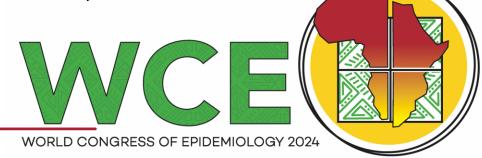
Walking the line in social epidemiology: Rigour versus pragmatism?

Michelle Kelly-Irving

Inserm research professor,

Director of the Equity research team, University of Toulouse, France

25 Sept 2024



Social epidemiology: what is it all about?



Social-structural determinants affect health indirectly and directly through a tissue of causal structures, having small but potentially widespread effects on population-level health, disease and mortality

(Galea & Keyes 2016)

As social epidemiologists we aim to:

- clearly theorise and define our social concepts
- measure them as accurately as possible
- perform rigorous analyses capable of answering our research questions

Conceptual & measurement quality: challenges

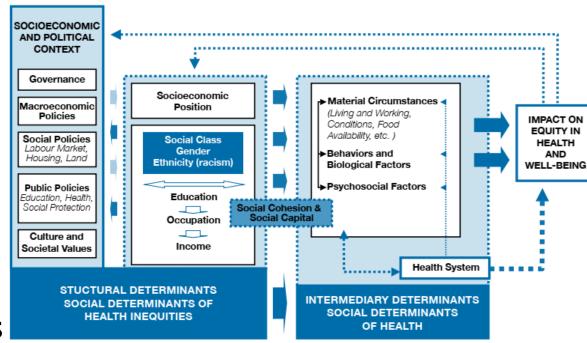
Ubiquity

"Small changes in ubiquitous causes may result in more substantial change in the health of populations than larger changes in rarer causes" (Galea 2018)

Often our measures are proxy variables capturing a structural concept we infer: ethnicity/race used to capture racism;

sex used to capture structural gender relations

Figure A. Final form of the CSDH conceptual framework



Solar O, Irwin A. (2010) WHO

Advocacy for progress in our field

We aim to scientifically criticise and defend our concepts and measurements as legitimate, and very real determinants of health

It is also our role to advocate for social epidemiology beyond the specialised individuals among our ranks because:

- Social factors affect all aspects of public health and clinical medicine
- We want to see diverse social measures collected and used within the hospital walls, in surveillance systems, as well as epidemiological studies

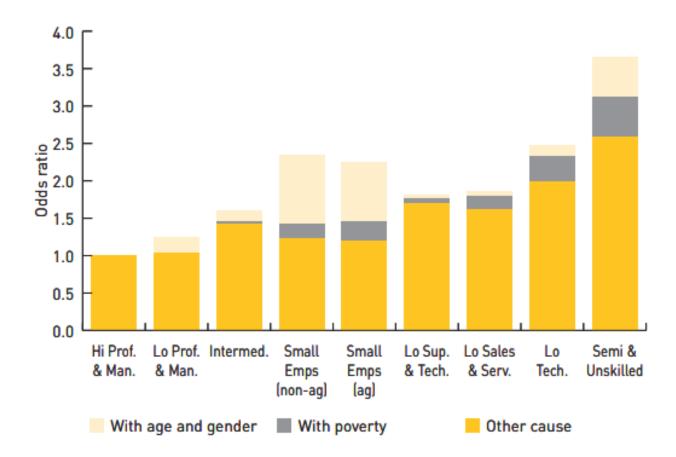
This can result in a tension between rigour and pragmatism. An example...

Example: Social class and health

- Data collection: To examine how health is distributed by social class we need to precisely collect data on occupation:
 - employment status
 - title & name of job
 - kind of industry/ service
 - number of employees/ people supervised
 - type of contract
 - number of hours worked
- Data coding: the information collected, for example via the International Standard Classification of Occupations (ISCO)
- Categorisation as of occuptions into a theorised measure of social class, for example the European socioeconomic classification (ESEC) which focusses on employment relations

Example: Social class using ESeC self-reported poor health

Figure 2.12: ESeC class differentials in 'less than good health' before and after controls for age, gender and income poverty (EU-SILC 2004)



Example: Social class and health

But...in routine or administrative data how can we examine social class and health? An example from France:

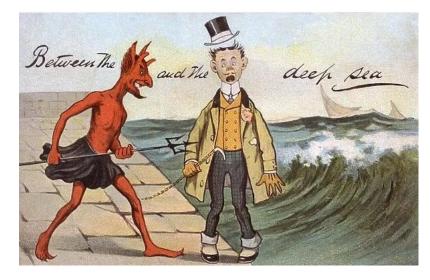
French data derived from health insurance contains the following variables:

- Are you receiving the « state » basic health coverage
- An area-based deprivation index with four variables* at commune level**

None of these are scientifically satisfactory. Solutions?

- Make do, and discuss the limitations
- Linkage?
- Collect individual socioeconomic variables in health care settings, where time and data collection skills are limited

A position of compromise



When you are invited to participate in projects where the social questions posed and social variables collected are far from desired standards, what do you do?

Compromise:

In the case of practitioners wanting to collect social position variables in hospital data in France, our team recommends a drop-down menu of education categories

We prefer pragmatism over attempting to poorly measure a well-defined concept like social class

Walking the line: accepting a diachronical process



- Pragmatic positionality but with reputational concerns
- Nature of discipline of epi a science pulling towards action: we cannot remain within our ivory tower but have to move towards action
- Provide definitions, methods, data but remain flexible, make concessions, come back to definitions diachronically
- Be clear on limitations of concepts and measures, especially when we are compromsing!

Thank you for listening!

Thanks to my colleagues in the Equity research team

And also: Mel Bartley, David Blane, Meena Kumari, Saman KhalatbariSoltani, Anita van Zwieten

New edition of "Health Inequality book" out in Nov 2024!



