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TO: Members of the Life Enrichment Committee
FROM: Councilmember Desley Brooks
DATE: February 9, 2010

RE: **An Informational Report from UC Berkeley School Of Public Health On Racial Disparities: Social Stress As A Fundamental Cause Of Health Disparities**

Attached for your reference is a report prepared by UC Berkeley School of Public Health. Assistant Professor Amani Nuru-Jeter will be available to present the report and answer questions.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Desley Brooks".

Desley Brooks –Councilmember Dist. 6
Chair of Life Enrichment Committee

Enclosed:
Attachment A
Attachment B

Item: _____
Life Enrichment Comte.
February 9, 2010



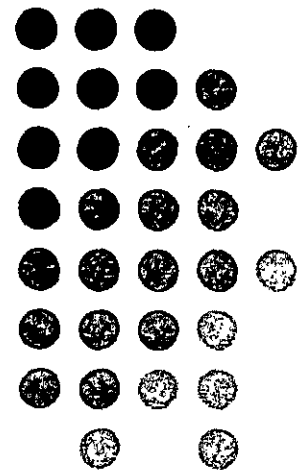
School of
Public Health

Racial disparities in Birth Outcomes: *Social stress as a fundamental cause of health disparities*

Amani Nuru-Jeter, Ph.D., M.P.H.
University of California, Berkeley

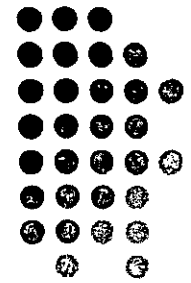
Life Enrichment Committee
Oakland City Council

February 9, 2010

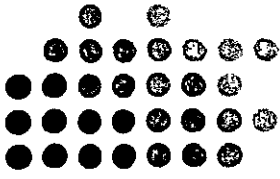


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The facts on racial disparities in birth outcomes

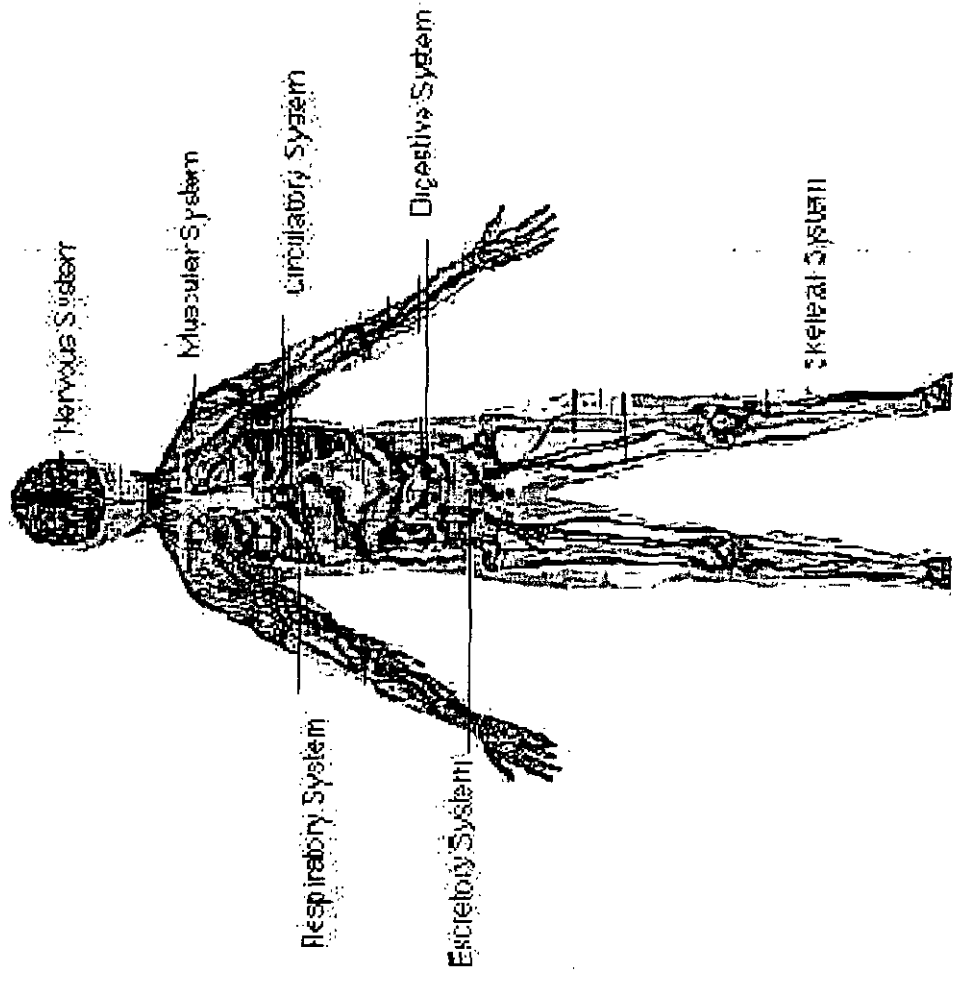


- Blacks have 2-3X the rate of IM, LBW/VLBW, PTD/VPTD, and maternal mortality compared to all other racial groups
- Poor birth outcomes related to health and developmental problems over the life course
 - Ex: PTD → respiratory, gastrointestinal, immune fn, neurological impairments, and socio-emotional difficulties
 - LBW → to chronic disease in adulthood (e.g., diabetes, heart disease)
- Racial divide in poor birth outcomes has persisted over time.



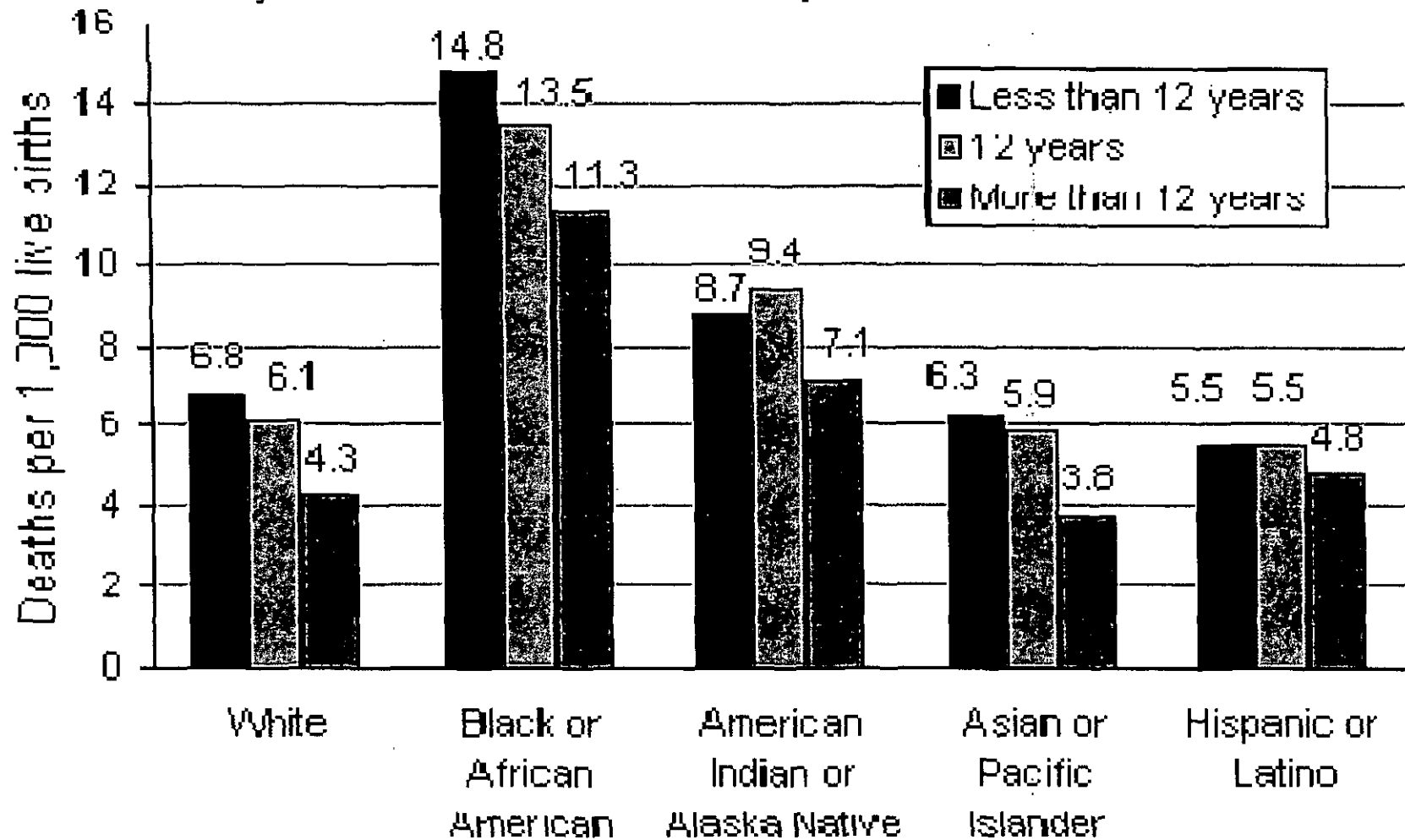
How Does "Race" Get Into the Body?

Race →



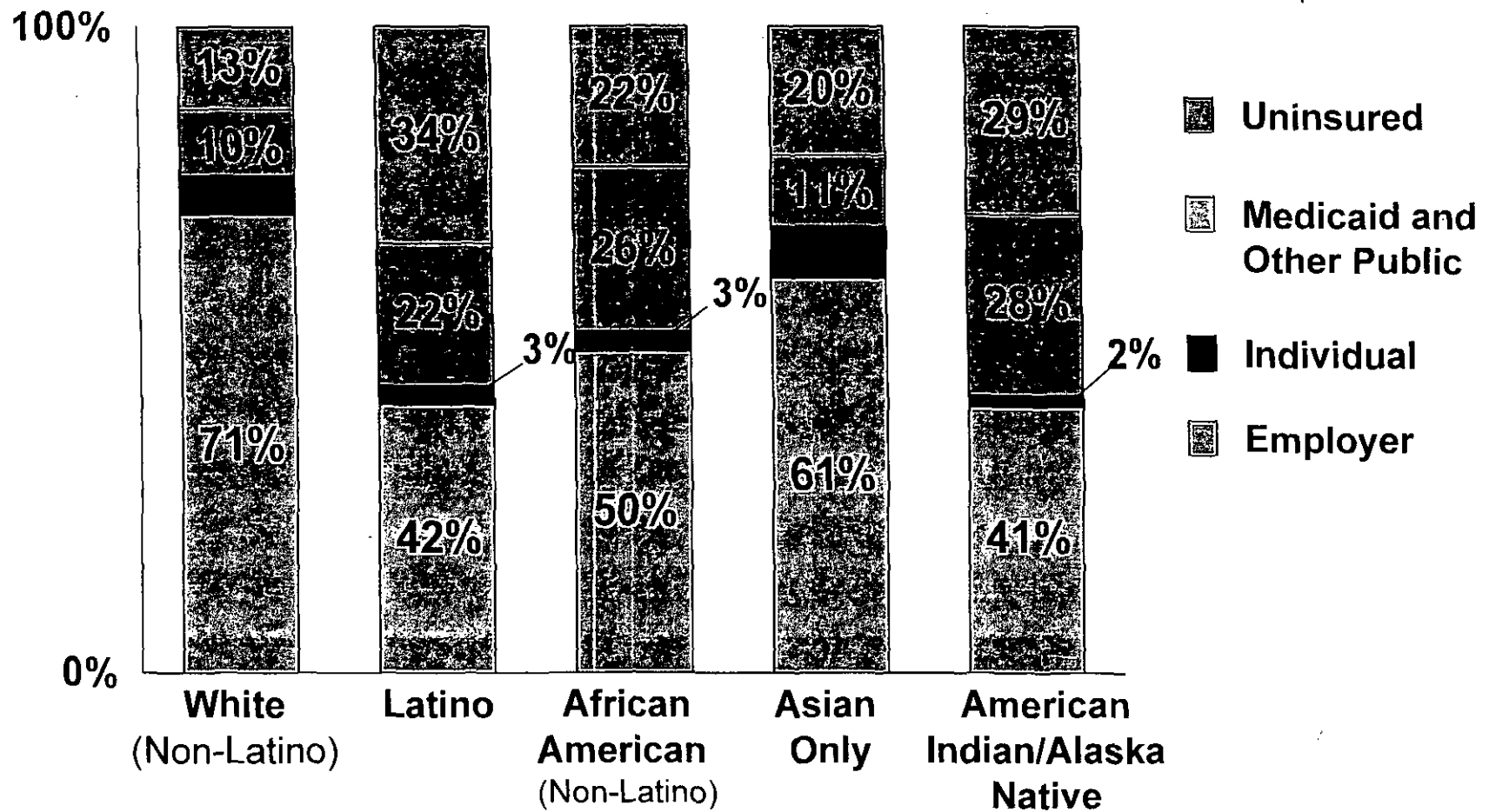
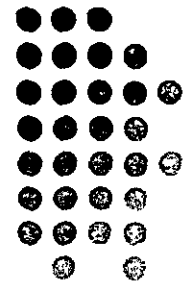
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Infant Mortality in 2008 by Mother's Race/Ethnicity and Level of Education



Source: Health, United States, 2006. Nat. Center for Health Statistics, U.S. DHHS

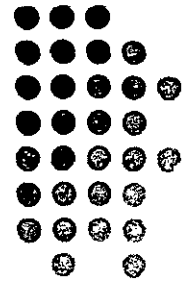
Health Insurance Coverage of the Nonelderly Population by Race/Ethnicity, 2002



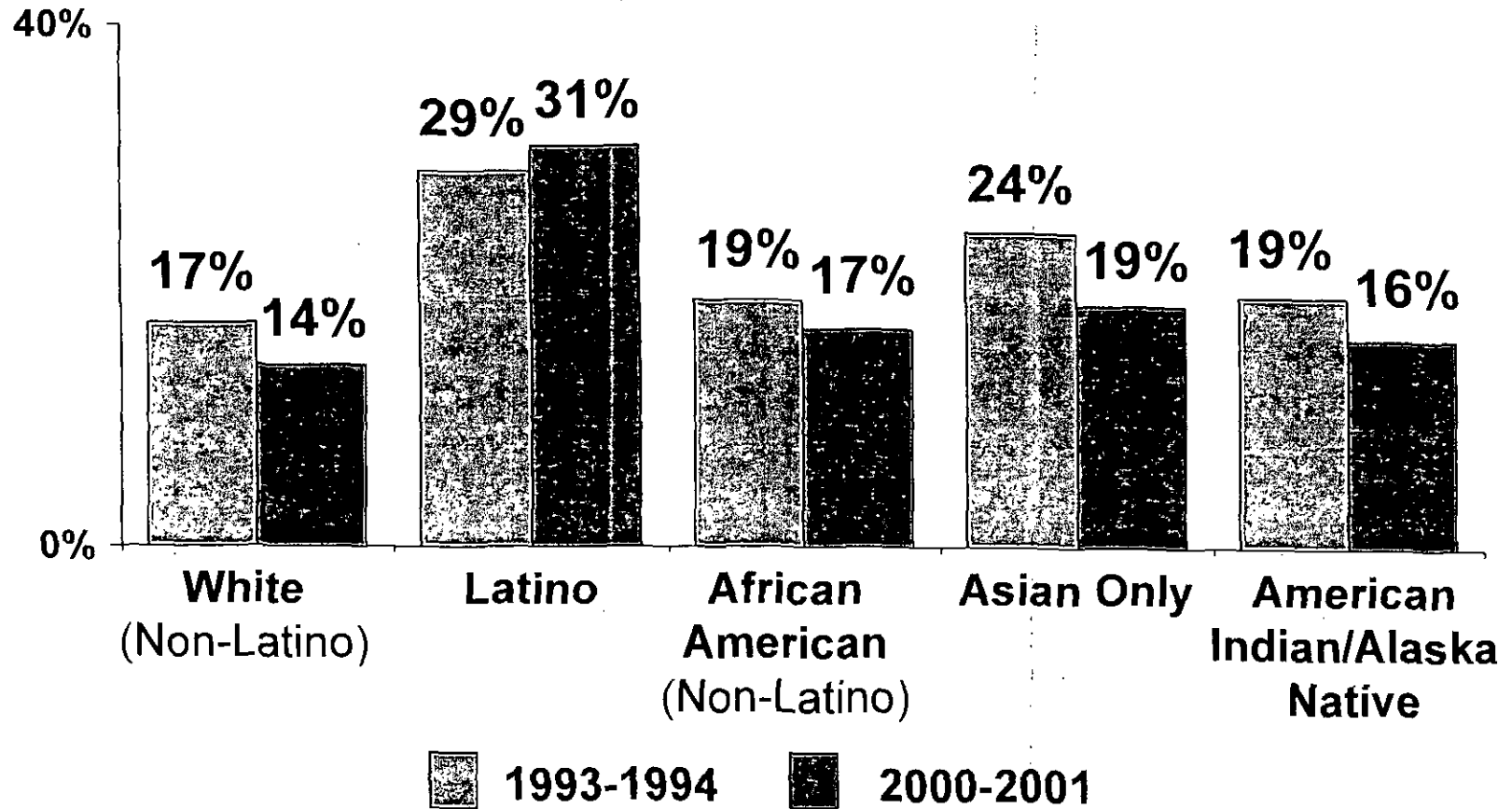
NOTE: "Other Public" includes Medicare and military-related coverage; two or more races not shown.

SOURCE: Kaiser Commission on Medicaid and the Uninsured, *Health Insurance Coverage in America: 2001 Data Update*, 2003.

No Usual Source of Health Care: Adults 18-64, by Race/Ethnicity

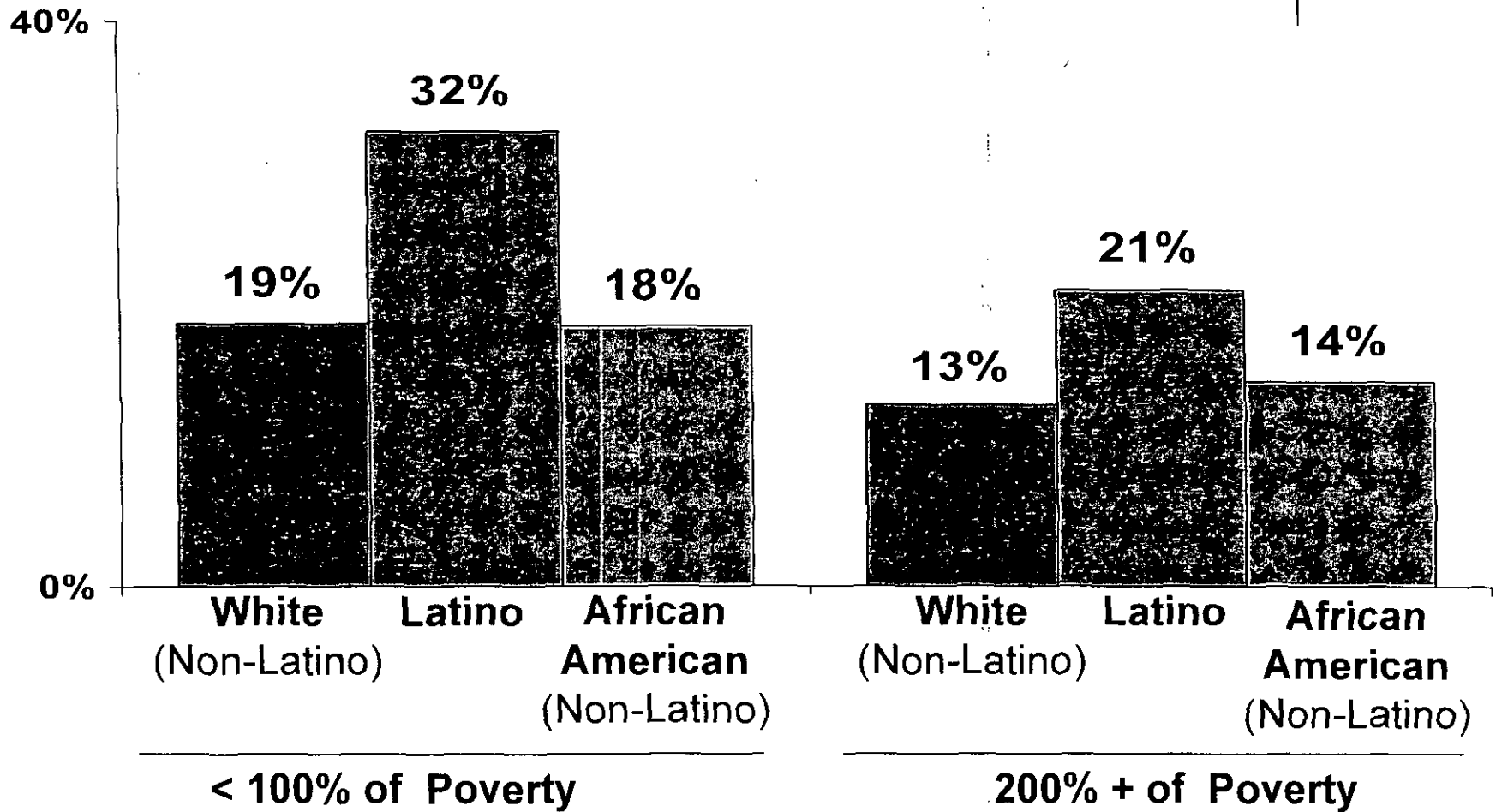
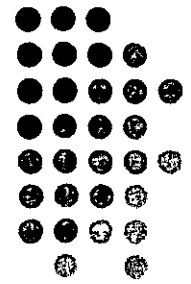


Percent without a usual source of care



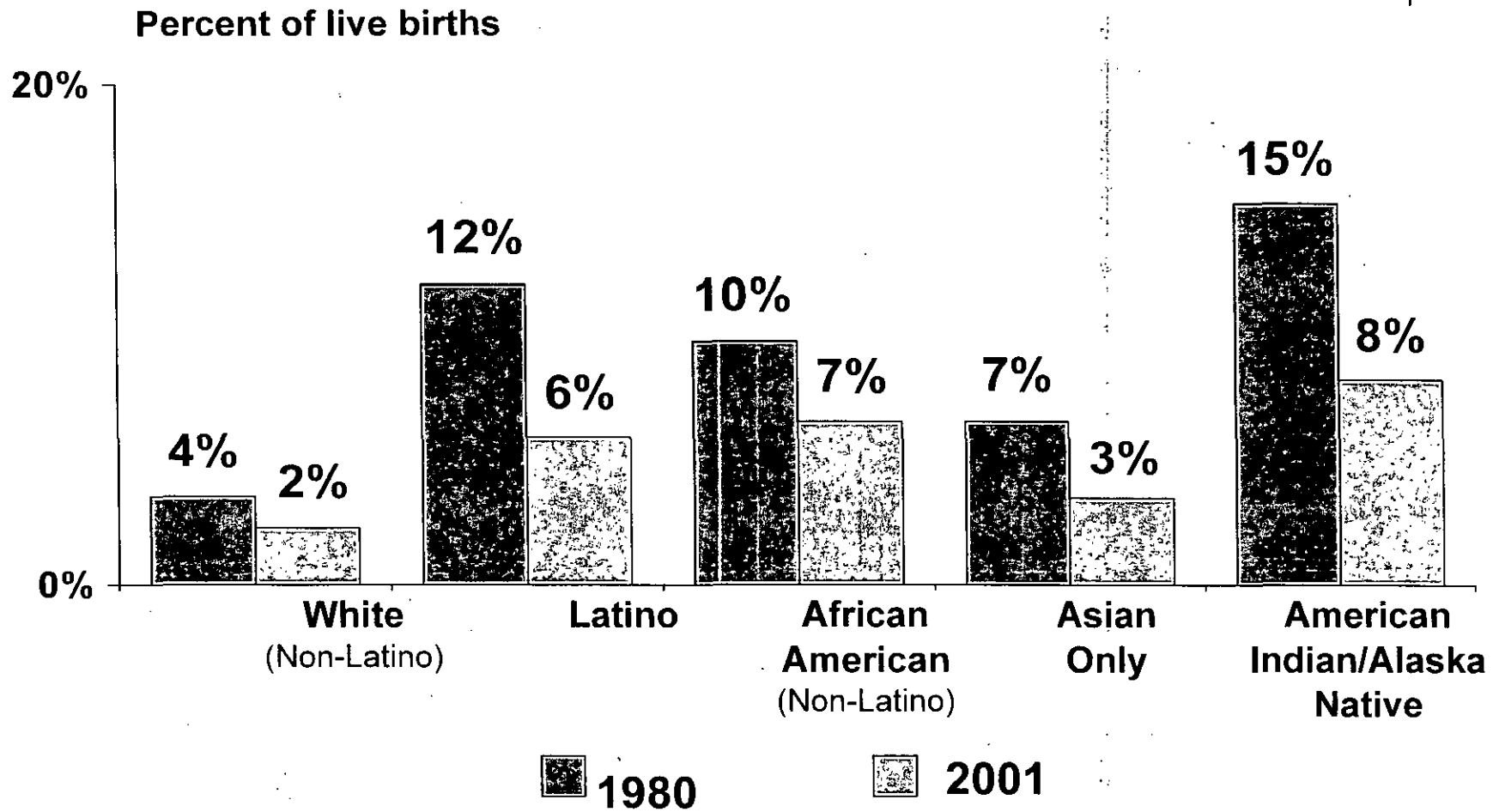
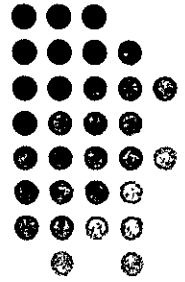
DATA: National Center for Health Statistics, National Health Interview Survey.
 SOURCE: *Health, United States, 2003*, Table 76.

Percent with No Health Care Visits in the Past Year, by Race/Ethnicity and Poverty Status, 2000



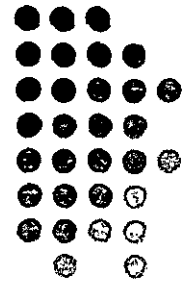
DATA: National Center for Health Statistics, National Health Interview Survey, 2000. *Health, United States, 2002*, Table 72. SOURCE: Kaiser Family Foundation, *Key Facts: Race, Ethnicity and Medical Care*, 2003, Figure 20b.

Late or No Prenatal Care, by Race/Ethnicity, 1980 and 2001



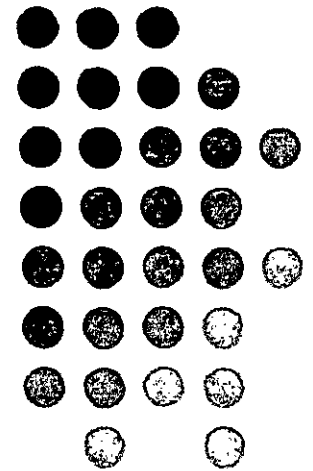
DATA: National Center for Health Statistics, National Vital Statistics System. SOURCE: *Health, United States*, 2003, Table 6.

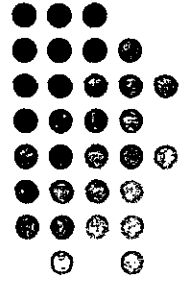
Common explanations



- Access to care
 - Utilization rates
 - Quality of care
- } 10%
- Genetics (20%)
- Social factors
 - Behavior
 - Social and environmental factors
- } 70%

Race, Stress, and Health

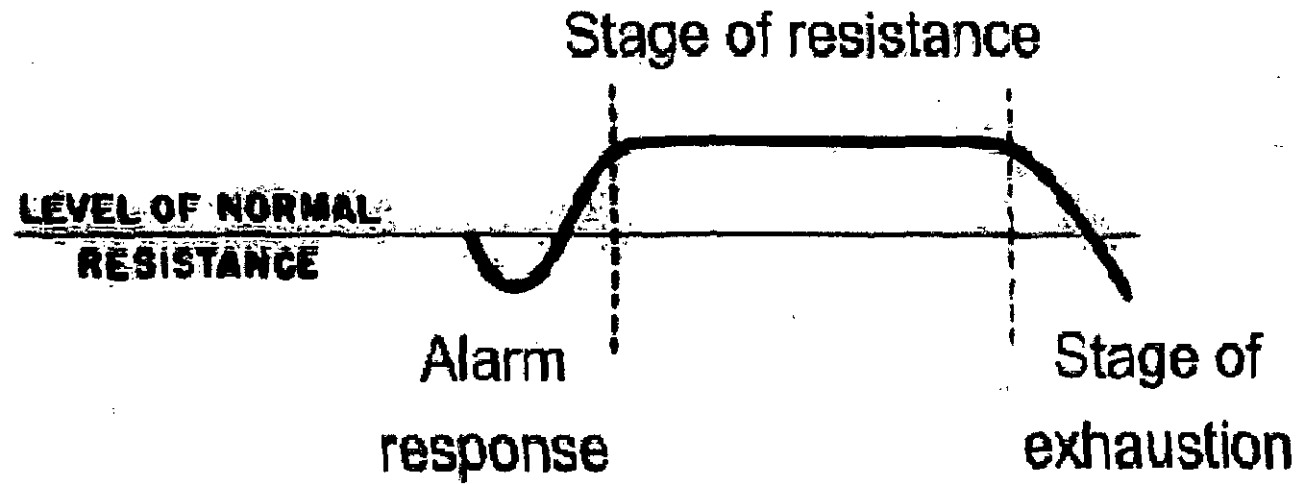
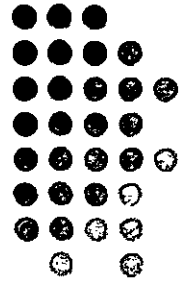




Birth outcomes

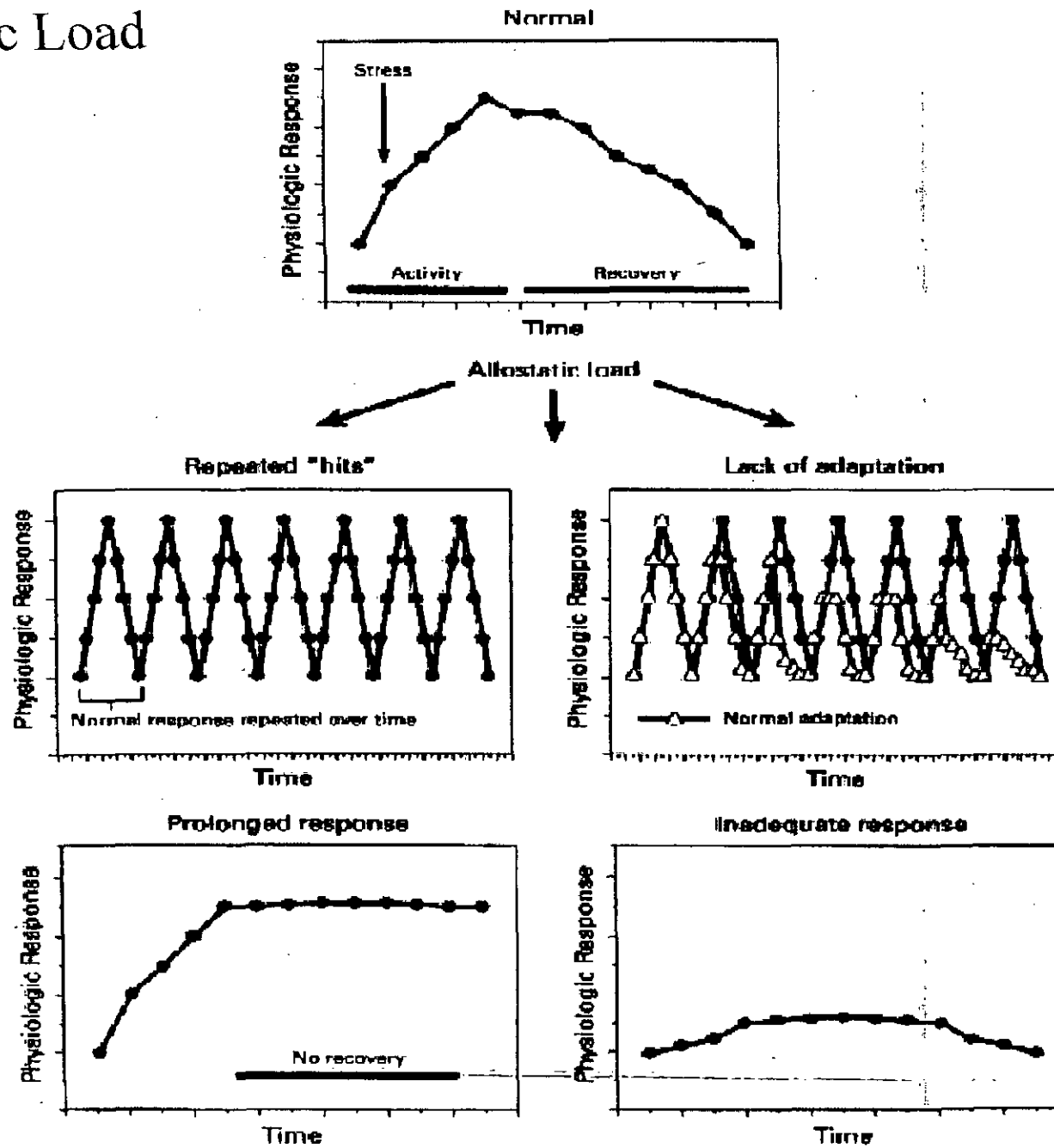
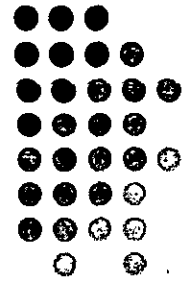
- Disparity not fully explained
 - ❖ Known risk factors explain ~50% of the risk differential
 - ❖ Disparity is greater at higher SES
- Chronic social stress explanation
 - ❖ Racism as chronic social stressor among African Americans
 - ❖ Psychosocial stress → physiologic stress
- Chronic physiologic stress
 - ❖ Compromised immune and other bodily systems
 - ❖ Toxic fetal environment via stress hormones
 - ❖ Health behavior
 - ❖ LBW, preterm delivery, birth defects, miscarriage, maternal mortality

General Adaptation Syndrome

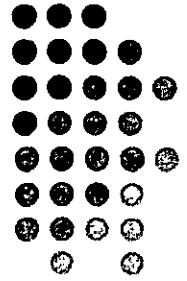


Selye (1954)

Allostatic Load

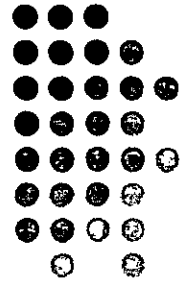


Example: Cortisol



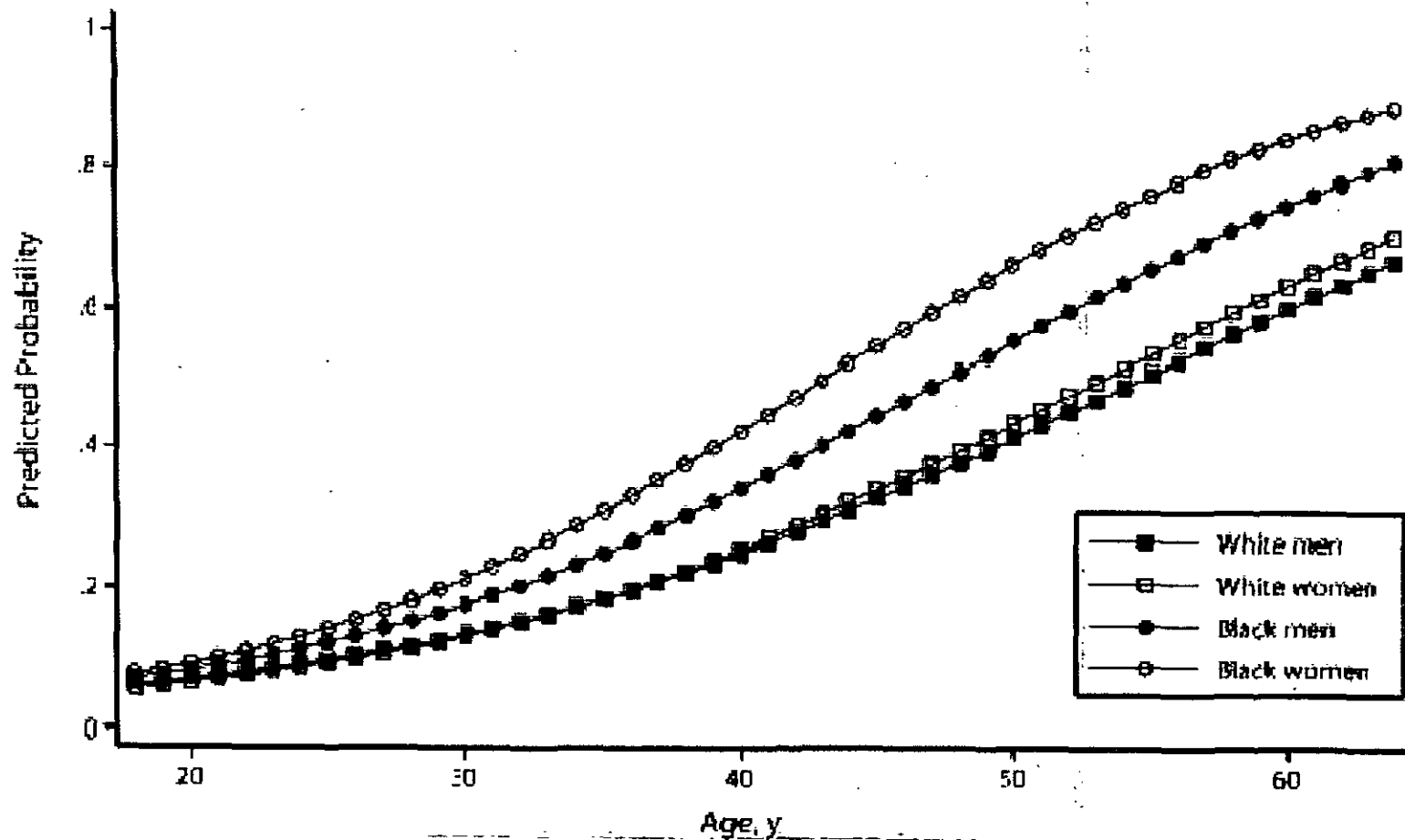
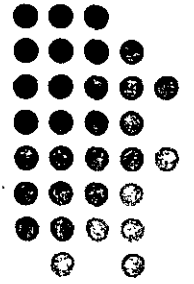
- Allostasis
 - Glucose metabolism
 - Blood pressure regulation
 - Immune function
 - Inflammatory response
- Dysfunction
 - Impaired cognitive fn
 - Blood-sugar imbalance (maternal complications)
 - Hbp (maternal mortality; PTD)
 - Immune suppression (maternal mortality, PTD)
 - Adrenal failure
 - Abdominal fat → heart attack, stroke
 - ↑ LDL
 - Decreased bone density

How stress affects the body I

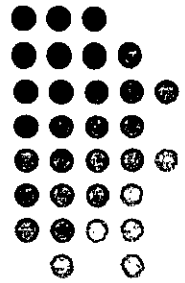


- Adaptational responses to stressors → allostatic load
 - ❖ Over-circulation of stress hormones → compromised immune and other bodily systems (McEwen 98)
 - ❖ Black women have 3X higher levels of allostatic load and premature physiologic aging during reproductive years compared to white women (Geronimus 06)
- “Weathering” - premature aging/decline in African American women’s reproductive health (Geronimus 99; Rich-Edwards et al 03)

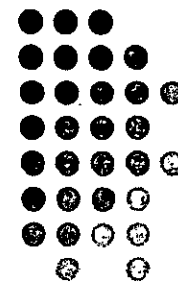
Probability of allostatic load



How stress affects the body II



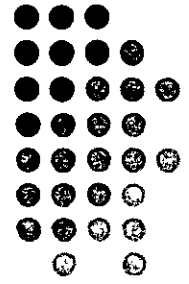
- African Americans show increased cardiovascular reactivity to racism in lab settings (Harrell et al 03; Hilmert et al, 2008)
 - ❖ Bp reactivity related to shorter gestational length and lower birthweight in laboratory settings among low-risk pregnant women (McCubbin et al 96)
- African American women highest rates of hypertensive disorders and bacterial vaginosis during pregnancy (Samadi & Mayberry 98; Goldenberg et al 96; Culhane et al 01)
 - ❖ both associated with chronic stress in pregnant women.
- Racism-related stress → unhealthy coping behaviors
 - ❖ Smoking (Landrine & Klonoff 2000)
 - ❖ Alcohol consumption (Yen et al 1999)



Perceived racism and birth outcomes

- ~13 studies examining relationship between perceived racism and pregnancy outcomes
 - ❖ 3X higher odds of VLBW (Collins et al 2000; Collins et al 2004)
 - ❖ Increased risk of preterm birth (Rosenberg et al 2000; Dole et al 2003)
- Feeling a need to protect children from racism and racism in the workplace → distress (Jackson et al 2001)
 - ❖ Hypothesized: perceived racism prior to and during pregnancy → adverse pregnancy outcomes
- Other studies
 - ❖ Psychosocial stress → LBW among blacks (Orr et al 1996)
 - ❖ Hypothesized: racism and psychosocial factors (e.g., coping style) → adverse pregnancy outcomes (David and Collins 1991)

Measures of Racism (MORS)



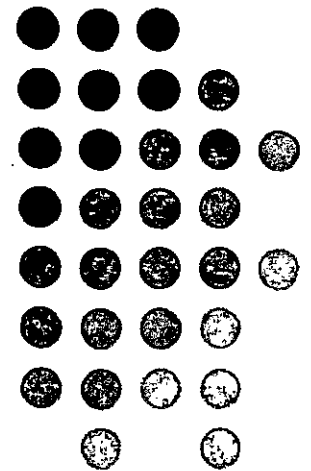
“I don’t think I really think about it. I just know ***it’s the skin you’re in. It’s just another part of your life.***”

“It’s the Skin You’re In”: African American Women Talk about Their Experiences of Racism

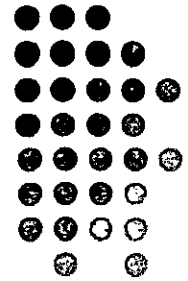
Nuru-Jeter A, Dominguez TP, Hammond WP, Leu J, Skaff M, Egerter S, Jones CP, Braveman P.

Maternal and Child Health Journal, 2008

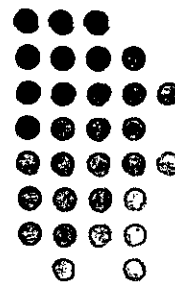
Racial Segregation



Racial segregation



- Theoretical framework
 - experience of chronic stress
 - by-product of depressed socio-environmental conditions
- Socio-environmental conditions (e.g., political economy)
 - markers for exposure to stress
 - differential exposure to health resources and risk factors (schools, employment & economic opportunities, access to health care, housing quality)
- Racial minorities exposed to more adverse socio-environmental conditions
 - standard of living & quality of life
 - area differences → varying patterns of morbidity/mortality



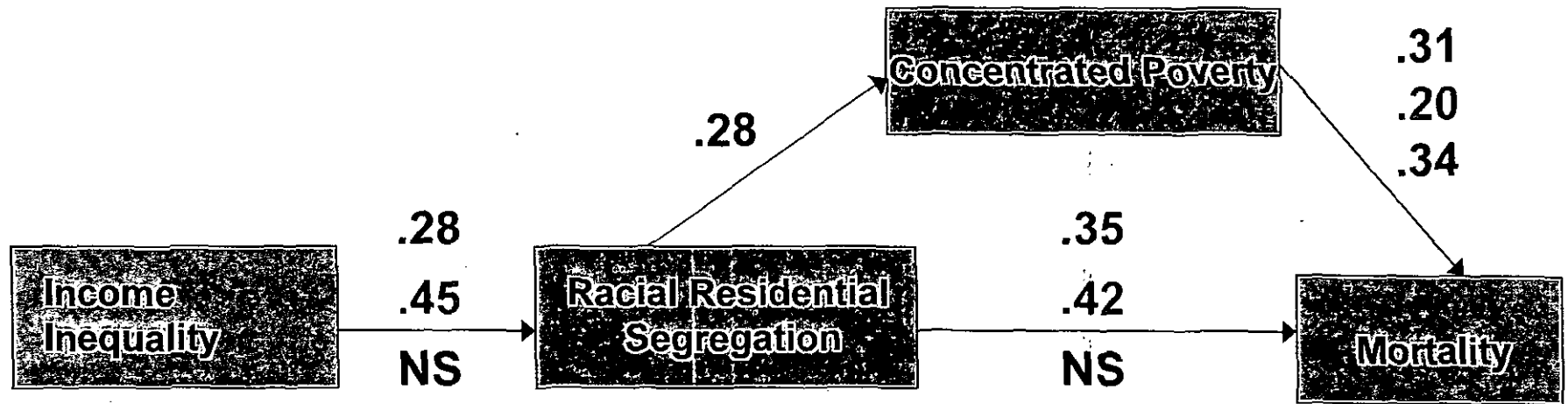
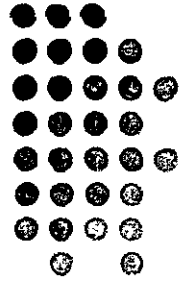
In their own words...

- *“There are too many liquor stores in a black neighborhood. [In] **other** neighborhoods there are **grocery stores.**”*

- Berk, high SES
- *“The majority of African-Americans live in **impoverished... neighborhoods**, and ... I notice that those **schools are really low quality** in the impoverished neighborhoods, or the neighborhoods **where there’s people of color...**”*

- SF, low SES

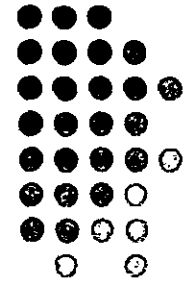
Racial segregation matters more for Blacks



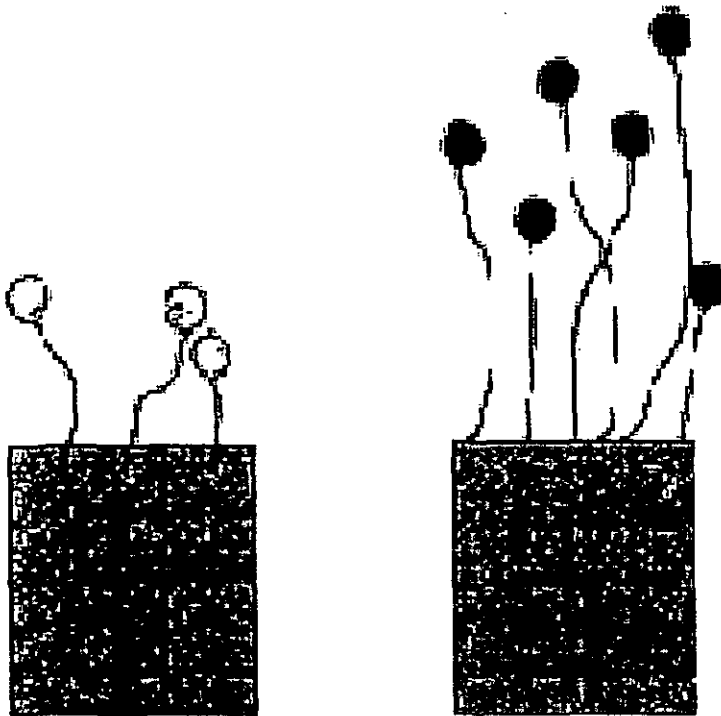
Legend:

Total sample
 Black
 White

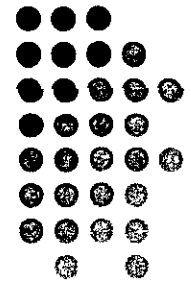
Nuru-Jeter A et al, in progress



Institutional racism: Investment in opportunity



- Initial historical insult
- Structural barriers
- Inaction in face of need
- Societal norms
- Biological determinism
- Uneamed privilege

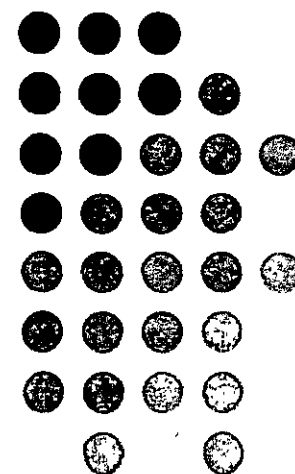


What do we do about it?

- Emphasizes importance of place as potential target for health and social policy/program efforts.
 - ❖ Healthy Places = Healthy People
 - ❖ Focus on socioenvironmental context
- Focus on racial minorities (e.g., distributive justice policies)
 - ❖ The rising tide does NOT lift all boats
 - ❖ Population approach vs. “high risk” approach (political feasibility ?)
 - ❖ Changing demographics = health for all
- Developmental approach
 - ❖ Lifecourse perspective (developmentally appropriate risks/benefits)
- Identification of risk ~~AND~~ protective factors

Thank you!

anjeter@berkeley.edu



“It’s The Skin You’re In”: African-American Women Talk About Their Experiences of Racism. An Exploratory Study to Develop Measures of Racism for Birth Outcome Studies

Amani Nuru-Jeter · Tyan Parker Dominguez · Wizdom Powell Hammond ·
Janxin Leu · Marilyn Skaff · Susan Egerter · Camara P. Jones ·
Paula Braveman

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Abstract *Objectives* Stress due to experiences of racism could contribute to African-American women’s adverse birth outcomes, but systematic efforts to measure relevant experiences among childbearing women have been limited. We explored the racism experiences of childbearing African-American women to inform subsequent development of improved measures for birth outcomes research. *Methods* Six focus groups were conducted with a total of 40 socioeconomically diverse African-American women of childbearing age in four northern California cities. *Results* Women reported experiencing racism (1) throughout the lifecourse, with childhood experiences seeming

particularly salient and to have especially enduring effects (2) directly and vicariously, particularly in relation to their children; (3) in interpersonal, institutional, and internalized forms; (4) across different life domains; (5) with active and passive responses; and (6) with pervasive vigilance, anticipating threats to themselves and their children. *Conclusions* This exploratory study’s findings support the need for measures reflecting the complexity of childbearing African-American women’s racism experiences. In addition to discrete, interpersonal experiences across multiple domains and active/passive responses, which have been measured, birth outcomes research should also measure

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women's childhood experiences and their potentially enduring impact, perceptions of institutionalized racism and internalized negative stereotypes, vicarious experiences related to their children, vigilance in anticipating future racism events, as well as the pervasiveness and chronicity of racism exposure, all of which could be sources of ongoing stress with potentially serious implications for birth outcomes. Measures of racism addressing these issues should be developed and formally tested.

Keywords Race · Racism · Birth outcomes · African-American women

Background

Low birthweight (<2,500 g) and preterm delivery (<37 weeks) are two to three times more likely among African-Americans than Non-Hispanic Whites [1], a difference that has not been explained by well-established risk factors [2, 3]. These adverse birth outcomes predict infant mortality, as well as numerous other adverse outcomes across the life course, including child developmental deficits such as lower cognitive and educational achievement, and adult cardiovascular disease and diabetes [4–6]. Infections have been frequently cited as a potential explanation for these disparities. However, evidence on the role of infections is inconclusive [7, 8]. Further, a solely genetic explanation is unlikely given the favorable birth outcomes of immigrant black women [9, 10]. Attention is now being paid to the social context of pregnancy [11]. Within this context, racism has been hypothesized as a potential contributor to racial disparities in birth outcomes [3, 12–22].

While definitions of racism vary [23–26], all include the notion of unequal treatment based on skin color or other physical characteristics. Because these characteristics are immutable and often central to one's identity, racism constitutes a profoundly personal and severe threat to well-being [27]. We use "experiences of racism" to refer to a range of both direct and indirect experiences of unequal treatment based on race/ethnicity or skin color. Such experiences include thoughts and emotions about past and/or current race-based unfair treatment of oneself or others in one's group, as well as fear or anxiety about unfair treatment in the future.

Within the last decade, self-reported experiences of racism have been empirically linked with up to three-fold increases in adverse birth outcomes including low birthweight, very low birthweight, and preterm delivery [13, 19, 28, 29]. One recent study highlighted the importance of the life stage in which women's racism experiences occur [29]. Another study found that less educated Black women who

reported experiencing racism were at higher risk for preterm delivery than their more educated counterparts, suggesting that socioeconomic status (SES) may moderate the relation between racism and birth outcomes [20].

It is biologically plausible that racism could affect health, including birth outcomes, through physiologic pathways involving stress [8]. Racism is typically conceptualized in health research as a psychosocial stressor [24, 30]. Stress is a multidimensional construct involving exposure to a stressor, appraisal of its threat, and the cognitive, emotional, behavioral, and physiological responses corresponding to that appraisal [31]. Over time, adaptational responses to stressors, especially chronic or severe stressors, may produce physiologic wear and tear, or *allostatic load*, which can erode the body's ability to regulate key biological systems, thereby increasing disease susceptibility [32]. Several studies have noted an accelerated decline in African-American women's reproductive health with aging [33–35], which may reflect stress-related changes in neuroendocrine, immune, and/or cardiovascular functioning in response to chronic racism exposure [33–35]. One study showed that compared to White women, African American women have higher levels of allostatic load and experience premature physiologic aging during their reproductive years [36].

African-Americans have shown increased cardiovascular reactivity in response to racist stimuli in laboratory settings [37]. Both shorter gestational length and lower birthweight have been associated with greater blood pressure reactivity to a laboratory stressor in low-risk pregnant women [38]. African-American women have the highest rates of all racial/ethnic groups of hypertensive disorders in pregnancy [39]. African-American pregnant women also have the highest incidence of bacterial vaginosis, a urogenital infection linked to premature rupture of membranes, preterm labor and preterm delivery [40, 41], which has been associated recently with chronic stress in pregnant women [42]. Racism-related stress may also damage maternal and infant health by contributing to unhealthy coping behaviors, such as smoking [43] and alcohol consumption [44], both of which may be harmful to pregnancy.

Though research in this area is in its infancy, evidence of the effects of racism on the poor birth outcomes of African American women is growing. Findings, however, are mixed, which may owe in part to variations in measures used to assess racism. Measures of racism in published birth outcome studies have primarily explored discrete direct interpersonal events across life domains [3, 12–22]. Some investigators focus on recent experiences, while others assess whether a woman has "ever" experienced racism [12, 14, 15, 19–21, 27, 45], and a few have examined coping responses [13, 15, 19, 21]. In addition to these

factors, awareness of the ever-present possibility of discriminatory treatment may itself be a chronic stressor for people of color [46]. Moreover, accumulating literature on the health consequences of childhood stress [47–56] underscores the importance of considering racism experiences early in the life course [29]. Gender- and social role-related differences in experiences of racism also may be important [28, 30], particularly a mother's sense of obligation to protect her children from racism [16]. We were not able to identify birth outcome studies that have examined these latter issues. To inform the systematic development of more comprehensive measures of racism relevant to the experiences of African-American women of childbearing age, we conducted an exploratory qualitative investigation as a first step toward subsequently developing, testing, and using those measures to examine the role of racism in birth outcome disparities.

Methods

This study was approved by the University of California San Francisco Committee on Human Research. Using methods based on modified grounded theory [57, 58], we conducted six focus groups (5–10 women per group) with a total of 40 African-American women of childbearing age in San Francisco, Oakland, Berkeley, and Sacramento from May 2004 to April 2005. Focus groups are particularly well-suited for studying stigma-related experiences [59] and for research with ethnic minorities, who may minimize or deny discrimination experiences when queried individually, to appear less vulnerable [60, 62]. By emphasizing shared experiences, focus groups may lessen participants' discomfort with disclosing personal victimization [61].

Adult women (age 19 or older) with children under age 15, including pregnant women, who self-identified as African-American were eligible to participate. We aimed to recruit a socioeconomically diverse sample to better capture the range of racism experiences African-American women may encounter. To that end, we employed a purposive sampling strategy augmented with snowball sampling techniques. Partners with the public health departments/divisions of San Francisco, Sacramento, and Berkeley helped recruit lower SES women through the California Black Infant Health (BIH) Program, a state-supported prenatal outreach program targeting high-risk African-American women, and the Women, Infants and Children (WIC) nutritional supplementation program. Higher SES women were recruited through professional groups/networks and sororities. Eligible women who consented to participate were assigned to focus groups according to recruitment source (public programs versus

other), to increase the likelihood that participants would engage more easily in conversation with one another [63].

Data Collection

Each focus group was staffed by one facilitator and, for completeness and accuracy, two note-takers [64], all of whom were African-American women. Focus groups were approximately two hours long, audio-taped, and subsequently transcribed. After each focus group session, participants completed questionnaires providing sociodemographic information, including age, income, education, number of children, and household size. Each participant was paid \$50 and childcare was provided.

A semi-structured interview guide was developed by the "Measures of Racism Working Group," which consisted of the study investigators and our health department partners. The guide included open-ended questions intended to engage women in freely discussing their experiences with racism. For example, women were asked, "Now we would like you to think about particular experiences that you or someone close to you may have had with race or racism. Have you ever felt that you, or someone close to you, have ever been treated differently from others because of race?" A formal definition of racism was intentionally not given to avoid artificially constraining the way women understood "racism". Additional probes focused on childhood (under age 12) and adolescence (ages 12–19) and on emotional, somatic, cognitive, and behavioral responses to racism experiences (e.g., "What, if anything, went through your head when that happened?" and "How did you feel?"). As they became available, transcripts of completed interviews were read by primary coders, who helped modify the guides for subsequent groups to better capture emerging or missed issues [65].

Data Analysis

When data collection was complete, all transcripts were read by an interdisciplinary team of six coders with expertise in epidemiology; clinical, social, and developmental psychology; cultural anthropology; social welfare; and health and social policy. Using open-coding to identify emergent themes, coders followed an interactive and iterative process to reach consensus on major themes and develop higher-order constructs. Focus group data were organized/analyzed using ATLAS.ti 5.0 [66].

Results

The 40 focus group participants were between the ages of 18 and 39 (2 were <20 years old, 9 were aged 20–29, 17 were 30–39, and age information was missing for 12).

Characterizing their income per family size in relation to the federal poverty level (FPL), 9 women were poor (incomes <100% FPL), 9 were near-poor (101–200% FPL), 8 had incomes from 201% to 300% FPL, 5 from 301% to 400% FPL, and 9 had incomes over 400% FPL. Two participants had not completed high school, 3 had only a high-school education, 8 had some college education, 12 were college graduates; education information was missing for 15 women. Seventeen women had one child, 10 had 2 children, 7 had 3, and 6 women had 4 children. The youngest child's age was <1 year for 14 women, 1–2 years for 13 women, 3–4 years for 6 women, 5–6 years for 5 women, 7 or more years for one woman and missing for one woman.

As summarized in Table 1, content analysis of the focus-group data revealed six major themes characterizing the participants' self-reported experiences with racism: (1) Racism experiences occurred throughout the lifecourse, with childhood experiences seeming particularly salient and to have enduring effects; (2) The women experienced interpersonal, institutional and internalized forms of racism; (3) The participants experienced racism both directly and vicariously, the latter relating primarily to the racism experiences of their children; (4) Racism was experienced in various social settings; (5) The women had active and passive responses to racism, which manifested behaviorally, emotionally, cognitively, and somatically; and (6) The women maintained a pervasive sense of vigilance in anticipation of future racism events for themselves and their children, preparing themselves behaviorally, cognitively, and emotionally for potential racism encounters.

The Focus Group Participants Experienced Racism Across the Lifecourse; Childhood Experiences Appeared to Have Enduring and Particularly Painful Effects

Focus group participants reported racism experiences during childhood, adolescence, and adulthood. Childhood events often represented the women's first experience of "being different" or receiving negative reactions from others based on their race. These initial racism encounters were recalled vividly and with emotion, and appeared to have an enduring impact on the participants. Prejudice among playmates' families was commonly mentioned as the first introduction to racism. For example,

I used to play with this White girl every day, like she was my best friend...she would always come to my auntie's house. And then, there was one time where I went to her house, and she said, 'Well, my parents said we can't allow anybody (black) in the house.' And...that was something that always stayed with me my whole life. And that was really, for a little kid...heartbreaking, you know? And that's, when I first learned that...there is a difference ...with the colors. I thought about it a lot. I still think about it.

Women also talked about being treated differently by childhood playmates. For example, one woman reported a deeply stigmatizing experience she had while playing with "little White girls":

Table 1 Emergent themes from focus groups with childbearing women exploring their experiences of racism

- (1) Racism experiences occurred throughout the lifecourse; childhood experiences appeared to have particularly painful and long-lasting effects.
- (2) The participants experienced racism directly and vicariously, the latter relating primarily to the racism experiences of their children.
 - Direct experiences refer to African American women's own racism encounters.
 - Vicarious experiences refer to those that are either the witnessed encounters of others or those reported by others such family, friends and co-workers.
- (3) The women experienced interpersonal, institutional and internalized forms of racism:
 - Interpersonal racism refers to encounters between individuals.
 - Institutional racism refers to the differential access to goods, services, and/or opportunities that stigmatized groups may experience, without necessarily involving any specific interpersonal encounter.
 - Internalized racism occurs when members of stigmatized groups consciously or unconsciously accept or believe negative stereotypes about their group and/or themselves as part of their group. Examples include embracing "whiteness," self-devaluation, resignation, and adopting behaviors that substantiate negative stereotypes.
- (4) Racism was experienced in various social settings: examples included work and school settings, in everyday social interactions such as shopping and in other settings defined by public space, and when interacting with health care, justice, and housing systems.
- (5) The women had active and passive responses to racism, which manifested behaviorally, emotionally, cognitively, and somatically:
 - Active reactions are discrete, outwardly observable actions taken in response to a racism event, such as expressing anger or hurt.
 - Passive reactions involve apparent non-response to a racism encounter, such as suppressing feelings or behaviors expressing those feelings.
- (6) The women maintained a pervasive sense of vigilance in anticipation of future racism events for themselves and their children, preparing themselves behaviorally, cognitively, and emotionally for potential racism encounters:
 - "It's the skin you're in," verbalized by one woman, seemed to capture the inescapable sense of pervasive awareness and vigilance that women in all the focus groups described experiencing on a chronic basis.

I always had to be the monster when we played games, and they said because you're black you're the black monster or the creature from the black lagoon, and it was because of the color of my skin and that stuck with me forever.

Another woman reported being called "nigger" by a little boy at school and wondered, "how a child that young could have that much hate? He didn't know anything about me. It just really stuck with me. I can still see his face."

During adolescence, women mentioned feeling excluded from leadership positions in their schools because of their race, and losing friends when their school social groups were segregated by race. Focus group participants described identifying with other African-Americans as well as other racial minorities while often referring to Whites as "others", noting that they "could be themselves" around other people of color, but often felt that they had to "change" (e.g., their speech, dress, etc.) when around Whites. Participants' exposure to overt and subtle racist events persisted into adulthood. Several participants reported their frustration that racism continues to exist. Responding to being called a "nigger" just a few years ago, one woman remarked, "Wow, *nothing has changed*".

Study Participants Experienced Interpersonal, Institutional, and Internalized Forms of Racism

Although interpersonal racism was the most commonly reported form of racism, the women also reported experiencing institutional and internalized racism. Central to women's reports of institutional racism was their awareness of structural inequalities between neighborhoods and schools segregated by race, noting differential access to healthy living environments, goods and services, and quality employment and educational opportunities. One woman observed,

There are too many liquor stores in a black neighborhood. [In] other neighborhoods there are grocery stores.

Another participant added,

The majority of African-Americans live in impoverished... neighborhoods, and ... I notice that those schools are really low quality in the impoverished neighborhoods, or the neighborhoods where there's people of color...

Generational disadvantage emerged as a sub-theme related to institutionalized racism. The women talked about the financial, social, and cultural privileges that Whites possess because of the historic advantages their race/skin color has afforded them. Women noted that, compared with Whites, their families had generally lacked access to the

opportunity, capital, knowledge and skill (e.g., how to invest in stocks or apply for a scholarship or loan) necessary for upward mobility.

Women further acknowledged struggling against accepting or internalizing negative stereotypes of African-Americans. For example, one woman expressed reservations about sending her children to a predominantly African-American school:

I know when I'm looking for schools...I'm like... 'am I just thinking this school is good because it's White and White folks are sending their kids there? And am I thinking this school is [just] okay because a lot of Black folks are there?' And that's sad when you are a Black person and you have to fight against your own stuff.

Women talked about stereotypical views and expectations others held of them, their friends, and family members, such as being a "welfare mom", an athlete, "different than those others" because of lighter skin complexion, and not being as smart, accomplished, and articulate as Whites.

The Women Experienced Racism Both Directly and Vicariously, Particularly in Relation to Their Children

Participants recounted many direct experiences with racism. However, their vicarious experiences, either witnessed by them or reported to them by family, friends, and other African-Americans in general, emerged as a powerful aspect of women's racism experiences. It was through their role as mothers, in particular, that the women reported feeling the greatest impact—albeit indirect—of racism:

I'm stressed because now that my kids are getting older, the school-age ones, they go through it all the time...So everyday I have to deal with that, so it's stressful. I take that in internally. It's subtle, it's not out in the open like slavery days, it's like hidden, but you feel it still. So I feel like I feel it everyday...Because as adults it seems like I could overlook it a little bit and not think about it everyday. But you have kids coming home everyday, oh he called me a nigger or black. That affects you as a parent... I go through the hurt when they go through the hurt.

Both their children's direct experiences and their anticipation of their children's potential exposure were identified as major sources of stress. Women talked extensively about feeling responsible for protecting their children against racism and trying to prepare them for dealing with it. They talked about their anxiety, even when their children were very young, about the future challenges their children would face. One mother reported:

I remember looking at my baby— he had to be about 2. I remember looking at him and saying, ‘Oh my God, what have I done [bringing him into the world]?’ And that’s a sad, sad, sad feeling ...because your child is supposed to be the happiest thing that you have on this earth and I’m looking at him going, ‘What have I done?’ My child is going to have to go through this life being black.

Women also described their efforts to counter their children’s internalizations of negative stereotypes. For example, one woman explained,

I’ve heard my son say to me, ‘Why don’t I have blue eyes?’ And I look at him [and say] ‘because I have brown eyes and your daddy has brown eyes. That’s why you have brown eyes. And be proud that you have beautiful brown eyes and nappy hair.’ So constantly having to fight against that and educating [my child].

Study Participants Experienced Racism in Many Different Domains and Settings

Women reported experiencing racism in employment, education, health, housing, legal, other services, and other everyday social settings. The workplace was a frequently mentioned setting for experiences of racism, where racist comments from co-workers and customers were commonplace. Women reported feeling “like a quota” and being treated as an expert on all African-American issues, a “black dictionary,” as one participant explained. A more subtle form of racism participants noted was the lack of support for career advancement compared to that of their White co-workers,

I can say, when I’ve worked in majority White organizations, I’ve never had the mentoring step that my White counterparts have had. Someone to see them through and help them navigate through the system.

Schools also were regularly mentioned as settings for racist experiences, for both the participants and their children. A predominant sub-theme (also related to institutional racism) was the lowered expectations that they felt teachers or the school system held for African-American students, with several women reporting teachers being surprised when they or their children did well academically. The participants felt they had to work harder, with less support, to prove themselves in school.

In the women’s everyday lives, shopping was a frequently mentioned context for racist experiences. Participants reported being followed in stores, ignored by clerks, and treated disrespectfully or with suspicion or disdain in public settings:

I was walking down the street and a White woman grabbed her purse....that’s something you always feel...because no matter what you have, you’re black first....they will kiss your behind as long as you have money, but they still see a nigger...

The Women’s Responses to Racism were Active and Passive, and were Manifested Behaviorally, Emotionally, Cognitively, and Somaticly

The women in the focus groups most commonly described active responses to racism encounters, characterized by open expression of emotion and concerted action, although passive responses, whereby women suppressed their feelings or ignored the situation, were also frequently reported. Emotional responses included feeling “tense”, “stressed”, “sad”, and “worthless”, and were often complex in nature, particularly anger. In more than one group, women talked about wanting to avoid the “angry black woman” stereotype, while simultaneously identifying anger as their typical response to racist situations:

...the thing is that... there’s never any pleasant or correct way to address it. All the things that I was thinking of saying to this lady, none of them would have come out right. They would have all come out bad... there’s an effort because you know, the angry Black woman thing...I really want to address things when they happen, I don’t want to walk away mad, I don’t want it to linger, you know. So, that’s one thing about this feeling, the angry feeling.

Cognitive responses included attempts to redefine, ignore, or simply accept racism as a part of “everyday life”:

Realistically it’s going to affect you. No one can say that they don’t care what people think, because you do care. It does bother you— you just put it in a different place.

Another participant stated, “I don’t think I really think about it. I just know it’s the skin you’re in. It’s just another part of your life.”

Somatic responses to racist encounters were also commonly described. When asked how they felt physically when a racist experience occurred, women reported feeling sick, having headaches, getting stomach aches, breaking out in hives, and shaking all over.

The Women Maintained a Pervasive Sense of Vigilance in Anticipation of Future Racism Events for Themselves and Their Children

Many participants reported thinking about their race or racism at least daily. This awareness often seemed to take

the form of conscious efforts to prepare themselves—through heightened awareness and altered behaviors—for situations where they were likely to face racist attitudes or behaviors. The anticipation of and preparation for potential racist encounters took behavioral, cognitive, emotional, and physiological forms. For example, one woman talked about dressing in a particular way to reduce the likelihood of a racist encounter while shopping:

...when I'm going shopping, I prepare myself...it's like I will take forever to find me something to wear because I feel I'm not going to be treated right...and I feel I shouldn't have to do that, but I do that because I'm treated different. I think when I go out everyday some situation is going to happen as far as racism.

In other cases, women described readying themselves emotionally, cognitively, and/or physiologically for anticipated encounters, such as this woman preparing for a conference at her child's school:

...it's like you get tense. Because you know...I know this person is going to say something that's going to make me, my heart rate [go up], or maybe have to hold back my tears while I'm talking to them. I don't want them seeing me crying, cause I don't want them thinking I'm sad, I'm not sad, I'm mad... you just get tense, cause you know you have to brace yourself for something stupid that they're gonna say... with a White person, you know that some level of racism is going to hop out of their mouth... And so you have to prepare your body for that.

Discussion

The six themes emerging from these focus groups confirm the relevance of aspects of experiences of racism previously measured in birth outcomes studies and also highlight issues deserving further consideration. Our findings support the need, addressed by several birth outcome studies, to assess discrete interpersonal racism events directly experienced across multiple life domains and capture both active and passive coping responses. However, our findings suggest that such an approach, in and of itself, is insufficient for capturing the full spectrum and complexity of African-American women's racism experiences. Based on the themes that emerged from the focus groups, there are a number of steps that researchers can take to more comprehensively assess the racism experiences of African-American women of childbearing age. Doing so may help to better elucidate the relationship between racism-related stress and poor birth outcomes:

First, the focus group results indicate that it is important to assess women's childhood racism experiences and the impact of those experiences across the lifecourse. Most instruments used in the racism and birth outcomes literature do not specifically measure childhood racism exposure, but focus instead on exposure during the perinatal period, the past year, or "ever" in one's lifetime. In our focus groups, the cognitive and emotional impact of women's childhood racism experiences was evident and seemed profound, even when recounting events later in life. Highly threatening situations in childhood may generate stress-induced emotional and physiological changes with long-range mental and physical health consequences, including poor birth outcomes [67]. For example, emotional stress responses have elicited physiologic responses such as cardiovascular reactivity, which can adversely impact the pregnancy outcomes of African-American women [37]. Occurring at a developmentally sensitive period of the life course, childhood racism experiences may adversely affect ethnic identity and self-concept, which have been demonstrated to protect ethnic minorities from the psychological harms of racism [68].

Second, the women in our focus groups expressed deep concern and anxiety over the racism experienced by their children. Similar to findings reported by Jackson et al. [16], our study participants verbalized feeling responsible for protecting their children from racism, suggesting that African-American women's social roles, particularly as mothers, may be important to consider when measuring their experiences of racism. The stress experiences of close others can also impact one's own emotional and physical well-being [69]. Thus, these women's vicarious racism experiences, particularly those related to their children, may add considerably to their overall level of stress. Two of the eleven existing birth outcome studies use measures that capture women's vicarious racism experiences, such as those experienced by a close family member or friend [21, 29]. Only one of these studies, to our knowledge, has specifically assessed women's vicarious experiences during their own childhood, which were a significant independent predictor of their infants' birthweight [29]. Several women in our study discussed how the racism experiences faced by their children brought back memories of their own childhood experiences, suggesting potential links between these two aspects of women's racism experiences.

Third, our findings suggest that institutional and internalized forms of racism may also contribute to African-American women's racism-related stress burden. Theories of weathering [70] and stress age [34] explain how increasing stress loads accelerate physiologic deterioration and increase a woman's risk of adverse reproductive outcomes. Focusing exclusively on direct, interpersonal racism exposures may seriously underestimate the racism-related stress a woman experiences.

Fourth, besides measuring exposure to perceived racism events, our findings suggest that it is important also to measure the pervasive vigilance with which African-American women anticipate future racism encounters and consider the effects that such chronic hyperarousal could have on pregnancy. The women in our study vividly described their cognitive, behavioral, and physiologic preparation for potential racism threats. Chronic hyper-vigilance in anticipation of unfair treatment could damage multiple organ systems and immune defenses [32], thereby producing poor birth outcomes.

Finally, this study's findings suggest that African-American women's racism experiences start early in life and continue pervasively throughout the lifecourse. As described previously, racism measures used in birth outcome studies tend to assess racism experiences by focusing on incidents that an individual, or someone close to her, has experienced during pregnancy, in the past year, or ever. Our results indicate the importance of assessing the chronicity of racism experiences throughout African-American women's lives.

Limitations of this exploratory study include the small size and that the Northern California convenience samples may not be nationally representative. This study did not aim to test hypotheses about racism's health effects or develop new measures; rather, it engaged women in verbalizing their experiences, to provide a basis for developing more adequate measures for birth outcomes research in the future.

Although education information was frequently missing, poverty status was described for all 40 women and the sample appeared socioeconomically diverse. Our impression was that women in the groups recruited from public programs ("low SES") reported more childhood and direct racism experiences, and appeared to internalize experiences of racism more than the women in the other groups ("moderate/higher SES"). However, this study was not designed to draw conclusions about socioeconomic differences in racism experiences; furthermore, the demographic information collected at the end of focus group sessions showed some overlap in income and education levels between the "low SES" and "moderate/high SES" groups. Relatively little attention has been paid to socioeconomic variation in perceptions of racism. However, racism experiences and responses to those experiences could vary by socioeconomic status/position (SES) [71]. Given differences in the types of social institutions and interpersonal situations that African-Americans of different social standing are likely to encounter on a regular basis, higher SES African-Americans may score higher on measures assessing subtle, institutionalized forms of racism, while lower SES African Americans may score higher on measures capturing exposure to blatantly unfair treatment [24]. In subtle or ambiguous situations,

socially disadvantaged groups have attributed negative experiences to their own personal inadequacies rather than to discriminatory treatment [72, 73]. Both positive and negative associations between racism and SES have been reported, the nature of which may depend on how racism is measured [24]. Socioeconomic differences in experiences of racism should be considered in developing and testing measures. Birth outcomes studies should also consider the suitability of instruments used to measure institutional and internalized racism in studies of other health outcomes.

Conclusion

The insights from this exploratory study should inform the development of more comprehensive racism measures, and should be tested with socioeconomically diverse African-American women in diverse settings. We conclude that further work is needed to ensure that racism measures in birth outcome studies adequately capture women's childhood experiences, the potentially enduring impact of those experiences, perceptions of institutionalized racism and internalized negative stereotypes, women's vicarious experiences specifically related to their children, and the pervasiveness and chronicity of African-American child-bearing women's racism experiences. These different but not necessarily mutually exclusive aspects of women's racism experiences could be important sources of chronic psychological stress with serious impacts on health, including birth outcomes. Our findings underscore the multidimensional nature of racism as a lived experience, and emphasize the inherent complexities involved with measuring it and quantifying its effects. The themes emerging from the focus groups suggest several new directions for improving the measurement of racism for African-American women of childbearing age. More comprehensive racism measures may enhance our understanding of the association between racism and birth outcomes and guide work to elucidate specific psycho-physiologic pathways through which racism experiences adversely affect pregnancy outcomes.

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Race, Racism, and Racial Disparities in Adverse Birth Outcomes

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Abstract: While the biologic authenticity of race remains a contentious issue, the social significance of race is indisputable. The chronic stress of racism and the social inequality it engenders may be underlying social determinants of persistent racial disparities in health, including infant mortality, preterm delivery, and low birth weight. This article describes the problem of racial disparities in adverse birth outcomes; outlines the multidimensional nature of racism and the pathways by which it may adversely affect health; and discusses the implications for clinical practice.

Key words: race, racism, racial disparities, infant mortality, birth outcomes, pregnancy

Introduction

Despite considerable evidence across multiple disciplines that biologic conceptualizations of race are scientifically groundless,¹ the notion that races are genetically distinct subgroups of the hu-

man species remains a contentious issue in the biomedical and public health fields.² The social significance of race, however, is indisputable. Given the legacy and continuing presence of racism in the United States, race operates as a social stratifier, resulting in racial group hierarchies and marked inequalities in resources, power, opportunity, and social status.³ Racism not only creates and maintains racial disparities in social well-being, it is also considered a fundamental contributor to racial disparities in health.^{1,3,4} One of the most troubling and insidious of these health differentials is the long-standing racial gap in infant mortality (IMR; death of live-born infant within first year of life) and its leading antecedents, low birth weight (LBW; < 2500 g) and preterm delivery (PTD; < 37 wk). This article focuses on racism as an underlying social determinant of race-based differences in adverse birth outcomes. It describes the enduring problem of racial disparities in infant mortality, LBW, and PTD; outlines the multidimensional nature of

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racism and the pathways by which it may adversely affect health; and discusses the implications for clinical practice.

Persistent Racial Disparities in Adverse Birth Outcomes

Despite tremendous gains in maternal and child health over the past century, racial disparities in infant mortality and adverse birth outcomes persist in the United States.⁵ African Americans shoulder the greatest burden of infant death, PTD, and LBW of all racial/ethnic groups in the country (Table 1).^{6,7} The birth outcomes and infant death rates for Hispanics and Asians/Pacific Islanders (APIs) are fairly comparable with those of non-Hispanic whites (NHWs), the typical benchmark given their majority status and social dominance. However, variations do exist by ethnic subgroup. For example, among the 3 largest Hispanic subpopulations, the infant mortality rate for Cubans (4.6 deaths/1000 live births) and Mexicans (5.5/1000) is lower than that for NHWs, whereas the rate for Puerto Ricans (8.2/1000) approximates that of American Indians/Alaska natives, the group with the second highest infant death rate in the

country.⁶ For the 3 largest API subgroups, Japanese and Chinese Americans have lower IMRs (3.8 and 4.7 deaths/1000 live births, respectively) than their NHW counterparts, whereas Filipino Americans (6.3/1000) have higher rates of infant death than NHWs.⁸

The more favorable birth outcomes of Hispanics and APIs vis-à-vis African Americans is largely a function of the high proportion of births to the immigrant members of these groups, who typically experience better perinatal outcomes and infant survival rates than their US-born counterparts.⁸ Because foreign-born women tend to possess fewer sociodemographic, medical, and behavioral risk factors, their reproductive advantage is thought to result from positive selection or a "healthy immigrant effect."⁸ Culturally based protections, such as highly favorable attitudes toward childbearing, religiosity, and strong family support, are additional factors that are thought to explain the unexpectedly positive pregnancy outcomes of socioeconomically disadvantaged immigrant women, such as Mexicans and Southeast Asians.^{9,10} Even after controlling for a wide variety of risk factors, however, African Americans are more likely to experience poor

TABLE 1. Racial/Ethnic Differences in Infant Mortality and Adverse Birth Outcomes

	Overall	NHW	Non-Hispanic Black	Hispanic*	API	American Indian/Alaska Native
Infant mortality (deaths per 1000 live births)	6.84	5.70	13.60	5.65	4.83	8.73
LBW† (<2500 g)	8.1	7.2	13.7	6.8	7.9	7.5
Very LBW† (<1500 g)	1.5	1.2	3.1	1.2	1.1	1.3
PTD† (<37 wk)	12.5	11.5	17.9	12.0	10.5	13.7
Very preterm† delivery (<32 wk)	2.0	1.6	4.01	1.8	1.5	2.2

* Hispanics may be of any race.

† Figures are percentages of births.

Infant mortality data are selected from *National Vital Statistics Reports*. 2006;54: Tables 1 and 2; Birth outcome data are selected from *National Vital Statistics Reports*. 2006;54: Tables 23 and 24.

birth outcomes and infant death.¹¹⁻¹³ Moreover, the racial gap in infant mortality, LBW, and PTD widens at higher socioeconomic levels,^{14,15} a troubling paradox since the health benefits of greater socioeconomic resources are well-documented.¹⁶

Although postulated by some, a genetic explanation for African Americans' reproductive disadvantage is extremely unlikely. As previously noted, there is a considerable lack of scientific support for the idea that racial group taxonomies reflect genetically distinct subgroups of the human population.² Moreover, African Americans' reproductive vulnerability is evident across all of the leading causes of infant death (Table 2), and their mortality risk is elevated across most of the leading causes of adult death, as well.¹⁷ Although there is some evidence of racial differences in genetic factors potentially linked to PTD, the likelihood that genetics contribute significantly to

population-based differences in PTD is a remote possibility,¹⁸ let alone that genetics are responsible for African Americans' excess mortality across multiple causes of death that span the life course. Even sickle-cell anemia, a genetic disorder known to be more prevalent in Blacks, accounts for less than one-half of 1% of the excess deaths that African Americans experience.¹⁹ As African Americans' health disadvantage spans many disease categories and health conditions, it is more probable that the underlying contributor to such extensive disparity is population-based differences in the social conditions of life.²⁰

Nativity differences in Black women's pregnancy outcomes further undermine a genetic basis for the persistent racial gap. If genetic factors linked to race, as biologically construed, underlie the poorer pregnancy outcomes of African Americans, then Black race should confer a reproductive disadvantage upon all

TABLE 2. Racial/Ethnic Comparison of Infant/Mortality Rate Per 1000 Live Births by the 5 Leading Causes of Infant Death

	Overall	NHW	Non-Hispanic Black*	Hispanic†	API‡	American Indian/Alaska Native§
All causes	6.84	5.70	13.60	5.65	4.83	8.73
Congenital disorders	1.38	1.28	1.68	1.44	1.17	1.88
Short gestation and LBW	1.19	0.80	3.14	0.95	0.87	1.13
Sudden infant death syndrome	0.53	0.51	1.09	0.26	0.28	1.24
Maternal complications of pregnancy	0.42	0.34	0.94	0.30	0.27	
Complications of placenta, cord, and membranes	0.27	0.23	0.52	0.21	0.14	

* Perinatal infections (55 deaths/100 live births) were the fifth leading cause of infant death for Non-Hispanic Blacks.

† Hispanics may be of any race.

‡ Diseases of the circulatory system tied as the fifth leading cause of infant death for APIs.

§ Accidents (0.47 deaths/1000 live births) was the fourth leading cause of death, and influenza and pneumonia (too few deaths to calculate reliable rate) was the fifth leading cause of infant death for American Indians/Alaska Natives.

|| Too few deaths to calculate reliable rate.

Data are adapted from *National Vital Statistics Reports*. 2006;54: Table 7.

women of African descent. More than that, African American women should exhibit better pregnancy outcomes than their foreign-born counterparts, on the basis of the level of European genetic admixture evident in the American Black population.¹⁷ However, studies of national^{18,21} and state-level¹⁸⁻²³ vital statistics data show that US-born Blacks have greater risk-adjusted odds of infant mortality, LBW, and PTD than their foreign-born counterparts. Findings from the few investigations reporting no risk-adjusted nativity differences^{24,25} also run counter to the genetic hypothesis, as they demonstrate that African Americans are not better off than Black immigrants at similar levels of risk. Furthermore, an intergenerational study of nativity-based birth patterns found that US-born daughters of Black immigrant women deliver infants who weigh less and have a higher incidence of LBW than their foreign-born mothers of the previous generation.²⁶ The reproductive advantage of immigrants in general erodes with acculturation and time in the United States.^{9,27} These nativity patterns underscore the importance of the social environment for shaping disease risk in populations. Given African Americans' unique sociopolitical history in the United States, their poorer health status may be a "biologic expression of race relations."

The Multidimensional Nature of Racism

Racism is a system of domination and oppression based on physical characteristics (ie, skin color) and/or racial group affiliation, rooted historically in ideologic beliefs about the innate superiority and inferiority of certain groups, whereby one racial group (ie, whites) derives benefits and privileges from the systematic and pervasive subjugation of other racial groups (ie, non-whites).^{3,28} Racism

involves the stratification of racially defined groups according to ideologic notions of their inherent value and worth, leading to racial group hierarchies organized along a color continuum with whites at the very top and Blacks at the very bottom.²⁹ Racism permeates the interpersonal, institutional, and cultural contexts of social life through prejudiced beliefs and attitudes, discriminatory treatment, structural barriers to resources and opportunities, and ethnocentric cultural models.²⁸ It may be obviously or subtly manifested, consciously or unconsciously perpetuated. Racism so pervades the American social landscape that it often goes unnoticed or unquestioned, blending almost seamlessly into the routine of daily life.¹⁹ Results of national surveys indicate, for example, that most whites believe that racism is no longer a problem, despite the fact that prejudiced attitudes and negative stereotypes persist.³⁰

In studying its relation to health, researchers often focus on the interpersonal manifestations of racism, typically operationalized as race-based experiences with unfair treatment, prejudiced attitudes, personal attacks or harassment, social exclusion, and daily hassles.³¹ Although results are somewhat mixed, perceived or self-reported racism has been related in the expected direction to a number of health behaviors (eg, smoking, alcohol/substance use), mental (eg, depression, anxiety, self-esteem, life satisfaction), and physical health outcomes (eg, hypertension, heart disease, diabetes).³¹ Only within the last decade, a handful of investigators have examined perceived racism's connection to pregnancy-related outcomes, with some finding significant relations with general perceptions of stress during pregnancy, and also PTD and LBW.³² In prospective investigations of pregnant African American women, the adjusted odds of PTD in studies reporting an association have ranged from a low of 1.40 to a high of 3.05 for women

with "high" versus "no" self-reported exposure to racism. In retrospective case-control studies, the adjusted odds of very LBW have ranged from 2.60 to 3.30 for African American women reporting a high degree of racism exposure. Racism has also been shown to significantly attenuate racial differences in PTD, LBW,³³ and fetal growth,³⁴ after controlling for medical, behavioral, socioeconomic, and psychosocial risk factors. Finally, results of a qualitative study of college-educated African American women suggest that deep concern over protecting children from racism could dramatically increase women's levels of stress during pregnancy, thereby increasing risk of poor outcomes.³⁵

Although studied less often, the racism embedded in social institutions produces disparities in life conditions which also threaten health. Indeed, it is institutionalized racism that is thought to be the rudimentary cause of persistent racial disparities in health, because social institutions provide the infrastructure through which social resources are distributed.³ Social resources enable people to avoid health risks altogether and to minimize the deleterious effects of disease should it occur. Thus, those who control social resources are best positioned to promote and protect their health across the entire spectrum of health risks and disease outcomes.²⁰

The unequal distribution of social resources along racial lines is strikingly apparent in the differential allocation of financial resources. Race and class are absolutely enmeshed in the United States, and socioeconomic inequalities account for much of the race-based variation in health status.²⁹ An important caveat, however, is that African Americans and whites at similar levels of socioeconomic status (SES) are not directly comparable, given institutionalized racial barriers to social mobility. Therefore, the influence of socioeconomic factors on racial health

disparities cannot be adequately controlled by simply adjusting for income or education. At every level of education, African Americans earn less, have more people to support with those earnings, have less accumulated wealth, and face higher average costs for basic necessities.²⁹ In addition, many higher SES African American women have experienced some degree of socioeconomic deprivation as children.³⁶ This may help to explain the widening racial gap in infant mortality and adverse birth at higher levels of SES. Several classic studies have demonstrated that the social class of a woman's childhood is a stronger predictor of her birth outcomes than the social class into which she marries.^{37,38}

One of the primary mechanisms by which racial differences in social resources are enacted and sustained is residential segregation.³ Throughout the post-Civil War period, African Americans were systematically funneled into the worst neighborhoods, as zoning laws, lending policies, and other housing-related institutional practices severely limited their residential choices. Housing discrimination persists today, and African Americans remain the most highly segregated racial group, regardless of SES and residential preferences.³⁹ Segregated neighborhoods increase exposure to harmful stimuli, such as crime, pollution, toxic waste, overcrowding, and poverty, while simultaneously decreasing access to health-promoting services and resources (eg, health care, supermarkets, parks, quality education, employment opportunities).³⁹ Not surprisingly, then, residential segregation is linked to the incidence of both infant mortality⁴⁰ and LBW.⁴¹

Differential allocation of social resources is institutionalized within the health care system as well. The Agency for Healthcare Research and Quality reports that "disparities related to race, ethnicity, and socioeconomic status still pervade the American health care system,"

and are evident in health care quality and access across levels and types of care, clinical conditions, care settings, and various patient subgroups (eg, children, elderly, rural residents).⁴² Of particular salience to the topic at hand, African American pregnant women are less likely to receive medical advice, information about health risks and complications,⁴³ and common prenatal treatments, such as tocolytics and antenatal steroids.⁴⁴ A landmark study conducted by the Institute of Medicine (IOM) finds that even at comparable levels of access, racial/ethnic minorities receive less intensive and poorer quality health care services than do whites.⁴⁵ Racial differences in patient preferences and care-seeking behaviors do not explain these inequities in treatment. Rather, the IOM concludes that institutional and provider bias are chiefly responsible for disparities in health care.⁴⁵

Pathways Linking Racism to Disparities in Health

There are several pathways by which racism harms health. First and foremost, racism increases the "risk of risks"²⁰ by limiting economic opportunity and access to social resources. In so doing, it heightens exposure to noxious environments and enhances the likelihood that this exposure will compromise health. Racism also yields unequal returns for and fosters the unfair treatment of those who do have access to economic, social, and health care resources. It inflicts emotional and bodily harm via verbal insults, physical attacks, and social and cultural exclusion.^{1,28} Racism operates through stress pathways as well. Both animal and human studies demonstrate that subordinate positions in social hierarchies adversely affect physiologic function, rendering subordinate group members highly vulnerable to an array of adverse health conditions.⁴⁶ The chronic stress of social inequality could

trigger heightened and prolonged engagement of the body's "fight or flight" mechanism, resulting in physiologic wear and tear. This wear and tear, known as allostatic load, erodes the body's ability to regulate key biologic systems efficiently, thereby increasing disease susceptibility.⁴⁷ African American women exhibit an accelerated decline in their reproductive health status as they age, especially those of lower SES.⁴⁸ Labeled weathering or stress age, this premature aging is attributed to stress-induced alterations in physiologic function produced by lifelong exposure to social disadvantage and racial discrimination.⁴⁹ Mounting empirical evidence that the biologic systems central to the body's response to stress (ie, neuroendocrine, immune, and vascular systems) are involved in the process of parturition support this hypothesis.⁵⁰

Implications for Clinical Practice

As healthy women tend to deliver healthy babies, the clinician's role in promoting favorable pregnancy outcomes should begin long before a woman initiates prenatal care. A woman carries with her into a pregnancy the sum total of biopsychosocial experiences that have characterized her life up to that particular point in her development.⁵¹ Pregnant African American women have greater accrued risk for and fewer amassed protections against poor birth outcomes because of the multi-generational social inequities racism produces. Consonant with theories of weathering and allostatic load, their reproductive health may be compromised well before they ever become pregnant. As a result, prenatal care, though important, is limited in its ability to promote favorable birth outcomes in the context of lifelong social disadvantage.⁵¹

Medical providers must educate themselves about persistent racial disparities in

adverse birth outcomes and the social underpinnings of this public health problem. They must begin to conceptualize pregnancy care within a wider time frame than that defined by a 38 to 42-week gestational period. By adopting a life course perspective, health care professionals can place greater emphasis on primary, preventive, preconceptional, and interconceptional care, which is key to promoting women's overall health.⁵¹ For vulnerable populations especially, doing so may increase the likelihood that their pregnancies culminate in positive outcomes.

African American women will not benefit from this recommended continuum of health care services, however, if they do not have adequate access to the health care system. The United States is the only industrialized country without a universal system of health care. African Americans are disproportionately represented among the uninsured, and lack of health insurance is associated with African American women's increased risk of LBW.⁵² African Americans are also disproportionately represented among the publicly insured, whose access to the health care system often is constrained by cumbersome bureaucracies, difficulties in securing timely appointments, extended stays in waiting rooms, and inhospitable facilities. Not coincidentally, Medicaid covers nearly a third of the total hospital charges associated with caring for LBW/PTD infants.⁵³ It is imperative that medical providers actively engage in advocacy efforts to promote health equity and ensure access to the medical services that are integral to reducing racial health disparities.

Although dismantling system-level barriers is essential for improving access, careful attention must be paid to enhancing the quality of the clinical relationship once patients enter the health care system. There is strong empirical evidence that negative racial stereotypes influence

health providers' diagnostic and treatment decisions, as well as their attitudes toward and expectations of their patients.⁴⁵ Largely unrecognized and unintended, provider bias nevertheless contributes to patient mistrust and dissatisfaction with care. For example, a qualitative study of African American pregnant women's health care experiences finds that these patients frequently confront others' assumptions that they are young, unmarried, multiparous, on welfare, and that they maintain poor health habits. Moreover, they often perceive their health care to be indifferent and disrespectful.⁵⁴ Likewise, findings based on national data from a Kaiser Family Foundation survey indicate that African Americans are significantly less confident than NHWs that health care providers have their best interest at heart.⁵⁵ If patients do not trust their providers, they are less likely to follow through with diagnostic screenings or adhere to treatment recommendations.⁵⁵ Trust, therefore, is the basis of quality clinical care.

Although racism is no longer culturally or legally acceptable, it continues to permeate the American social conscience. Racial stereotypes are so ingrained that unintentional bias occurs even among social egalitarians who do not consider themselves to be racially prejudiced.⁵⁶ Health care providers must become aware of their inherent racial biases and ought to challenge stereotypical thinking and prejudiced attitudes in themselves, their colleagues, and the institutions in which they practice. Racial biases are difficult to recognize and disturbing to acknowledge, as they usually occur subconsciously and are apt to conflict with personal and professional values. Understanding this, the IOM recommends the development and implementation of evidence-based practice guidelines and the systematic and routine collection of clinical care data by patient race/ethnicity.⁴⁵ Anonymous surveys and periodic focus groups can

also provide valuable information about the quality of care from the perspective of those being served. By documenting areas in which disparities exist, and increasing the level of provider awareness and accountability, these methods of monitoring can facilitate changes in clinical practice that may help to reduce race-based inconsistencies in medical treatment.⁴⁵

Besides provider bias, racism can undermine the patient-provider relationship by fostering resistance within minority patient populations. Given their sociopolitical history in this country, African Americans have developed a "healthy cultural suspicion" of white America and its institutions.⁵⁷ As agents and power brokers of a system with a particularly sordid legacy of racial maltreatment (recall the Tuskegee syphilis experiments), health care providers are especially subject to being regarded with some degree of skepticism. In an effort to steel themselves against potential harm, African Americans may rely on anticipatory coping strategies, staying on high alert for racism threats.⁵⁸ Clinicians might interpret this psychologic hypervigilance as defensiveness or resistance, and could be tempted to disengage from patients they view as difficult. Such a reaction would only serve to foster and perpetuate patient mistrust. Instead, providers should make a concerted effort to be courteous, empathic, attentive, and sincere in their clinical encounters. They must foster a sense of mutuality in the helping process by encouraging patients to ask questions, express concerns, and share in treatment planning. Clinicians need to draw on the expertise of human service professionals, such as social workers, to assist them in gaining a more contextualized understanding of patients' lives. Pregnancy constitutes a major psychosocial experience, as well as an important biologic event. Taking the time to assess the amount of stress in a woman's life and the supports

and resources available to her for coping with it is vital to promoting a healthy pregnancy, particularly in historically oppressed groups. Caring about patients, not just caring for patients, should be the therapeutic aim of clinical practice.

Outside of the realm of direct practice, providers can help to educate and mobilize the medical community around this important public health problem. Physicians and the general public are largely oblivious to the fact that racial health disparities exist.⁵⁹ To increase awareness, providers can organize presentations at grand rounds, professional meetings, medical schools, local universities, community clinics, etc. Partnering with hospital and clinic administrators, public health officials, community leaders, and health researchers can facilitate the acquisition of the most complete and up-to-date epidemiologic data, highlight strategic efforts to address the problem, recommend ways that individual providers can be part of the solution, and facilitate coalition-building. These educational campaigns should emphasize that disparities are consequential for every member of society. The March of Dimes estimates, for instance, that \$27 billion a year is spent on the medical, educational, and lost productivity-related costs of PTD/LBW.⁶⁰ Racial gaps in infant death also contribute to the United States's unexpectedly low international ranking in infant mortality, a key indicator of national well-being, despite its boasting the largest percentage of Gross Domestic Product devoted to health care.¹⁷ The medical community is a powerful constituency in this country that is vitally important to engage in efforts to eliminate health disparities.

Conclusions

Americans espouse the right of every individual to life, liberty, and the pursuit of happiness. Long-standing racial disparities

in infant mortality and adverse birth outcomes are stark reminders that social realities do not always reflect cultural ideals. Racism is a disquieting, deeply entrenched, and frequently unspoken fact of American social life. Undoing it seems a virtual impossibility, and many health care providers may feel that such an undertaking, although noble in its intentions, is simply not a part of their job description. After all, the clinician's daily charge is individual patient care, not social activism. Yet, inaction constitutes a silent affirmation of the status quo. Medical providers must fully appreciate and actively address the underlying social factors that impact the health of their patients if they are to be successful in delivering effective, high quality, equitable care. Eliminating racial disparities in health will require a serious commitment from us all to confront racism and the social inequities that result from it.

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