Fifth Annual Maureen Dixon Lecture

A Health Policy that Promotes Health

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Key Determinants of Health

- Income and Social Status
- Social Support networks
- Education
- Employment/Working Conditions
- Social Environments
- Physical Environments
- Personal Health Practices
- Healthy Child Development
- Biology and Genetic Endowment
- Health Services
- Gender
- Culture

Figure 1 Determinants of Health

- General socio-economic, cultural and environmental conditions
- Social and community networks
- Individual lifestyle factors
  - Age, sex and hereditary factors
- Education
- Work environment
- Living and working conditions
- Unemployment
- Water and sanitation
- Health care services
- Housing
- Agriculture and food production
Health Service Utilization

1000 → 750 → 250 → 9 Community Hospitals

5 Specialists
1 Teaching Hospital

White, et al, 1963
SOCIETY AND INSTITUTIONS

COMMUNITY

INDIVIDUALS

INDIVIDUAL ILLNESS

TARGET OF INTERVENTION

TYPE OF INTERVENTION

Clinical Care
Health Promotion/Prevention
Public Advocacy
Intersectoral Working: Jobs/Housing/Education

POPULATION HEALTH
Community Health Improvement Strategy

• Identify a defined population ("community") and develop links
• Assess health status and need and adjust volume and types of services
• Develop effective primary care systems
• Develop effective intervention programs in partnership with the community
Community Health Improvement Strategy (Continued)

- Address the health status of the workforce
- Develop staff as force for community health
- Serve as advocate in the community to increase healthy choices available to the population
- Use economic leverage for health related changes:
  - Jobs
  - Channeling purchasing power
  - Housing development
Causes of Premature Mortality

- Behavioral Factors: 50%
- Environmental Factors: 20%
- Genetic Factors: 20%
- Inadequate Access to Medical Care: 10%

The Core Function Project: U.S. Public Health Service, 1993
Public Health Expenditures As a Percentage of Health Expenditures

Public Health Expenditures
1%

Total Health Expenditures
99%

The Core Function Project: U.S. Public Health Service, 1993
Figure 3.2  Health expenditure 2001, by programme

- Community welfare  8.5%
- Psychiatric programme  7.2%
- Programme for the handicapped  11.7%
- Community health services  16.3%
- Community protection  4.3%
- General support programme  4.5%
- General hospital programme  47.5%

Source: Department of Health and Children
Figure 2.4 Mortality by cause  All ages, Ireland 1999

- Circulatory: 41.0%
- Cancer: 23.5%
- Respiratory: 16.4%
- Other: 13.8%
- Injury & poisoning: 4.7%
- Infectious diseases: 0.6%

Source: Central Statistics Office
Actual Causes of Premature Death in the United States - 1990

<table>
<thead>
<tr>
<th>Cause</th>
<th>Estimated</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>400,000</td>
<td>38%</td>
</tr>
<tr>
<td>Diet/activity patterns</td>
<td>300,000</td>
<td>28%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>100,000</td>
<td>10%</td>
</tr>
<tr>
<td>Microbial agents</td>
<td>90,000</td>
<td>8%</td>
</tr>
<tr>
<td>Toxic agents</td>
<td>60,000</td>
<td>6%</td>
</tr>
<tr>
<td>Firearms</td>
<td>35,000</td>
<td>4%</td>
</tr>
<tr>
<td>Sexual behavior</td>
<td>30,000</td>
<td>2%</td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>25,000</td>
<td>2%</td>
</tr>
<tr>
<td>Illicit use of drugs</td>
<td>20,000</td>
<td>1%</td>
</tr>
</tbody>
</table>

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Infant Mortality Rates and Social Classes: England and Wales

Principles of Epidemiology, Ian Taylor and John Knowelden, London, 1957
Social Class Difference in Infant Mortality

Deaths per 100,000

- England and Wales
- Sweden

Social Class

Redrawn from Wilkinson, Richard G., *Unhealthy Societies*. Taken from Leon et. Al. 1992
Mortality rate adjusted by age and sex composition

Source: David Kindig, University of Wisconsin
Mortality rate adjusted by age, sex, race, and ethnic composition

Deaths per 100,000
- 680-730
- 730-780
- 780-830
- 830-880
- 880-930
- 930-980
- 980-1030
- 1030-1080
- 1080-1130
Mortality rate adjusted by age, sex, race, ethnic, and socio-economic composition
Mortality rate adjusted by age, sex, race, ethnic, and socio-economic composition and medical services
Figure 2.15 Standardised death rate per 100,000 population
All causes, Ireland by county, 1995-1999
Figure 2.14 Occupational class gradients in health

Mortality difference between highest and lowest occupational classes

<table>
<thead>
<tr>
<th>Cause of death</th>
<th>Percentage difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All causes of death</td>
<td>300</td>
</tr>
<tr>
<td>Infectious disease</td>
<td>400</td>
</tr>
<tr>
<td>Cancer</td>
<td>200</td>
</tr>
<tr>
<td>Circulatory disease</td>
<td>250</td>
</tr>
<tr>
<td>Injuries &amp; poisoning</td>
<td>600</td>
</tr>
<tr>
<td>Respiratory disease</td>
<td>700</td>
</tr>
</tbody>
</table>

Source: Institute of Public Health (2001)
The Public Health System

Community

Health care delivery system

Governmental Public Health Infrastructure

Assuring the Conditions for Population Health

Employers & Business

Academics

The Media

INSTITUTE OF MEDICINE