
- Purpose of this paper is to determine whether certain behavioral risk factors explain the association between SES and mortality.

- They argue that earlier studies on the topic had suffered from numerous weaknesses, including:
  - Previous samples were usually geographically confined.
  - Some studies only used males in the analyses.
  - Many studies did not examine the effects of both education and income.

**Significant findings in Lantz et al.**

(Table 2)

- In terms of health risk behaviors, persons with lower levels of education and income were more likely to:
  - Be current smokers
  - Abstain from alcohol
  - Be overweight
  - Engage in little physical exercise.

**SES and mortality in Lantz, et al.**

(Table 4)

- In the first model in Table 4, Lantz et al. show that education has no effect on mortality, but that income does have the expected effect. That is, persons with lower levels of income were at a significantly higher risk for mortality over the follow-up period.

- In the second model, the authors control for a number of health risk factors. The effect of income on mortality declines somewhat, but it remains a significant predictor of that outcome.

**Conclusions from Lantz, et al.**

- Socioeconomic status does have a significant effect on mortality among U.S. adults.

- Some of the health risk behaviors (i.e., being underweight, lack of physical exercise) are related to mortality, but they do not fully explain the effect of socioeconomic status.
• The authors suggest that health behaviors, psychosocial attitudes, etc. should be viewed as products of or responses to the social environment rather than as individual behavioral choices.

• In referring to a study by Lynch et al., they suggest that more work must be undertaken to better understand how health behaviors and the psychosocial factors are patterned by SES.

Healthy People 2000: National Health Promotion and Disease Objectives

• Lantz, et al. state that guidelines such as those found in Healthy People 2000 may be missing the mark in trying to correct for health problems in certain segments of the population.

• What is Healthy People 2000?
  • A national prevention strategy to improve the health of the American people. It has three main goals:
    • Increasing the span of healthy life for Americans
    • Reducing health disparities among Americans
    • Achieving access to preventative services for all Americans.

Priority areas for Healthy People 2000

• Priority 1: Increase physical activity and fitness

• Priority 2: Improve nutrition

• Priority 3: Reduce levels of tobacco use

• Priority 4: Reduce levels of substance abuse, including both alcohol and other drugs

• Other priorities include family planning, curbing violent and abusive behavior, increasing occupational, and increasing food and drug safety. In all, there are 22 of these objectives.

What does the Lantz, et al. paper tell us about the potential efficacy of achieving the HP2000 objectives?

• Given that socioeconomic status differences remained after controlling for health behaviors, the objectives won’t reach the goal of eliminating health differences across class groups in U.S. society.

• However, because Lantz, et al. only adjusted for a few of these factors and did not consider others (such as employment status or environmental safety), all of the objectives taken together might eliminate current inequalities in health.

- Purpose: Most previous studies have examined the effects of income health with income measured at only one point in time. Such a procedure may fail to capture the health effects due to:
  - Sustained economic hardship
  - Movement in and out of economic hardship

- This paper examines the effect of income measured during three points in time (1965, 1974, and 1983) on health status of sample members in 1994.

The effects of sustained economic hardship on health (Table 2)
- Generally speaking, the longer that economic hardship was sustained, the more likely sample members were to have experienced health problems.

- These differences persist despite controls for health risk factors (e.g., smoking, BMI, physical activity) and for certain diseases.

- The effects are strongest for psychological and cognitive functioning.

What about social drift?
- Lynch et al. consider the possibility that reverse causation (or social drift) may be occurring in these analyses. How would that work in this context?
  - Either unmeasured health status at the first wave or health problems occurring immediately after the first wave would produce both poor health outcomes in 1994 and sustained economic hardship.

How do they overcome the reverse causation problem?
- They use three methods to overcome the possibility of social drift as an explanatory factor.
  - First, they limited the sample to those who were less than 50 years of age and had no functional health problems at baseline.
  - Second, they examined the effects of economic hardship in 1965 on health in 1994 only among those who reported good or excellent health in 1965.
  - Third, they restricted the sample to respondents who reported good or excellent health in 1965 and who derived no income from wages or salaries in 1965 or 1974.

With these additional methods, what did they find?
• The effects of economic hardship on health in 1994 remained strong.

• For the second method, the results were somewhat weaker, but they remained significant.

What are the implications of these findings?
• Haan, et al. appeared to be correct when they argued that the social drift hypothesis isn’t a convincing argument for explaining the SES-health relationship.

• Cumulative disadvantage does appear to be an important element of the SES-health relationship.

• As Lynch, et al. argue, increasing economic inequality in the U.S., especially among children, is likely to have disastrous health consequences over time.

• She argues that factors associated with economic status can have compounding effects on health throughout the life course.

• At birth: maternal smoking, poorer nutrition and lack of medical care are associated with an increased risk for perinatal death.

• Infancy: parental smoking, poor housing, and nutrition all contribute to the child’s risk of current illness and on future respiratory capacity. Children in poorer circumstances also are less likely to enter preschool, and so are at a disadvantage in terms of educational attainment.

Wadsworth (continued)
• Childhood: the most consistent SES difference at this stage is variation in height growth. This difference seems to arise from nutritional deficiencies and poor home physical environment. There are also significant differences in morbidity at this stage. Poor health can lead to reduced educational attainment.

• Adolescence: much of the patterned differences in health from earlier stages continue to this point. An important additional factor is parental concern for educational attainment.

• Early adulthood: educational attainment has a great effect on SES status and occupation. These factors in turn predict risk factors for health problems, such as smoking, poor diet, and lack of exercise.

- **Purpose:** To examine the lifetime and 12-month prevalence rates of certain psychiatric conditions in the United States.

- To examine how prevalence rates differ based on sociodemographic characteristics.

**What is DSM-III-R?**

- *Diagnostic and Statistical Manual of Mental Disorders*

- Its purpose is to establish a set of guidelines for categorizing disorders on the basis of symptoms or behaviors.

- Earlier systems based diagnosis on the causes of disorders, which rendered them unreliable given high levels of speculation regarding the causes.

- DSM also provides information about disorders in terms of their causes, age of onset, sex ratios, and prevalence in the general population.

**What is the major advantage of this research?**

- The research uses data from the National Comorbidity Survey (NCS).

- The NCS is the first representative sample of adults living in the U.S. for which these types of data have been collected.

- The previous major effort in this regard was the series of Epidemiologic Catchment Area studies. These were limited in that they focused on specific communities in different parts of the U.S.

**What are the most prevalent mental disorders?**

*(Table 2)*

- Both in terms of 12-month and lifetime prevalence, depression is the most common of all of the mental disorders listed.

- It is estimated that by the year 2020, major depression will be the fourth largest contributor to lost productivity.

- The second most common disorders are phobias, both social and simple, followed by alcohol dependence.
• Note the sex differences in mental disorders: women are more likely to report major depression and phobias, whereas men are more likely to report alcohol problems.

What are the effects of SES and race on prevalence rates?
(Tables 5 & 6)
• Respondents with less income and education are more likely to report mental disorders. The effects are especially pronounced for ASPD and disorder comorbidity.
• Blacks tend to have lower rates of mental disorder compared to Whites.
• In terms of 12-month prevalence, Hispanics have higher rates for affective disorders and comorbidity.

What are some of the questions used to elicit reports of mental disorders?
• A variety of these questions were asked in the Detroit Area Study in order to create diagnostic measures for several disorders.

• Purpose: To examine the role of living in an area that is characterized by high rates of poverty or difficult living conditions.

• He argues that most analyses of SES and health tend to focus on individual level measures of income, which tend to ignore the “patterned sets of exposures, opportunities, and resources that differ by social class level.”

Poverty area and mortality
(Table 2)
• The first study discussed by Kaplan examines the effect of living in a federally designated poverty area on mortality over a nine-year follow-up.

• The results indicate that net of sociodemographic factors, income, employment status, and other measures, living in a poverty area remains a significant predictor of mortality.

Census tract characteristics and mortality
(Figure 1)
• In the second study, Kaplan and his colleagues created indices to represent different types of residential areas. They then examined whether living in these types of areas
had an impact on mortality rates.

- The results indicated that living in areas marked by high levels of certain characteristics (e.g., housing with no heat, deteriorating housing, high numbers of divorced families) was associated with a greater risk for mortality.

- This risk was sustained even after controlling for a number of other factors, including income and health risk behaviors.

Clustering of risk factors
(Figure 3)
- In the final study, Kaplan and his colleagues calculated the odds of living in an area characterized by high rates of mortality based on certain individual risk factors.

- They found that a number of risk factors, most notably lack of education, an inability to fill prescriptions, obesity, and social isolation, were associated with living in high mortality areas.

The interplay between resources and demands
(Figure 4)
- Kaplan argues that there may be an interaction between lack of resources and excessive demands. What is the nature of this argument?

- Having either high demands or low resources should put respondents at risk for excessive mortality, but having both high demands and lacking the resources to compensate should place respondents in even greater jeopardy. Does he find this?

- Yes, respondents who were low in resources and high in demands were the most likely, by far, to live in areas characterized by high mortality levels.

How does the stress buffering hypothesis apply here?
- A great deal of research has shown that stress can have major psychological and physical health consequences.

- The stress buffering argument suggests that the effects of stress on health should be lower or nonexistent among persons who have the resources necessary to cope with the stressor. The most commonly cited resource for dealing with stress is social support.

- Numerous studies have shown that low-SES individuals are less likely to have social support. As such, they lack the resources needed to combat the stressors that will no doubt arise in their lives.

- The purpose of this paper was to examine the association between income inequality measured at the state level and various indicators of societal well-being.

- Their measure of income inequality was the proportion of income received by the less well off 50% of households.

- Income inequality ranged from about 17% (Louisiana, Mississippi) to about 23% (Utah, New Hampshire).

What did Kaplan, et al. find?

- Income inequality was associated with:
  - Mortality ($r = -.62, p < .0001$)
  - Proportion of live births ($r = -.65, p < .001$)
  - Homicides ($r = -.74, p < .0001$)
  - Violent crime ($r = -.70, p < .0001$)

Are Kaplan, et al. guilty of the ecological fallacy?

- Not really. There are certain variables that can only be measured at the community level. Given that income inequality is a characteristic of a population and not an individual, it qualifies as such a variable.

- Nevertheless, it will still be important to determine what the mechanisms are by which income inequality affect individual health.

What are some potential explanations or mechanisms?

- It isn’t really income inequality that drives the problem, it is the proportion of people living in poverty. If it were only income inequality, then raising people out of poverty would have the same effect as pulling more affluent people down.

- Relative deprivation

- Economic segregation (i.e., more poverty areas)