



Health and Inequality

EE 474 Health Economics
Semester 1/2012

Introduction

- This is to show how health and other economic indicators are interrelated, and what possible policy implications could be drawn.
- The materials are based on Deaton (2003), “Health, Inequality, and Economic Development,” *Journal of Economic Literature*.
- The paper explores the theoretical basis and empirical evidence for a relationship between inequality and health.
- General conclusion:
 - There is no direct link between health and income inequality *per se*.

Motivation

- Why do we want to know the relationship between income inequality and health?
- If we can show that inequality causes poorer health, then, for policy implications, one may try to eliminate income inequality in order to improve health status of the population.
- But is there really a connection there? Or if there's a connection, **what's the mechanism through which income inequality affects health?**

Possible Stories

- “Absolute income hypothesis”
 - Health is affected by income.
- “Relative income hypothesis”
 - Health depends on relative income.
- Other possible effects:
 - Effects of income on investment in health and education
 - Link between nutrition and earnings
 - Effects of inequality on the ability of the political process to deliver public goods
- *Inequality is a consequence of ill health*

Income and Health

- Economic arguments:
 - Income improves health through improved public health.
 - Income is correlated with education (Grossman) and preference factors, such as discount rates (Fuchs).
- Literature outside economics:
 - Income as a “marker” for socioeconomic status – cause of health discrepancies
 - Income is correlated with education.

Absolute Income Hypothesis

- Among poor countries, average income matters for population health, and income inequality is less important.
- Among rich countries, average income is less important, and income inequality is more important.
 - The effect of income inequality relative to that of average income tends to grow as countries become richer.
- Dual causality between income and health

Relative Income Hypothesis

- “If health is lower for those whose income is relative low, then **higher inequality makes the poor even poorer in relative terms**, and so worsen population health.”
 - Role of income inequality at the group level: **Between groups, average health is weakly dependent on average income, but is negatively related to income inequality.**
 - Health is determined by *rank* in an income distribution: **Rank is a plausible determinant of power, of social status, and others, which have been associated with health.**

Other Stories

- Deprivation
 - Psychosocial stress is the main pathway through which inequality affects health.
- Credit constraints
 - Income inequality may affect investment in health and education. (Possible fix: income redistribution)
- Nutritional wages model
 - Inequality in land holdings is the determinant of poor health. (Possible fix: land redistribution)

Income Inequality as a Consequence of Health

- Health shocks are important determinants of earnings and consumption in developing countries.
 - Poor health → inability to work, running down assets to pay for health care
- The distribution of income will depend on the level and distribution of health.
 - Measure that reduces the spread of health conditions across population, or improve the health environment, will narrow the distribution of income.
 - Reduction in health shocks (e.g. health insurance) reduces income inequality.

Conclusion

- The stories about income inequality affecting health is stronger than the evidence.
- Income inequality is *not* a major determinant of population health. **It is the *poverty*, not income inequality, that affects health.**
- The attention should be directed away from income inequality per se. Instead, the urgent need is to investigate the role that income plays in promoting health (e.g. through income itself, wealth, education, etc.)