An Economic Perspective on Public Health

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Economics and the NCD Agenda

The Global Economic Burden of Non-communicable Diseases

Killer Diseases Spur UN Action Call to Avert $47 Trillion Cost

THE LANCET

Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost-effectiveness

The Lancet

Imperial College Business School - Centre for Health Economics & Policy Innovation
Was Rose Right?

It is better to be healthy than ill or dead.

That is the beginning and the end of the only real argument for preventive medicine.

It is sufficient.

Geoffrey Rose
Health and Welfare

Maintaining good health is an important goal for most individuals, but health is by no means the only outcome that individuals value when they choose how to lead their own lives. Individuals wish to engage in activities from which they expect to derive pleasure, satisfaction, or fulfilment, some of which may be conducive to good health, others less or not at all. [...] An assessment of the role of prevention must not ignore those competing goals” (Sassi and Hurst, 2008)
The Political Economy of Public Health
An Economic Case for Prevention - Market Failure

- Classical market failures:
  - Externalities
  - Information failures
  - Supply-side market failures

- Rationality failures:
  - Hyperbolic discounting and poor self-control
  - Heuristics and bias
  - Framing and salience
  - BUT ALSO: Manipulation and deception
Manipulation and Deception

• Consumers are influenced by their choice environment to the limits of manipulation and deception

• Analysis of market equilibria should factor this in

• Additional cause of market failure
Obesity in Children and Adults

Boys and girls having at least one obese parent are about three times as likely to be obese

A “Social Multiplier” Effect

• Negative externalities, which may potentially turn into positive externalities
  – Provide justification for action
  – Suggest that individuals should be targeted within relevant social contexts

• Initiatives involving peer-groups or families may exploit the social multiplier effect and may:
  – Produce greater effectiveness
  – Produce faster spread of healthy behaviours
Health-related Behaviours

• Driven by social norms
  - Peer, social, family influences
  - Commercial advertising

• Myopic, inconsistent time preferences
  - Awareness of risk, but procrastination
  - Perception of risk is generic, biased

• Habit-forming
  - Decisions based on heuristics
  - Large use of default options
  - Rational addiction
Food Layout (Default)
Traffic-light Food Labelling (Salience)

Source: Food Standards Agency
What Policy Options?

- Increasing choice
- Information, education, influencing established preferences (nudging)
- Raising prices on unhealthy choices
- Banning unhealthy behaviours
Prices and Taxes as Health Policies

The OECD CDP Model
Why We Need Models

1. Long time frame of public health policy outcomes
2. Virtually impossible to separate policy effects from confounding effects based on direct observation
3. Heterogeneity of individual characteristics and policy responses matters
4. Variety of outcomes to satisfy a wide range of information needs
## Effective & Affordable Prevention Packages

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<th><strong>OECD Countries</strong></th>
<th><strong>Emerging Economies</strong></th>
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<tbody>
<tr>
<td>Mass media campaigns</td>
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<td>Compulsory food labelling</td>
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<td>Industry self-regulation of food advertising to children</td>
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<td>Physician-dietician counselling</td>
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<td>School-based interventions</td>
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<td>Canada</td>
<td>24.03 $/cap</td>
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<td>Europe</td>
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An Affordable Prevention Package

Source: Cecchini et al., Lancet, 2010
Financial Impacts of Obesity Policies

Obesity Policies: Cost-Effectiveness (Europe)

Years after initial implementation

Cost-effectiveness ratio ($PPP per DALY)

- school-based interventions
- worksite interventions
- fiscal measures
- mass media campaigns
- physician counselling
- physician-dietician counselling
- food advertising regulation
- food advertising self-regulation
- food labelling

Distribution of Sugar Consumption in France

Source: OECD analysis, 2015
Expected Changes in World Sugar Markets

Global increase in sugar production of 11.6 Mt, instead of 20 Mt, by 2025

OECD analysis, 2015
Meeting WHO Guidelines on Fat Consumption

% Reductions to meet Guidelines

Source: OECD analysis, 2012
Impacts on Meat Market

Pacific beef and veal price (USD/t)

Source: OECD analysis, 2012
Obese People are Less Likely to Be Employed

Employment rate, age 50-59, in 2013, SHARE data

Source: OECD/EU Health at a Glance Europe 2016
Obese People are More Likely to Be on Sick Leave

Median number of sick days in last 12 months, age 50-59, in 2013, SHARE data

Source: OECD/EU Health at a Glance Europe 2016
Overweight and Education

Source: OECD Fit Not Fat 2010
Conclusions

1. Economics is playing an increasingly important role in public health

2. The NCD agenda places behaviours and welfare at the centre

3. Economics highlights the constraints for public health action and provides the tools to support policies

4. Important to increase awareness in the public health community of what economics is and what it can contribute