The 2014 Congressional Black Caucus Foundation Health Brain Trust and National Minority Quality Forum 11th Annual Health Disparities Leadership Summit & Awards Dinner

Health Equity Now!: The Progress That’s Been Made and The Work That Remains

Arthur R. James MD, FACOG
Associate Professor, Ohio State University
Board of Directors: National Healthy Start Association
April 29, 2014
...because 400 years is enough!
Goal of this talk:

Add urgency to our national conversation about achieving health equity.

Encourage development of a comprehensive plan (by 2019) that will lead to the elimination of health disparities in birth outcomes.
Infant Mortality:

**Definition:** The death of any live born baby prior to his/her first birthday.

“The most sensitive index we possess of social welfare . . .”

Julia Lathrop, Children’s Bureau, 1913
Infant Mortality is:

Multi-factorial. Rates reflect a society’s commitment to the provision of:

1. High quality health care
2. *Adequate food and good nutrition
3. *Safe and stable housing
4. *A healthy psychological and physical environment
5. *Sufficient income to prevent impoverishment

“As such, our ability to prevent infant deaths and to address long-standing disparities in infant mortality rates between population groups is a barometer of our society’s commitment to the health and well-being of all women, children and families.”

* = non-clinical measure
USA Infant Mortality Rate – 2011

- OVERALL: 6.05
- WHITE: 5.11
- BLACK: 11.42
- HISPANIC: 5.27

B/W: 2.2

X: HP 2020 Goal

NVSS
Leading Cause-Specific Infant Mortality
By Maternal Race, US: 2009

Rate per 100,000 live births

Preterm / LBW
Birth Defects
SIDS
Maternal Preg. Comp.
RDS
Placenta/ Cord Comp.

73.6
119.2
54.8
30.8
10.7
21
284.4
100.8
84.5
32.9
46.7
157.5

White
Black

Source: National Center for Health Statistics
Prepared by March of Dimes Perinatal Data Center, 2013
USA IMR: 1980-2011

1980: 12.6
1990: 6.05

NCHS
USA IMR: 1980-2011

52% Improvement!
USA Total, White, and Black IMR: 1980-2011

Black:

White:
USA Total, White, and Black IMR: 1980-2011

“...our ability to prevent infant deaths and to address long-standing disparities in infant mortality rates between population groups is a barometer of our society’s commitment to the health and well-being of all women, children and families.”...SACIM

54% improvement in the w-imr and 48.6% improvement in the b-imr

NCHS
USA White and Black IMR: 1980-2011

Black:

White:
USA White and Black IMR: 1980-2011

Black:

10.9

11.42

White:
During the 30+ years represented on this slide, the black IMR in 2011 is still greater than the white IMR was in 1980…a lag time of more than 30 years! At this rate it will be **2046** before black babies born in the USA experience the same rate of survival as white babies born today.
Health Disparity:
Defining Health Disparity:

What are “health disparities”?

“What health disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States.”

NIH Strategic Plan to Reduce and Ultimately Eliminate Health Disparities, 2001
Disparity = a difference

Two quantities that are not equal

Rate A ≠ Rate B
What’s the difference between “health disparity (inequality)” and “health inequity”?
Disparities (inequalities) in health are based on observed differences:

- Poor people die younger than rich people.
- Infants from lower socio-economic families have lower birth weights.
- Smokers get more lung cancer than non-smokers.
- Women live longer than men.
- Black babies die at higher rates than white babies.
Inequities in health are based on ethical judgments/decisions about those differences:

• Should poor people die younger than rich people?

• Should infants from lower socio-economic families have lower birth weights?

• Should smokers get more lung cancer?

• Should women live longer than men?

• Should black babies die at higher rates than white babies?
Epidemiologists can measure health disparity or inequality...

However, some process of socio-political discourse is required to assess which disparities are an affront to social justice and thus require intervention.
Healthy People 2010 Goals:

Increase quality and years of healthy life

Eliminate health disparities
HP 2010 Priority Areas for Reducing Disparities:

- Diabetes
- Immunizations
- HIV/AIDS
- Cardiovascular disease (CVD)
- Cancer
- Infant Mortality
  - Decrease infant mortality rate to \( \leq 4.5/1,000 \)
“We must eliminate disparities in health”

“For all the medical breakthroughs we have seen in the past century, we still see significant disparities in the medical conditions of racial groups in this country.

What we have done through this initiative is to make a commitment - really, for the first time in the history of our government - *to eliminate, not just reduce, some of the health disparities between majority and minority populations.*”

D. Satcher, US Surgeon General
USA Black:White Infant Mortality Rates, 1950-2000:

Source: National Center for Health Statistics, 2003
### Healthy People IMR Goals:

(Healthy People)

<table>
<thead>
<tr>
<th>Goals:</th>
<th>HP-1990:</th>
<th>HP-2000:</th>
<th>HP-2010:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>W-IMR:</strong></td>
<td>“&lt; 9”</td>
<td>“&lt; 7”</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>(1988 @ 8.8)</td>
<td>(1992 @ 6.9)</td>
<td></td>
</tr>
<tr>
<td><strong>B-IMR:</strong></td>
<td>12</td>
<td>11*</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>(2010 @ 11.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B/W Ratio:</strong></td>
<td>1.34</td>
<td>1.57</td>
<td>1</td>
</tr>
</tbody>
</table>

* = as of 4/29/2014 we still have not accomplished this goal
Recent Declines in Infant Mortality in the United States, 2005–2011

Marian F. MacDorman, Ph.D.; Donna L. Hoyert, Ph.D.; and T.J. Mathews, M.S.

Key findings

- Following a plateau from 2000 through 2005, the U.S. infant mortality rate declined 12% from 2005 through 2011. Declines for neonatal and postneonatal mortality were similar.
- From 2005 through 2011, infant mortality declined 16% for non-Hispanic black women and 12% for non-Hispanic white women.

Infant mortality is an important indicator of the health of a nation (1,2). This report describes the recent decline in the U.S. infant mortality rate from 2005 through 2011. Changes in infant mortality rates over time are examined by age at death, maternal race and ethnicity, cause of death, and state. The linked birth/infant death data set (linked file) is generally the preferred source for infant mortality rates by race and ethnicity (3,4). This is particularly important for racial and ethnic groups other than non-Hispanic white, non-Hispanic black, and Hispanic. For these three groups, rates calculated from the mortality and linked files have been very similar for many years, and trends are unlikely to differ (3–5). Thus, data from the mortality file are used for this analysis because of their greater timeliness (3,6). Data for 2011 are preliminary (5).

Because preliminary data are not available by state, data for the 2005–2010 period were used for the geographic analysis.

http://www.cdc.gov/nchs/data/databriefs/db120.pdf
Recent Declines in Infant Mortality in the United States, 2005-2011

• Following a plateau, from 2000 through 2005, the US IMR declined 12% from 2005-2011.
  ✓ Declines in the neonatal and postneonatal mortality rates were similar
• From 2005-2011 IMR declined
  ✓ 16% for Black women
  ✓ 12% for White women
  ✓ 9 % for Hispanic women
• IMR declined for 4 of the 5 leading causes of infant death from 2005-2011.
New Targets for Infant Mortality

Based on recent trends, SACIM recommends that the targets should be “five-five by fifteen” and “four-five by twenty” – that is, aim to reduce the infant mortality to 5.5 per 1,000 by 2015, and to 4.5 by 2020.

Trend in U.S. Infant Mortality Rate, Actual and Projected to 2020

USA Black:White Infant Mortality Rates, 1950-2010:

Deaths per 1,000 live births

Year


B/W Ratio

Source: National Center for Health Statistics, 2012
Why the Disparities?

• Behaviors
  ✓ Smoking
  ✓ Drug use
  ✓ Marital Status
  ✓ Domestic violence

• Prenatal Care
  ✓ Initiation/Access
  ✓ Duration (inter-conception, preconception)
  ✓ Quality of Care

• Genetics/Epigenetics

• Societal organization
  ✓ Social Determinants of Health/Place Matters

• Socio-economics
  ✓ Poverty

• Education

• Racism

• Others (Fatherhood, incarceration rates, food insecurity, etc.)
Lifecourse:

Explicitly considering time
A Lifecourse Approach – The Basic Idea

• Many illnesses, like heart disease, stroke and cancer, have natural histories that involve long latency periods.

• Thus, it is logical to assume that exposures earlier in life have a role to play in the development of diseases (Barker’s Hypothesis).

• Adopting a lifecourse perspective, means trying to assess the role of “early-life”, “life-long”, and perhaps “generational” exposures – be they biological, psychological, behavioural or socioeconomic – and then trying to understand how they interact and accumulate over the lifetimes of individuals and populations to eventually manifest as disease (Weathering Hypothesis).
We can think about inequalities in infant health as partly the result of processes acting over the lifecourse of the parents.
The Lifecourse and Health Inequalities

- Time – individual lifecourse (Generational)
- Cohort specific effects (AA’s)
- Place specific effects
- Across Domains

Childhood Conditions

Prevailing Social Policies & Circumstances

Inequalities in birth outcome infant health

Inequalities in adult health
A multi-level and multi-time point model
Political Economy
Discrimination
Institutions

History
Culture

Neighborhood
Community

Socioeconomic
Psychosocial

Behavioral

Work
Friends
Family

Genetics
Human Biology

Pathological Biomarkers

Health Status

Conception
Old Age

Structural
Macrosocial
Factors

Distal Social
Connections

Work

Proximal Social
Connections

Individual
Characteristics

Genetic
Characteristics

Pathobiology
(including medical sequelae of non-medical antecedent events)

Lifecourse

Lynch (2000)
The Basic Idea:
Socioeconomic position, race/ethnicity and gender all structure the likelihood of multiple exposures at multiple points in time – over the entire lifecourse from conception to old age.

It is this life-long cascade of interacting multiple exposures, balanced against available resources, that are the important determinants of how social inequalities leave their imprint as health disparities.

Poverty and Race are intertwined...with each making the other worse. Racism represents a particularly damaging and pervasive exposure. For the poor, it is the venom in the bite of poverty. Racism is intricately woven into every domain of American life and has cumulative detrimental effects throughout an individual’s lifetime, across all domains, and across generations.
Why Race Still Matters:

All indicators of SES are non-equivalent across race. Compared to whites,
1. blacks receive less income at the same levels of education,
2. have less wealth at the equivalent income levels, and
3. have less purchasing power (at a given level of income) because of higher costs of goods and services.

Health is affected not only by current SES but by exposure to social and economic adversity over the life course.

Personal experiences of discrimination and institutional racism are added pathogenic factors that can affect the health of minority group members in multiple ways.
Health disparities are referred to as “health inequities” when they result from the systematic and unjust distribution of conditions that support health (social determinants).

“The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries (or communities).

The structural roots of health inequities lie within education, taxation, labor and housing markets, urban planning, government regulation, health care systems, all of which are powerful determinants of health, and ones over which individuals have little or no direct personal control but can only be altered through social and economic policies and political processes.” (WHO)
Determinants of Population Health and Health Inequalities:

- Social and Economic Policies
  - Institutions (including medical care)
- Living Conditions
- Social Relationships
- Individual Risk Factors
  - Genetic/Constitutional Factors
- Pathophysiologic pathways

Individual/Population Health

Physical Environment (Community)

Kaplan, 2002
U.S. Declaration of Independence

The second paragraph of America's founding document states:

"We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness."
However, events like Hurricane Katrina & the persistent racial disparity in birth outcomes remind America that not all of us benefit from this Declaration equally...
### African American Citizenship Status: 1619-2014:

<table>
<thead>
<tr>
<th>Time Span:</th>
<th>Status:</th>
<th>Years:</th>
<th>% U.S. Experience:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1619-1865</td>
<td>Slaves: “Chattel”</td>
<td>246</td>
<td>62.3%</td>
</tr>
<tr>
<td>1865-1964</td>
<td>Jim Crow: virtually no Citizenship rights</td>
<td>99</td>
<td>25.1%</td>
</tr>
<tr>
<td>1964-2014*</td>
<td>“Equal”</td>
<td>50</td>
<td>12.7%</td>
</tr>
<tr>
<td>1619-2014</td>
<td>“Struggle” “Unfairness”</td>
<td>395</td>
<td>100%</td>
</tr>
</tbody>
</table>

* USA struggles to transition from segregation & discrimination to integration of AA’s
So...how do you “keep up” in a race when the other team has a 350 year head start?

Today, we behave as if the Civil Rights Act leveled the playing field between Blacks and Whites and some point to the election of President Obama as evidence that America no longer has a race problem, but...

“You do not take a person who, for years, has been hobbled by chains and liberate him, bring him up to the starting line of a race and then say, "you are free to compete with all the others," and still justly believe that you have been completely fair”.

President Lyndon B. Johnson, 6/4/1965
Racial Disparities: *we made it this way?*

We often perceive racial health disparities as consequences of “nature”. As such, we convince ourselves that these differences are “fixed” or “hardwired”; a part of what is different about us as people and therefore cannot be changed. “*Often our tendency is to attribute poorer outcomes to “group level flaws.”*”

Similarly, we often see America as it is instead of an America as it should be...and we accept the difference between the two as “normal”.

However, these disparities are differences that we created, differences that occur as a consequence of systems that we put into place. Therefore, we know they can be changed and would suggest that their persistence is in part because of our unwillingness to “undo” what we have done.
Infant Mortality:

- Premature Births
- Congenital Anomalies
- Maternal pregnancy Complications
- SUID
- Placental or cord anomalies

Arthur R. James
Infant Mortality:

- Premature Births
- Congenital Anomalies
- SUID
- Maternal pregnancy Complications
- Placental or cord anomalies

Social Determinants of Health/Lifecourse

Disparities

Arthur R. James
Disparities in Birth Outcomes:

Social Determinants of Health:

- Racism
- Fatherless households
- Poverty
- Limited Access to Care
- Under-Education
- Lower graduation rates
- No Insurance
- Housing
- Incarceration rates
- Neighborhoods
- Unemployment
- Hopelessness
- Policies
- Weathering
- Smoking
- Substance Use
- Stress
- Family Support
- Poor Working Conditions
- Nutrition
- Teen Births

Medical Problems:
Call to Action: “2019”
2019: “Mother Mattie Bennett Plan”... because 400 years is enough!

- In 5 years this Nation will acknowledge the 400 year anniversary of the arrival of Africans to the shores of America.
  - 246 years as Slaves, 99 years under “Jim Crow”, 50 years (< 13%) since the Civil Rights Act…
  - AA’s have never had equality – in fact, we have had marked inequality – so why should we strive for health equity? Why should we care? Why now?

- We cannot continue to allow black babies to die at 2-3 times the rate of whites, or a black maternal mortality rate that is 3-5 times the rate of other groups.
- It is wrong to accept that we have to wait another 35 years before black babies born in our country have the same survival opportunity as white babies born today.
- 400 years of this is enough…

My maternal grandmother was Mrs. Mattie Bennett who died while giving birth at home in Louisiana, circa 1915 at a time when black women n the south were forbid from going to the hospital to have babies.
2019: “Mother Mattie Bennett Plan”

- Call to Action:
  - Challenging the CBC-Foundation and national MCH leadership to address racial disparities by developing a comprehensive plan for the elimination of disparities in birth outcomes and introduce that plan to the nation by 2019!
  - Comprehensive:
    - So needs to address the clinical and non-clinical contributors to compromised birth outcome.
2019…

because our mothers, fathers, and our babies need our help…

…because 400 years is enough!
It always seems impossible until it's done.

-Nelson Mandela
1918-2013
Arthur.James2@osumc.edu
(614) 293-4929
“Ambulance Down in the Valley”

poem by Joseph Malins

T’was a dangerous cliff as they freely confessed. Though to walk near its edge was so pleasant. But over its edge had slipped a Duke, and it fooled many a peasant.

The people said something would need to be done but their projects did not at all tally.
Some said, “build a fence around the edge of the cliff,” others, “an ambulance down in the valley.”

The lament of the crowd was profound and loud as their hearts overflowed with pity. But the ambulance carried the cry of the day as it spread to the neighboring cities. So a collection was made to accumulate aid and dwellers in highway and alley, gave dollars and cents not to furnish a fence, but an ambulance down in the valley.
“Ambulance Down in the Valley”
(continued)

For the cliff is alright if you’re careful they said, and if folks ever slip and are falling; It’s not the slipping and falling that hurts them so much as the shock down below when they are stopping.

And so for years as these mishaps occurred quick forth would the rescuers sally, to pick up the victims who fell from the cliff with the ambulance down in the valley.

Said one in his plea, it’s a marvel to me that you’d give so much greater attention to repairing results than to curing the cause, why you’d much better aim at prevention.

For the mischief of course should be stopped at its source; come friends and neighbors let us rally. It makes far better sense to rely on a fence than an ambulance down in the valley.
“Ambulance Down in the Valley”

(continued)

He’s wrong in his head the majority said. He would end all our earnest endeavors. He’s the kind of a man that would shrink his responsible work, but we will support it forever. Aren’t we picking up all just as fast as they fall, and giving them care liberally. Why a superfluous fence is of no consequence, if the ambulance works in the valley.

(And when we decide that the ambulance ride is ok for one group but not another? Despite causing more pain and costing more cents, we neglect the fence for those with fewer pence, but erect it for those with more money. And then we even assert that those experiencing more hurt somehow DESERVE the increased pain that they are getting).
Now this story may seem queer as I’ve given it here, but things oft occur which are stranger. More humane we assert to repair the hurt, than the plan of removing the danger. The best possible course would be to safeguard the source, and to attend to things rationally. Yes, build up a fence and let us dispense with the ambulance down in the valley!
It’s a medical problem... so why should I get involved?

It’s too complicated

It cost too much money

There’s death behind that door so I don’t want to go there...

USA Infant Mortality

It can’t be fixed

Disparities are because of THOSE people’s behavior

THOSE families just don’t care

It’s just the way that it is
Eliminating the Birth Outcome Racial Gap:

Blacks, Native Americans, People living in poverty, Others...