, President Clinton proposed a program to eliminate racial disparities in six areas of health access and outcomes, including infant mortality.[19] The eradication of disparities in racial health outcomes is a resounding theme in the new *Healthy People 2010* objectives.[20]

Within this overall context and in response to these objectives, studies and programs are being proposed in the United States to improve access to and quality of prenatal care. Much of the research is in early stages, and many of the initiatives are yet to be evaluated for their domestic effectiveness, let alone their appropriateness for international export. A common

denominator in the ongoing research and design of these programs, however, is an ethical mandate to address the discrepancies in access to health care and in treatment experienced during care once vulnerable groups finally connect with the health care system.

Though in the beginning stages, a major program receiving national attention is currently based on an ethical principle of improving equal access. The program is predicated on the notion that reducing the physical distance that a low-income, Medicaid-eligible, pregnant mother may have to travel to reach her health providers and the psychological distance that she may feel from them (as well as the often confusing and frustrating system itself) will improve her motivation to seek care and to continue to use available health services for herself and her children.[21] This program is based on the view that quality prenatal care is more than simply quantity of care (one clinic visit or a recommended number of visits). Rather, quality care is conceptualized as an effective, caring, multidimensional medical, social, and physical environment that creates a positive pregnancy experience.[22] A basic assumption of quality care is that all pregnant women will be treated with the highest ethical, medical, and humane standards. In this model of quality prenatal care, significant effort will be invested in strengthening the health care system and the community. The purpose will be to provide accessible and quality prenatal care services to low-income pregnant women and their families, thereby improving prenatal care utilization and birth outcomes. A model for care has been developed that contains the following components and their interrelationships:

- *The health care system*: all providers, their network, and interrelationships, certification, rules, and procedures that govern the delivery and financing of care.
- *The community*: the social, cultural, governmental, and physical environment(s) encompassing the patient and the health system.
- *The patient*: characteristics including relevant psycho-demographic factors, risk factors, family network features, and psychosocial support.
- *Access*: the availability of prenatal care and auxiliary services (e.g., psychosocial counseling, pediatric prenatal care), the motivations and barriers to entering care (e.g., transportation, lack of child care for older children).
- *Utilization*: the extent to which patients seek and maintain their participation in the health care system and adhere to recommended regimens.
- *Communication*: all interactions between the patient, the patient's companions/family members, and all representatives of the health care system.
- *Satisfaction*: the affective reactions of patients, companions/family members, and health providers to interactions and services and the motivation to return for continuing care with the same or similar providers.

- *Outcomes*: the health status of mother and baby, birth weight, birth complications, compliance, pattern of risks behavior, birth spacing, and the extent to which auxiliary services are used after delivery.

Conclusion

Although the United States is a "developed" nation, the low birth weight rate of African American babies in the United States is comparable to those in poor developing countries. This situation exposes a logical fallacy. Advanced science, technology, and economic growth should be expected to produce higher-quality health care delivery and stronger health outcomes for all groups in the population. Unfortunately, racial discrepancies in maternal and child health indicators in the United States demonstrate otherwise. Medical complications in perinatal health outcomes result in not only devastating social and health consequences, but also increased economic costs that portend future health care and opportunity costs for a family, community, state, or nation (including expensive neonatal intensive care costs, lack of school readiness at kindergarten age, and reliance on government programs to address core needs of disabled children).[23] The medical outcome disparities that continue to be suffered by underserved groups demonstrates the need to attend to the social factors underlying national monetary and industrial trends. In short, preventive health care is an important premise for policies in promoting the ethical development of a nation. The benchmark for quality is the extent of emphasis placed on equal access to strong, quality preventive and protective health care for pregnant mothers and babies. This type of health care for vulnerable groups in the population is a way to promote healthy beginnings and obviate costly treatments that delay human development, encumbering valuable economic resources that could be better invested in ways that ensure future human growth.[24]

This paper is based on a presentation made at the AMFITAN Conference on Development Ethics, University of Dar Es Salaam, Tanzania, February, 2000. With special thanks to other members of the research team: Richard Lasco, Ph.D., Dee Jeffers, RN, MPH, Edward Feaver, M.DIV, and Patricia Gorzka, Ph.D., ARNP. This work is supported by the Lawton and Rhea Chiles Center for Healthy Mothers and Babies and the Centers for Disease Control and Prevention (Cooperative Agreement #S1152-19/19).

Notes

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[2] Ibid., 3.

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[7] *Child Health USA 1999* (Washington, D.C.: U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau, September 1999), 6.

[8] Ibid., 6.

[9] Ibid., 20.

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[19] *The Initiative to Eliminate Racial and Ethnic Disparities in Health* (Washington, D.C.: U.S. Department of Health and Human Services, 1998).

[20] "Maternal, Infant and Child Health," in *Healthy People 2010: Objectives for Improving Health,* Vol. 2, conference ed. (Washington, D.C.: U.S. Department of Health and Human Services, 2000): 16–17.

[21] Federal funding for this program as a line item in the 2001 federal budget refers to it as the "Friendly Access Prenatal Health Program," earmarked for The Lawton and Rhea Chiles Center for Healthy Mothers and Babies in Tampa, Florida, to conduct extensive research, implementation, and evaluation.

[22] Terrance Albrecht, Danice Eaton, and Charles Mahan, *Portal to Portal: Friendly Access Healthcare for Low-Income Mothers and Babies: A Literature Review and Reformulation*. Working document, The Lawton and Rhea Chiles Center for Healthy Mothers and Babies, Tampa, Florida, 1998, 32.

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