

**S/A 4071: Social/Cultural Aspects of Health and Illness:**  
**Class 5: Historical Considerations in Health & Illness**

**(1) Clarke: Chapter 3:**

\* Today we will take a critical look at health historically & internationally

(1) *Life expectancy:*

- life expectancy has grown significantly from historical averages  
In the developed world over the past 100-150 years (gender gap)
- epidemiological transition: change from low to high per capita income results in shift from high mortality/fertility to low mortality/fertility
- 3 phases in patterns of disease: (1) age of pestilence & famine; (2) age of receding pandemics; & (3) age of degenerative & man-made diseases (Omran's descriptive account/ not an explanation)
- McKeown: European decline in mortality almost entirely due to decline in infectious diseases. This attributed to: (1) improvements in nutrition (1/2); (2) improvements in hygiene (1/6); & (3) increasing control of disease causing microorganisms/medical therapy (1/10)
- Kim & Moody (1988): 117 countries: contribution of medical resources to population health small relative to socio-economic resources
- In Canada, declines in infant mortality not equally spread

(2) *Death, Disease & Disability Globally: Key Explanatory Factors:*

- *Income* linked to health (many things in life depend on)
- Wennemo (1993) comparative international data show that relative income/unemployment linked to infant mortality

- Wnuk-Lipinski & Illsley (1990) socio-economic conditions linked to life expectancy
- Navarro (1992) socialist countries fostered better health than capitalist ones
- *Food security* plays a large role, particularly for women/children
- *Clean drinking water* is very important (water borne diseases vs. infrastructure costs, marketing of formula)
- *Personal safety, security & stability* (violence incompatible with health/often linked to social/economic conditions/falls on most vulnerable)
- *The position of women* (inequality has major impact on nutrition, access to medical care & violence against women)
- *Birth control* (having many children in impoverished, unsanitary conditions contributes to maternal/infant mortality & disease)
- *Comprehensive health care* (especially community development & education, supplemented by medical intervention when necessary)
- *Immunization* (very important in developing world, where few receive inoculation against diseases rare in West).

(3) *Death, Disease & Disability in Canadian Society:*

- Chief causes of death heart disease, cancer & accidents (“diseases of civilization” /”man-made diseases” different from developing world)
- Causes: socio-economic inequity reflected in lifestyle, environmental & work-related factors
- Potential years of life lost statistic linked to smoking, alcohol, fat, sodium & sugar-rich diets, stress, occupational/environmental hazards, health & safety policies, risk-taking behaviors, lowered social cohesion/social capital, inequity & impoverishment

(4) *Causes of Disease & Death:*

- M. Lalonde (1974): moved beyond biomedical model to define 3 causes of disease:

(a) self-imposed (smoking, alcohol, junk food, no exercise, etc)

(b) environmental (pollution, urbanization, working conditions)

(c) biological factors (genetics)

- Note that social inequality not explicitly on list

- “Self imposed” factors:

- excessive alcohol use linked to cirrhosis/violence/DWI

- smoking /secondhand smoke obviously bad for health

- many Canadians don't get enough physical activity: impacts health

- obesity an epidemic linked to many diseases/ mortality

- body image & eating disorders

- AIDS is obviously a risk necessitating caution when engaging in sexual activity

**(2) McKinlay & McKinlay:**

**“Medical Measures & the Decline of Mortality”**

\* General thesis: medical measures were not major factor in historical declines in mortality. Three topics considered

(1) Prior research & debate

(2) Age & sex adjusted mortality rates for the U.S. (1900-73)

(3) Policy implications

\* Prior research/debate:

- McKeown: decline in mortality largely due to fewer deaths from infectious diseases: linked to better diet & hygiene
- McKeown: immunization & therapy responsible for only 1/6 & 1/10 of decline in death rate respectively
- Dubos: Non-medical reasons for changes in population health
- Kass: declines in mortality often occurred before discovery of causes and treatments
- Weinstein: some conditions improved in absence of treatment
- Less comprehensive analysis in US than elsewhere
- Mortality statistics: problematic but best we have

\* The Modern decline in Mortality:

- Marked decline occurred in mortality rates for the US since 1900
- Largely related to virtual disappearance of infectious diseases
- Largest increase in spending on medical care occurred when 92% of the modern decline in mortality had already occurred
- 10 major infectious diseases accounted for nearly 40% of decline in mortality rate 1900-73 (offset by growth in heart disease, cancer & strokes). Reductions in TB & pneumonia significantly contributed to this decline, the rest only 12%
- Only poliomyelitis showed significant change in trend following medical intervention
- Only 3.5% of fall in death rate in pneumonia, influenza, whooping cough & diphtheria can *possibly* be explained by medical intervention

\* Conclusions:

- Medical measures have contributed little to overall decline in

mortality in the US since 1900 (i.e. often introduced after declines already occurred)

- For five conditions in which declines continued after medical intervention, if we assume all of this decline is attributable to the intervention, still at most 3.5% of the decline could be ascribed to medical measures
- Social policy implications: if medical intervention is so ineffective in producing changes in mortality, a reordering of priorities/social change is in order