

Socioeconomic Position and Health

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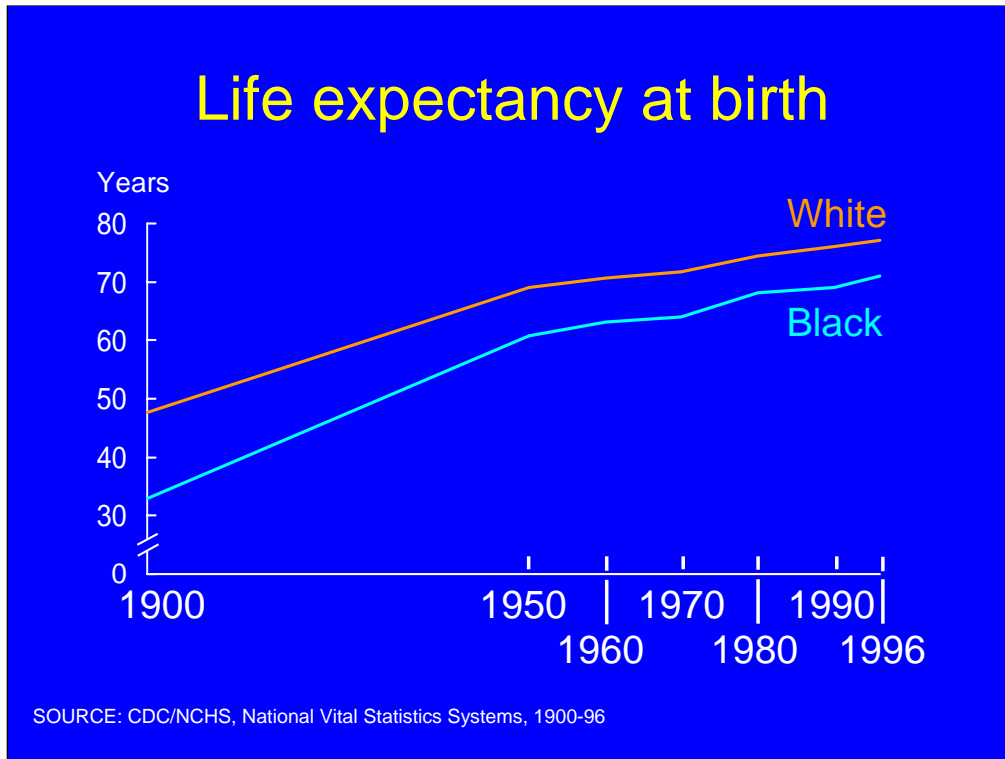
Historical Perspective

- 1950's – Health shaped by biological processes and medical care
- Present – Health also a function of social, psychological, and behavioral factors

Socioeconomic Position

- ... the social and economic factors that influence what position(s) individuals and groups hold within the structure of society, i.e., what social and economic indications of location in the social structure that may have influences on health.”

Lynch and Kaplan, 2000



This simple slide summarizes both the incredible success of the public health, medical, and social advances over this century as well as one of the most important remaining challenges.

But this slide also represents an outdated view of the health of the country.

Everyone's health is better, but disparities have remained remarkably persistent.

Take a good look at this slide for another reason as well. If we are truly successful in advancing our research agendas to truly address the complexity of the population, this type of slide will become of limited value for reasons that will become more clear.

Socioeconomic Status

Socioeconomic Status

- 150 years of data linking SES and health
- Individual SES has been related to:
 - All-Cause Mortality
 - Chronic and Communicable diseases
 - Injury and Adverse Effects
 - Health-related quality of life

It is well established that lower SES is associated with increase all-causes of death in addition to a greater exposure to hazardous occupations and environmental exposures (Howard, Anderson, Russell, Howard, & Burke, 1999; Kaplan, Haan, Syme, & Mischynski, 1987; Kaplan, & Keil, 1993). In contrast higher SES is linked with better health status through the possible following mechanisms: adequate accessibility, availability of health care services, adequate housing and nutrition, pertinent health education, and a lifestyle that avoids risks factors (Howard et al, 1999). SES has significant implications for women's health given that poverty is significantly more prevalent among women than men (O'Leary & Helgeson, 1997). However, the association between health and SES does not only occur at the bottom of the gradient, but also at all levels.

What is Socioeconomic status?

Typical measures:

- Income
- Education
- Occupation

Education and Mortality

Often used because it available and
less reverse causation

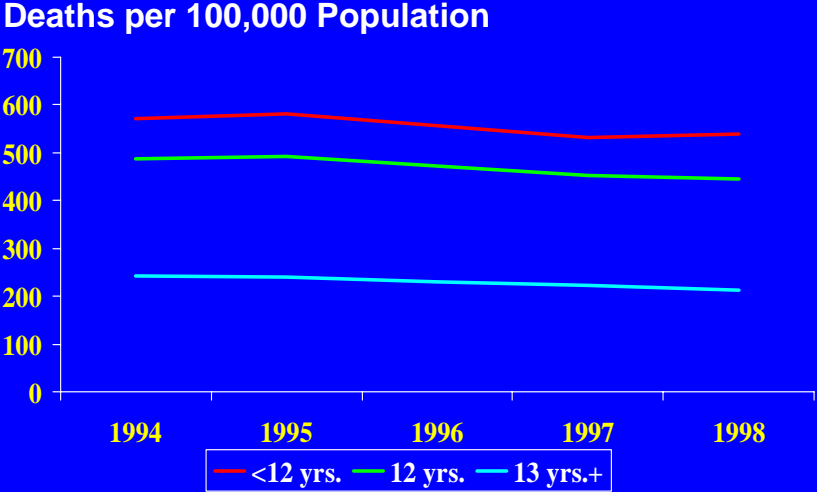
Each socioeconomic indicator has its own set of advantages and disadvantages (Krieger, Williams and Moss, 1997; Williams & Collins, 1995). The advantages of using educational attainment include:

- Education is fairly stable beyond early adulthood
- Its measurement is practical and convenient in many contexts
- It is one of the socioeconomic indicators especially likely to capture aspects of lifestyle and behavior



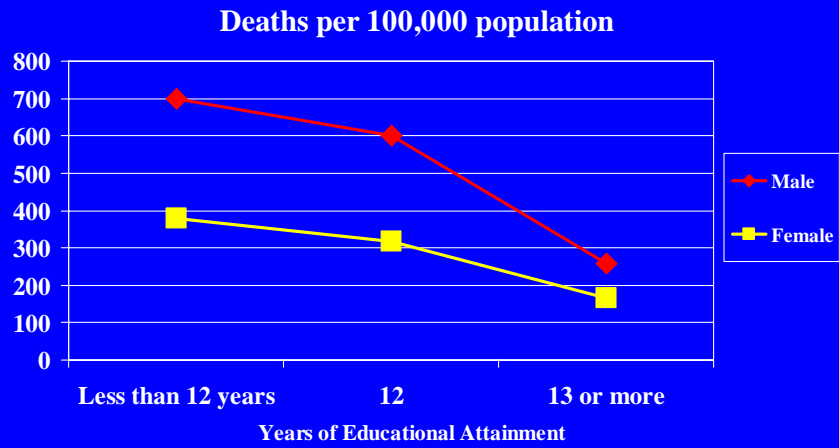
John D. and Catherine T. MacArthur
Research Network on Socioeconomic Status and Health

Age-Adjusted Death Rates by Educational Attainment, Ages 25-64: Selected States, 1994-1998



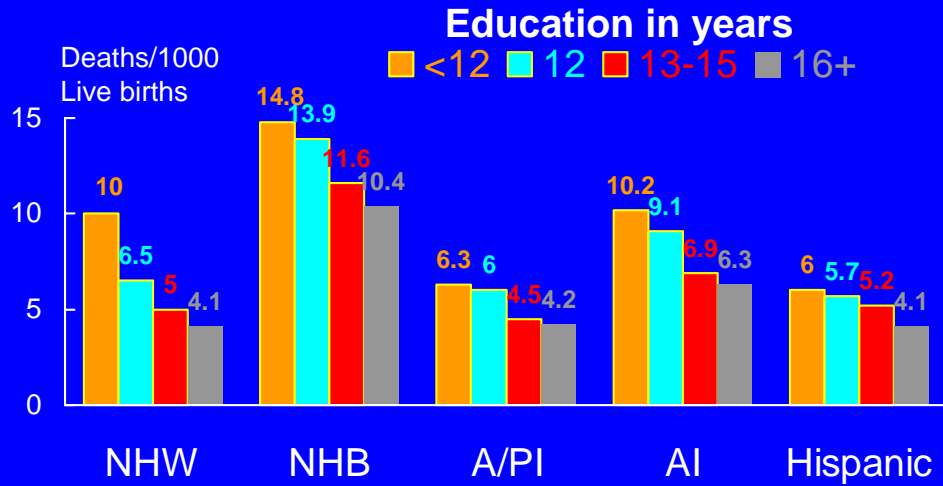
Source: National Vital Statistics System, NCHS

Education and causes of death: 1998 death rates for persons 25-64 years of age



Age-adjusted

Infant mortality rates in the United States

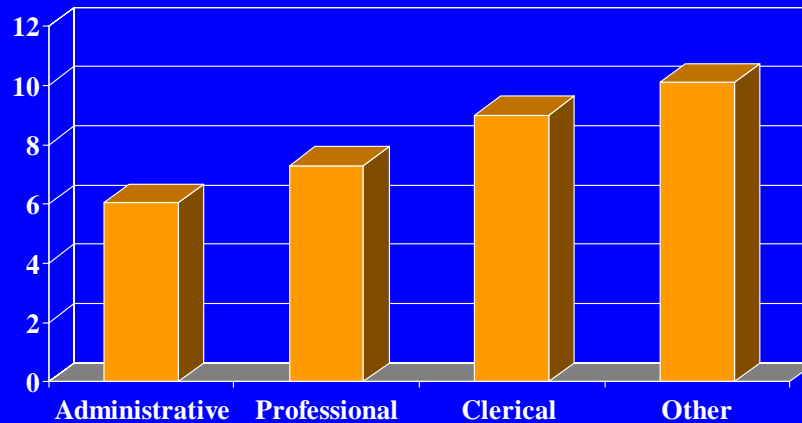


SOURCE: CDC/NCHS/NVSS, 1998

Occupation

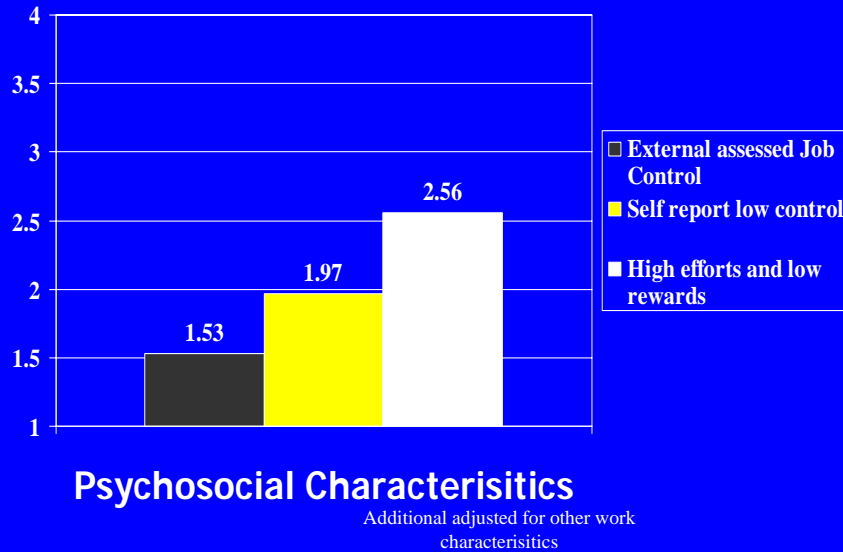
Employment Grade and CHD Deaths

25 Yr Death Rate - Whitehall I



When family income is used both men and women have similar social gradient in prospectively measured mortality. In this study there was also adjustment for race and broad occupational and economic sector class. When adjusting for all of these variables, as shown on the next slide black women still had 78 percent higher death rate from cardiovascular disease. This illustrates the complexity of social determinants of health clearly gender is important, family income or wealth is important, and race is important. But many of these studies are limited if they are prospective studies because they only as measure social position or major psychosocial stress at one point in time. There are limited number of studies that in women have tried to look at the life course perspective. To expand both later and early stressors. Let's look at one such study.

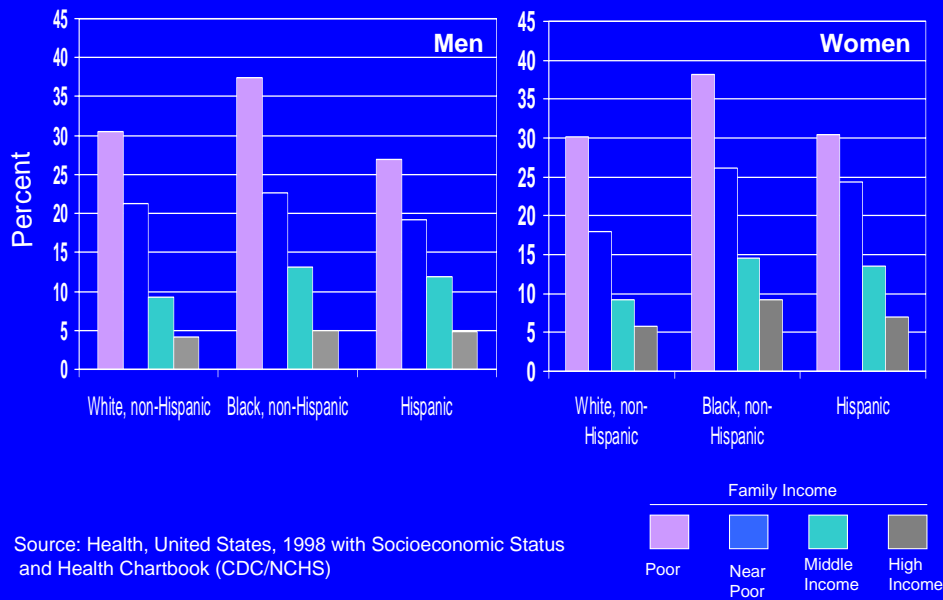
Work Psychosocial Factors and Heart Disease in Whitehall II



Whitehall II study of English civil servants from secretaries to highest level, all OR are significant and all are fully adjusted for traditional risk factors, employment grade, depression, and other psychosocial factors.¹⁵

Income and Health

Fair or poor health among adults 18 years of age and over by family income, sex, race, and Hispanic origin: United States, 1995



Percent reporting limitations on
activity

	<u>Poor</u>	<u>Near-poor</u>	<u>Non-poor</u>
Black	29.4	20.0	10.7
White	29.5	20.7	10.7

Wealth

Generalized resource that provides access to improved material conditions and can be used to buffer social and environmental stress.

Racial/ethnic Differentials in Wealth

- For everyone one dollar of wealth of a middle-aged white household, an African American household has 27 cents

Smith, 1995

Racial/ethnic Differentials in Wealth (con't)

- At top quintile, African American households have 56% less wealth and Hispanics have 67% less net worth than white households
- In lowest quintile, African-American and Hispanic households have 85% and 63% less net worth

Smith, 1995

Median Financial Assets by Race/Ethnicity

- White households \$17,300
- African-American households \$ 400
- Hispanic households \$ 78

Smith, 1995

Resources available to buffer shocks essentially 0.

Neighborhoods and Communities

Neighborhood Measures

- Median or per capita income
- Percent in poverty
- Median level of education
- Percent white collar occupations
- Unemployment rate
- Social cohesion

Units of Analysis

- Census blocks and tracts
- Postal codes
- Metropolitan Statistical Areas
- States
- Counties

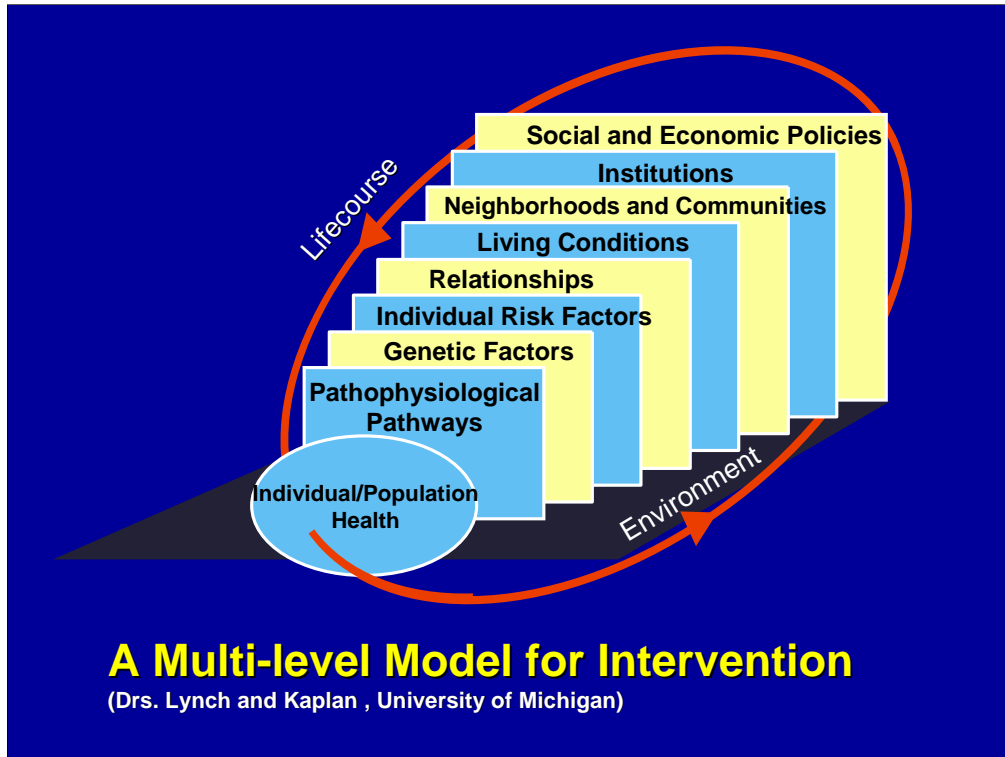
Neighborhood effects

- Residence in a poverty area in Alameda County was associated with a 50% increased 9 year death rate (Haan et al, 1987)
- Infant mortality, child development, life expectancy, etc.

How does socioeconomic position affect health?

- Access to health care
- Access to information
- Nutrition
- Housing
- Psychological pathways such as self-efficacy and stress
- Education
- Behavioral norms
- Environmental and occupational exposures

For each pathway, the lives of women may be sufficiently different from men to make a difference in outcomes



Data Needs

- Longitudinal data
- Lifecourse measures
- More sophisticated measures of SEP on an individual basis
- More and better measures of community level variables
- Additional ways of integrating variety of measures to determine SEP