

Cultural and Social Factors Influencing Mortality Levels in Developing Countries – John C. Caldwell

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Overview of Paper

- Collection of several surveys
- Use them to explain global mortality transition
- Analyze how social factors affect death rates
- Thesis:
 - Social factors or cultural characteristics are more influential in determining mortality levels than is access to medical services, income, or nutritional levels

Ten social factor studies

- Halstead, Walsh, Warren
 - NOT income or level of health services
- Flegg
 - Literacy – low infant mortality
 - Equality of income, and level of medical care
- Caldwell
 - Proportion of females in school a generation earlier
 - Also, family planning and male school attendance
- Rodgers and Wofford
 - Literacy, proportion of population working outside of agriculture
- Gaisie
 - Mother education
- Behm
 - Mother education
- World Fertility Survey (2 separate analyses)
 - Parental education
 - Also, income (evidenced by father's occupation)
- Mensch, Lentzer and Preston (analyzed 15 surveys)
 - Mothers education, ethnicity, and father's education in urban areas
- Orubuloye and Caldwell
 - Mother's education – controlled for occupation of parents, urban/rural, family structure, family planning
- Cleland and Ginneken
 - Mother's education – only half of effect is due to the material advantages associated with mother education

Cultural factors studies

- DaVanzo, Butz, Habicht
 - Ethnic groups
- World Fertility Surveys
- Indian Sample Registration Survey and International Diarrhoeal Diseases Research Center data
- Changing African Family Project
- One-per-Thousand Survey of China

Cultural factors

- "...persistent, but under-researched, finding is that there are major ethnic or cultural differentials in mortality... - differences that survive controlling for income and education."
- "...societies are largely prisoners of their cultures and histories and that the roots of contemporary health successes lie far back in those histories."
- Reasons
 - Preference for sons over daughters
 - Girls neglected, get less share of limited resources
 - Family planning

Measurements

- Infant mortality
 - $\frac{1}{4}$ of all births result in deaths before 5 years of age.
 - Due to age structure of population, half of all deaths in the society occur to persons under 5 years.
 - Also, more controlled data?
- Years of education
 - Easy to quantify
 - Related to other cultural factors that are harder to measure

Social Factors Explanations

- Education
 - Two impacts:
 - Changing behavior of individuals
 - Changing society
- Educated Mothers
 - More effective in gaining resources from their husbands
 - More likely to be the one to detect that their child is sick.
 - More likely to adopt effective home action when there is a sickness
 - Home care accounts for at least half of all treatment in the Third World
 - Spend more time with the doctor giving child's history
 - More likely to carry out doctor's instructions properly
 - More likely to go back to the doctor if the condition does not improve

Compares to development of Western cultures.

- Turn of the century in the US, was sharp decline in mortality rate
 - Industrial revolution
 - Higher real incomes
 - Improved healthcare, hospitals.
- Gap in US in 1900 between educated and uneducated classes was smaller than in contemporary Third World.
 - Because behavioral pattern was still similar between classes.
- Reasons for mortality declines in Third World are different than those of the US.
 - Health-friendly social norms were already being spread through missionaries, media, and education system.
 - Technology is there, it is access and proper use that is important

Theories for “health transformation”

- There have always been socioeconomic differentials in mortality levels.
 - Dismissed: improved efficacy of medicine – people with more access will benefit more
- Interaction with modern medicine
 - Uncontrolled spread of medicine through unauthorized sources – hardly researched
 - Dismissed: “breakthrough periods in reducing mortality levels ... have been associated with the democratization of services, not increase of quality.”
- All facets of the same phenomenon: “social modernization.”
 - Individualism, Westernization
 - Belief that sickness is not magical, but that it is possible to do something about it. – “secularization of health behavior.”

My Thoughts

- Paper is from 1990. – What has happened since?
- Mostly unorganized
- Correlation / causation?
 - Nomenclature: “indicator” vs. “influences”
 - “...may, in fact, correlate more highly because health investment has been running ahead of social investment in terms of the optimum mix.”
 - Other factors involved with education?
 - I guess that is his point.

Questions

Backups

One Example: Halstead, Walsh, Warren

- 4 Third World societies
 - 3 had ~15 year higher life expectancies than countries with similar incomes. 3 years lower than Eastern Europe.
 - Sri Lanka spends 1.2% of GNP on health (Western civilized countries is 3.7%), and has 15 times as many people per doctor.
 - Other countries “Probably present a similar picture...”
- “The conclusion is inescapable that neither income nor levels of health services... are the explanation for the remarkable health achievements of these societies.”

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