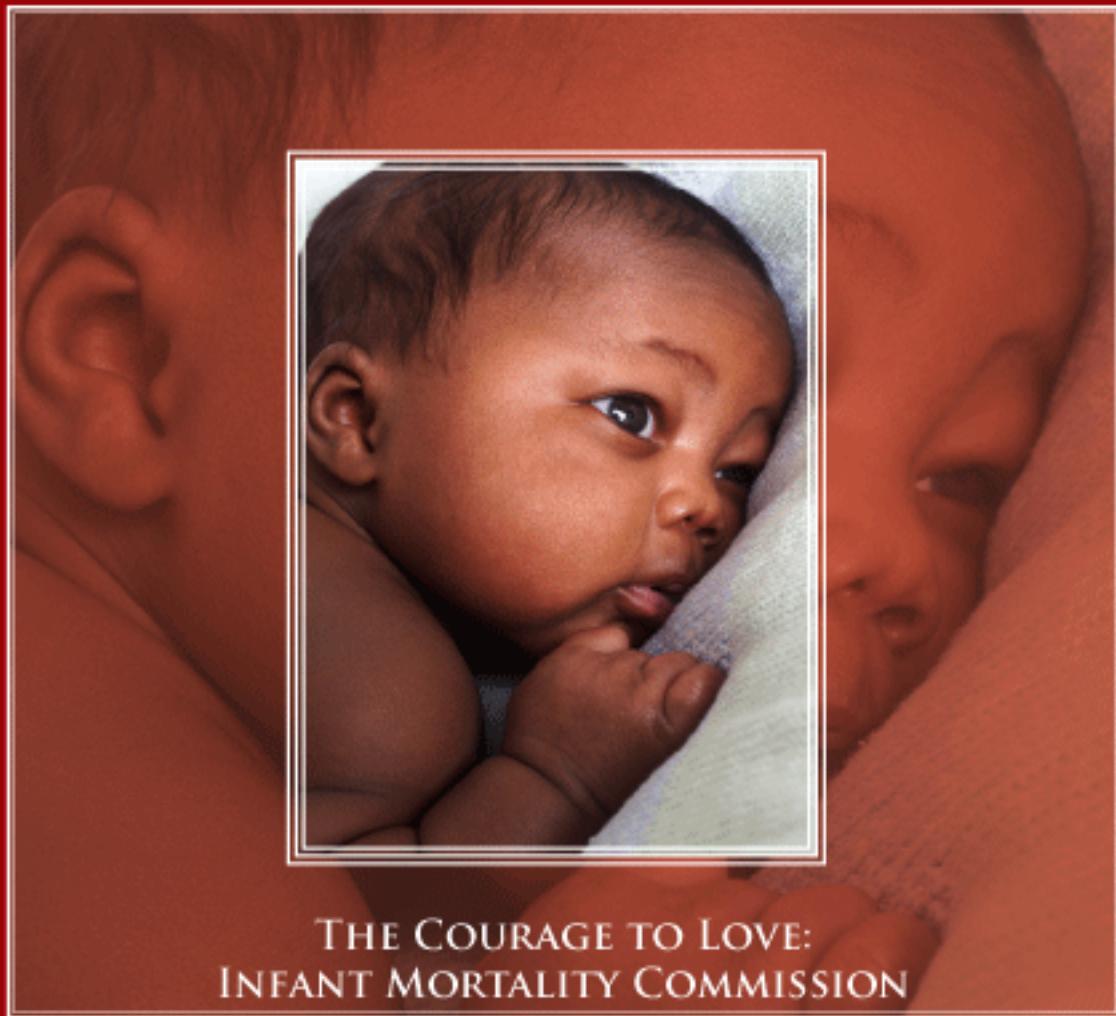


# RACE, STRESS, AND SOCIAL SUPPORT: ADDRESSING THE CRISIS IN BLACK INFANT MORTALITY



THE COURAGE TO LOVE:  
INFANT MORTALITY COMMISSION

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FLEDA MASK JACKSON

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**THE COURAGE TO LOVE: INFANT MORTALITY COMMISSION  
IMPLICATIONS FOR CARE, RESEARCH, AND PUBLIC POLICY TO  
REDUCE INFANT MORTALITY RATES**

**RACE, STRESS, AND SOCIAL SUPPORT:  
ADDRESSING THE CRISIS IN  
BLACK INFANT MORTALITY**

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JOINT CENTER FOR POLITICAL AND ECONOMIC STUDIES  
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## RACE, STRESS, AND SOCIAL SUPPORT: ADDRESSING THE CRISIS IN BLACK INFANT MORTALITY

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RACE, STRESS, AND SOCIAL SUPPORT:  
ADDRESSING THE CRISIS IN BLACK INFANT MORTALITY



## PREFACE

Solutions to the problem of higher infant death rates among black families have eluded medical, health policy, and research communities for decades. African American women continue to face a disproportionately higher risk for delivering premature and low birthweight babies, many of whom die within their first year of life.

Although infant mortality in the United States decreased among all races between 1980 and 2000, the overall black-white gap for infant mortality widened—and this pattern has continued. A 2002 Centers for Disease Control and Prevention analysis of infant mortality rates in 1995–1998 in the 60 largest U.S. cities revealed that the median infant mortality rate for blacks was 13.9 per 1,000 live births, compared to 6.4 and 5.9 for whites and Hispanics, respectively. Nationwide, the most recent data (2003) show that the infant mortality rate for blacks is 13.5 per 1,000 live births, compared to 5.7 for non-Hispanic whites and for Hispanics. The lack of progress in closing the black-white gap is largely due to a persistent two- to threefold higher risk for low birthweight and very low birthweight among black infants compared to white infants.

Healthy People 2010 is this nation’s health promotion and disease prevention initiative. It includes a national objective to reduce deaths among infants (aged less than one year) to fewer than 4.5 per 1,000 live births within all racial and ethnic groups. If current infant mortality rates among African Americans persist, however, such national health objectives to reduce infant mortality and to eliminate related racial and ethnic disparities will not be met.

The root causes of persistent racial disparities in infant mortality are not thoroughly understood. Many theories have been proposed. The high incidence of infant deaths among African Americans has been attributed to high teen pregnancy rates, single motherhood, lower education levels, poverty, and—most recently suggested—genetic causes. These theories fade in the light of robust research, however; alarmingly high levels of infant mortality persist, even when most factors are controlled. African Americans have higher infant mortality rates in every age category; maternal characteristics, such as marital or employment status, do not alter disparities; nor do education or income levels. The genetic theory is weakened by research that shows better birth outcomes among foreign-born black women; regardless of their socioeconomic status, native-born African American women fare worse in birth outcomes compared to white women at every income and education level. Most recently, the Institute of Medicine’s 2006 Report on Preterm Birth concluded that racial/ethnic differences in

socioeconomic condition, maternal behaviors, stress infection, and genetics cannot fully account for disparities. The report called for research that continues to prioritize efforts to understand factors contributing to the high rates of preterm birth among African American infants.

If age, marital status, education, income, and/or genetics cannot be seen as a singular root cause for racial and ethnic disparities in infant mortality, what common variables or set of variables might be seen as common among African American women and others who experience poor birth outcomes? Are these variables or set of variables responsive to intervention? The search for answers to these perplexing questions led the Health Policy Institute of the Joint Center for Political and Economic Studies to establish a national commission to study infant mortality within a new context of “relationality”—the notion that relationships are constitutive of what it means to be human. The central role of relationships and their associated effects upon maternal and infant well-being have generated a new understanding of the infant mortality challenge. This new approach is grounded in social determinants of health theory; women and their babies must be viewed not only as individuals, but as members of families, communities, and larger systems that have either positive or negative impacts upon their psychological and physical states. The economies, opportunities, environmental influences, as well as risk and protective factors within their places of work, life, and play must be considered.

The Courage to Love: Infant Mortality Commission, co-chaired by Ronald David, MD, MDiv, and Barbara Nelson, PhD, was formed by the Joint Center Health Policy Institute, in collaboration with the University of California, Los Angeles (UCLA) School of Public Affairs, to review the history of infant mortality rate analysis and interpretation, examine basic assumptions, redefine the problem, and imagine new possibilities for action. The Commission’s intentional focus on relationality has potential implications for improved pregnancy outcomes, economic prosperity, and meaningful civic participation for all women and for African American women in particular.

To better understand the issues and to inform its deliberation in formulating recommendations for policy, research, and practice, the Commission asked experts in various fields related to maternal and child health and infant mortality to prepare background papers on specific issues. This background paper examines the impact of stress and stress mediators on pregnancy outcomes for African American women. The report also examines social support and other relational experiences

and makes recommendations for related changes in public policy and maternal and child health practices. This analysis complements and reinforces the recommendations of other Courage to Love: Infant Mortality Commission background and framing papers on infant mortality and resilience; the role of breastfeeding in maternal and infant health; the historical framework of policies and practices to reduce infant mortality; the authentic voices of those affected by infant mortality; and infant mortality in a global context.

The work of the Courage to Love: Infant Mortality Commission is part of the larger effort by the Joint Center Health Policy Institute (HPI), whose mission is to ignite a “Fair Health” movement that gives people of color the inalienable right to equal opportunity for healthy lives. Funded by the W. K. Kellogg Foundation, HPI seeks to help communities of color identify short- and long-term policy objectives and related activities that:

- Address the economic, social, environmental, and behavioral determinants of health;
- Allocate resources for the prevention and effective treatment of chronic illness;

- Reduce infant mortality and improve child and maternal health;
- Reduce risk factors and support healthy behaviors among children and youth;
- Improve mental health and reduce factors that promote violence;
- Optimize access to quality health care; and
- Create conditions for healthy aging and the improvement of the quality of life for seniors.

We are grateful to Dr. Fleda Mask Jackson for preparing this paper and to those Joint Center staff members who have contributed to the preparation, editing, design, and publication of this paper and the Commission’s other papers. Most of all, we are grateful to Drs. Ronald David and Barbara Nelson, the members of the Commission, and Dr. Gail C. Christopher, Joint Center vice president for health, women and families, for their dedication and commitment to improving birth outcomes for African Americans and reducing racial and ethnic disparities in infant mortality rates.

**RALPH B. EVERETT**  
**PRESIDENT AND CEO**  
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## INTRODUCTION

A recent front-page story in the *New York Times* reported a significant escalation in the number of African American babies in the southern United States who die as a consequence of preterm delivery and low birthweight.<sup>1</sup> Having seen some marginal improvements in the rates of preterm delivery and low birthweight, health care professionals for mothers and their infants had been hopeful that further progress would be made. However, the current precipitous rise in poor birth outcomes undermines successes to date and raises major questions about what can be done to quell an escalating epidemic.

Explanations for the increasingly poor birth outcomes among African American women are complex, involving a number of biological, psychological, social, and economic factors that surround pregnancy and birth. Diabetes, hypertension, and obesity are being scrutinized as major risks for adverse birth outcomes. However, more attention must be given to psychosocial risk factors, which may directly or indirectly trigger physiological responses, leading to premature births and low birthweights.<sup>2</sup>

This report examines the impact of stress and stress mediators on pregnancy outcomes for African American women. Its aim is to shed light on the negative impact of particular stressors accompanying race and gender on African American women across socioeconomic categories and to explore the plethora of conditions—especially inequity and discrimination—that African American women name and experience as sources of stress. Additionally, as a product of the Infant Mortality Commission, this report examines social support and other relational experiences as potential factors in halting the devastation of infant death.

## BACKGROUND AND LITERATURE REVIEW

While there has been an overall decline in U.S. infant mortality over the last fifty years, racial disparities in infant mortality persist. The majority of African American babies are born healthy, yet the rate of infant mortality for black babies is two to three times higher than for white babies.<sup>3</sup> Further, southern states have shown a recent increase in infant mortality rates among African Americans. Indeed, there are reportedly areas in the southeast where the rate of preterm delivery among black women stands at five times that of white women.<sup>4</sup>

Poverty remains a contributing factor to African American women's poor birth outcomes. African American women

are nearly three times more likely to live below the federal poverty line and are nearly twice as likely to live below 200 percent of the federal poverty line as white non-Hispanic women.<sup>5</sup> Consistent economic uncertainty traps these women in poor housing, inadequate education, and unsafe neighborhoods. These factors are exacerbated by the absence of material resources as well as the waning social and relational resources that have traditionally mitigated the hopelessness of poverty.

Yet poverty alone does not explain reproductive disparities for African American women. Over a decade ago, researchers at the Centers for Disease Control and Prevention and elsewhere examined the birth outcomes of college-educated African American women in order to test the impact of socioeconomic status on birth outcomes.<sup>6</sup> The expectation was that African American women with higher incomes, insurance, and access to care would have good birth outcomes. Surprisingly, the investigators' analysis revealed disparate rates of preterm and low birthweight babies, even among well-educated African American women. More startling, the data showed that the rates of low birthweight and preterm delivery for college-educated African American women were more closely aligned with outcomes for non-college educated, unemployed, uninsured white women than they were with college-educated, employed, and insured white women.<sup>7</sup> Also of note are the birth outcomes among poor Mexican immigrant women. Rates of low birthweight among the infants of first-generation Mexican women are comparable to Caucasian women; in fact, their birth outcomes resemble those of white women from higher socioeconomic backgrounds.<sup>8</sup> In addition, compared to African American women, first-generation Mexican women are at lower risk of giving birth to babies born prematurely and with low birthweights. These and other findings challenge the argument that poverty offers the main explanation for poor birth outcomes.

Increasing attention is being given to genetic contributors to adverse birth outcomes, with mixed results. Evidence suggesting that premature births run in families warrants further attention.<sup>9</sup> Because genetics, access to health care, and income cannot completely explain African American women's poor birth outcomes, researchers' attention has turned to stress as a key ingredient among the complex factors contributing to reproductive disparities.

## WHAT IS STRESS?

Stress is a complex phenomenon that encompasses exposure to psychosocial, environmental, and physical changes and the body's responses to those experiences.<sup>10</sup> Past assumptions

about biological stress responses embraced the concept of *homeostasis*, which refers to an optimal set point that could be disrupted by exposure to stressors. The concept of *homeostasis* has been replaced with the notion of *allostasis* as a way to capture the body's attempts to maintain stability, or optimal set points, during a time of change that includes exposure to stressful experiences.

The inability for the body to have time to recover from stress exposure is crucial to determining its long-term physical and emotional consequences. *Allostatic load* captures the body's failure to recover from wear and tear as the result of prolonged periods of allostasis in the absence of efficient ways to turn off the physiological responses. In other words, the bombardment of stressors over a prolonged period of time in the absence of effective biological and psychosocial coping responses is thought to invoke the genesis of illness and chronic diseases.

Scientific literature on stress clearly indicates its adverse effects on practically every system in the body. Stress triggers responses that can lead to intermediary emotional and physiological reactions. Over time, these reactions can, in turn, result in illnesses and the development of chronic diseases, including gastrointestinal conditions, cardiovascular disease, and poor respiratory outcomes. Prolonged stress of any kind compromises the immune system, disrupts the hormonal balance, and threatens vascular functioning.

With respect to pregnancy, Wadhwa et al. have constructed a model to demonstrate how maternal stress compromises immune, endocrine, and vascular functioning during pregnancy, resulting in preterm delivery.<sup>11</sup> Their approach postulates two physiologic pathways by which maternal stress can result in premature birth: 1) through a neuroendocrine pathway that hyperactivates the maternal-placental-fetal endocrine system; and 2) as the result of an immune/inflammatory connection leading to increased susceptibility to intrauterine and fetal infectious processes.

Psychosocial stress that triggers physiological responses can be defined as experiences that impede an individual's long-term or short-term goals. Stress is simultaneously experiential and anticipated so that the expectation of a stressful experience can prompt the same psychosocial and biological responses as if particular stressors are actually being experienced. Stress can be a chronic experience indicating frequent and regular assaults or it might result from an acute episode (e.g., death, loss of job, divorce, etc). Stress can also result from a traumatic experience, such as a natural or human-made disaster.

Prolonged, longitudinal stress is thought to create a "weathering effect" that supposedly ages the individual, thereby producing the premature development of chronic disease. With respect to adverse birth outcomes, research suggests that "weathering" produced by cumulative stressors before pregnancy results in poor birth outcomes.<sup>12</sup>

The disproportionate rate of stress-related illnesses among African Americans has stimulated reexaminations of the components of stress. All people experience stress of one kind or another; however, researchers increasingly are examining the particular stressors of discrimination as an explanation for health disparities. There is strong scientific evidence indicating the deleterious effects of racism on health outcomes among African Americans.<sup>13</sup> Increasingly, racism is seen as a significant health risk because of the psychosocial or affective responses it produces (i.e., stress, anger, depression, anxiety, etc.), which subsequently trigger physiological responses directly associated with chronic diseases.<sup>14</sup> The work of Howard University psychology professor Jules Harrell and colleagues across the country offers clear evidence of physiological responses to racial discrimination. Harrell's work demonstrates that African Americans have adverse responses even to scenes of racist acts.<sup>15</sup> For instance, the blood pressure levels of his research participants rose after seeing Billy-clubs pummel the bodies of African American men.

The ill effects of racism are also confirmed in a community-based longitudinal study of menopause conducted by Tené Lewis of Rush University in Chicago and her colleagues.<sup>16</sup> Participants from Pittsburgh and Chicago completed self- and interviewer-administered questionnaires, were measured for height and weight, and completed clinical tests that included an assessment of coronary artery calcification (CAC). Coronary artery calcification is related to the lipid substances that result in blockage potentially leading to hardening of the arteries. The result from the study by Lewis and her associates indicates significant associations between chronic exposure to discrimination and the presence of CAC.

Their work covered multiple sources of discrimination, suggesting that gender also is a significant source of stress. Indeed, increased focus on women's health has drawn attention to the negative effects of gendered stress.<sup>17</sup> Stress in the context of gender is manifested in role expectations, overload, and locus of control in the home and workplace. For example, research shows that women who are caregivers heal more slowly after an injury than non-caregivers and that, after a spousal argument, women experience a prolonged stress response of elevated cortisol, compared to men.<sup>18</sup>



African American women are confronted with the particular stressors that emerge from the simultaneous experiences of race and gender. There are indications that gender exacerbates the responses to racial stressors. Studies have shown that African American women demonstrate more adverse physiological reactions to scenes of racially motivated police brutality than African American men.<sup>19</sup>

## STRESS AND COPING

When the number of stressors exceeds the capacity to cope, adverse emotional and physical responses are likely to occur. The consequences of stress are determined by the effectiveness of individual coping responses and resources. Personality, environmental resources, and biology determine the extent to which reactions to stress pose a risk for poor health outcomes. Reactions to stressful situations are tied to the biological factors governing physiological reactivity to stressors. Scientists believe that individual levels of reactivity may be evident during childhood or have their genesis in the prenatal stage.

In terms of emotional and social responses to stress, research suggests that women cope with stress differently from men. In contrast to the classical “fight and flight” reaction, females tend to engage in nurturing and care-giving responses in which they “tend or befriend.”<sup>20</sup> More research confirming this response would lend support to the notion that effective social support can help prevent poor pregnancy outcomes.

Such research would add to the body of literature showing that social support is a significant mediator for psychosocial stress; its positive effects on health outcomes are well established. In their nine-year study of social ties and health outcomes, Berkman and Syme found significant differences between the mortality rates for socially connected versus socially isolated individuals. Their research provides evidence of the importance of social connectedness for health and survival.<sup>21</sup> In an examination of the lives of middle-class African American women, Warren uncovered the protective effects of social support against depression.<sup>22</sup> Despite its positive impact, however, the research cautions that social support can reach a threshold, where the reciprocal expectations and demands of social networks exceed capacity, thereby creating stress.

Research, such as that by Ickovics and her colleagues, has suggested the positive impact of social support during pregnancy.<sup>23</sup> These investigators studied a Centering Pregnancy program, the intent of which is to accommodate the clinical, psychological, social, and behavioral aspects of pregnancy by having women, in groups, engaged in all

aspects of their prenatal health care. In their evaluation of the program, the researchers documented improved birthweights among the premature babies born to African American and Hispanic women who participated in group care, compared to those who engaged in individual prenatal care. However, there are no indications of how the particular concerns of race and gender are addressed as part of this program.

To date, population studies have failed to confirm that social support reduces high rates of premature births. Despite the lack of large-scale evidence of the impact of social support on pregnancy outcomes, the extensive data on social support and health indicate that this potential mediator is worthy of pursuit as an avenue for arresting the ill effects of stressors during pregnancy.

## THE ATLANTA STUDY OF GENDERED RACISM

There is growing scientific evidence connecting racial and gendered discrimination to health outcomes, and additional research is needed to uncover the specific ways that those experiences, in combination, compromise health. The perennial issue of how best to assess racial and gendered stressors is critical to connecting psychosocial experiences with the reactions to those experiences that stimulate the prolonged physiological responses resulting in poor health.

Generalized stress measures provide an opportunity to compare experiences across race, ethnicity, class, and gender. However, the ability to make those comparisons limits our capacity to assess *particular* racial or gendered experiences and how they affect health outcomes.

To address this methodological challenge, my colleagues from Spelman College and Emory University and I embarked upon research with the expressed purpose of developing a stress measure to assess racial and gendered stress among African American women. The specific goal of the research, conducted over a period of ten years, was to document the lived experiences of race and gender for African American women and to translate those experiences into a race- and gender-specific stress measure.

The agenda for the research placed great emphasis on the methodology for uncovering the stressors of race and gender. The principal objective was to ensure that the voices of African American women, sharing their own experiences of racial and gendered stress and critiquing our translation of those responses, functioned as the driver for an iterative multi-method process. Therefore, the research was designed as a community-based participatory effort that elicited the

collaboration of nearly 600 African American women living in Atlanta, Georgia.<sup>24</sup> The research was conducted in two phases: phase one involved mostly non-pregnant women and phase two enrolled women who were in the first to second trimester of their pregnancy. Research collaborators participated in interviews, focus groups, and the administration of the psychosocial measures of stress, anger, anxiety, and active coping. Most importantly, during the first phase they collaborated in the development of a racial and gendered stress tool by critiquing the form and content of the pilot measure.

The voices of research collaborators informed every phase of the research. Women who lent their voices, perspectives, and expertise represented diverse educational and income backgrounds. Ranging in age from 17 to 77, they came from all walks of life. They included college-educated and non-college educated women, with occupations across a range of professions.

As noted above, the research took place in Atlanta, Georgia. Atlanta offers a unique opportunity for examining the particular stressors of race and gender, both of which are embedded in class experiences. Because of the prosperity among black Atlanta residents and the progressive politics of the city, Atlanta has an international reputation as the “black mecca.” But this celebratory distinction exists in spite of Atlanta’s 25 percent poverty rate and its reputation for having one of the highest foreclosure rates in the nation.<sup>25</sup> This admixture of poverty and prosperity offered a useful setting in which to explore what African American women across socioeconomic categories saw as the explanation for health disparities.

The research began by asking African American women, gathered in alumnae groups, church and sorority meetings, and social occasions, “why do you think that African American women have such high rates of illnesses and premature death?” Their responses included diet, lack of exercise, and family history as explanations for the health disparities. Issues surrounding health care, its costs, insurance, and a lack of quality services were also offered as explanations.

As anticipated, the women also unanimously named stress as a major health risk. Janine, a woman in her early thirties, stated:

Sometimes I think we black women have the most stressful lives on the planet. I could be exaggerating, but sometimes I feel as if I am in the world by myself.<sup>26</sup>

The introductory meetings advanced from focus groups to interviews designed to elicit further elaboration on the ways that women experienced stress. Race was a central focus as the women expounded on unfair treatment in the workplace. One woman expressed:

I would work long hours because I wanted to make a good appearance...but it didn't make a difference. I was a black person and how dare I have the right to be there.<sup>27</sup>

Another woman, who was retired, talked about her experiences in the workplace:

Well, I was in situations where I was sometimes the first black...there were times when I elected not to take a job where they did not have another black person. I had listened to things that were not true...once I was very combative, I was talkative, I fought back...another stage I took it and that was worse.<sup>28</sup>

Race also came up when women talked about the actual and anticipated racial experiences of their children. One graduate of Spelman College said:

I voiced to my son’s assistant principal not too long ago some of the things that I have been concerned about with my children, [that] she will never have to worry about because my children are black and her children are white. She will never have to go in a store and the man was watching my children and I know that he thought that they were trying to steal, you see? And I was telling her about some things... I told her you don’t have to worry for your children... you don’t have what I have to worry about.<sup>29</sup>

Another woman, who shared her experiences as a classroom teacher, expressed these concerns:

I see a lot of divisiveness amongst the faculty along racial lines...particularly when I hear comments addressed at the kids [and] when I hear the white faculty members, maybe in the teachers’ lounge, making comments about “those kids” and that type thing.<sup>30</sup>

The interviews revealed that racial experiences always intersected with the expectations and perils of gender. The women talked extensively about high expectations and role overload as they assumed—and had imposed upon



them—the responsibilities of caregivers and nurturers. They discussed how those roles were made more difficult by the added burden of race. Particularly germane for pregnancy outcomes were the concerns they had about the racial experiences of their children even before they were born. Another Spelman graduate said:

[The pregnancy] scares the life out of me because I am pregnant with a baby boy and [I] know how black boys are treated in this society. And because I've seen them, it worries me because I wonder if [I] can give this baby what he needs in order to make it in this racist society.<sup>31</sup>

Another woman expressed her frustration about expectations of women as caregivers and nurturers:

You asked what advice did people give to me when I was pregnant? I always felt like, don't tell me...tell the people in my life. It's like, rest more. Okay—when? Could you help me with this part? So I need to get in a conference [with the people in my family]...sit down and tell the people.<sup>32</sup>

While there were women who felt cared for by husbands, partners, family, and friends, for others, pregnancy was the time when already fragile relationships dissolved. Kathy, a women in her late twenties, shared her experience with her partner:

We went from seeing each other every day to not seeing each other at all. From once to maybe twice a week...to barely seeing each other at all. I confronted him about the lack of support...he said he was afraid of what was going on and didn't know what to expect...how to be there for me.<sup>33</sup>

Their relationship ended before the birth of a premature, low birthweight baby girl. Before giving birth, the mother was bed-rested and hospitalized.

Analysis of the focus group and interview data was translated into statements that were subsequently included in a stress measure critiqued by African American women from across the city. As the result of a robust methodology, the Jackson, Hogue, Phillips Contextualized Stress Measure (JHP) was developed as an instrument to assess the intersection of the stressors of race and gender and to offer a measure that, when used in conjunction with other psychosocial tools, provides a context for interpreting the results.<sup>34</sup>

The results from administering the Jackson, Hogue, Phillips Contextualized Stress Measure confirm what the women said about race, particularly their encounters with racism in their communities, its effects on their children, and their experiences in the workplace. Responses that captured the gendered stressors confirmed high expectations for women to deliver support to others, with little reciprocity to address their own concerns or needs. The majority of the women (65 percent) agreed with the statement, "I am taking care of everyone, but no one is taking care of me." The results also provided clear indication of gendered stress in the workplace in the form of barriers to promotion or disregard for the contributions of women in workplace activities. The results from the assessment of the affective states of stress indicated that almost one-fourth of the women felt as if they were alone and that loneliness was significantly associated with racial and gendered stress.<sup>35</sup>

The quantitative responses to the Jackson, Hogue, Phillips Measure also reveal significant associations between gendered racism, anger, and anxiety. Those results offer an indication of how the intersection of racial and gendered stress is linked to anger and anxiety—both of which are risks for chronic diseases, especially cardiovascular disease. Anger and anxiety are implicated in hypertension, which poses a risk for preterm delivery.

There is a paucity of evidence for the associations between anger and blood pressure responses for African American women specifically. However, there are some indications that anger is a variable for hypertension for this population; limited research demonstrates the relationship between elevated ambulatory blood pressure and anger among African American women.<sup>36</sup> Participants in a qualitative study by Fields and colleagues expressed anger over the way that they were treated disrespectfully in the workplace.<sup>37</sup> In that study, the women were concerned about how to manage/express anger and not lose control. Interestingly, however, anger had its advantages as well because it was thought to be the impetus for action and change.

## CALMING THE WATERS

The final phase of the Atlanta Project was devoted to reporting the preliminary findings of the research to study participants and offering information on approaches for mediating the deleterious impact of stress. A two-day conference, entitled "Calming the Waters: Holding Back the Storms©," was created as a dissemination/intervention activity that encouraged research participants to offer their own coping responses corresponding to the particular stressors of race and gender.

This activity was developed in response to the reactions of research collaborators after participating in focus groups and interviews. Those sessions always extended beyond the scheduled time, and participants expressed their dismay over the absence of structured opportunities to dialogue about the stressors in their lives and to hear how women like themselves handled the burdens of their roles and responsibilities. To a certain extent, the exchanges among women during the conference—in sessions called “talking circles”—continued the dialogue that took place as part of the research. However, facilitated sessions during the conference placed greater emphasis on coping strategies. The goal was to provide information and demonstrations on coping strategies that included meditation, diet, and exercise, and to elicit the approaches the women employed to manage and enhance their lives.

The process for the conference included explicit attention to girlfriend relationships, a core element of social support, and explorations of the particular components of religion and spirituality in stress mediation. The aim was to foster the development of social networks designed to support women in their struggles with racial and gendered stress, as part of the process for addressing African American women’s health needs. The emphasis on social support and social networks is embedded in the goal of empowering African American women to advocate for their own health care needs. These health needs can be best addressed by encouraging good health practices that include paying attention to emotional as well as physical health. By examining the negative consequences of prolonged stress, this approach also helps to de-stigmatize mental health care.

## BEST PRACTICES

The draconian cuts to programs and services for expectant mothers and their babies come at a time when there is evidence to support programmatic expansion to address the psychosocial needs of women at risk for adverse reproductive outcomes. But hope prevails.

Our research uncovered a number of “best practices” that exist with respect to improving pregnancy outcomes among women at risk. National Friendly Access is a program of the Rhea and Lawton Chiles Center at the University of South Florida and is designed to change the culture of public maternal and child health care delivery.<sup>38</sup> With its focus on respect and caring, it seeks to improve health care access, satisfaction, and outcomes through training and accountability to produce quality prenatal care. As a consortium of programs with preexisting track records, staff training emphasizes customer care that is culturally, racially, and gender sensitive.

A partnership with Genesee County, Michigan, offers a model of a successful collaboration among community residents, public health workers, industry, and an academic institution to address the devastation of infant death in that community.<sup>39</sup> The Genesee project is a comprehensive effort that addresses not only the physical and emotional needs of expectant mothers, but also the conditions in their lives contributing to poor birth outcomes. A cornerstone of that collaboration between the health agencies, community and industry from Genesee County, and the University of Michigan is the project’s explicit examination of the adverse impact of racism on health through seminars and community dialogue. Hence, cultural competency training, inclusive of the acknowledgment of the adverse effects of racism on health, is key to improving prenatal services. The project also emphasizes the economic concerns of the community. Most impressive is the utilization of community residents as advocates who respond to the array of needs of expectant mothers. As “experts” in the lives of the women whom they serve, the advocates themselves are empowered through employment and the support they offer to pregnant women living in their communities.

Other models have demonstrated the importance of empowering women, particularly poor women, as community health workers who monitor pregnancy, birth, and early motherhood in their neighborhoods. And it is in these relationships between community workers and their neighbors where the subtle and profound experiences of race and gender, and their immediate impact on the lives of women and their infants, are addressed.

Finally, the Centering Pregnancy project indicates that women benefit from collaborative prenatal care. Calming the Waters: Holding Back the Storms® offers a model for dialogue and the expression of individual and collective responses to the ill effects of race and gender on the health of African American women, particularly those who are pregnant.

Ultimately, efforts to improve birth outcomes must confront the structural issues surrounding employment, housing, education, and safety, as these are paramount concerns embedded in the racial and gendered realities of African American women’s lives. But equally important as systemic and structural changes are support and promotion of relational responses to the particular stressors of pregnancy that are present before conception and continue after birth and throughout the life span.



## POLICY RECOMMENDATIONS

The current crisis signals the need to pay close attention to the conditions in the lives of African Americans that lead to the pain of the loss of a child, particularly the psychosocial factors that pose risks for poor pregnancy outcomes. It is imperative that a concerted effort on the part of government, medical agencies, communities, and faith organizations be mounted to stop this national tragedy—babies' lives are at stake.

The following recommendations flow from the research findings presented in this report.

### Research

- Expand the current research focus on reproductive disparities to include the preconceptual and interconceptual experiences that affect birth outcomes.
- Align research methodologies to the realities of the lives of African American women in ways that maximize data gathering to inform culturally sensitive and sustainable interventions.
- Examine the assets within African American communities that account for positive birth outcomes in spite of adverse environmental conditions.
- Document and evaluate existing medical services that include psychosocial care.
- Examine the existing interactions among key institutions within African American communities—i.e., churches, civic organizations, schools, and health care agencies—to explore potential avenues of collaboration for addressing psychosocial risk for poor pregnancy outcomes.
- Advance lifespan research that connects childbearing experiences with the development of psychosocial risk for chronic diseases.

### Policy

- Provide support to create comprehensive prenatal care that addresses the psychosocial needs as well as the medical concerns of expectant mothers across socioeconomic categories.
- Provide funding for comprehensive culturally sensitive, race- and gender-specific research and interventions explicitly designed to respond to the current crisis of infant mortality. These programs must be community based and include a focus on expectant fathers.
- Provide support to empower community-based initiatives and existing programs designed to monitor and support positive pregnancy outcomes.
- Examine the conditions that have produced the rise in infant deaths and address these conditions as a civil rights issue.

## NOTES

1. E. Eckholm, "In Turnabout, Infant Deaths Climb in South," *New York Times*, April 22, 2007, Volume CLVI 53.922.
2. D. Rowley, "Closing the Gap, Opening the Process: Why Study Social Contributors to Preterm Delivery among Black Women," *Maternal and Child Health Journal* 5, no. 2: 71-74.
3. C. Berg, L. Wilcox, and P. J. d'Almada, "The Prevalence of Socioeconomic and Behavioral Characteristics and their Impact on Very Low Birthweight in Black and White Infants in Georgia," *Maternal and Child Health Journal* 5, no. 2 (2001): 75-84; C. Hogue and J. Bremner, "Stress Model for Research into Preterm Delivery among Black Women," *American Journal of Obstetrics and Gynecology* 192 (5 Suppl) (2005): s47-55.
4. The Healthy Start Coalition of Hillsborough County, analysis of local and state maternal and child health data, 2006.
5. S. Iyasu, J. Becerra, D. Rowley, and C. Hogue, "Impact of Very Low Birthweight on the Black-White Infant Mortality Gap," *American Journal of Preventive Medicine* 8, no.5 (1992): 271-77; Bureau of the Census, Poverty Table: POV01, *Age and Sex of All People, Family Members and Unrelated Individuals Iterated by Income-to-Poverty Ratio and Race* (CPS 2006 Annual Social and Economic Supplement).
6. K. C. Schoendorf, C. J. Hogue, J. C. Kleinman, and D. Rowley, "Mortality among Infants as Compared with White College-educated Parents," *New England Journal of Medicine* 326, no.23 (1992):1522-26.
7. Rowley, "Closing the Gap, Opening the Process."
8. R. Zambrana, S. Scrimshaw, N. Collins, and C. Dunkel Schetter, "Prenatal Health Behaviors and Psychosocial Risk Factors in Pregnant Women of Mexican Origin: The Role of Enculturation," *American Journal of Public Health* 87, no.6 (1997): 1022-26.
9. X. Wang, B. Zuckerman, G. A. Coffman, and M. J. Corwin, "Familial Aggregation of Low Birth Weight among Whites and Blacks in the United States," *New England Journal of Medicine* 333 (1995): 1744-49.
10. R. M. Sapolsky, *Why Zebras Don't Get Ulcers: An Updated Guide to Stress, Stress-related Diseases and Coping* (New York: W. H. Freeman Company, 1998).
11. P. D. Wadhwa, J. F. Culhane, V. Rauh, S. S. Barve, V. Hogan, C. A. Sandman, et al., "Stress, Infection and Preterm Birth: A Biobehavioral Perspective," *Pediatric Perinatal Epidemiology* 15 (2001): 17-29.
12. A. T. Geronimus, "The Weathering Hypothesis and the Health of African-American Women and Infants: Evidence and Speculation," *Ethnicity and Disease* 2, no.3 (1992): 207-21.
13. J. P. Harrell, M. M. Merritt, and J. Kalu, "Racism, Stress, and Disease," in *African American Mental Health*, ed. R. Jones (Hampton, VA: Cobb & Henry Publisher, 1998), 247-80; D. Williams, "Racial/Ethnic Discrimination and Health: Findings from Community Studies," *American Journal of Public Health* 93, no. 2 (2003): 200-08; C. Jones, "Levels of Racism: A Theoretic Framework and a Gardener's Tale," *American Journal of Public Health* 90, no.8 (2000): 1212-15; J. A. LaVeist , R. Sellers, and H. W. Neighbors, "Perceived Racism and Self and System Blame Attribution: Consequences for Longevity," *Ethnicity and Disease* 11, no.4 (2001): 711-21.
14. Williams, "Racial/Ethnic Discrimination and Health."
15. J. P. Harrell, *Manichean Psychology: Racism and the Minds of People of African Descent* (Washington, DC: Howard University Press, 1999).
16. T. Lewis, S. A. Everson-Rose, L. H. Powell, K. A. Matthews, C. Brown, K. Karavolos, et al., "Chronic Exposure to Everyday Discrimination and Coronary Artery Calcification in African-American Women: The SWAN Heart Study," *Psychosomatic Medicine* 68, no. 3 (2006): 362-68.
17. S. Gore and T. W. Mangione, "Social Roles, Sex Roles, and Psychological Distress: Additive and Interactive Models of Sex Differences," *Journal of Health and Social Behavior* 24, no. 4 (1983): 301-312; L. Gianakos, "Predictors of Coping with Work Stress: The Influence of Sex, Gender Role, Social Desirability, and Locus of Control," *Sex Roles* 46 (2002): 149-60.
18. J. K. Kiecolt-Glazer, P. T. Marucha, W. B. Malarkey, A. M. Mercado, and R. Glazer, "Slowing of Wound Healing by Psychological Stress," *Lancet* 346, no. 4 (1995):1194-96; J. K. Kiecolt-Glazer, T. Newton, J. T. Cacioppo, R. C. MacCallum, R. Glaser, and W. B. Malarkey, "Marital Conflict and Endocrine Function: Are Men Really More Physiologically Affected than Women?" *Journal of Consulting and Clinical Psychology* 64, no. 2 (1996): 324-32.



19. D. R. Jones, J. P. Harrell, C. E. Morris-Prather, J. Thomas, and N. Omowale, "Affective and Physiological Responses to Racism: The Roles of Afrocentrism and Mode of Presentation," *Ethnicity and Disease* 6, no. 1-2 (1996): 109-22.
20. S. E. Taylor, L. C. Klein, B. P. Lewis, T. L. Gruenewald, R. A. R. Gurung, and J. A. Updegraff, "Biobehavioral Responses to Stress in Females: Tend-and-Befriend, Not Fight-or-Flight," *Psychological Review* 107, no. 3 (July 2000): 411-29; B. Fields, K. Reesman, C. Robinson, A. Sims, K. Edwards, B. McCall, B. Short, and S. P. Thomas, "Anger of African American Women in the South," *Issues of Mental Health Nursing* 19, no. 4 (Jul-Aug 1998): 353-73.
21. L. F. Berkman and S. L. Syme, "Social Networks, Host Resistance, and Mortality: A Nine-year Follow-up Study of Alameda County Residents," *American Journal of Epidemiology* 109, no. 2 (1998): 186-204.
22. B. J. Warren, "Depression, Stressful Life Events, Social Support, and Self-esteem in Middle Class African American Women," *Archives of Psychiatric Nursing* 11, no. 3 (1997): 107-17.
23. J. R. Ickovics, T. S. Kershaw, C. Westdahl, S. Schindler Rising, C. Klima, H. Reynolds, and U. Magriples, "Group Prenatal Care and Preterm Birth Weight: Results from a Matched Cohort Study of Public Clinics," *Obstetrics and Gynecology* 102 (2003): 1051-57.
24. F. Jackson, C. Hogue, and M. Phillips, "Examining the Burdens of Gendered Racism: Implications for Pregnancy Outcomes among College-educated African American Women," *Maternal and Child Health Journal* 5, no. 2 (2003): 95-107; F. Jackson, "Considerations for Community-based Research with African American Women," *American Journal of Public Health* 92, no. 4 (2002): 561-64; F. Jackson, "Calming Waters: A Research Dissemination Project for Stress Reduction among African American Women," Ford Foundation final report (September 2006).
25. R. Bullard and E. K. Thomas, "Atlanta: Mecca of the Southeast," *In Search of the New South: The Black Urban Experience in the 1970s and 1980s*, ed. R. Bullard (Tuscaloosa, AL: University of Alabama Press, 1989); D. Sjoquist, *The Atlanta Paradox* (New York: Russell Sage Foundation, 2000).
26. F. Jackson, "Social Determinants of Women's Health: In Our Best Interest," Governors' Conference on Women's Health, Orlando, Florida, 2006.
27. Ibid.
28. Jackson et al., "Examining the Burdens of Gendered Racism."
29. Jackson, "Considerations for Community-based Research."
30. Jackson et al., "Examining the Burdens of Gendered Racism."
31. Ibid., 95.
32. Jackson, "Calming Waters."
33. Ibid.
34. F. Jackson, C. Hogue, and M. Phillips, "The Development of a Race and Gender-specific Stress Measure for African America Women: Jackson, Hogue, Phillips Contextualized Stress Measure," *Ethnicity and Disease* 15, no. 4 (2005): 594-600.
35. Ibid.
36. L. A. Durel, C. S. Carver, S. B. Spitzer, M. M. Llabre, J. K. Weintraub, P. G. Saab, and N. Schneiderman, "Associations of Blood Pressure with Self-report Measures of Anger and Hostility among Black and White Men and Women," *Health Psychology* 8 no. 5 (1989): 557-75.
37. Fields et al., "Anger of African American Women in the South."
38. National Friendly Access is a program that advances quality prenatal care delivery. The invited sites were located in Indianapolis, Indiana; Jacksonville, Florida; East Tennessee; and Flint/Genesee County, Michigan. See <http://www.chilescenter.org/newsletters/winter01.pdf>.
39. R. Pestroni and M. Franks, "A Partnership to Reduce African American Infant Mortality in Genesee County, Michigan," *Public Health Reports* 118 (July/August 2003): 324-35.

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Fleda Mask Jackson, PhD, is a scholar with considerable expertise on the psychosocial factors contributing to the health and well-being of African American women. A college professor, researcher, and administrator, Dr. Jackson's work has focused on explorations of the significance of race, gender, and culture in the lives of African American women, as well as on the educational experiences of children. As a faculty member at the Rollins School of Public Health, she conducted seminal work on racial and gendered stress that led to the development of a unique tool for assessing the content and context of stressors confronted by African American women. This work was conducted with generous funding from the Centers for Disease Control and Prevention and the Ford Foundation.

Dr. Jackson serves as a member of the National Advisory Committee on Health Disparities for the Centers for Disease Control and Prevention. The author of numerous publications and a sought-after presenter at conferences for all types of audiences, Dr. Jackson also has been honored with several awards and recognitions. She is the recipient of the Alumnae Achievement Award from Spelman College and the Delta Torch Award for Activism in Health. The city of Atlanta recognized her work by honoring her in 2002 with a proclamation making September 24th Dr. Fleda Mask Jackson Day.

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