

Improving Global Health: **A Life-Course Perspective**

Michael C. Lu, MD, MS, MPH

Dean

U.C. Berkeley School of Public Health

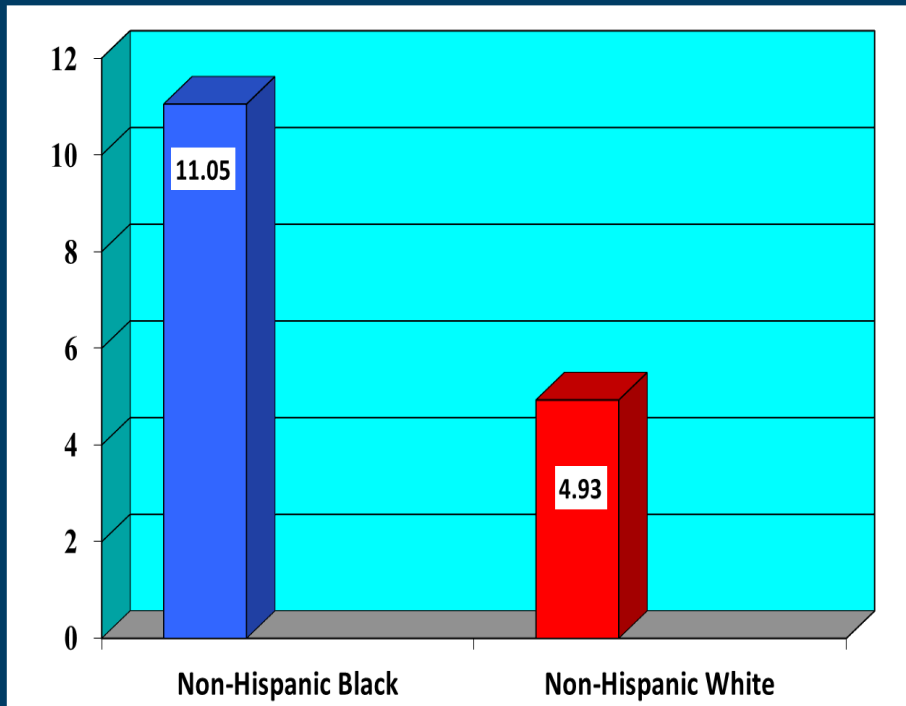
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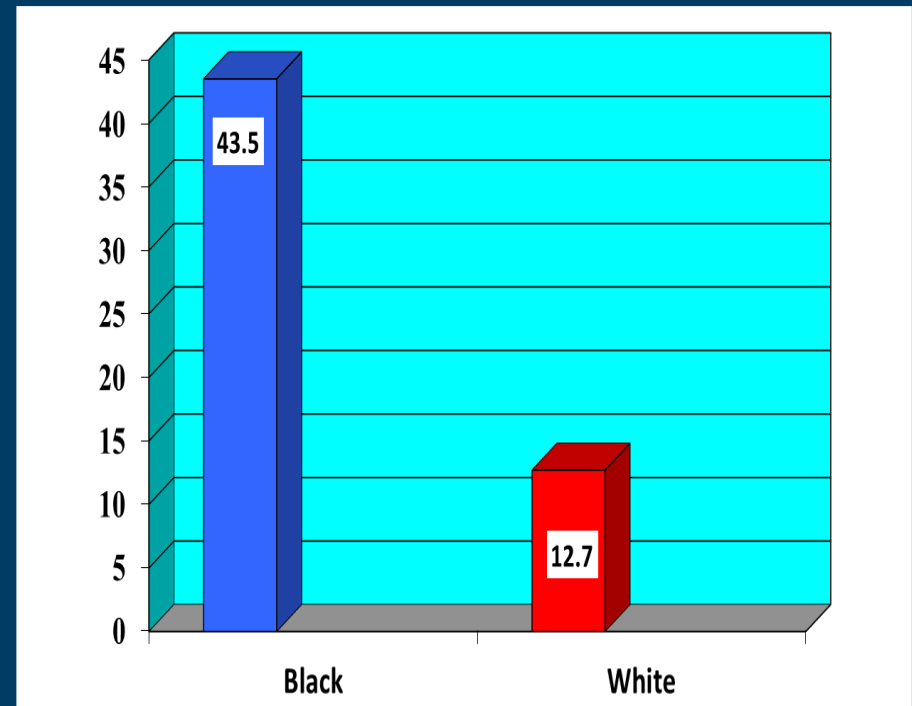
*What does the life course perspective
tell us about improving global health?*

U.S. Black-White Disparities In Maternal & Infant Mortality

U.S. Infant Mortality, By Race, 2014



U.S. Pregnancy-Related Mortality, By Race, 2011-13



Source: National Center for Health Statistics. 2016

Source: Centers for Disease Control and Prevention.
<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html>

Prenatal Care

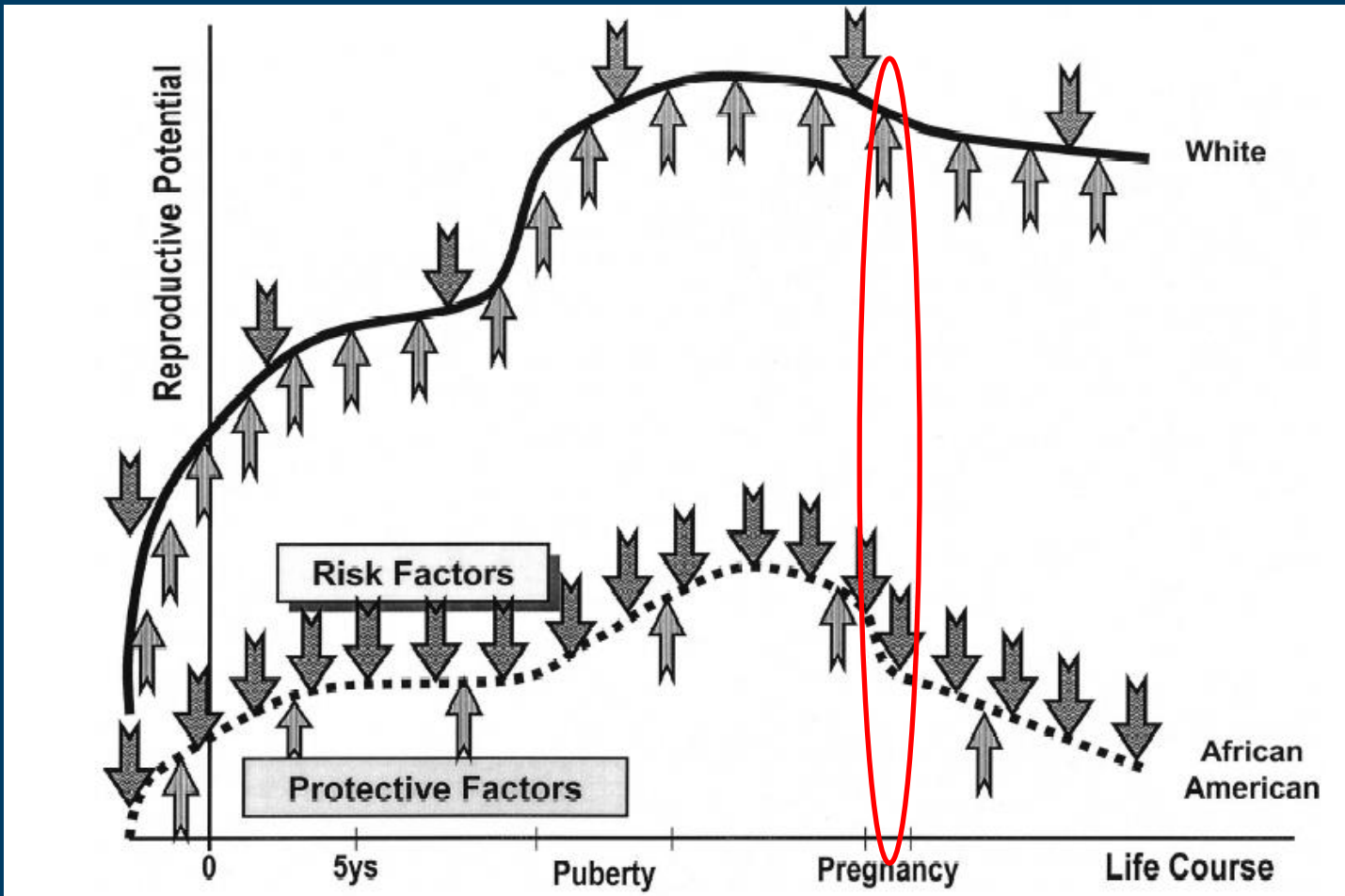
Preventing Low Birthweight



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Life Course Perspective



Lu MC, Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. *Matern Child Health J.* 2003;7:13-30.

Prenatal care may do too little, too late.

Improving Pregnancy Outcomes: A Life Course Perspective

- **Early Programming (developmental origins of health & disease)**
 - Experiences in early life can influence your (reproductive) health and functions for life
- **Cumulative Pathways**
 - Chronic stress across the life course (childhood trauma, poverty, racism, etc) can create wear and tear (allostatic load) on your body's physiologic systems, which over time can take a physiologic toll on your (reproductive) health
- **Why prenatal care may be too little too late**
 - To expect prenatal care, in less than 9 months, to reverse cumulative disadvantages and inequities across the life course may be expecting too much of prenatal care
- **Improving pregnancy outcomes**
 - Caring for women not only during pregnancy, but before, between, and beyond pregnancy & across the life course
 - Assuring the conditions in which girls and women can be healthy across the life course

*What does the life course perspective
tell us about improving global health?*

What does the life course perspective tell us about improving global health?

- **Intervene Earlier**
- **Treat Root Causes**
- **Go Upstream**

Intervene Earlier

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- **Child Obesity**

- **Before birth?**

- *Growing body of evidence linking prenatal influences to child obesity*

- **School Readiness**

- **First 1000 Days?**

- *Orphans in Romanian Orphanage Study subjected abuse and neglect show persistent structural and functional abnormalities in the brain on EEG and MRIs*
 - *Exception: orphans placed into nurturing foster care before the age of 2 showed normal brain structures and functions*

- **Neurogenerative Diseases**

- **In midlife?**

- *PET scan found amyloid plaque formation beginning in middle-age*

- **Earlier Interventions?**

- **Pre-disease pathways**

- *Future research should focus on mapping out early and long-term biological, behavioral, psychological, and social precursors to disease*
 - *And identifying sensitive or critical windows along pre-disease pathways most amenable to interventions*

Treat Root Causes

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- **Preventing Future Pandemics**

- Outbreaks (SARS, MERS, Ebola, etc) caused by viral spillover
- 800,000+ viruses capable of spillover lurking in the wild
- Climate change, urbanization, globalization, deforestation, wildlife trade fueling spillovers
- **Treat root causes: stopping relentless human encroachment on natural habitats & harvesting of wildlife**

- **Dismantling Institutionalized Racism (and all forms of violence)**

- Root cause of health disparities
- Manifest in differential access to healthcare, nutrition, housing, jobs, clean air & water...
- Most health professionals aren't trained in taking down racist institutions
- Go back to what's convenient (prenatal care, care coordination, etc)
- **Treat root causes: training next generation of health professionals equipped to dismantle institutionalized racism**

Go Upstream

Go Upstream

As much as we like to think we can fix all global health problems with global programs and services, tackling the root causes of some of our biggest problems will require social, political and policy change.



Health in All Policies

The biggest gains in global health in the last 150 years have come from regulation of food and environmental safety, passage of child labor laws and women's suffrage, and overall improvements in educational attainment, economic opportunities and social status of girls and women in our society and around the world.



Health in All Policies

The biggest gains in global health in the coming decades will come from reversing global warming, cleaning up toxic waste sites, rebuilding our nation's infrastructure, protecting reproductive rights, reducing social inequality and assuring the social conditions in which all children and families can be healthy and thriving.



All this will not be finished in the first 100 days. Nor will it be finished in the first 1,000 days, nor in the life of this Administration, nor even perhaps in our lifetime on this planet. But let us begin.

John F Kennedy (1961)

