Does Childhood Obesity Hinder Human Capital Development?

Franco Sassi PhD
Chair in International Health Policy and Economics
Director, Centre for Health Economics and Policy Innovation

Gastein, European Health Forum, 4th October 2018
Obesity: a Key Public Health Challenge of Our Times

- Obesity is a marker for behavioural and social factors linked with chronic diseases throughout the life course.

- Childhood obesity not only about childhood.

- US study predicts that 57% of current children will be obese at age 35, half of this prevalence will occur during childhood (Ward et al., 2017).

- Childhood obesity is a social phenomenon, impacts from and on family and household functioning.

- “our current knowledge of the causal impacts of obesity on [education, labour market and social] outcomes is limited at best”
Predicted Prevalence of Obesity at the Age of 35 Years.

Childhood Obesity Strongly Associated with SES in UK
An Important, and Yet Unanswered, Question

- Substantial work on **adult obesity** and labour outcomes: obesity affects employment, wages, sick leave, early retirement
  - Adult obesity causally linked with 5 socioeconomic outcomes in UK Biobank data (*Tyrrell et al.*, 2016).
  
- **Childhood obesity**: detrimental impact on girls’ educational attainment in correlation study based on ALSPAC (*Booth et al.*, 2014)

- Systematic review (*Martin et al.*, 2017; 31 studies, 17 cohorts): increasing evidence from longitudinal studies but mostly based on correlations
The Project’s Conceptual Framework

Childhood obesity

Gene expression, molecular signatures

Genetic traits

Educational attainment

Labour market and social outcomes

Obesogenic environments, parental exposures
The Economic and Social Outcomes of Childhood Obesity

Educational achievement:
• cognitive achievement (test scores from assessments)
• educational attainment (highest qualification obtained)

Employment and earnings:
• whether in employment
• occupation (official occupational UK classification)
• individual earnings

Civic participation:
• taking part activities organisations
• trust other people
• voting in last general election
Childhood Obesity Impacts over the Life Course

- Can we break the vicious circle linking obesity, ill-health and social disadvantage across generations, and mitigate its burden on women?

- Socially disadvantaged women – high prevalence of obesity
- Obese adults – labour market and social disadvantage
- Children highly likely to be overweight or obese – educational disadvantage
Understanding Impacts over the Life Course

- Impacts of *early-onset* obesity vs. *adolescent* obesity
- Impacts on *educational* outcomes at different points in time
- *Labour and social* outcomes at different life stages
- Impacts of *childhood-onset* obesity vs. *adult-onset* obesity
Policy Relevance and Potential Impacts

If project succeeds in demonstrating causal impacts of childhood obesity, twofold policy implications:

- Strengthen childhood obesity prevention through:
  - Government action in health care, public health, education, transport, environment, sport, media
  - Health professionals
  - Industry
  - NGOs and other civil society

- Mitigate the impacts of childhood obesity through government policies, health professionals, employers, civil society