

2010 National Conference on Health Statistics

Christine L. Himes, Ph.D.,
Syracuse University,
Center for Policy Research

NATIONAL CENTER FOR
HEALTH STATISTICS



NATIONAL CONFERENCE
ON HEALTH STATISTICS
CHARTING THE COURSE

How I have used vital statistics data

Age patterns of mortality

Causes of death

Links to other surveys

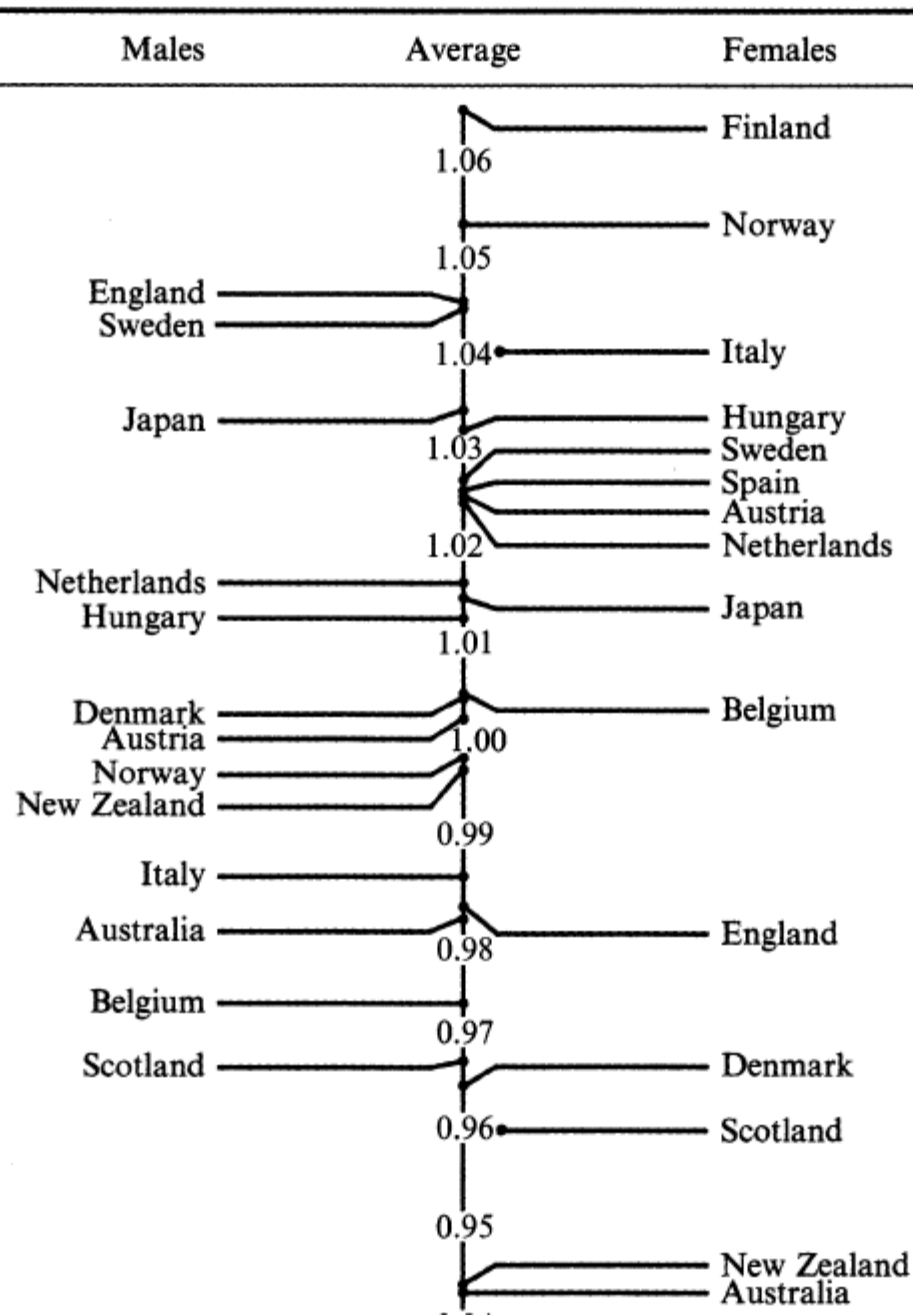
Age Patterns of Mortality

Cross national comparisons of age specific mortality rates

- Need for data by single year of age
- Problems of age misreporting

- Compare age patterns of mortality among countries with reliable data...initially did not include U.S.
- Interested in trajectory of mortality increase with age
 - Value of β greater than 1.0 represents a steeper increase in age specific mortality

Table 4. *The value of β averaged across time periods for countries included in the standard mortality pattern*



Causes of Death

Cross national comparisons of patterns in cause of death

- Need for data by single year of age
- Cause of death detail comparable to other countries
- Does mortality decline in the same way in all countries?

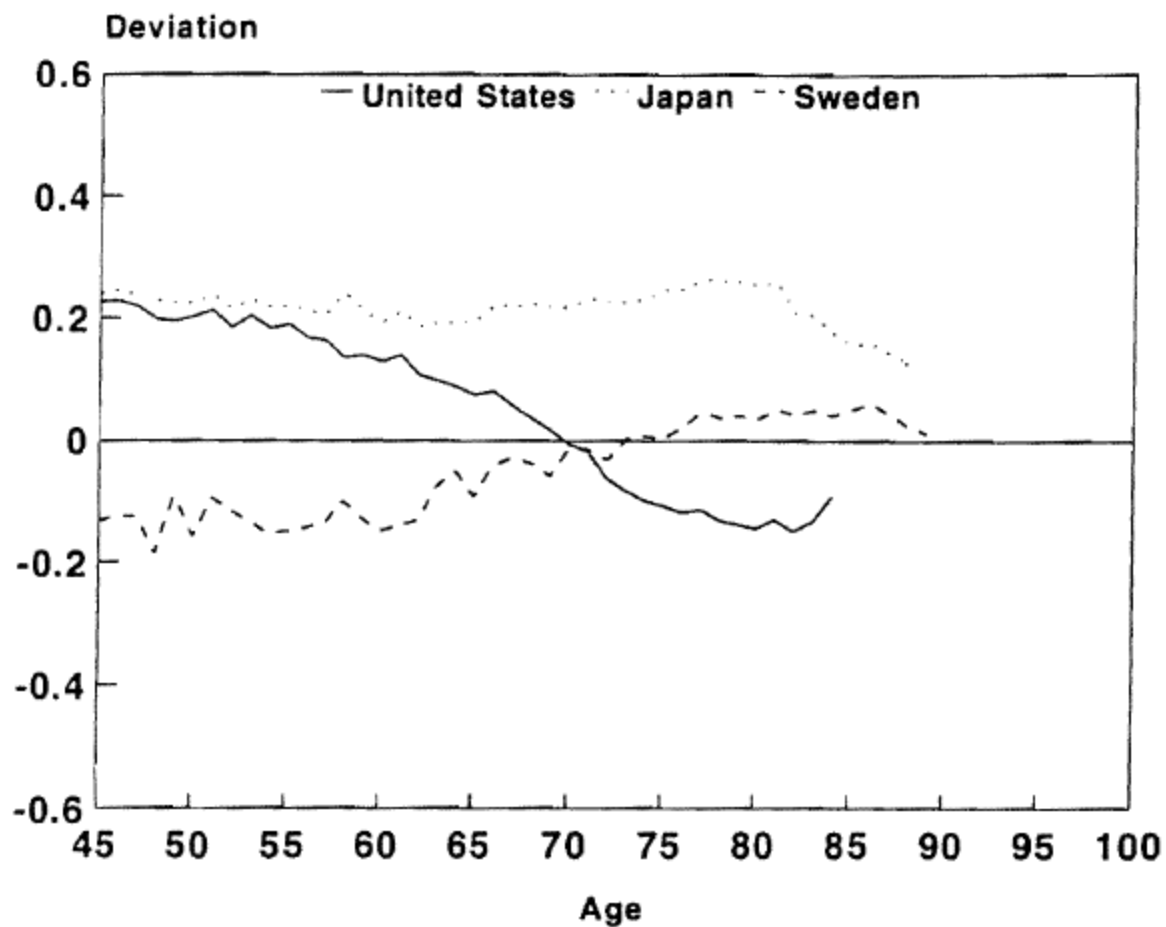


Figure 4. Comparison of Deviations from Standard Mortality Pattern for Females. 1960-1965

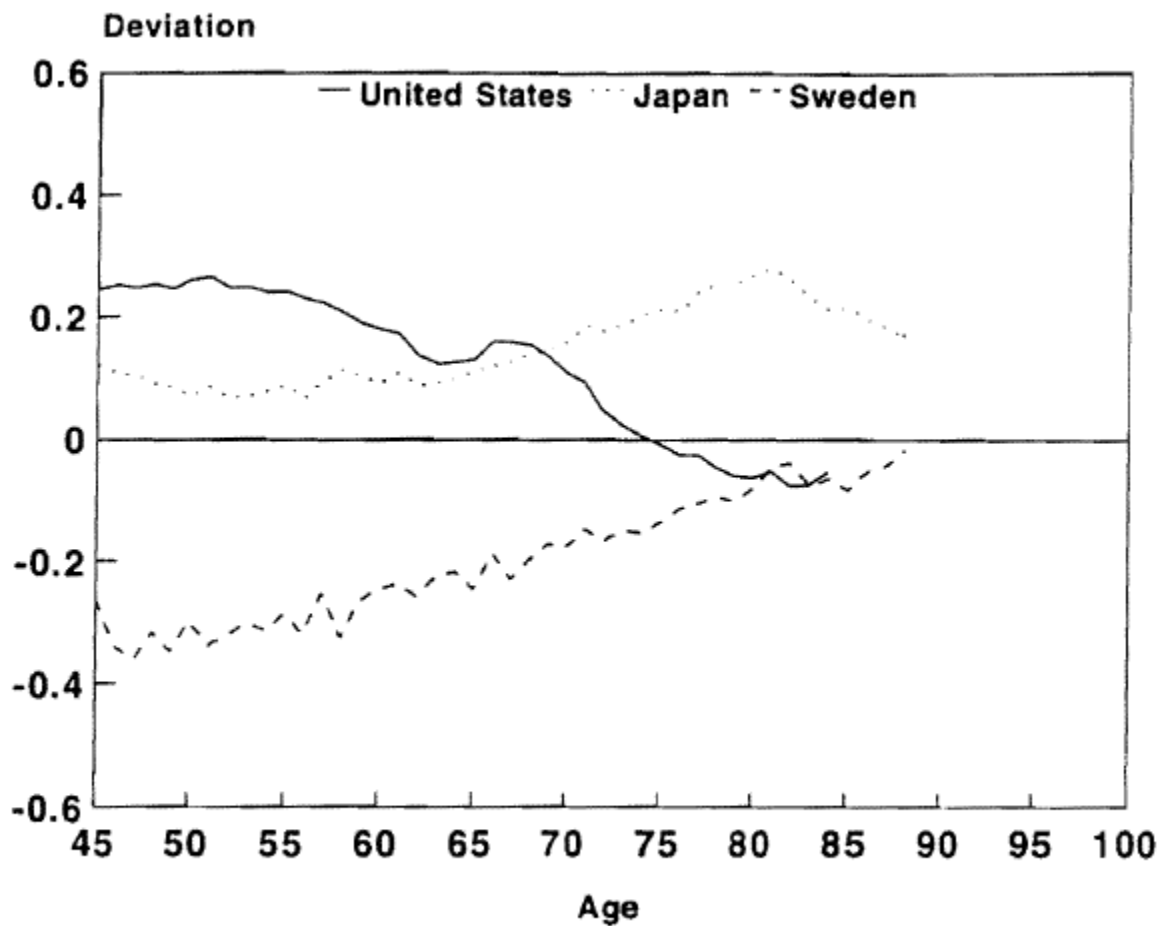


Figure 6. Comparison of Deviations from Standard Mortality Pattern for Males, 1960-1965

Table 4. Percentages of All Male Deaths in Sweden, Japan, and the United States Due to Particular Causes, 1985

Classification of Cause of Death	Age 45-54			Age 75 +		
	Sweden	Japan	U.S.	Sweden	Japan	U.S.
Infectious and Parasitic	.6	1.8	1.6	.7	1.5	1.2
Malignant Neoplasm	22.7	31.7	26.1	17.5	19.5	18.8
Stomach	1.5	8.6	.9	1.8	5.5	.7
Colorectal	2.6	3.1	2.3	2.3	1.9	2.5
Lung	5.5	3.6	10.0	2.3	4.2	5.0
Liver	n/a	5.2	.3	n/a	.9	.1
Circulatory	38.0	26.5	40.3	59.3	44.9	54.0
IHD	28.4	4.8	25.4	37.3	7.5	30.2
CVD	4.2	12.2	3.5	10.2	20.2	8.3
Respiratory	3.9	3.1	3.9	11.3	15.8	11.9
Digestive	5.1	11.5	6.8	2.4	3.9	2.7
Cirrhosis	2.9	8.9	4.7	.2	1.1	.4
Other	10.3	6.0	8.6	6.3	11.7	8.9
External	19.4	19.4	12.8	2.4	2.7	2.4
Motor vehicle	1.8	3.1	3.2	.3	.5	.4
Suicide	8.3	10.0	3.5	.4	.8	.5

Links to other surveys

Effects of social and economic factors on mortality risk

- LSOA
- HRS

Trends in health and disability

- How is obesity related to
 - Chronic disease
 - Functional limitation
 - Survival
- Optimal to link survey information with timing of mortality and cause of death

30 year perspective

- Online searching and tables
- Faster data release
- More reliable data

Possible Improvements

Researchers want to link mortality to social and economic factors earlier in life

Can achieve that partly through survey linkages (NDI)

Mortality Followback Survey