



CENTER ON SOCIAL DISPARITIES IN HEALTH
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Why should nurses be concerned with the social determinants of health and health disparities?

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Why should nurses be concerned with the social determinants of health & health disparities?

- Definitions
- Do social determinants have a big impact on health and health disparities?
- What could nurses do?
- For the panel: How would a more diverse nursing workforce help address the social determinants of health and health disparities?



Definitions

Social determinants of health: factors apart from medical care that influence health in important ways and can be shaped by social policies— e.g., education, child care, housing, income, conditions in neighborhoods

Health disparities: Differences in health that adversely affect groups of people who are already at a disadvantage economically /socially – e.g., African Americans, Latinos, low-income, disabled, and/or LGBT people – because of historical discrimination or marginalization



“The poor are getting poorer, but with the rich getting richer it all averages out in the long run.”



What are “health disparities/inequalities”?

- Differences, variations: descriptive terms
- Epidemiology is the study of health or health risk differences across population groups
- Most official U.S. definitions refer only to differences between unspecified groups
- But we really mean: Health differences that are unfair (in a particular way)
- M. Whitehead: unfair, avoidable, and unjust
- But ideas of fairness, avoidability, and justice vary



Are all health differences unfair?

- Girls have lower birth weights than boys
- Skiers have more arm/leg fractures than non-skiers
- People in an affluent area of City X have a health problem that people in a poor area do not
- Younger adults are generally healthier than the elderly
- Who determines what's fair?
- How?

What if the causes are not known?

- African-American women are 2 to 3 times as likely as Whites to give birth to babies who are
 - born too small &/or too early
 - which predict infant mortality, childhood disability, adult chronic disease & premature mortality
- The causes are not known
- Can we call this unfair?





Human rights principles provide guidance

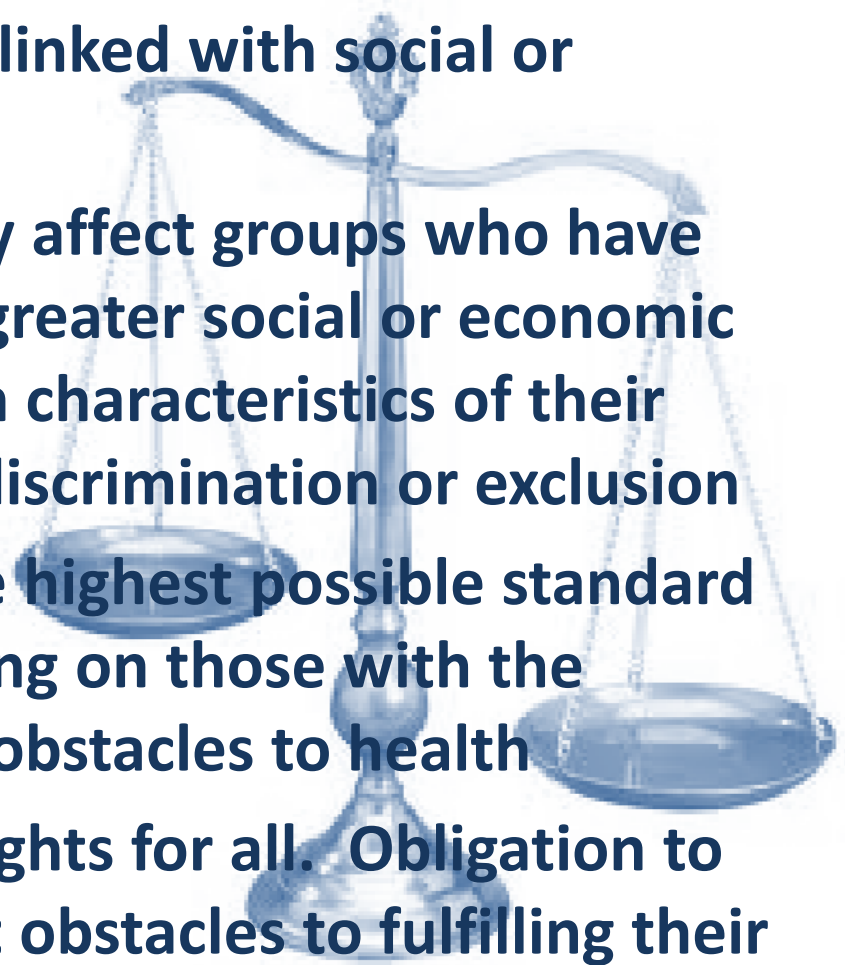
- Social & economic rights, including the right to achieve the highest attainable standard of health
- Rights to: education, living standard adequate for health, benefits of progress, participation in society
- Governments should progressively remove obstacles to fulfillment of rights of all, **especially for those with more obstacles**
- Non-discrimination & equality: prohibits actions with intent **or effect** of discrimination; requires affirmative action



Human rights principles: Non-discrimination and equality

- **Specify vulnerable groups: race or ethnic group, skin color, religion, language, or nationality; socio-economic status; gender, sexual orientation or gender identity; age; disability; geography; political affiliation**
- **Implicit: vulnerability due to history of discrimination, social exclusion or marginalization**
 - **Examples: slavery, genocide, hate crimes, expropriation of ancestral lands, targeted marketing of harmful goods, negative media depictions, slurs**

A rights-based definition of health disparity & health equity

- **A health difference closely linked with social or economic disadvantage**
 - **Health disparities adversely affect groups who have systematically experienced greater social or economic obstacles to health based on characteristics of their group historically linked to discrimination or exclusion**
 - **Health equity: pursuing the highest possible standard of health for all while focusing on those with the greatest social or economic obstacles to health**
 - **Equity vs equality: Equal rights for all. Obligation to focus on those with greatest obstacles to fulfilling their rights.**
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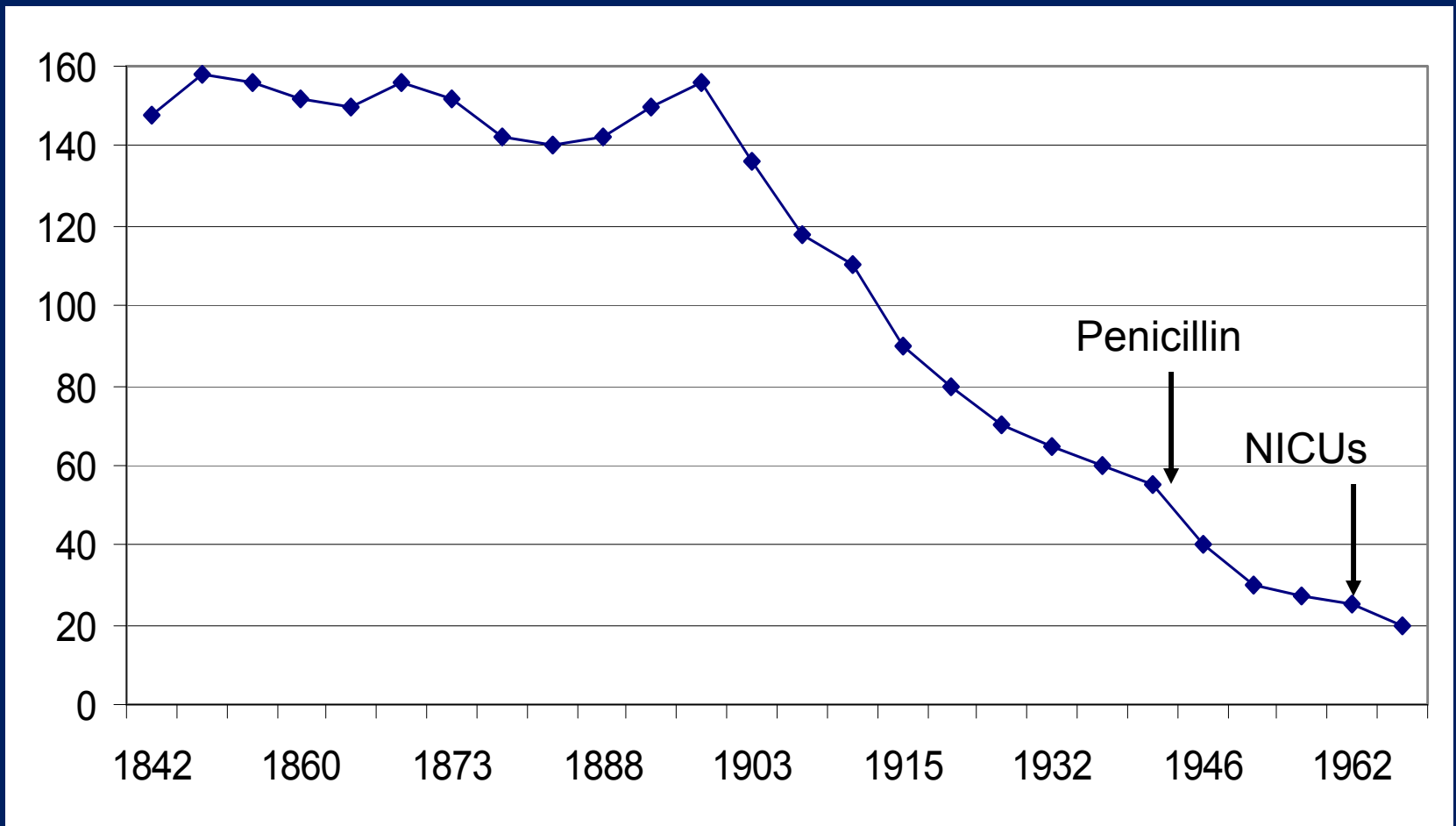
Concepts and measurement of health disparities and health equity: not just a technical issue

- **Based on values**
 - **Equity is the ethical principle underlying a commitment to reduce disparities**
 - **Health disparities are the metric by which health equity is assessed**
- **Implications for policy and resource allocation in multiple sectors, including medical care**
- **Pursuing equity requires swimming upstream, against prevailing tides – will encounter resistance**
- **Need to know where we are headed and why**

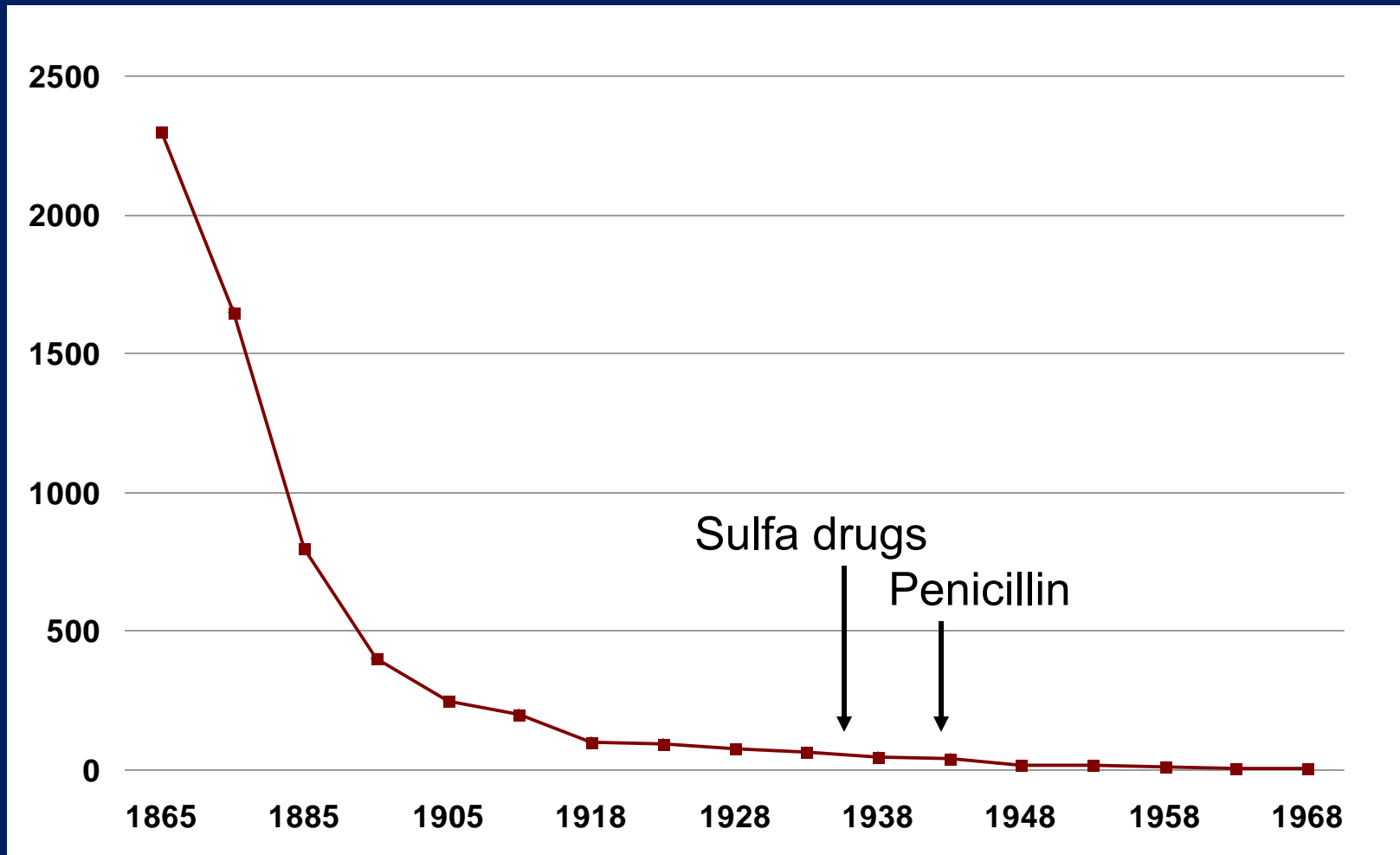
More health care spending but less health: Life expectancy

1	Japan (82.3 years)
2	Australia
3	Canada
4	Spain
5	Sweden/Switzerland
6	Israel
7	Iceland
8	New Zealand
9	Italy
10	Norway
11	Ireland
12	United Kingdom
13	Greece
14	Austria
15	Netherlands
16	Luxembourg
17	Germany
18	Belgium
19	Finland
20	Korea
21	Denmark
22	Portugal
23	United States (78.2 years)
24	Chile
25	Slovenia

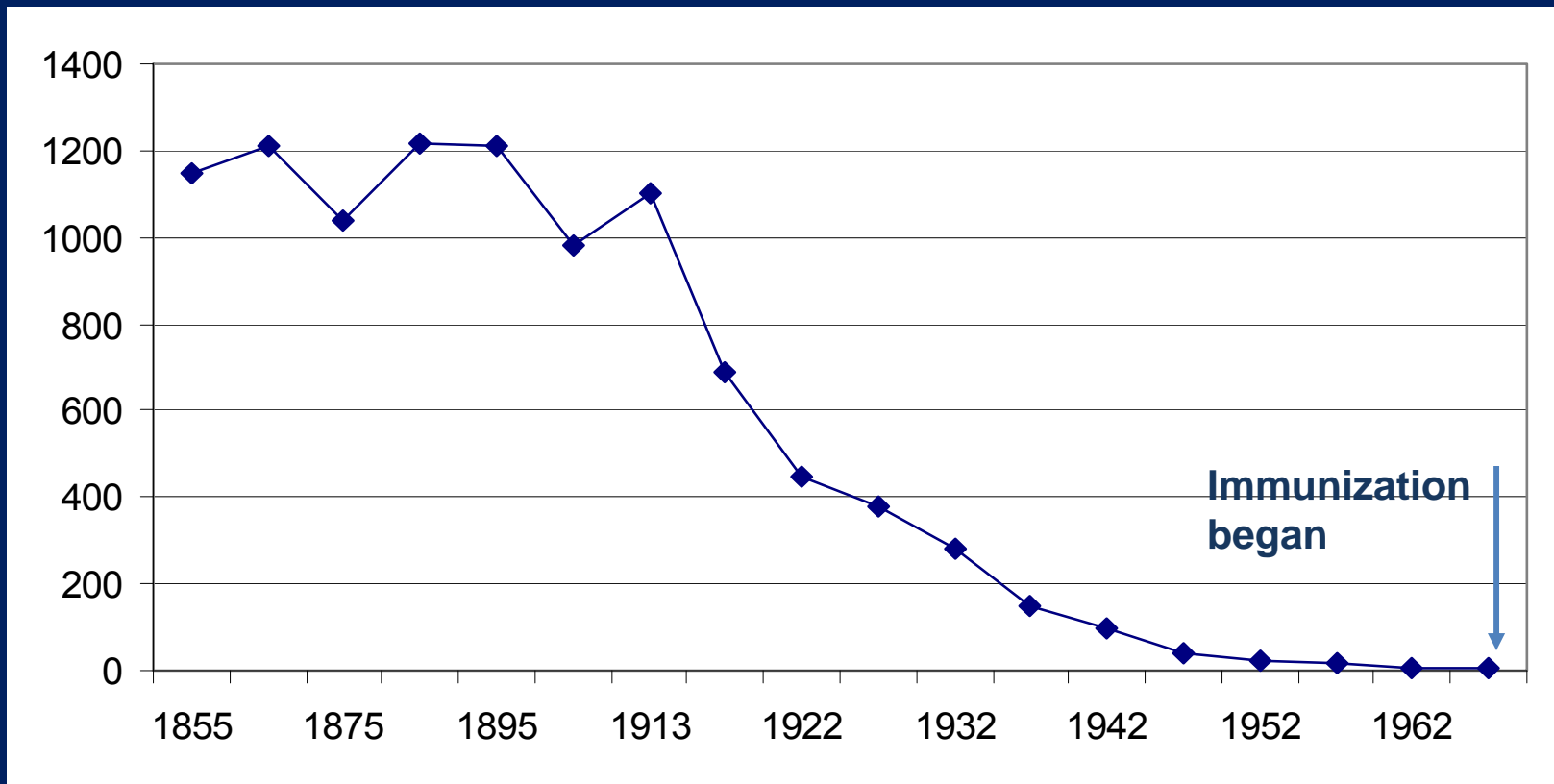
Infant mortality rate: England and Wales



Scarlet fever mortality in children under 15: England and Wales

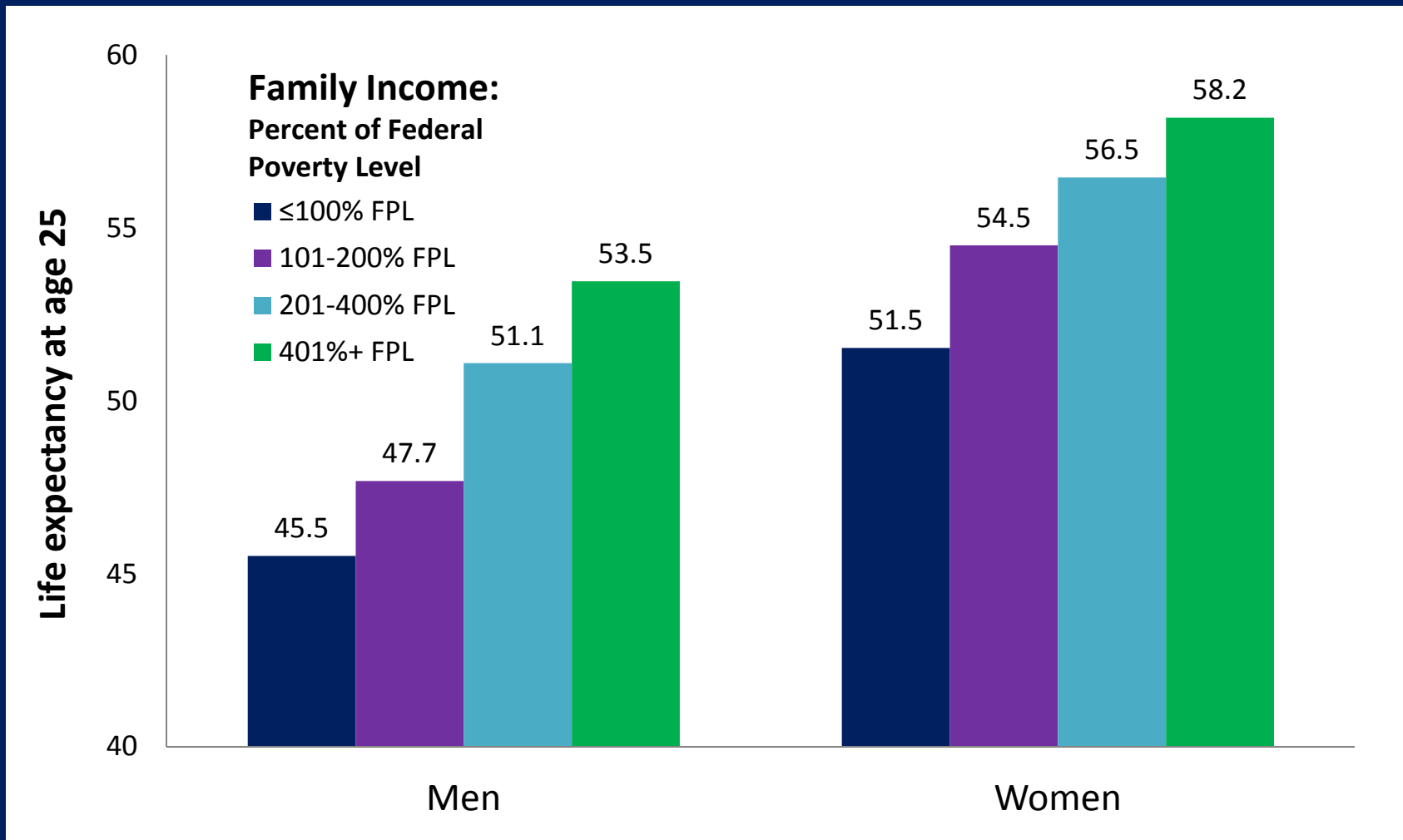


Measles— mean annual death rate of children under 15: England and Wales



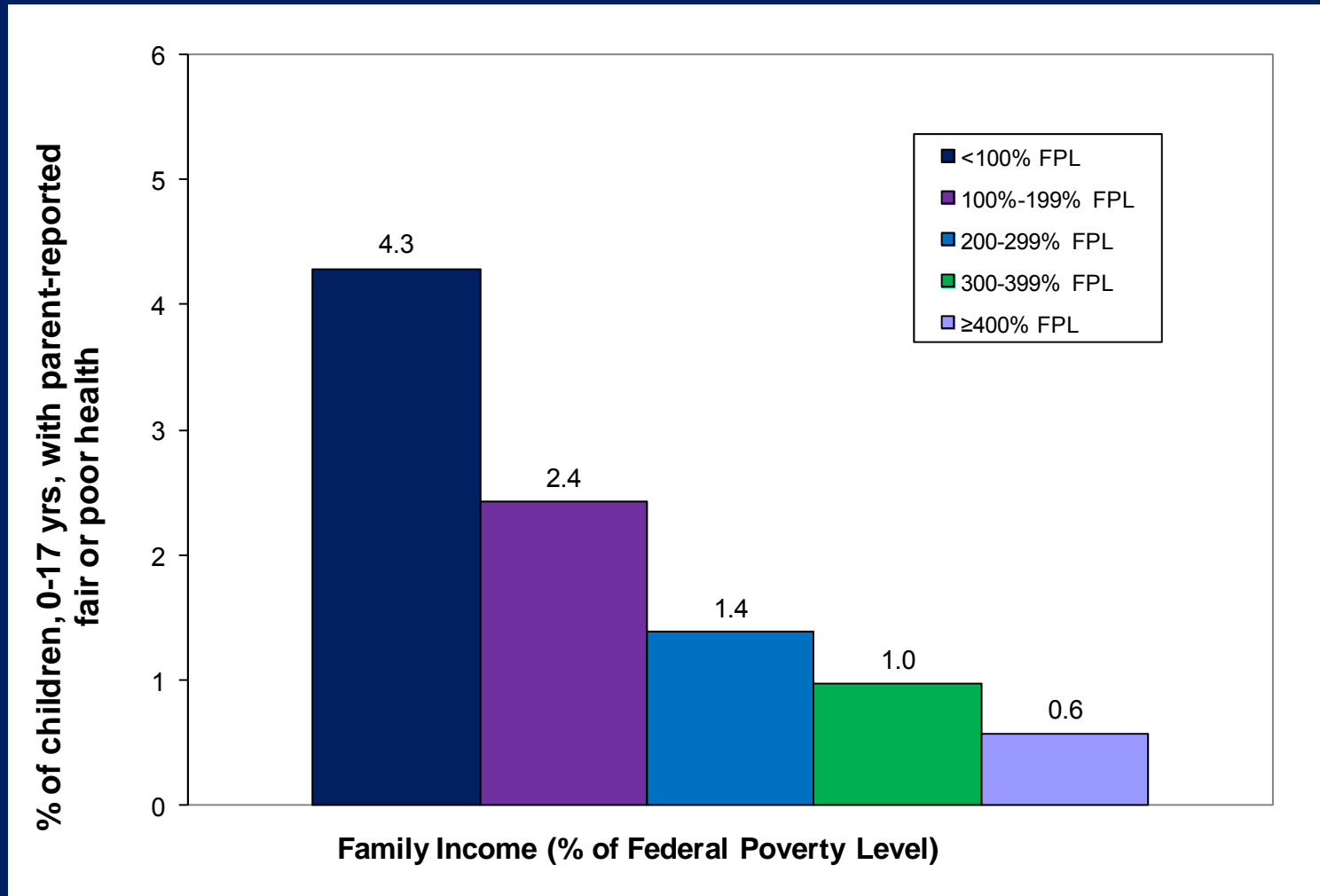
Source: T. McKeown, 1974

Life expectancy varies by income (& education, not shown) in a stepwise gradient pattern



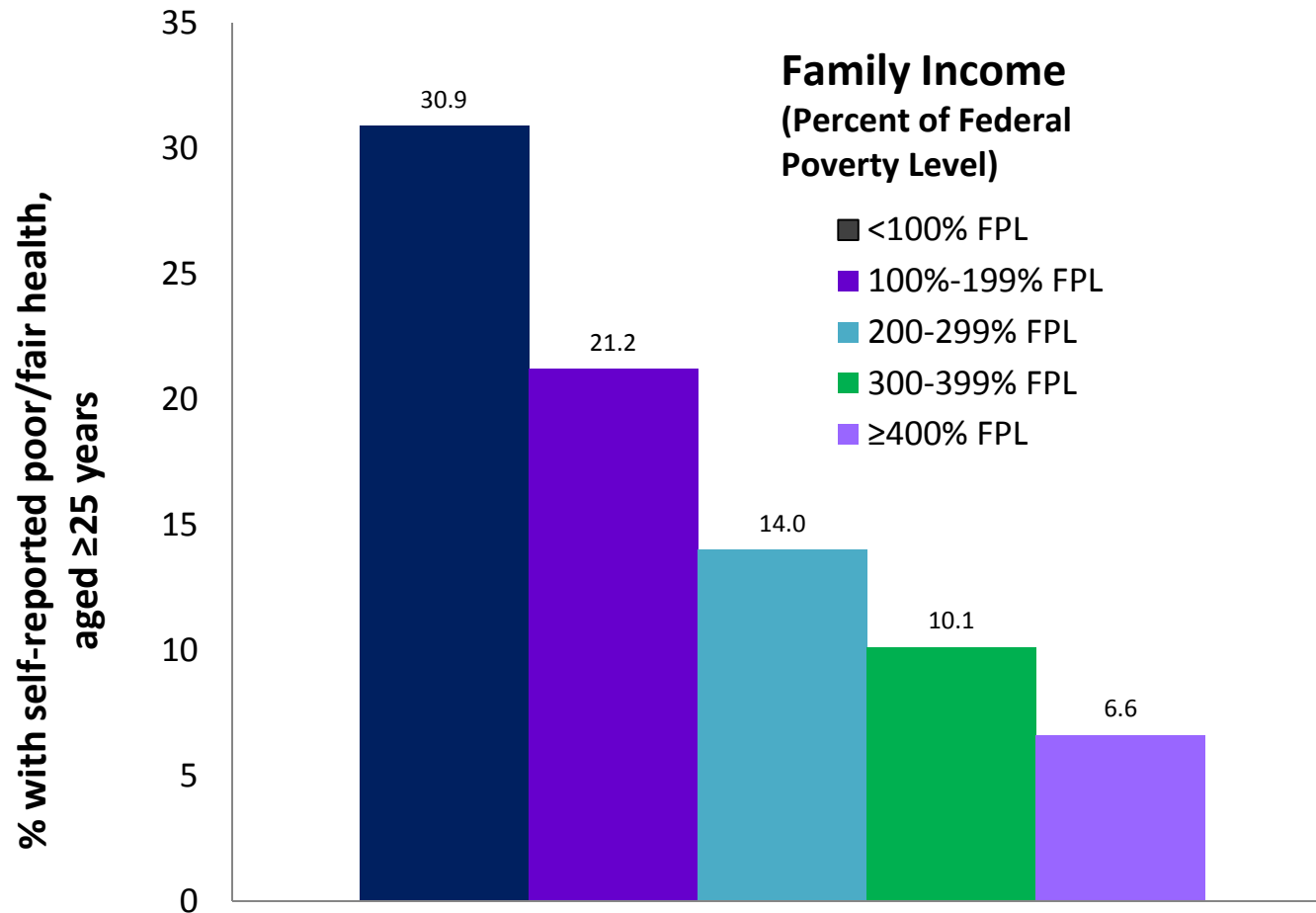
Analyses by Braveman et al., UCSF, Data source: National Longitudinal Mortality Study, 1988-98.

Child health varies by family income (& education): Poor/fair child health reported by parent



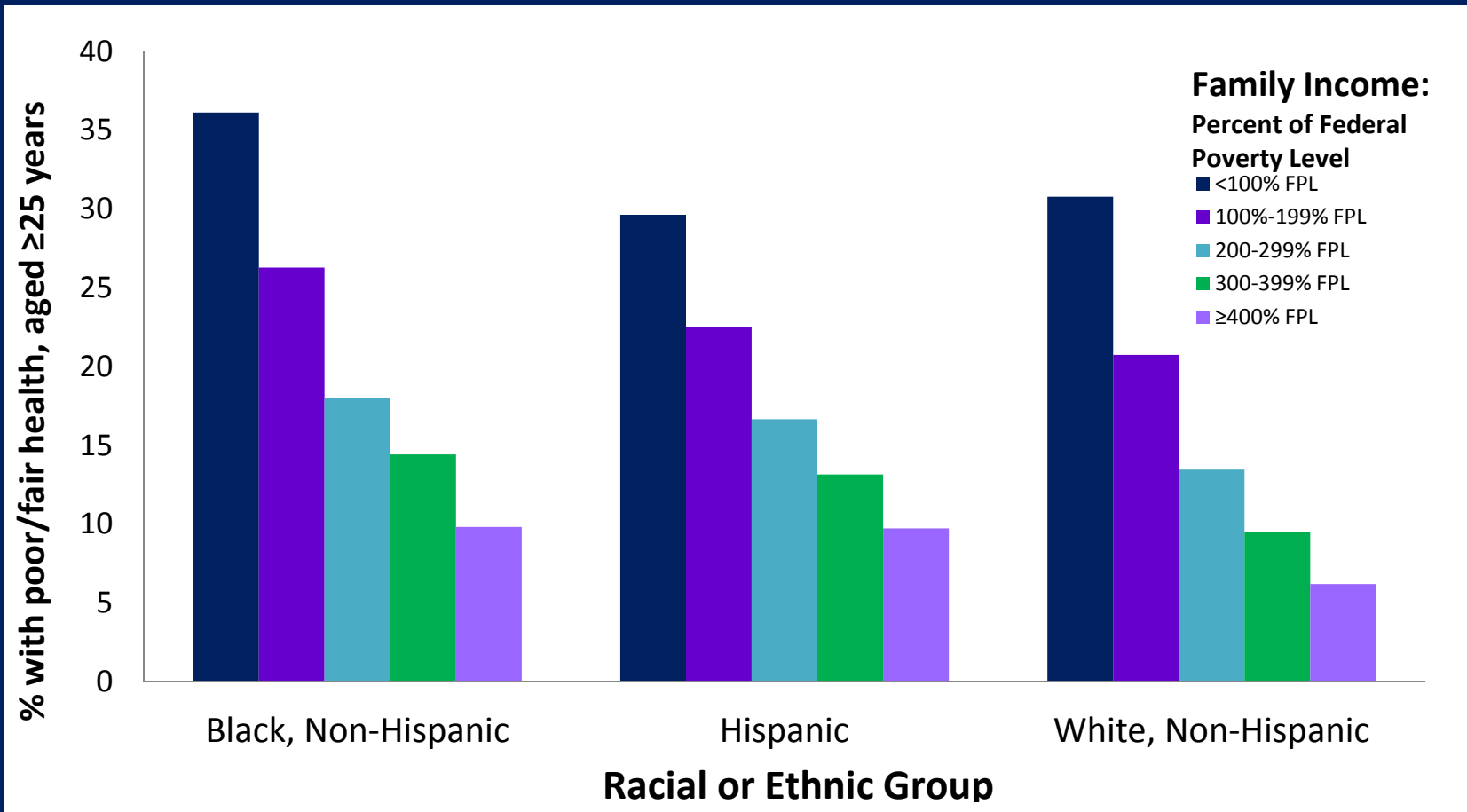
Source: National Health Interview Survey (NHIS) 2001-2005. Age-Adjusted

Adults' self-reported poor or fair health varies by income (& education)



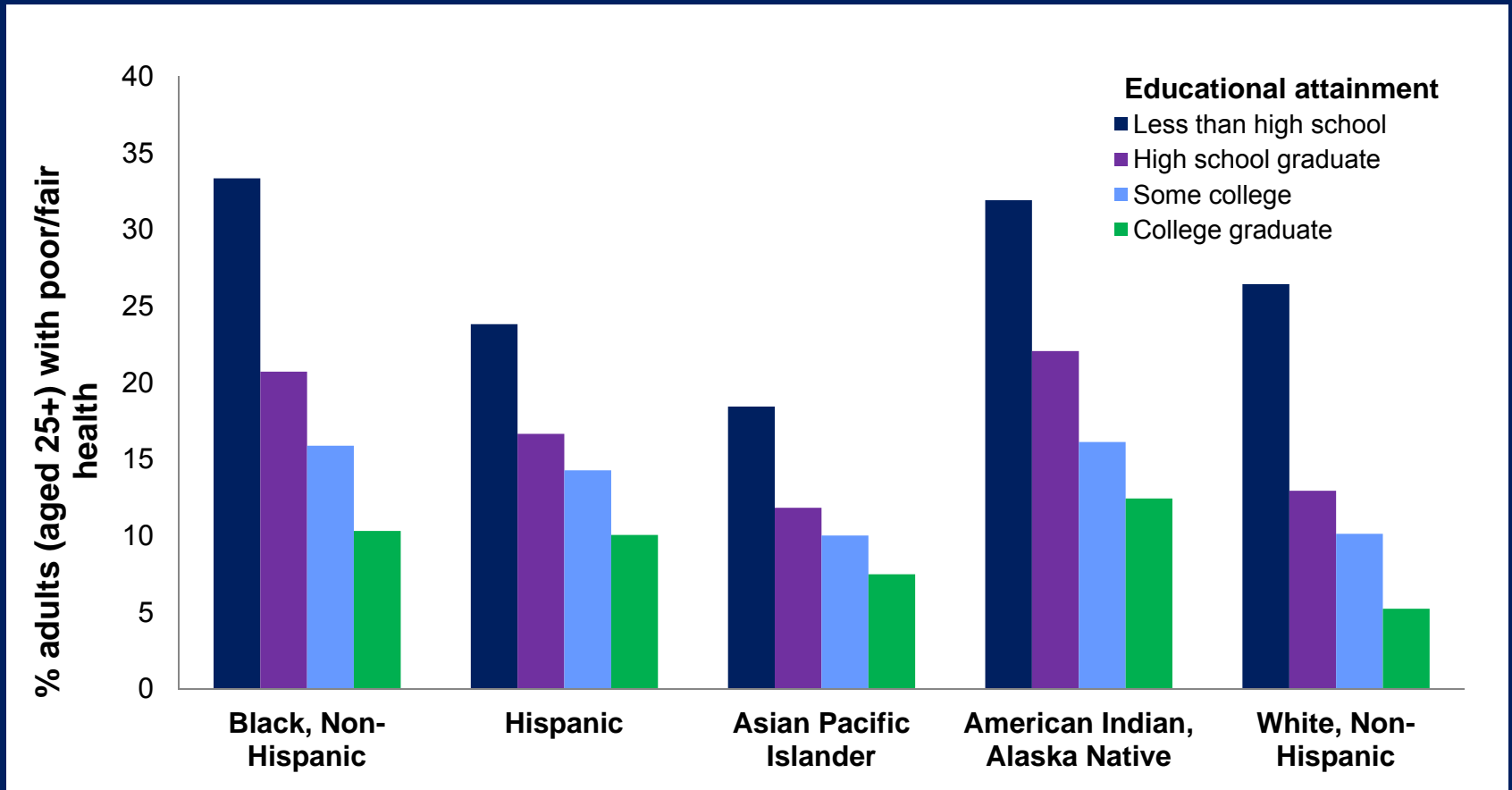
NHIS 2001-2005. Age-adjusted

Racial/ethnic differences do not explain income (or education) differences in adult health



Analyses by Braveman et al., UCSF. Data source: NHIS 2001-2005. Age-adjusted

Racial/ethnic differences do not explain adult health differences by education (or income)



Analyses by Braveman et al., UCSF.

Data source: BRFSS.2005-07 Age-adjusted



What influences health?

- Medical care
- Age, sex, genetic makeup
- Climate & natural physical environment
- Behaviors, nutrition
- What else?
- And what influences the influences?
- Plausible biological mechanisms?

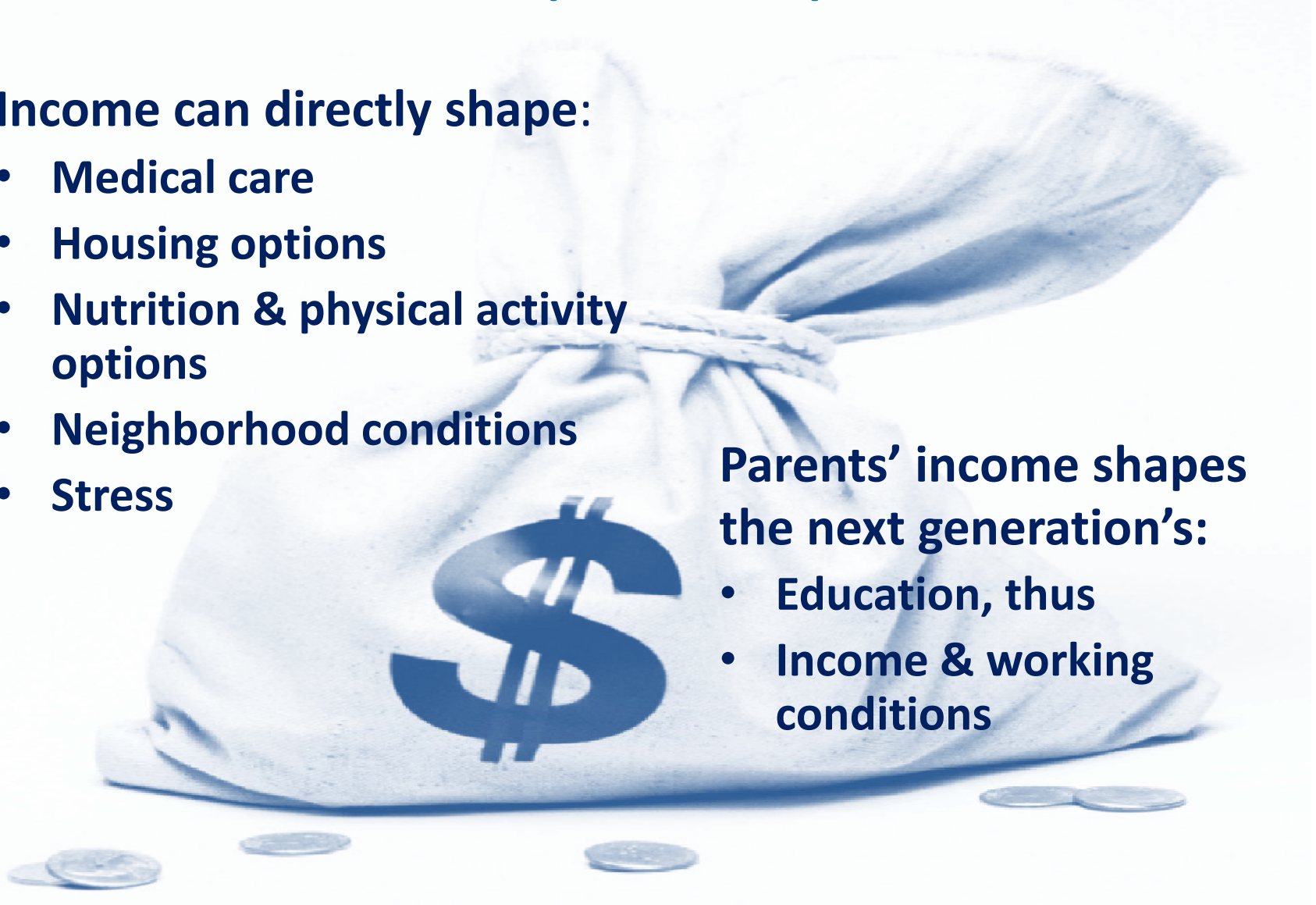
How could income (or wealth) affect health?

Income can directly shape:

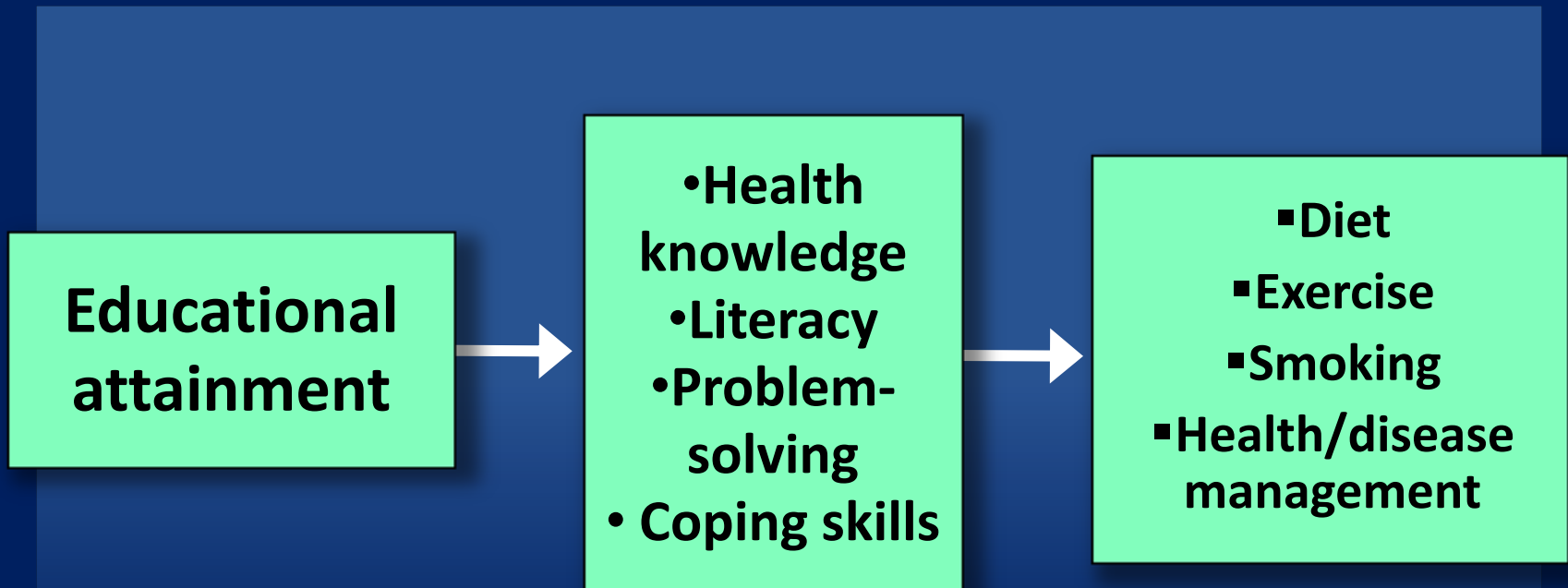
- **Medical care**
- **Housing options**
- **Nutrition & physical activity options**
- **Neighborhood conditions**
- **Stress**

Parents' income shapes the next generation's:

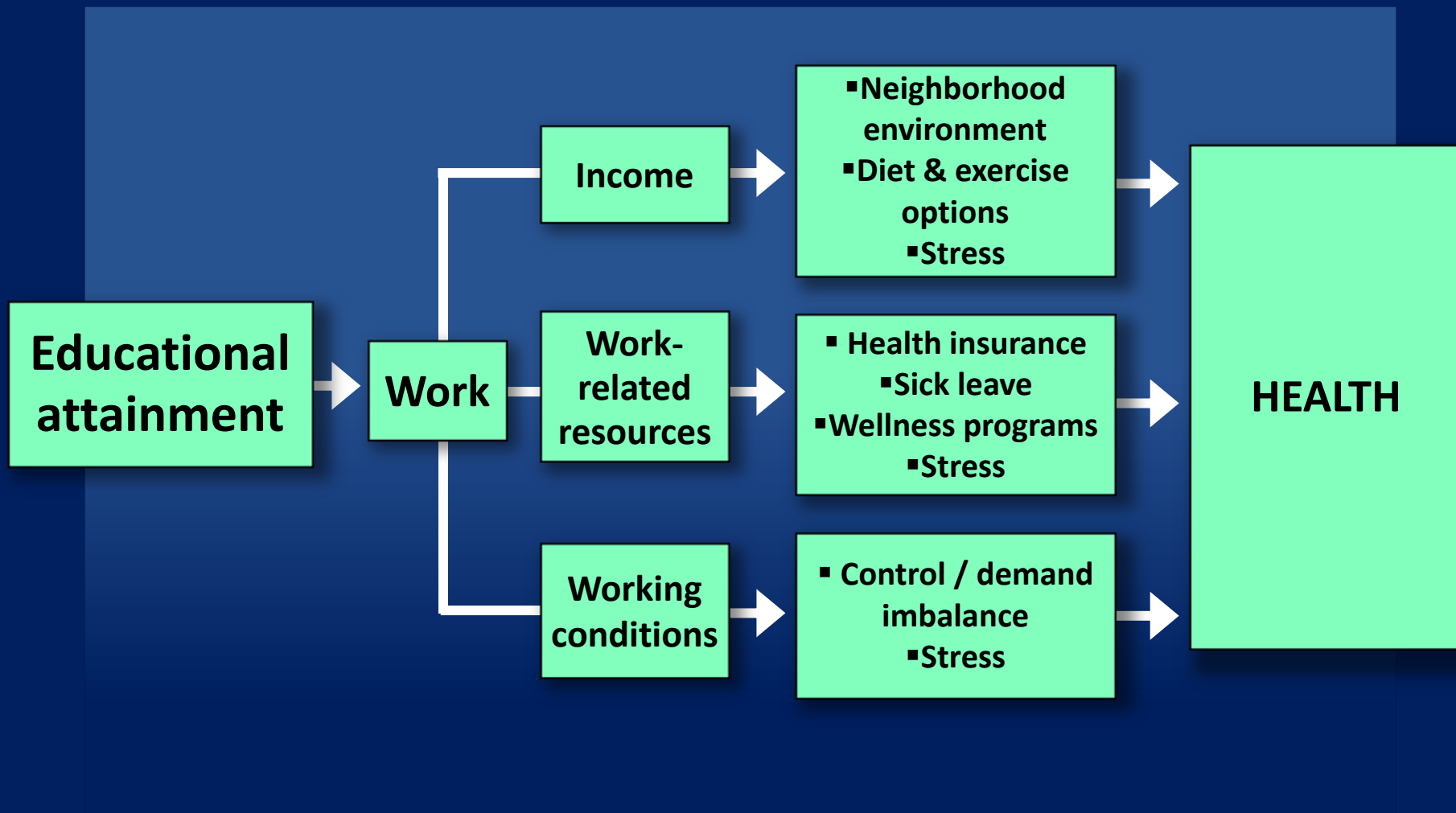
- **Education, thus**
- **Income & working conditions**



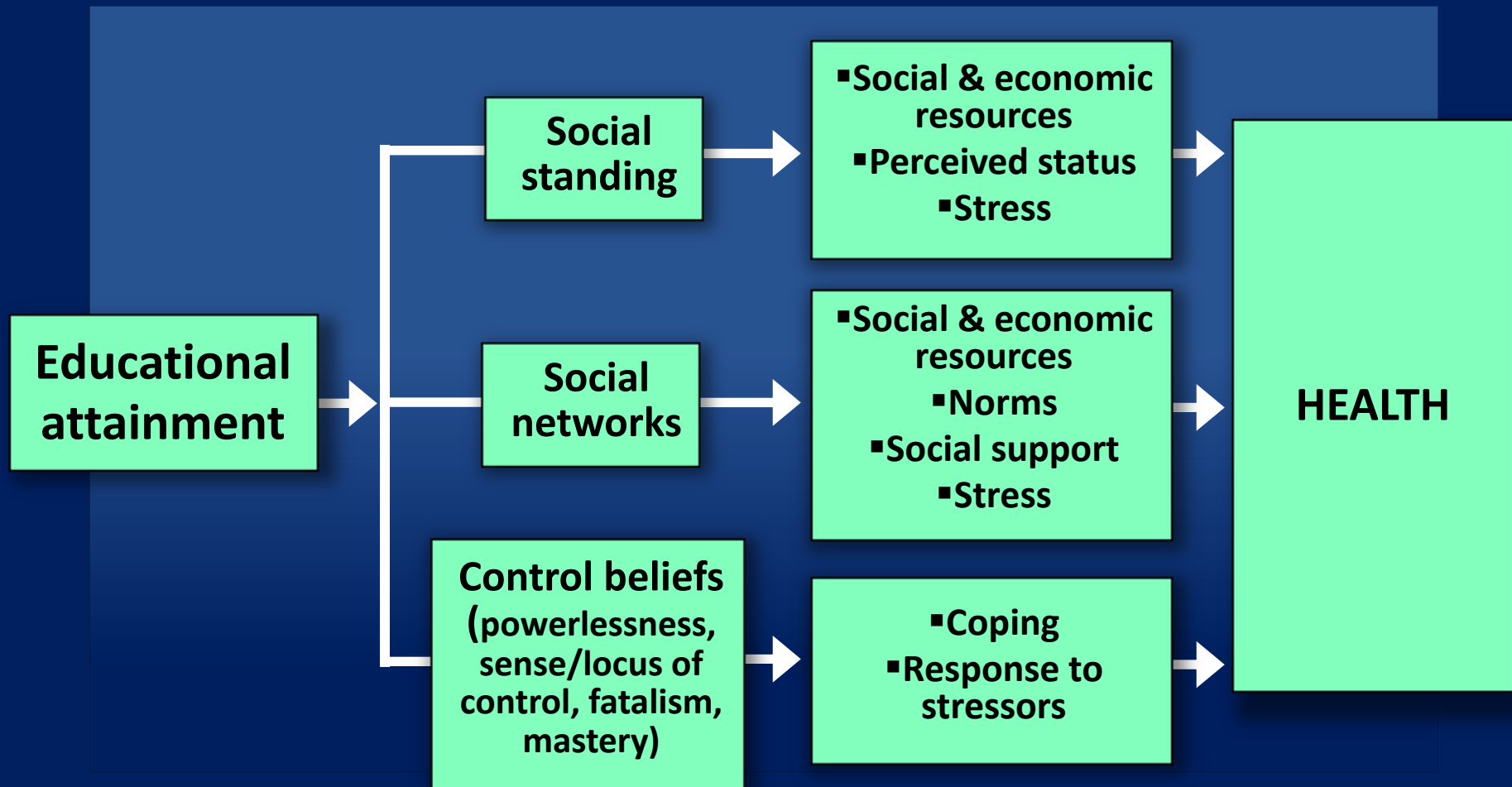
Education can shape health behaviors by determining knowledge and skills



Other plausible pathways from education to health, e.g., via work & income



Psychosocial pathways from education to health

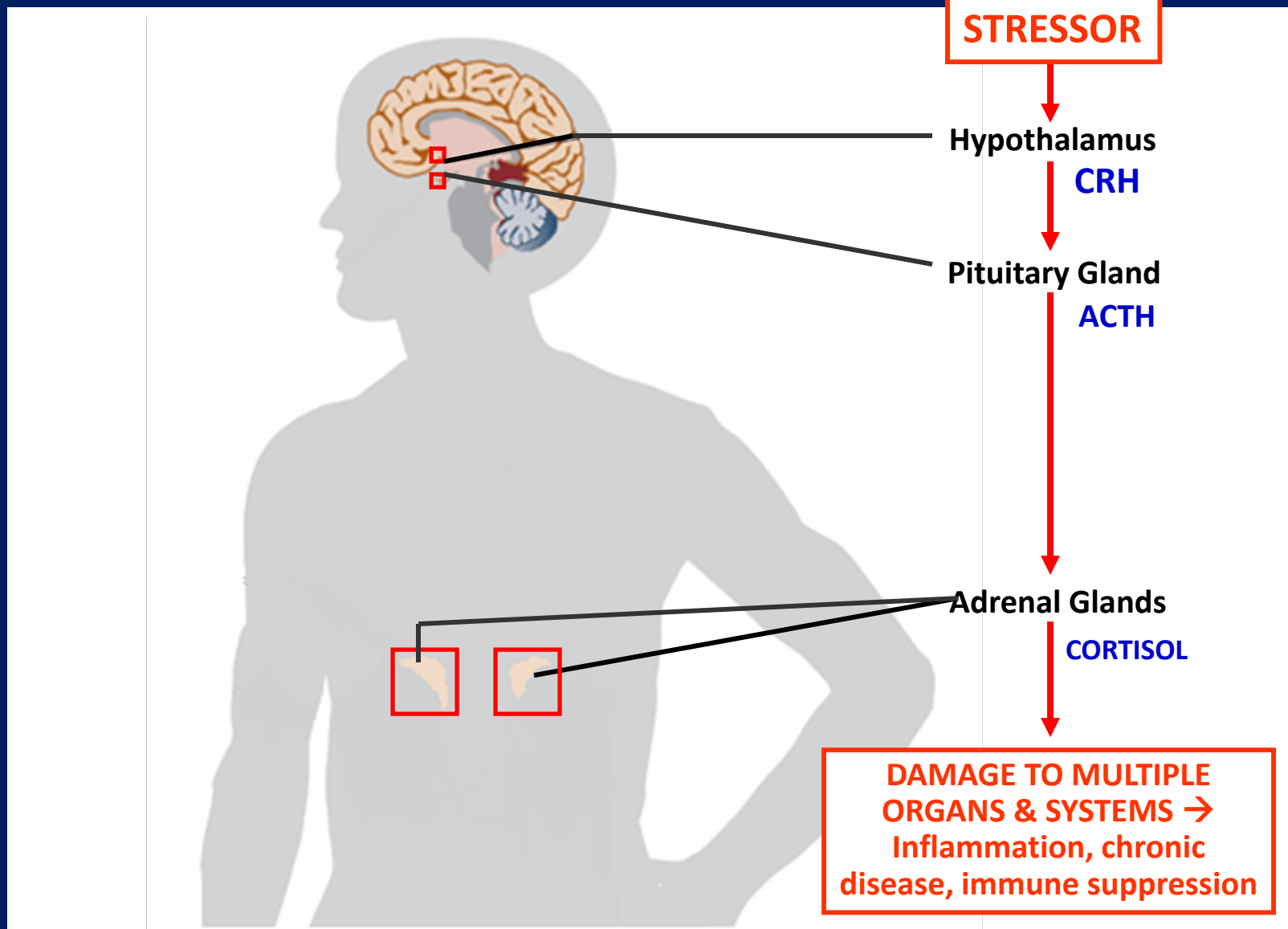




Is the stress-health link biologically plausible?

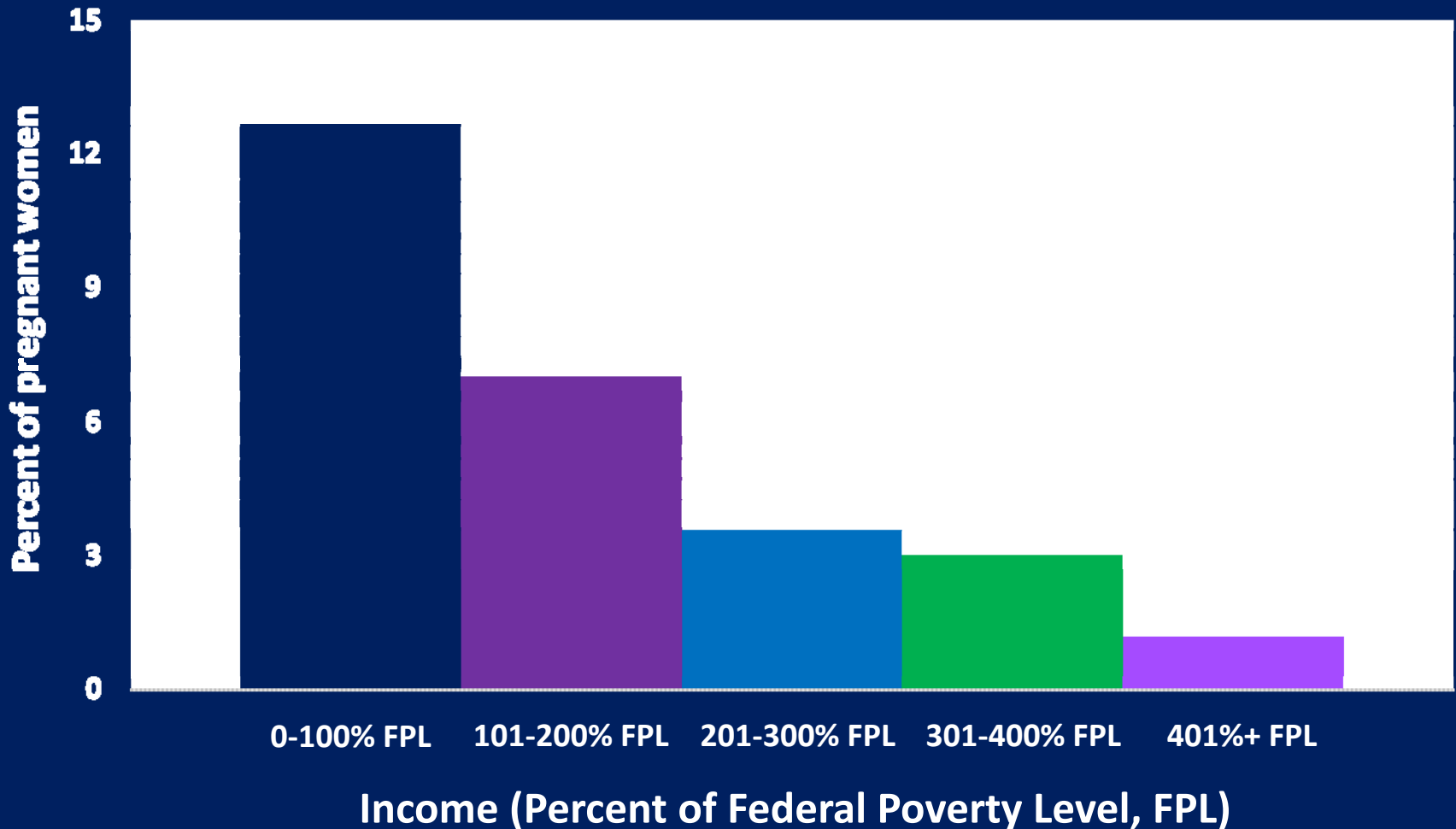
- Advances in neuroscience & psychoneuro-immunology help elucidate how social factors “get into the body”
- HPA axis, sympathetic nervous system, and immune/inflammatory mechanisms have been demonstrated as responses to stress
- Chronic stress is a likely major contributor to both the socioeconomic gradient in health and racial/ethnic disparities in health

Biological mechanisms linking stress & health, e.g., HPA axis reactivity



Less income, more stressors.

Separation or divorce during pregnancy (similar patterns for 11 major stressors)



Source: CA Maternal & Infant Health Assessment 2003-2006



Income influences neighborhood options. How could a neighborhood affect health?

- Safe places to exercise
- Access to healthy food
- Ads for harmful substances
- Social networks & support
- Norms, peer pressure, role models
- Fear, anxiety, despair, stress
- Quality of schools
- Racial segregation tracks Blacks & Latinos into unhealthier neighborhoods than Whites of similar income



Early childhood conditions are linked to health across the life course

- **Knowledge has accumulated showing adult health is shaped by early social experiences – from birth/conception**
 - Lasting effects of early childhood deprivation
 - E.g., via HPA axis and immune dysregulation
- **Strong evidence that early child development programs can narrow disparities in important social outcomes (e.g., education, employment, incarceration) that influence health**



Epigenetics: “Genetics loads the gun but the environment pulls the trigger” (J. Stern)

- **Features of social and physical environments can interact with an individual’s genome to influence whether a given gene is expressed**
- **Experience can become biologically embedded --Some of these alterations in gene expression are heritable**
- **May be important in intergenerational transfer of health risk and social disadvantage**
- **Policies can alter the social/physical environmental exposures that trigger/suppress gene expression**



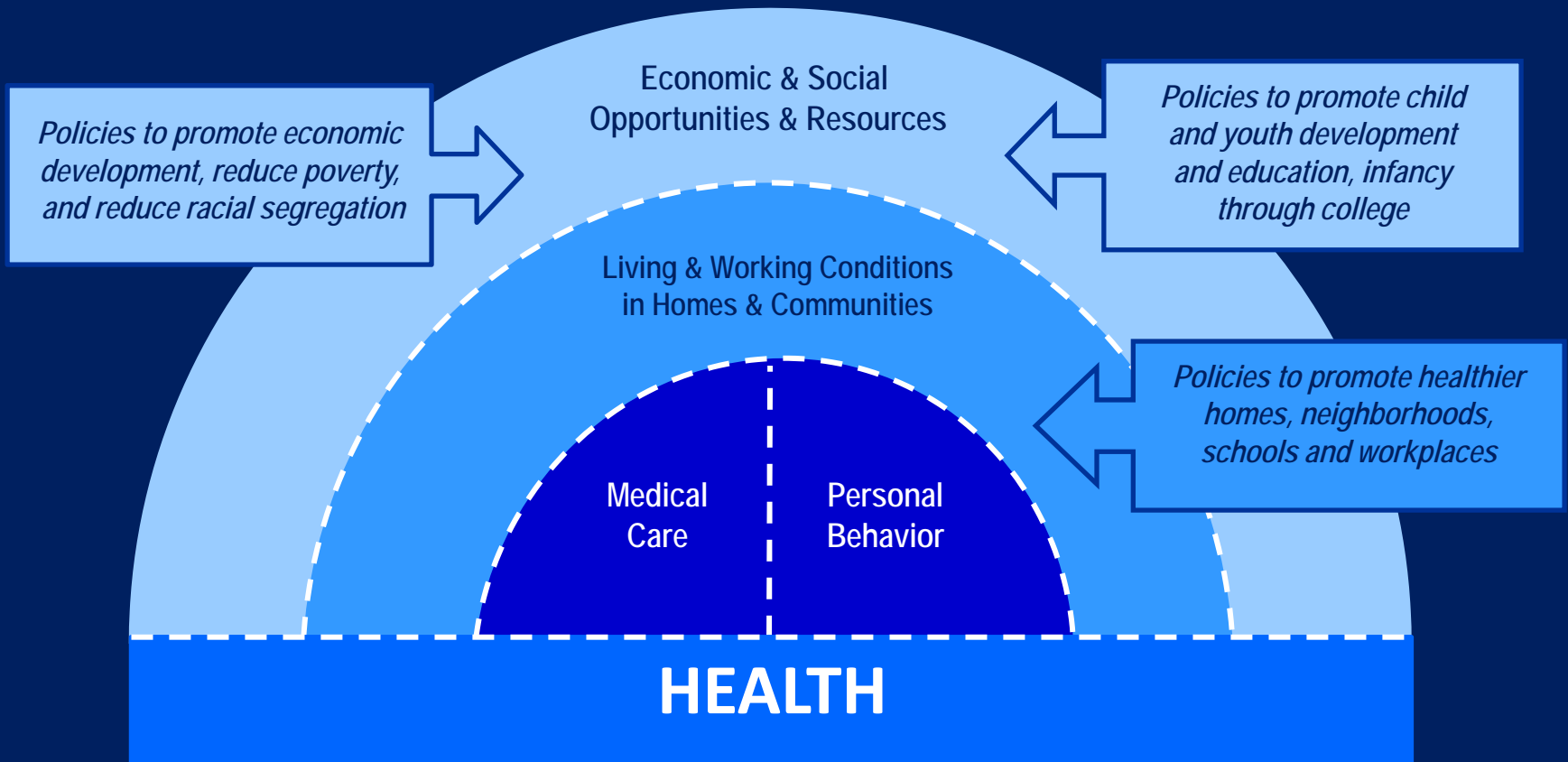
Racial/ethnic disparities

- For many but not all health indicators, racial/ethnic disparities disappear or are greatly reduced after controlling for socioeconomic differences
- Race/ethnicity captures unmeasured socioeconomic differences
 - Structural legacy of racism continues to relegate Blacks and Latinos to lower income, wealth, & education, and to unhealthier occupations & neighborhoods
- Discrimination could affect health in various ways, including effects on HPA axis, autonomic nervous system, vascular, and immune/inflammatory mechanisms
- Policies could reduce racial disparities in the social determinants of health

Find a way to keep your stress level down. What works for me is making a ton of money & having practically free health care.



Addressing health disparities by considering the causes of the causes





What could—and should—nurses do?

- Recognizing the role of social factors can inform more effective Rx plans; need a diverse workforce for this
- Strategically positioned to identify needs for social services & push health care and public health agencies to address these needs
- Advocating policies likely to have major health impact
 - Locally (e.g., playgrounds, bike lanes, affordable housing)
 - State and national policies on, e.g., poverty reduction, child care, education, transportation, housing
- Informed voters
- Nurse researchers can add to the knowledge base