

Social Epidemiology

Yvonne L. Michael, ScD
Department of Public Health and
Preventive Medicine

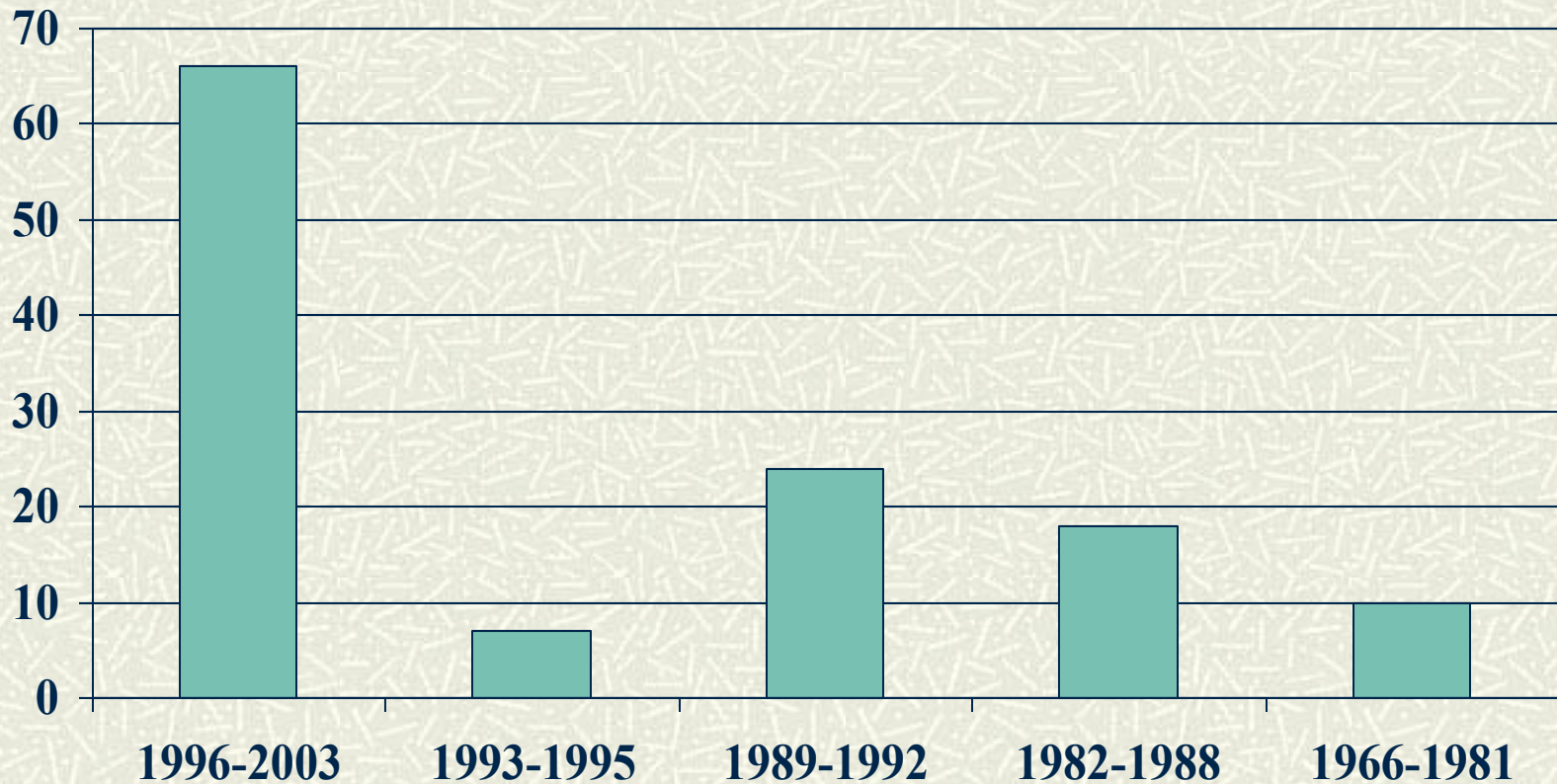
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Social Epidemiology

- # The study of “the social distribution and social determinants of states of health.”
 - Identify socioenvironmental exposures that may be related to broad range of physical and mental health outcomes.
 - # “...the vast majority of diseases and other health outcomes such as functional status, disability, and well-being are affected by the social world surrounding us all...”
 - (Berkman and Kawachi, 2000)
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Social Epidemiology Publications



Search conducted in Medline using "Social Epidemiology" as key word (5-Dec-03)

A Useful Sub-discipline?

- # Public health involves understanding societal, social and psychological processes
 - # Multidisciplinary training necessary for broad understanding of population health
 - True integration of biomedical and social/behavioral disciplines
 - # Scientific progress in identifying social gradient as well as mechanisms
 - International Journal of Epidemiology 2001;30:43-50.
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Socioeconomic Gradients in Health

- # Social class differences in health
 - Exist as a gradient rather than poverty threshold
 - Related to social distribution of wealth
 - # Fundamental Social Causes approach
 - People who have resources (knowledge, money, prestige) gain health advantage
 - Influence individual health behaviors
 - Shape access to broad contexts (neighborhoods, occupations, social networks)
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Average Annual Mortality, 1817-1821, Paris

Arrondissement	% untaxed rents	Mortality proportion	Rate per 100,000
2	7	1 in 62	1612.9
3	11	1 in 60	1666.7
1	11	1 in 60	1724.1
4	15	1 in 58	1960.8
11	19	1 in 51	1851.8
6	21	1 in 54	1785.7
5	22	1 in 53	1923.1
7	22	1 in 52	2000.0
10	23	1 in 50	2272.7
9	31	1 in 44	2325.6
8	32	1 in 43	2325.6
12	38	1 in 43	2325.6

Table adapted from Krieger, 2001 (Villermé, 1826)

Important Psychosocial Risk Factors for Health

- # Psychosocial factors patterned by socioeconomic position and race/ethnicity
 - Social relationships and support
 - Chronic stress in work and life
 - Acute or event-based-based stress
 - Psychological dispositions
 - Anger/hostility, lack of self-efficacy/control, negative affect
 - House (2002) journal of health and social behavior
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Methodological and Conceptual Challenges

- # Study design
 - # Measurement of exposure/risk factors
 - # Data analysis strategies
 - # Etiological theory about how exposure affects outcomes
 - Kasl and Jones (2002) International Journal of Epidemiology
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Study Design

- # Ambiguity about mechanism of social risk factors in disease causation
 - # Research design needs to utilize a “disease development paradigm”
 - Determine transition points affected by social variable
 - Disentangle causal priorities
 - # “Doubly” prospective design
 - Study the causes of the causes
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Measurement of Exposures

- # Objective v. subjective measures
 - # Inconsistent operationalization of constructs
 - # Psychosocial exposures often “reactive”
 - Length of exposure may lose meaning
 - Cohort follow-up starts at beginning of exposure
 - Post-baseline monitoring for exposure-linked changes in behaviors, attitudes, perceptions
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Data Analysis Strategies

- # “Risk factor epidemiology in its pure form exploits neither the depth and precision of micro-levels nor the breadth and compass of macro-levels.” (Susser, 1998)
 - Contextual analysis undermined by ecologic fallacy
 - # Multilevel analysis provides opportunity to combine individual-level data with contextual effects
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Theory in Social Epidemiology

Psychosocial

- Endogenous biological responses to interaction

Social production of disease/political economy of health

- Economic and political determinants

Ecosocial theory and related multi-level frameworks

- Integrate social and biological reasoning

- Krieger (2001) International Journal of Epidemiology
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