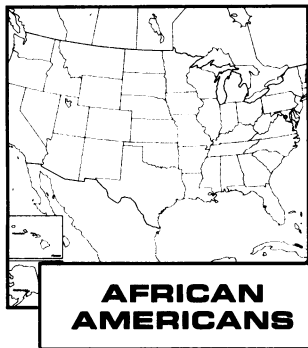


- In 1989 in the US African-American infant mortality was 18.6/1,000 live births, twice the rate for other ethnic groups
- Being African American is a major risk factor for low birth weight and infant mortality, even among women who receive prenatal care



Cross-cultural Medicine

A Decade Later

The Business of Preventing African-American Infant Mortality

JAN GATES-WILLIAMS, MA, *San Francisco, California*;
 M. NJERI JACKSON, PhD, *Richmond, Virginia*;
 VALATA JENKINS-MONROE, PhD, and LANDON R. WILLIAMS, MPP, *Berkeley, California*

African-American women are twice as likely as women from other ethnic groups to have babies with low birth weights and to experience the loss of infant death. The problem is so endemic in black communities in Alameda County, California, that numerous programs have been developed over the past decade to reduce maternal risk factors and eliminate barriers to prenatal care. Despite these efforts, African-American ethnicity continues to be a major risk factor for infant mortality for reasons that are poorly understood. We take a critical look at 3 types of studies characteristic of infant mortality research: epidemiologic, studies that advocate prenatal care, and ethnomedical (cultural). We argue that the assumptions informing this research restrict the thinking about infant mortality and the political issues involved in how prevention programs are developed and structured. The persistent focus on maternal behavioral characteristics limits more in-depth analysis of the micropolitics of perinatal bureaucracies established in response to this ongoing crisis.

(Gates-Williams J, Jackson MN, Jenkins-Monroe V, Williams LR: The business of preventing African-American infant mortality, *In Cross-cultural Medicine—A Decade Later* [Special Issue]. West J Med 1992 Sep; 157:350-356)

Infants with low birth weights (preterm and small for gestational age) account for less than 10% of all live births in the United States, but the death toll among this small proportion of infants is largely responsible for the country's embarrassing international ranking of 24th in infant mortality.¹ African-American babies contribute disproportionately to the number of infants with low birth weights and infant deaths.¹

The idea that infant mortality is an index of community health has nearly reached the status of cliché. Technologic advances enabling smaller and smaller babies to survive, however, have made infant mortality a less sensitive indicator of overall community well-being. Infant mortality can decline without any substantive changes in a community's general material, social, or health condition.² Most of the recent improvement in the US infant mortality is attributed to neonatal technology³⁻⁵ and not to major successes in preventing low birth weights, its primary determinant. For African Americans, infant mortality is but a prelude to a series of alarming health and social status indicators carrying an ominous message: being black is a health hazard. National trends indicate that the reproductive and infant health status of African-American women and their babies parallels this deterioration in quality-of-life indices, despite a periodic commitment of resources to reversing the legacy of disparities that have characterized the experiences of African Americans. While we must question why the overall status of African Americans has worsened despite what some consider heroic intervention strategies, such a question is particularly relevant with regard to low birth weights and infant mortality.

The literature that explains and proposes solutions for

low birth weights and high infant mortality in the African-American community is voluminous, and the institutions and bureaucracies mobilized to address the issue are extensive. Yet failure looms large (Table 1).^{1,6-9} The current reproductive and infant health status of African-American women and their babies is reminiscent of levels of the late 1970s and early 1980s. We examine the low-birth-weight research, policies, and practices of the decade in which the current crisis

TABLE 1.—Black/White* Infant Mortality, Per 1,000 Live Births

Population	Black	White (Non-Black)	% Change Mid to Late 1980s	
			Black	Non-Black
United States				
1989†	18.6	8.1	+3.33	-8.99
1986‡	18.0	8.9		
California				
1987§	17.6	7.7-8.3	-6.87	-11.25
1984	18.9	8.9		
Alameda County, Calif				
1989¶	14.9	5.7	-21.16	-17.39
1988¶	18.9	6.9		

*The use of all-inclusive categories White (Non-Black) and Non-Black distorts important interethnic group differences in infant mortality by inflating the "White" rate and masking the variations in rates of ethnic groups without African ancestry. We recognize the limitations of this practice. Ethnic group misclassification is a legendary flaw in vital statistics reporting.
 †From MacDorman and Hudson (National Center for Health Statistics).¹
 ‡From the National Center for Health Statistics.⁶
 §From the California Department of Health Services.⁷
 ||From the Southern California Child Health Network and the Children's Research Institute of California.⁵
 ¶From the Alameda County Health Care Services Agency.⁹

From the Medical Anthropology Division, Department of Epidemiology and Biostatistics, University of California, San Francisco (Ms Gates-Williams); the Department of Political Science, Virginia Commonwealth University, Richmond (Dr Jackson); and the Department of Psychology, California School of Professional Psychology (Dr Jenkins-Monroe), Alameda, and the City Manager's Office (Mr Williams), Berkeley, California.
 Reprint requests to Jan Gates-Williams, MA, 2700 Coolidge Ave, Oakland, CA 94601.

in maternal and child health is situated. As case illustrations we use Alameda County, California, and Oakland, its principal city, wherein most of the African-American women in the county who lost their babies lived. What happened there has also happened elsewhere.

Conceptual Diversity in Studies of Infant Mortality

It is well established that the antecedents of birth-weight and non-birth-weight specific mortality are multifactorial and complex.¹⁰⁻¹³ The research generally fits into three cate-

gories: epidemiologic study, prenatal care promotion, and clinically oriented ethnomedical research. Ethnomedical studies typically deal with "folk medicine" or traditional medical beliefs and practices of cultural groups. Usually they focus on aspects of traditional medical systems that diverge from the biomedical model of disease. All of these studies, however, have important clinical and policy implications. They have the potential to challenge misconceptions and cultural biases, particularly with regard to populations overrepresented in data on poor birth outcomes. Insights can be

TABLE 2.—Meta-analysis of Research on Infants With Low Birth Weights

Source	Study Type	Organizing Assumptions	Unit of Analysis	Proposed Solution or Conclusion
Shiono and Klebanoff, 1986 ¹⁴	Epidemiologic	Women's prenatal behavior, sociodemographic and medical conditions	Individual	Further study of maternal risk factors
Murray and Bernfield, 1988 ¹⁵	Epidemiologic	Women's prenatal behavior and sociodemographic condition	Individual	Further study of prenatal care use determinants
Showstack et al, 1984 ¹⁶	Epidemiologic	Women's sociodemographic and medical conditions and prenatal behavior	Individual	Further study of effective prenatal care components and low birth weights
Kugler et al, 1990 ¹⁷	Epidemiologic	Women's sociodemographic condition and prenatal behavior	Individual	Further study of causes of low birth weights and infant morbidity
Lieberman et al, 1987 ¹⁸	Epidemiologic	Women's sociodemographic and medical conditions	Individual	Further study of socioeconomic status, hematocrits, and preterm births
Kleinman and Kessel, 1987 ¹⁹	Epidemiologic	Women's sociodemographic condition	Individual	Further study of low-risk black and white women's effective prenatal care components and systems
Emanuel et al, 1989 ²⁰	Theoretic/policy	Women's childhood and current pregnancy and sociodemographic condition	Individual	Further study of biologic mechanisms of infant mortality—keep programs for women and children
Boone, 1989 ²¹	Epidemiologic/anthropologic	Women's sociodemographic and medical conditions, prenatal behavior, and cultural beliefs	Individual	Develop innovative prenatal care and targeted outreach for high-risk women, culturally relevant programs
Petitti et al, 1987 ²²	Epidemiologic	Women's sociodemographic and medical conditions, prenatal behavior	Individual	Use data to plan targeted community, medical, and personal interventions
Binsacca et al, 1983 ²³	Epidemiologic	Women's sociodemographic and medical conditions, prenatal behavior	Individual	Use data to focus additional services on high-risk women
Council on Maternal and Child Health, National Association for Public Health Policy, 1986 ²⁴	Prenatal care promotion	Prenatal care and cost efficiency, women's sociodemographic condition and prenatal behavior	Prenatal care system and individual	Develop comprehensive, culturally sensitive, universal maternity care
Kotch, 1986 ²⁵	Prenatal care promotion	Women's sociodemographic condition, prenatal care, and cost efficiency; prenatal behavior	Individual and prenatal care system	Improve social conditions of child-bearing population; develop universal maternity care as part of a national health program for the US
Brown, 1985 ²⁶	Prenatal care promotion	Women's sociodemographic and medical conditions, prenatal behavior, cost efficiency	Individual and prenatal care system	Universal prenatal care, targeted, high-risk interventions
Korenbrot, 1984 ²⁷	Prenatal care promotion	Women's sociodemographic and medical conditions, prenatal behavior, cost efficiency	Individual and prenatal care system	Legislate expanded Medicaid benefits for low-income pregnant women
Institute of Medicine, Committee to Study Outreach for Prenatal Care, 1988 ²⁸	Prenatal care promotion	Women's sociodemographic condition, prenatal behavior, and cultural beliefs; cost efficiency	Individual and prenatal care system	Target a culturally sensitive, high-risk—health education media campaign; eliminate financial and system barriers; universal maternity care
Smith, 1990 ²⁹	Prenatal care promotion	Women's sociodemographic and medical conditions, prenatal behavior, cultural beliefs	Individual and prenatal care system	Health care system uncoordinated and inadequate to meet demand; target high-risk interventions with emphasis on prenatal education
Snow et al, 1978 ³⁰	Ethnomedical	Women's sociodemographic and medical conditions; cultural beliefs and prenatal behavior	Individual	Women's cultural belief system influences use of prenatal care and compliance; health professionals need cultural sensitivity
Snow and Johnson, 1978 ³¹	Ethnomedical	Women's sociodemographic and medical conditions; cultural beliefs about food and prenatal behavior	Individual	Reproductive folklore about diet can help or hurt maternal and infant nutritional status; can be problematic for disseminating scientifically correct information
Johnson et al, 1978 ³²	Ethnomedical	Women's sociodemographic and medical conditions; cultural beliefs about reproductive health and contraception	Individual	Reproductive folklore influences incorrect and inadequate information among high-risk pregnant patients
Snow and Johnson, 1978 ³³	Ethnomedical	Women's sociodemographic condition, cultural beliefs about menstruation	Individual	Women are victims of their reproductive folklore, can influence negative health practices, compliance

gained by characterizing these studies by their governing assumptions about what causes (and ultimately prevents) low birth weights and high infant mortality, the particular variable(s) or unit(s) of analysis on which they focus, and the kinds of solutions to which the respective frameworks give rise (Table 2).¹⁴⁻³³

Because the arguments and assumptions of these studies have inevitably been incorporated into intervention strategies, a careful consideration of their limitations makes it apparent why “the problem” seems so intransigent. It is difficult to try to address low-birth-weight and infant-mortality issues with public policies that are implemented through private and public bureaucracies created expressly for such purposes.

Epidemiologic Studies

Epidemiologic studies consistently show that high neonatal death rates among African Americans are due to racial differences in the birth-weight distribution.^{3,4,14,19,20} Black women have a higher incidence of low-birth-weight babies that is largely attributed to, but only partly explained by, a higher frequency of risk factors.^{18,19}

An important question in the epidemiology of infant mortality concerns the contribution of prenatal care to birth weight. Are the more favorable birth results among women who obtain prenatal care due to the prenatal care or because these women are different in significant ways (that affect birth weight) from women who do not receive adequate care?³⁴ This question stems in part from results of studies that show that African-American women have poorer birth outcomes than other women even when other well-known determinants, including prenatal care, are controlled for. Maternal sociodemographic characteristics such as age, parity, marital status, education, employment, the median income in the census tract where the woman lives, and public assistance status are conventional variables of analysis. Medical factors examined have included maternal hematocrit levels, pregnancy complications, infections, the number of previous spontaneous and therapeutic abortions, and preexisting diabetes mellitus. Medical care system and maternal behavioral factors such as hospital type, prenatal care adequacy, and tobacco, alcohol, and illicit drug use have been studied, as have infant characteristics such as gestational age and sex.¹⁴⁻²³

Together these variables have failed to consistently or fully account for the excess of preterm infants, low birth weights, and infant death among African Americans. These studies found that the (nonlinear) relationship between gestational age and birth weight explains 41% of the variance in mean birth weights of African-American infants.¹⁶ They show that the number and timing (adequacy) of prenatal visits is associated with 8% of African-American infant birth weights.¹⁶ Adequate prenatal care reduces the rate of low birth weights in term infants by 71% but has virtually no effect on the rate of preterm low-birth-weight infants.¹⁵ Conventional wisdom about the nature of maternal risk is increasingly being challenged. Questions remain about why black:white low-birth-weight ratios¹⁹ and preterm birth rates are significantly higher among low-risk women¹⁸ and why only 15% of the black-white racial disparity in the incidence of low birth weights and very low birth weights is attributed to ethnic differences in prenatal care use.¹⁵ Even when income differences are factored in and financial access to pre-

natal care is assured, African-American women use prenatal care later and less. They may have lower rates of neonatal death and low-birth-weight babies, but the racial disparity in the rates of low-birth-weight infants remains unchanged.^{15,17}

Although several investigators acknowledge the possible bias of uncontrolled sociodemographic and cultural variables that may contribute to excess African-American infant deaths,^{16,17} how they conceptualize and interpret the variables that are controlled for is equally troublesome. For example, it is common for studies to assume that health maintenance organization membership and other simple measures of prenatal care adequacy, maternal education, marital and financial status are accurate components of or sufficient controls for socioeconomic status and actual patterns of prenatal care use.¹⁴⁻²³ When significant and independent associations between low birth weights and African-American ethnic identity are discovered, race and measures of socioeconomic status are treated as proxies of other unidentified biologic, social, environmental, behavioral, and medical care factors thought to be more directly related to low birth weights.^{14,16,19} The point here is that studies are reporting less optimistic if not conflicting evidence about how much prenatal care can reduce the wide disparities between ethnic groups in rates of low birth weights and that eliminating financial barriers does not reverse the pattern of underuse of prenatal care by African-American women.

This inability to identify specific population-level causes of the large ethnic differences in low birth weights and infant death rates has led some investigators to focus on historical factors particular to African-American women. Experts give little credence to a historical model that relies on genetics or inheritance as a major determinant of black low birth weights because normal biologic interethnic group variation in birth weights is not of the magnitude to produce such substantial differences in the birth weight distribution and rates of infant death^{15,19,20}; black infants with low birth weights tend to have comparable or higher survival rates than white infants of the same weight^{19,35}; infant mortality due to congenital anomalies is the only cause of death in which an excess among African Americans does not occur³⁶; over time the reproductive performance of immigrants from countries with high infant mortality tends to take on more favorable patterns of the host country³⁶; and the overwhelming weight of the national and international evidence implicates social, behavioral, or environmental causation.^{2,18,19,35,37,38}

Emanuel and co-workers ask, what about the lives of African-American women is hazardous to fetal and infant health?²⁰ Drawing mainly from research in Great Britain, they argue that the answer lies in the maternal childhood environment and the environment in which a woman's pregnancy occurs, that a woman's stunted intrauterine growth and body size reduce internal or reproductive organ development. Unfortunately, the intergenerational low-birth-weight thesis suffers from inattention to qualitative differences between generations, social and biologic reductionism, and recycled dichotomous variables like urban and rural, Southern and Northern. The larger issue, however, is not urban or rural, or Northern or Southern, but how and through what processes are the social, biocultural, and political realities of African-American women manifest in different pregnancy outcomes?

Boone's case-control study of black infant mortality in Washington, DC, unites epidemiology and anthropology in

an attempt to clarify the importance and interaction of many social and medical risk factors.²¹ Boone rejects the "culture of poverty" thesis in favor of a shallow explication of African-American women's negative attitudes about men, their failure to articulate a "visualized household," and the absence of notions about shared (conjugal) child rearing. She hypothesizes that this group of disadvantaged women lacked a connection between male-female interactions and pregnancy and childbirth.

Because epidemiologic studies assume that the behavior of individual women is largely responsible for birth outcomes, even when they explore the societal dimensions of such behavior, the logic of their arguments leads them to advocate transforming the life-styles and beliefs of high-risk women until they show what is deemed to be acceptable behavior. Moreover, other than brief references to demographic traits or trends or to poverty, they rarely question why, let alone analyze how, it is that African-American women have become so poor and at high risk in the first place.

Studies Advocating Prenatal Care

Despite conflicting research findings about how much prenatal care contributes to reducing the wide ethnic group disparity in infant death rates, there is considerable consensus about its importance in preventing low birth weights.^{3,26} Like Boone's study, much of the literature advocating prenatal care is a by-product of clinical experience and of epidemiologic and maternal and child health program studies that correlate women's use of medical care during pregnancy with better birth results. The consistent theme in this research is the cost-effectiveness or cost versus benefits to the health care system that reducing maternal risk factors will bring.^{24,25,27,29} This is an important centerpiece of the policy argument for universal prenatal care.

In 1988 the Institute of Medicine identified barriers to prenatal care and recommended corrective measures.²⁸ The barriers included cost, inadequate program capacity, difficult and unpleasant practices that discourage women's participation, and a lack of public understanding about early prenatal care benefits. The report urged policy and program changes that would eliminate financial barriers, increase capacity with no more than a two-week wait for an appointment, and include an aggressive outreach and public information campaign targeted to specific groups. It recommended that programs have bilingual staffs, cultural sensitivity, locations accessible by public transportation, child care, more provider training, and flexible service hours. These suggestions reflect the experience and growing awareness of health professionals that financial access alone does not automatically translate into an early initiation of prenatal care.

Ethnomedicine

Cultural perspectives on maternal and infant risk in the United States can be found in clinically oriented ethnomedical research. These studies address alternative models of health and illness that coexist in different communities and often conflict with established doctrines and practices of Western medicine. In the areas of African-American reproductive health and childbirth, several articles address the clinical implications of folk medical beliefs that stem from the persistence of humoral pathology and concepts of disease

etiology split into natural and supernatural domains.³⁰⁻³³ Although not culturally specific to lower-class African Americans, research suggests that this cognitive framework contributes to maternal risk, late prenatal care, cultural conflict, and noncompliance in clinical settings. The pluralistic nosology of traditional black therapeutics and models of health are derived from African, Southern, Native-American, and European magicoreligious healing and medical systems.³⁹ Along with elements of mainstream biomedicine, this system affects the process of symptom recognition, illness labeling, and help seeking. Conflict may surface because of the types of health specialists that are consulted, different patient or physician behavioral expectations, communication styles, models of disease, and patients' resistance to invasive "high-tech" prenatal diagnostic and treatment methods.

As a corrective to epidemiologic studies where women have been matched according to similar educational levels, these ethnomedical findings are particularly instructive. They raise doubts about the validity of using educational levels for intergroup and intraethnic group comparisons that rely only on grade levels or years of education completed. Women thought to have the same educational level may differ in achievement, quality of formal education, and culturally based concepts of maternal and infant health. This applies also when education is assumed to be an acceptable proxy for socioeconomic status.

Micropolitics of Care

Although different in intent, the orientation and results of much ethnomedical research do not escape entirely the conceptual difficulties found in the epidemiologic articles and those advocating prenatal care. In all of these studies, prenatal care and the women who do or do not use it are extracted from their local political, cultural, and community contexts. Possible relationships between a community's pattern of low birth weights and the micropolitics of prenatal care have not received the scrutiny they deserve. What services are rendered, who provides them, and how they are perceived by both women who refuse and who use them are the key questions.⁴⁰

The political dimensions of prenatal care are typically discussed at the macro level—that is, inadequate prenatal care program funding, insufficient media campaigns promoting prenatal care, the lack of a national health insurance program, and the need for policies and mandates to ensure greater, if not universal, access to prenatal care. Once again, even when system barriers to prenatal care are derided, the explanatory models do not attend to the micropolitics of institutional arrangements and the guiding assumptions of prenatal care outreach, content, and service systems. Rather, they focus on some alleged deficiency inherent in the "high-risk" target population and often imply that the cultural belief systems or a lack of values associated with poverty encourage high-risk behavior. As such, these cultural deficiencies discourage the adoption of preferred "scientific" beliefs, domestic living arrangements, and health behavioral practices presumed to differ from dominant societal and cultural values. The logical response is to encourage cultural transformation, even if sensitively masked as "appreciating diversity." Implicit in this response is the idea that African-American pregnant women, not societal institutions, are most in need of transformation. As "diversity" has become

the cultural buzzword of the late 20th century, except for ethnomedically oriented, reproductive health-related studies in medical anthropology, in practice, the concept of "cultural sensitivity" in prenatal health services for African-American women is undefined. If specified, it is implicitly reduced to having black, same-sex service professionals with some experience working with African-American low-income populations. For more in-depth clinical perspectives on culturally appropriate assessment, diagnosis, and treatment of African Americans, it is helpful to consult the literature in African-American ethnopsychology and mental health.⁴¹⁻⁴⁶

Brief History of Alameda County's Perinatal Programs

Alameda County has a lengthy history of providing perinatal programs, advisory committees, advocacy organizations, and prenatal care outreach. For example, between 1978 and 1992, the following organizations have formed or dissolved in Oakland, the county's principal city: the Coalition to Fight Infant Mortality, the Oakland Perinatal Health Project, the Obstetrical Access Project, and the International Child Resource Institute. Prevention-related, policy advocacy groups and direct service programs have included Birthways; the Maternal, Child, and Adolescent Health Board of Alameda County; the East Bay Perinatal Council; the Perinatal Network; the Urban Strategies Council; the Oversight Committee on Infant Mortality; the Black Infant Mortality Forum; the Healthy Infants Program; Start Prenatal Care Program; Healthy Babies Project; Precious Beginnings and Baby Yours Projects; the Birth to School Project; and the Healthy Start Program. This is an impressive list of organizations and resources—until one realizes these agencies largely engage in a form of professional bureaucratic recycling.

The chronology of several of Oakland's perinatal health advocacy and infant mortality-related projects reveals interagency and intra-agency overlap and stagnation. This overlap is evident in personnel, in stated project agendas, and in the accumulation and control of funding for community low-birth-weight and infant mortality prevention. Since about 1985, subsidized prenatal care policies and other maternal and child health advocacy and program initiatives have expanded. This reflects years of advocacy work by a community trying to reckon with the problems of crack cocaine use, the acquired immunodeficiency syndrome, and their ramifications with respect to infant morbidity and mortality. In addition, federal and state (California) health policy has been developed that more overtly emphasizes the prevention of black infant mortality. In Alameda County this has meant the emergence of new public and private nonprofit advisory and advocacy organizations, direct service, and case management programs targeted to residents of Oakland's high-risk, working-class, and impoverished neighborhoods. Has program expansion broken the cycle of overlap among agencies? Does the adoption of favored case-management program models really "personalize the relationship between pregnant women and the network of service delivery"?

The answer to both these questions is no. The landscape of various specialized target group programs has diversified and grown, creating a new array of privately and publicly funded services and prospects for client and patient referrals. These developments have produced yet another service niche: technical consultation to health care professionals to

implement and understand new regulations and the formalized management of interagency professional referral and informational networks. Service providers now have state-subsidized forums for keeping up to date with one another and to systematize the advocacy for more perinatal resources.

The existence and structure of many of these programs suggest that the national trend toward cost-effectiveness and efficiency through interagency coordination, collaboration, and client case management has taken hold as a policy priority in California and Alameda County maternal and child health funded programs.⁴⁷ This affinity for networking has produced a relatively stable, if not fairly lucrative, "perinatal advocacy and service program oligopoly." The questions we should ask are, Has this oligopoly had a beneficial effect? and What is it about Oakland that has caused this oligopoly to emerge? These questions need answering because despite all these efforts, the trends of excess black low birth weights and infant mortality have not been noticeably reversed (Table 3).

TABLE 3.—Percent Change (1978 to 1988) in Low Birth Weight and Infant Mortality in Alameda County*

Data	African American, %	Non-Black, %
Low birth weights	+26	-12
Infant mortality	+22	-26
Total mortality†	+7	-25

*From Alameda County Health Care Services Agency, 1990.⁹
†Total mortality includes fetal deaths plus infant deaths.

The conditions precipitating the emergence of this oligopoly are related to the restructuring of the economy and an increasingly impoverished and stratified African-American population.^{46,48,49} Oakland's traditional economic base in transportation, distribution, and manufacturing eroded during the 1980s. The shift to a service economy increased private social service employment by 17% from its 1981 ranking as the city's eleventh largest employer to Oakland's seventh largest private industry group employer in 1986.^{50,51} During this same period, the racial disparity in low-birth-weight and infant mortality rates worsened.⁵²

Although beyond the scope of this article, it is worth considering in this context the history, policy changes, and political motives that link case management as a gatekeeping, service-brokering bureaucratic process with the underpinnings of the self-help movement, the privatization of public health, and decreased access to services (A. Reed, "All for One and None for All," *The Nation*, January 28, 1991, p 91).^{53,54}

Problematic Assumptions

The theoretical, health policy, and practical implications of the perinatal oligopoly must be situated in the context of changes in the local political economy and the conceptual frameworks out of which the oligopoly emerged. Despite the conceptual diversity of approaches to low birth weights and infant mortality, in each category of literature reviewed, the research results remain the same. They do not bring into focus the experiences and voices of women or how families cope and survive in a society hostile to African Americans and women and indifferent to motherhood and children "Scapegoating the Black Family: Black Women Speak," *The Nation*, July 24/31, 1989, entire issue).⁵⁵⁻⁵⁸ Conventional measures of socioeconomic status tend to homogenize

African-American diversity and obscure realities of sex, class, and ethnicity as social relationships—relationships shaped by and articulated in particular historical, sociopolitical, and cultural contexts. This diversity and its sociocultural and political determinants are not captured in the simple, nominal, discrete, or continuous variables abstracted from birth records or from interview questions constructed and interpreted by investigators unfamiliar with African-American culture.*

Studies of infant mortality in general and African-American infant mortality in particular omit the work of more than a century of African-American and feminist scholarship (M. N. Jackson, "African American Men and the Rights of Women: The Politics of Therapeutic Thinking," *Virginia Commonwealth University Voice*, February 7, 1992, p 8).⁵⁹ Most conventional analytic epidemiologic studies ignore this scholarship. Conversely, paradigms developed in the social and behavioral science literature of African-American and feminist thought have not seriously grappled with the clinical or epidemiologic literature of low birth weights. A result of this fragmentation is that socially constructed categories like ethnic identity and socioeconomic status remain suspended as proxy or surrogate variables conceptually unavailable for more in-depth analysis and explanation on their own terms. Even when alternatives are developed, often they do not stray from basic cultural assumptions that women, "people of color," and children are "problems" needing to be solved.⁶⁰⁻⁶² Faced with the task of "solving these problems," we turn to bureaucracies, expecting their supposed structural neutrality to compensate for biases inherent in these various interpretive frameworks. It is hardly surprising that they fail to do so.

The Problem With Bureaucracy

As Parenti notes, "[b]ureaucracy can be used to administer a national health program or run death camps. Much depends on the political and class context in which it operates."^{63(p255)} As well, bureaucracies are plagued by problems of accountability and control, equity, efficiency, responsiveness, and fiscal integrity.⁶⁴ If "[t]he bottom line . . . is that the manner in which any bureaucracy is organized affects how well it is able to accomplish its tasks,"^{65(p458)} what tasks are existing low-birth-weight and infant-mortality-prevention bureaucracies accomplishing?

The bureaucracies established in response to high African-American infant mortality are oriented toward high-risk persons rather than entire communities. The prevailing assumption is that this is a cost-effective, humane approach for rationing scarce resources in underfunded public health systems faced with escalating community health care needs. Chamberlin has argued persuasively that high-risk identification and intervention strategies have their place but that they will have little effect on the long-term incidence of maternal and child health problems because of the typical distribution of community risk.^{66,67} Without primary prevention of the underlying causes, more low- and medium-risk women and families will continue to replace that small percentage of high-risk families to whom enhanced services are primarily targeted. Some of Chamberlin's suggested community-wide strategies—after-school recreation programs, school-based health and child care, comprehensive prenatal care—are tak-

ing place, but to a large degree black infant mortality interventions are still focused on high-risk women and infants. Even with these in place in a community, Chamberlin's list of preventive programs of "proven value" takes no account of the micropolitics of implementation or their unlikelihood of being funded in these days of budget crises or ever-changing program funding priorities.

Conclusion

Because the frameworks we use to understand low birth weights and infant mortality target the behavior of women as causal factors, we are reduced to the dilemma of trying to ascertain to what extent it is appropriate for government or private sector bureaucracies to intervene in women's lives. The conceptual error is not simply that the focus is disproportionately on individual behavior but on the behavior of particular individuals. Public policies inevitably benefit certain populations or control or influence individual and group behavior. Data from the 1980s reveal that public policies in the area of low birth weights and black infant mortality have yet to affect African-American women and children in ways desired or expected. The questions begged by the data then are, Why do conceptual frameworks, approaches, and policies persist despite their ineffectiveness? Who gains from perpetuating the image of African-American women as being engaged in high-risk personal behavior?

The give and take of public policy-making and the persistent specter of draconian fiscal cuts in health and human services now force those concerned about low birth weights and infant mortality to push bureaucracies to critically assess their failures, limitations, and promise. In a climate that blames women for an ever-wider range of social problems, a danger in emphasizing the personal responsibility of African-American pregnant women for their plight is in creating an ideologic climate that legitimates more repressive policies presumably crafted with the goal of reducing maternal and infant risk.⁶⁸ The expansionist tendencies of bureaucratic agencies in the low-birth-weight prevention service industry make it imperative that we pay attention to whose interests are being served in the process. In a society where "high risk" is synonymous with being African American and where the failure to meet the needs of women and children becomes a metaphor for poverty and despair, administrators, clinicians, program developers, and case managers in service bureaucracies must insist, now more than ever, that policies be both more and appropriately responsive to women and children. This is possible only when trusted but inadequate paradigms and approaches are abandoned in favor of more accurate and less reductionist models and interpretations.

REFERENCES

1. MacDorman MF, Hudson BL: The Advanced Report of Final Mortality Statistics 1989, Vol 40. Hyattsville, Md, National Center for Health Statistics, 1992
2. Newell KW, Nabarro D: Reduced infant mortality: A societal indicator, an emotional imperative, or a health objective? *Trans R Soc Trop Med Hyg* 1989; 83:33-35
3. Institute of Medicine: Preventing Low Birthweight. Washington, DC, National Academy Press, 1985
4. Williams RL, Chen PM: Identifying the sources of the recent decline in perinatal mortality rates in California. *N Engl J Med* 1982; 306:207-214
5. David RJ, Siegel E: Decline in neonatal mortality, 1968-1977: Better babies or better care? *Pediatrics* 1983; 71:531-540
6. National Center for Health Statistics: Advance report of final mortality statistics, 1986. *Monthly Vital Stat Rep* [6] 1988; 37:[publication No. (PHS) 88-1120]
7. Black Infant Health Project RFA. Berkeley, Calif, Department of Health Services, 1989
8. Back to Basics: Improving the Health of California's Next Generation. Santa

*See B. P. Bowser, "African-American Culture and AIDS Prevention—From Barrier to Ally," on pages 286-289 of this issue.

- Monica, Calif, Southern California Child Health Network and the Children's Research Institute of California, 1987
9. Infant Mortality Reports. Oakland, Calif, Alameda County Health Care Services Agency, Community Health Services, Management Services, Planning and Policy Development, 1990 and 1991
 10. Chase HC: Perinatal and infant mortality in the United States and six West European countries. *Am J Public Health* 1967; 57:1735-1748
 11. Weaver JL: Policy responses to complex issues—The case of black infant mortality. *J Health Polit Policy Law* 1976-1977; 1:433-443
 12. Antonovsky A, Bernstein J: Social class and infant mortality. *Soc Sci Med* 1977; 11:453-470
 13. Reed WL: Suffer the children: Some effects of racism on the health of black infants. In Conrad P, Kern R (Eds): *The Sociology of Health and Illness—Critical Perspectives*. New York, NY, St Martin's Press, 1981
 14. Shiono PH, Klebanoff MA: Ethnic differences in preterm and very preterm delivery. *Am J Public Health* 1986; 76:1317-1321
 15. Murray JL, Bernfield M: The differential effect of prenatal care on the incidence of low birth weight among blacks and whites in a prepaid health care plan. *N Engl J Med* 1988; 319:1385-1391
 16. Showstack JA, Budetti PP, Minkler D: Factors associated with birthweight: An exploration of the roles of prenatal care and length of gestation. *Am J Public Health* 1984; 74:1003-1008
 17. Kugler JP, Connell FA, Henley CE: Lack of difference in neonatal mortality between blacks and whites served by the same medical care system. *J Fam Pract* 1990; 30:281-287
 18. Lieberman E, Ryan KJ, Monson RR, Schoenbaum SC: Risk factors accounting for racial differences in the rate of premature birth. *N Engl J Med* 1987; 317:743-748
 19. Kleinman JC, Kessel SS: Racial differences in low birth weight: Trends and risk factors. *N Engl J Med* 1987; 317:749-753
 20. Emanuel I, Hale CB, Berg CJ: Poor birth outcomes of American black women: An alternative explanation. *J Public Health Policy* 1989 Autumn, pp 299-308
 21. Boone MS: *Capital Crime: Black Infant Mortality in America*. Newbury Park, Calif, Sage, 1989
 22. Petitti D, Binsacca D, Allen B: Results of a Study of Low Birth Weight in Alameda County: Blueprint for Action. Oakland, Calif, Alameda County Low Birthweight Study Group, Alameda County Health Care Services Agency, Community Health Services, Management Services, Planning and Policy Development, 1987
 23. Binsacca DB, Ellis J, Martin D, Petitti D: Factors Associated With Low Birthweight in an Inner City Population: The Role of Financial Problems. Oakland, Calif, Alameda County Health Care Services Agency, Management Systems and Analysis, 1983
 24. Council on Maternal and Child Health, National Association for Public Health Policy: Background paper on universal maternity care. *J Public Health Policy* 1986 Spring, pp 105-123
 25. Kotch JB: Low birthweight and maternity care for all. *J Public Health Policy* 1986 Summer, pp 156-160
 26. Brown SS: Can low birth weight be prevented? *Fam Plann Perspect* 1985; 17:112-118
 27. Korenbrot CC: Risk reduction in pregnancies of low-income women. *Mobius* 1984; 4:34-43
 28. Institute of Medicine, Committee to Study Outreach for Prenatal Care: *Prenatal Care: Reaching Mothers, Reaching Infants*. Washington, DC, National Academy Press, 1988
 29. Smith R: Infant mortality and prenatal care. *Henry Ford Hosp Med J* 1990; 38:137-139
 30. Snow LF, Johnson SM, Mayhew HE: The behavioral implications of some old wives tales. *Obstet Gynecol* 1978; 51:727-732
 31. Snow LF, Johnson SM: Folklore, food, female reproductive cycle. *Ecol Food Nutr* 1978; 7:41-49
 32. Johnson SM, Snow LF, Mayhew HE: Limited patient knowledge as a reproductive risk factor. *J Fam Pract* 1978; 6:855-862
 33. Snow LF, Johnson SM: Myths about menstruation: Victims of our own folklore. *Int J Wom Stud* 1978; 1:64-71
 34. Shadish WR, Reis J: A review of studies of the effectiveness of programs to improve pregnancy outcome. *Evaluat Rev* 1984; 8:747-776
 35. Newland K: *Infant Mortality and the Health of Societies*. Washington, DC, Worldwatch Institute, 1981
 36. Lynberg MC, Khoury MJ: Contribution of birth defects to infant mortality among racial/ethnic minority groups, United States, 1983. *MMWR* 1990; 39:1-12
 37. Miller CA: Infant mortality in the United States. *Sci Am* 1985; 253:31-37
 38. Martorell R, Gonzalez-Cossio T: Maternal Nutrition and Birthweight. St Louis, Mo, Yearbook of Physical Anthropology 1987; 30:195-220
 39. Mathews H: Rootwork: Description of an ethnomedical system in the American South. *South Med J* 1987; 80:885-891
 40. Gates-Williams J, Schear S, Tervalon M: Health care administration and the county hospital: Community activism as a catalyst for change. *J Health Human Resources Admin* 1988; 10:297-310
 41. Bass BA, Wyatt GE, Powell GJ (Eds): *The Afro-American Family: Assessment, Treatment and Research Issues*. New York, NY, Grune & Stratton, 1982
 42. Pinderhughes E: African American families and the victim system. In McColdrick M, Pearce JK, Giordano J (Eds): *Ethnicity in Family Therapy*. New York, NY, Guilford, 1982, pp 108-122
 43. Staples R, Mirande A: Racial and cultural variations among American families: A decennial review of the literature on minority families. *J Marriage Fam* 1980 Nov, pp 887-903
 44. McAdoo HP: *Black Families*. Beverly Hills, Calif, Sage, 1981
 45. McAdoo HP, McAdoo JL (Eds): *Black Children: Social, Educational and Parental Environment*. Beverly Hills, Calif, Sage, 1985
 46. Thomas M, Hughes M: The continuing significance of race: A study of race, class and quality of life in America 1972-1985. *Am Sociol Rev* 1986; 51:830-841
 47. Spitz B, Abramson J: Competition, capitation, and case management: Barriers to strategic reform. *Milbank Q* 1987; 65:348-370
 48. O'Regan K, Wiseman M: Birthweights and the geography of poverty. *Focus* 1989; 12:16-22
 49. Reed A: Black urban administrations. *Telos* 1985; 65:47-58
 50. Walsh K: Oakland, California—Community Investment Opportunities. San Francisco, Calif, Community Affairs Department, Federal Reserve Bank, May 1989
 51. Landis JD, Guhathakurta S: *The Downsized Economy: Oakland Employment and Establishment Trends: 1981-1986*. Economic Development Task Force of the University of California-Oakland Metropolitan Forum, Executive Summary, January 1989
 52. Alameda County Perinatal Report Update Parts I and II. Oakland, Calif, Alameda County Health Care Services Agency, Community Health Care Services, Management Services Division, Analysis and Evaluation, 1986
 53. Luke TW: The modern service state: Public power in America from the New Deal to the New Beginning. In Reed A (Ed): *Race, Politics, and Culture—Critical Essays on the Radicalism of the 1960s*. New York, NY, Greenwood Press, 1986, pp 183-205
 54. Hayes FW: Governmental retreat and the politics of African-American self-reliant development—Public discourse and social policy. *J Black Stud* 1992; 22:331-348
 55. Miller-McLemore BJ: Let the children come. *Sec Opin* 1991; 17:10-25
 56. Preston SH: Children and the elderly in the United States. *Sci Am* 1984; 251:44-49
 57. Staples R: The political economy of black family life. *Black Scholar* 1986 Sep-Oct, pp 2-10
 58. Davis A, Davis F: The black family and the crisis of capitalism. *Black Scholar* 1986 Sep-Oct, pp 33-40
 59. Loewenberg BJ, Bogin R (Eds): *Black Women in Nineteenth Century American Life: Their Work, Their Thoughts, Their Feelings*. University Park, Pa, Pennsylvania State University Press, 1978
 60. Harrington M: *The Other America: Poverty in the United States*. New York, NY, Macmillan, 1962
 61. Sidel R: *Women and Children Last*. New York, NY, Penguin, 1987
 62. Epsin OM: Ethnicity, Race, and Class and the Future of Feminist Psychology. Presented at the annual meeting of the American Psychological Association, San Francisco, August 1991
 63. Parenti M: *Democracy for the Few*. New York, NY, St Martin's Press, 1988
 64. Wilson JQ: The bureaucracy problem. In Nivola PS, Rosenbloom DH (Eds): *Classic Readings in American Politics*. New York, NY, St Martin's Press, 1990
 65. Janda K, Berry JM, Goldman B: *The Challenge of Democracy*. Boston, Mass, Houghton Mifflin, 1992
 66. Chamberlin RW: Strategies for Disease Prevention and Health Promotion in Maternal and Child Health: The 'Ecologic' Versus the 'High Risk' Approach. *J Public Health Policy* 1984; 5:185-197
 67. Chamberlin RW: Preventing low birth weight, child abuse, and school failure: The need for comprehensive, community-wide approaches. *Pediatr Rev* 1992; 13:64-71
 68. McNulty M: Pregnancy police: The health policy and legal implications of punishing pregnant women for harm to their fetuses. *NY Univ Rev Law Soc Change* 1987-1988; 16:277-319