The Other Half of Health: Social Determinants

Gina Green Harris
In Wisconsin, adult health status\(^1\) varies by level of educational attainment and by racial or ethnic group.

- Compared with college graduates, adults who have not graduated from high school are 2.5 times as likely—and those who have graduated from high school are 1.7 times as likely—to be in less than very good health.
- Non-Hispanic black adults are 49 percent more likely than non-Hispanic white adults to be in less than very good health.

Comparing Wisconsin’s experience against the national benchmark\(^2\) for adult health status reveals that, at every education level and in every racial or ethnic group, adults in Wisconsin are not as healthy as they could be.

\(^1\) Based on self-report and measured as poor, fair, good, very good or excellent.

\(^2\) The national benchmark for adult health status represents the level of health that should be attainable for all adults in every state. The benchmark used here—19.0 percent of adults in less than very good health, seen in Vermont—is the lowest statistically reliable rate observed in any state among college graduates who were non-smokers with leisure-time physical exercise. Rates with relative standard errors of 30 percent or less were considered to be statistically reliable.

\(\dagger\) Defined as any other or more than one racial or ethnic group, including any group with fewer than 3 percent of surveyed adults in the state in 2005-2007.

\(\dagger\) Age-adjusted.
A Mom’s Education, A Baby’s Chances of Survival

Babies born to mothers who did not finish high school are nearly twice as likely to die before their first birthdays as babies born to college graduates.

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Prepared for the Robert Wood Johnson Foundation by the Center on Social Disparities in Health at the University of California, San Francisco.

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Adverse birth outcomes in African American women: the social context of persistent reproductive disadvantage.

African Americans have the highest rates of infant mortality and adverse birth outcomes of all major racial/ethnic groups in the United States. The long-standing nature of this disparity suggests the need to shift epidemiologic focus from individual-level risk factors to the larger social forces that shape disease risk in populations.


- The rates of low birth weight and preterm delivery are twice as high for African Americans as they are for Whites in the United States.

- African-American pregnant women are nearly four times more likely to die from pregnancy-related complications than are white women.

- African-American pregnant women are also two to three times more likely to experience preterm birth and three times more likely to give birth to a low birthweight infant.

- “[S]tress and racism are constant factors in African-American women’s lives and are inseparable from their pregnancy experiences.”

Overview

• The Lifecourse Initiative for Healthy Families is a regional collaborative effort to support African American women and their families to have healthy birth outcomes.

• Initiated in 2009, the Wisconsin Partnership Program supports the Lifecourse Initiative for Healthy Families to advance **policy, systems, and environmental changes** to address the root causes of why these disparities exist.
Why PSE?
It’s a Wisconsin Issue

Wisconsin has one of the worst black-white disparities in infant mortality in the United States.
It’s a Racial Issue

The Lifecourse Initiative for Healthy Families (LIHF) was established to address the disproportionately high rates of infant mortality among African Americans in Wisconsin.
Approach

Infant and child well-being is a reflection of access to health care and health information, as well as the **social**, **economic**, and **physical** environments that support health.
“Closing the Black-White gap in birth outcomes requires a life course approach which addresses both early life disadvantages and cumulative allostatic load over the life course.”

It’s a Local Issue

Conceptualized by the LIHF Communications Workgroup 1
Local Efforts

• Action-oriented LIHF Collaboratives in Kenosha, Milwaukee, and Racine lead the community-based activities of LIHF.

• The Collaborative model engages diverse stakeholder groups in developing and implementing multi-level solutions.

• LIHF Collaborative members include community residents and leadership from non-profit, healthcare, business, public sector, and faith-based organizations.
Local Efforts

Each Collaborative has an action agenda of local policy, systems and environmental change priorities.

The **Kenosha LIHF Collaborative** action agenda is focused on mental wellness and housing.

The **Milwaukee LIHF Collaborative** action agenda is focused on reducing prematurity.

The **Racine LIHF Collaborative** action agenda is focused on breastfeeding and teen health.
It’s a Regional Issue

More than **80%** of babies born to African American mothers in Wisconsin are located in

- Kenosha,
- Milwaukee, and
- Racine counties.
Regional Efforts

Universal depression screening for African American women during the perinatal period.
Regional Efforts

• **Lead.** Co-create a stigma reduction campaign about depression (a. changing the culture; b. encouraging women to get support; c) improving “approved” list of resources in each community for care and treatment.)

• **Support.** Co-create provider education about stigma and the campaign.

• **Monitor.** Advocate for a quality improvement project to increase maternal depression screening during the perinatal period, with the clinics and hospitals in the three LIHF cities.
Regional Threads

One common thread across each initiative is the inclusion of fathers.

- **Milwaukee**: Barbershop sessions to elevate dialogue about what makes a good father.
- **Kenosha**: Developed fatherhood programs for dads involved with the WIC program.
- **Racine**: Building capacity for fathers to support breastfeeding.

Sharmain Harris, WIC Father Involvement Coordinator
Policy Opportunity Examples

Advocate for policies that improve overall social and economic health and wellbeing of populations across the life span.

• **Poverty Reduction**: Expand Earned Income Tax Credits

• **Housing**: Eviction deferral for pregnant and new mothers
Alzheimer’s Disease: The Facts

- **5.5 million** Americans have Alzheimer’s disease (AD)
- By 2050, **13.8 million** Americans will have AD
- Every **66 seconds** someone in the US develops the disease. Without treatment, by 2050, this will be every **33 seconds**
- **6th** leading cause of death in the US
- Yearly out-of-pocket costs for care services range from **$3500 to $20,000**
- **$200B** in health care

Alzheimer’s Association 2016
Alzheimer’s Disease Facts and Figures.
African Americans are at Greater Risk for Alzheimer’s disease

The prevalence of Alzheimer’s disease or other dementias among older African Americans is roughly double that among non-Hispanic Whites, and is significantly higher than that among Hispanics.

We know this is not genetic, we are now trying to understand the impact of SDoH w/ African Americans and Dementia
Addressing the Community’s Concerns
MHSI Memory Clinic Model

- Physician
- Nurse practitioner
- Medical assistant
- Social worker
- Community health worker

Diagnostic testing
Diagnoses
Data collection

Care management
Follow-up services

Community health worker
SW care coordinator
Nurse practitioner

Family support
Community engagement

Patient referral

Research

Physicians
Social service agencies
Behavioral health community

Research specialist
Outreach coordinator
Dementia diagnostic team
Socioeconomic Contextual Disadvantage, Baseline Cognition and Alzheimer’s Disease (AD) Biomarkers in the Wisconsin Registry for Alzheimer’s Prevention (WRAP) Study

Amy Kind, MD, PhD; Barbara Bendlin, PhD; Alice Kim, BA; Rebecca Koscik, PhD; Bill Buckingham, PhD; Carey Gleason, PhD; Kaj Blennow, PhD; Henrik Zetterberg, PhD; Cynthia Carlsson, MD; Sterling Johnson, PhD

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What we found

People living in neighborhoods with the highest ADI had:

• Much worse cognitive performance in all aspects measured, even after adjusting for age and education

• Disproportionately higher levels of one Alzheimer’s disease biomarker (P-tau181)
Lifetime stressful experiences, racial disparities, and cognitive performance in the Wisconsin Registry for Alzheimer’s Prevention

Megan L. Zuelsdorff, PhD
Wisconsin Alzheimer’s Disease Research Center
Center for Women’s Health and Health Disparities Research
University of Wisconsin School of Medicine and Public Health
Key Findings

- Lifetime stressful experiences are associated with poorer cognitive health in later life among both African American and non-Hispanic white study participants.

- African Americans report more lifetime stressful experiences and each stressful experience is associated with greater cognitive detriment.

- Lifetime stress is a stronger predictor of executive function than genetic risk and age for African American participants, and is a major contributor to racial disparities in cognitive health.
The Complexities of Chronic Disease
Greater risk factors in African American WRAP participants

- APOE e4+ = 48% (compared to 38%)
- High Blood Pressure = 53% (compared to 29%)
- Diabetes = 20% (compared to 8%)
- Obesity = 57% (compared to 36%)

*No differences in age or gender*
**Impact of AD on Communities of Color**

- AD and other dementias are a public health crisis in communities of color in the US

- Increased risk due to multiple morbidities and untreated chronic illnesses –

- AD is the 6th Leading cause of death
- Caregiver burden in AA

- AD and other dementias are less likely to be diagnosed or treated

- Structural, social and attitudinal barriers unique to minority elders and their families
African American Caregivers

- More likely to provide more hours of care, higher-intensity care, and are more likely to report more unmet needs in terms of support and access to services.

- Also actively caring for other people in addition to the frail elderly, such as minor children, grandchildren, and other family members.

- Even though African-American caregivers are caring for severely debilitated elders and other family members, they are less likely than white caregivers to use formal care services like nursing homes.
African American Caregivers

- more likely to be adult children (women) with multiple care duties in/out of the home, extended relatives, or friends

- more likely to be working age (44-65), unmarried, with less formal education, and fewer financial resources.

- Report more loss of income, higher levels of stress, and worse health outcomes than white counterparts.

- Because of their lower income and higher poverty rates, the financial stress of caregiving may pose a greater emotional burden on African-American caregivers.\(^6,7\)
African American Caregivers

African Americans may find caregiving more rewarding than whites.

These reasons include that African Americans feel that caregiving is:

(1) a normative experience\textsuperscript{5,43};
(2) associated with spiritual purpose; and/or
(3) associated with pride in fulfilling filial or spousal responsibilities, and enhanced closeness with the care recipient.\textsuperscript{4,38,44,45}
The Amazing Grace Chorus Family Support Program

- Culturally tailored and Evidence based
- Stigma reduction
- Caregiver support
- Education presentations
- Resources for families
- Social support - peer learning
- No cost extended care/services for families
- No cost participation (affordable)
- 14 weeks/ Community performance
The Amazing Grace Chorus Family Support Program

- Reduces Caregiver Stress
- Improves mood
- Improves Memory Recall
- Self confidence
- Increases social engagement
- Focus and attention

Amazing Grace: Singing in chorus helps Alzheimer’s patients
Common Threads

- Racism
- Housing challenges
- Lower Income
- Adverse Health conditions
- Disadvantaged neighborhoods
- Early and Lifetime of trauma
- Stress
- Lack of access
- Lower education
- Modifiable Risk Factors
Conclusions
Suggests that neighborhood disadvantage (a modifiable fundamental risk factor) may account for some of the observed disparities in dementia prevalence.

Next Steps
We urgently need to reduce the burden of dementia and Alzheimer’s disease in disadvantaged neighborhoods. These results suggest that additional study is warranted.
How do we Address this issue?

- African Americans bear a disproportionate burden of AD and other dementias
- Structural and social barriers affect access to diagnosis, treatment and family support
- Establish guidelines and criteria the govern LTC facilities who care for people with dementia
- Require that care facilities meet minimum care standards and provide adequate training for staff to qualify as dementia capable organizations.
- Provide funding dollars to support people who develop AD before the age of 65
- More caregiver education, respite and support to help keep loved ones at home safer longer.
- Culturally tailored community based services are needed to reduce inequities and improve access to education, diagnosis, treatment and prevention programs.
- Asset Based Community Engagement programs have the potential to improve quality of care, reduce costs, decrease burden and improve quality of life
- More Community Based Participatory Research designed by the community to build stronger programs that address the SDoH, support resilience, and improve health overall.