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Understanding the social determinants of obesity and eating disorders: a population health approach

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Outline

- The population health approach
- Implications for weight-related issues
  - Overweight/obesity
  - Disordered eating/eating disorders

What is the population health approach?

Why is Jason in the hospital?

Because he has a bad infection in his leg.

Why does he have an infection?

Because he has a cut on his leg and it got infected.

Why does he have a cut on his leg?

Because he was playing in a junk yard next to his apartment building and cut it on jagged steel.

Why was he playing in a junkyard?

Because his neighbourhood is run down and there is nowhere to play.

Why does he live in that neighbourhood?

Because his parents can't afford a nicer place to live.

But why … ?

Source: Toward a Healthy Future: Second Report on the Health of Canadians

The population health approach: key themes

- Aims to improve the health of the **entire population**
- Aims to **reduce health inequities** among population groups

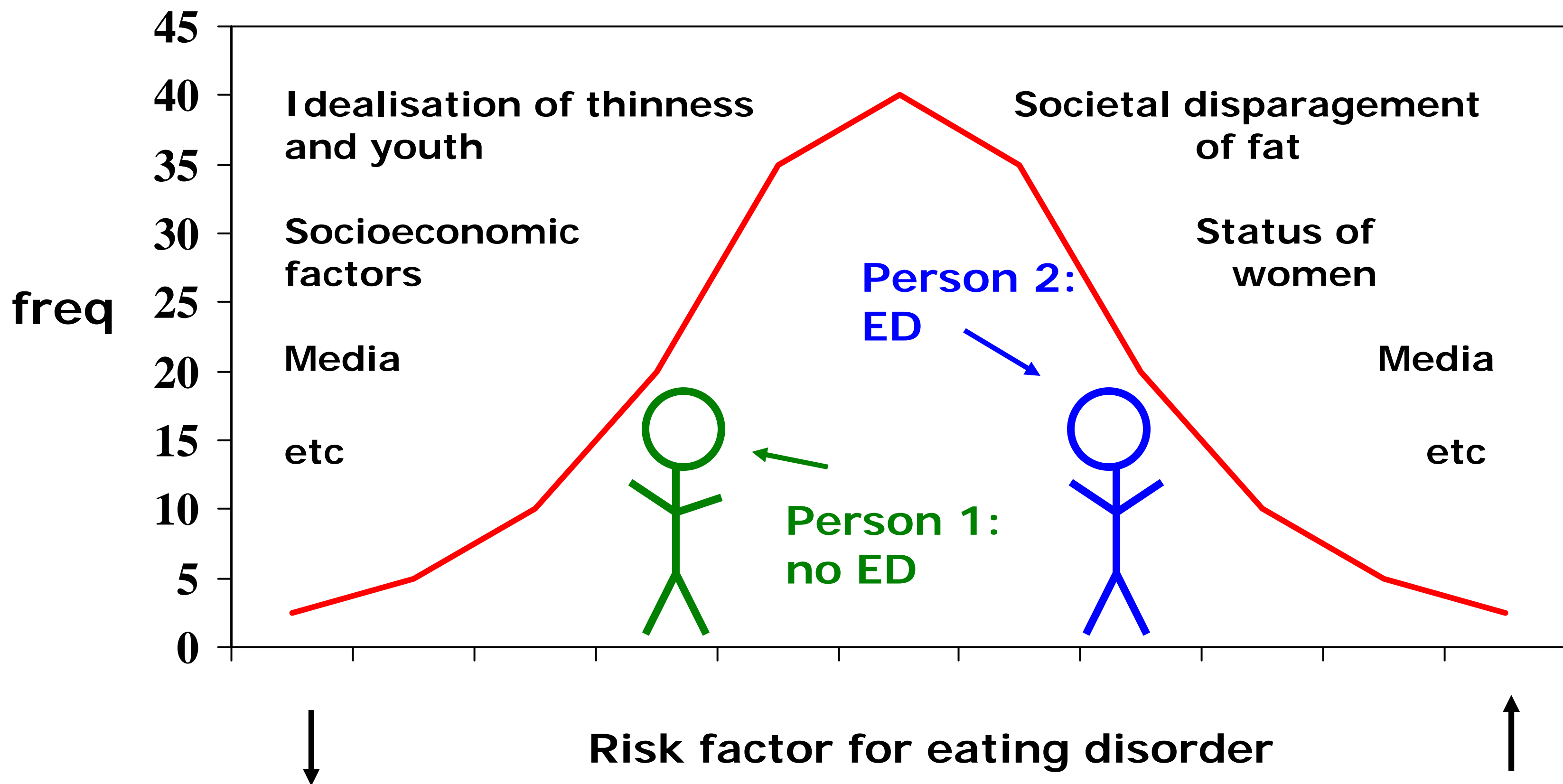
Source: Public Health Agency of Canada
http://www.phac-aspc.gc.ca/ph-sp/phdd/

1. Focus on entire populations

- G. Rose: two ways of thinking about cause
- **Causes of cases:** why did this person get this disease at this time?
- **Causes of incidence:** why do some populations have much of this disease, while it is rare in other populations (or, in the same population at a different period in time)

Sources: Rose *Int J Epidemiol* 2001; Rose *The Strategy of Preventive Medicine,* 1992; Austin *Prev Med* 2001.

Illustration of Rose's framework applied to eating disorders



2. Focus on health inequities

- **Social gradient in health**
- Marmot *Lancet* 2006; Raphael *Social determinants of health: Canadian perspectives* 2004

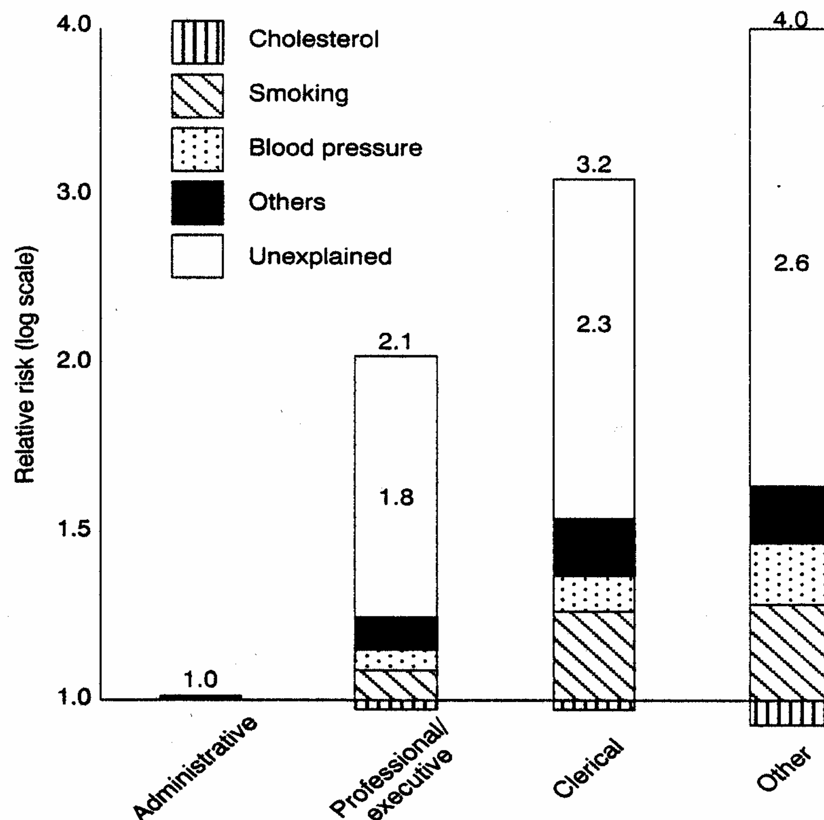
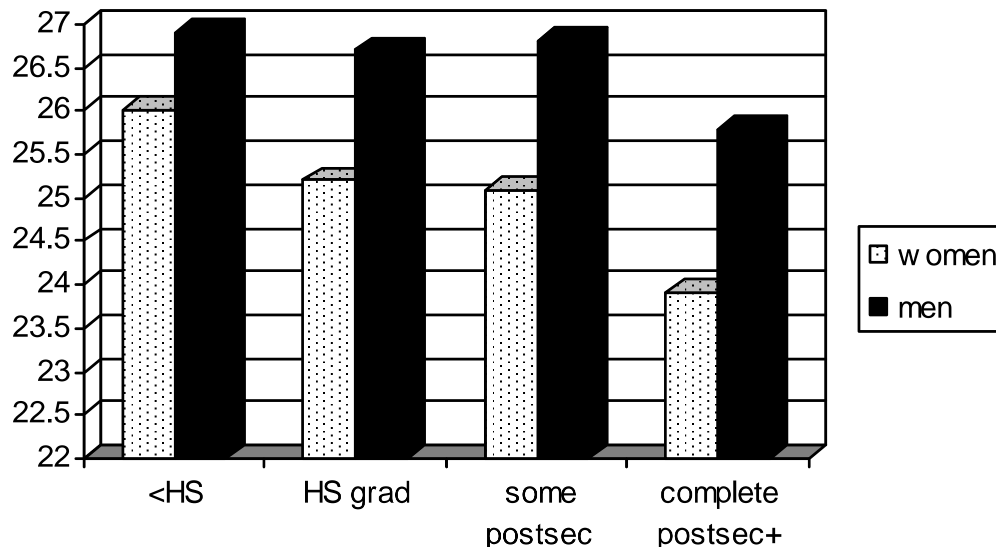


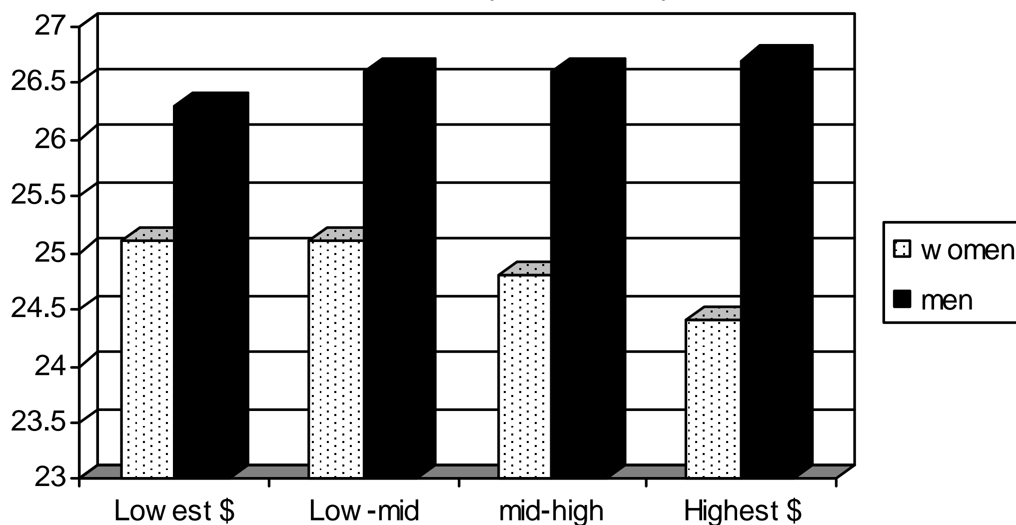
Figure 4.1: Relative risk of death from coronary heart disease according to employment grade, and proportions of differences that can be explained statistically by various risk factors
Note: 'Others' = height, body mass, exercise, glucose tolerance
Source: G. Rose and M. Marmot, Social class and coronary heart disease. *British Heart Journal* 1981: 13–19

Inequities (cont'd)

- **Social gradient in weight**



- McLaren *Epidemiol Rev* 2007; McLaren & Kuh *Soc Sci Med* 2004; McLaren & Godley *Obesity* in press



Inequities (cont'd)

- **Stress and control**
  - Low SES = stress
  - Stress can → weight gain
  - Low SES can → weight gain
  - Cognitive dietary restraint ←→ stress
  - Restraint; dieting etc can → weight gain

- Sapolsky *Why Zebras Don't Get Ulcers* 2004; Bjorntorp *Obes Rev* 2001; Rosmond & Bjorntorp *Obes Res* 2000; Daniel et al. *Obesity* 2006; Putterman & Linden *Appetite* 2006

Some future directions

- **Causes of incidence**
  - Build knowledge base with novel methods
  - Translate to prevention activities
- **Social inequalities in weight related issues**
  - Diverse axes of stratification
  - Cross cultural meaning and manifestation of inequality
  - Population/public health relevance