Cultural and Social Factors Influencing Mortality Levels in Developing Countries – John C. Caldwell
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
“...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
Infant mortality
- ¼ 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 form 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
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
- 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.”