The economic and social value of health from childhood to later life

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Aim

• Much is known about the effect of SES on health, but a recent CLS review identifies major gaps in our knowledge on the impact of health on social and economic outcomes.

• What impact does physical and mental health have on social and economic outcomes?
Impact of physical and mental health on

1. Educational development:
   • cognitive scores; school qualifications; highest qualification achieved

2. Economic outcomes:
   • labour supply; employment and occupational status; earnings; social class

3. Socio-emotional outcomes:
   • childhood behavioural adjustment; quality of life; social support; marital/partnership status.
The UK’s Longitudinal Studies TIMELINE

1930
Hertfordshire Cohort Study

1940
MRC National Survey of Health and Development

1950
1958 National Child Development Study

1960
1970 British Cohort Study

1970
Avon Longitudinal Study of Parents and Children

1980
Southampton Women’s Survey

1990
Understanding Society: The UK Household longitudinal Study

2000
Millennium Cohort Study

2010
Next Steps
Knowledge gaps we will fill

• Use MCS and Next Steps (born 89/90) to consider impact of childhood and adolescent health on social and economic outcomes for contemporary young people.

• Lasting effects of poor childhood/adolescent health for outcomes in mid-40s and older.

• Early to mid adult health (biomarkers) and later social outcomes

• Use NSHD and NCDS to examine outcomes at age 55+ using prospective data.
Life course approach using rich, longitudinal data

• Health status and outcomes from early childhood to later life (55-69)
• Dynamic trajectories and interrelationships between health and social outcomes
• Addressing socio-economic inequalities and sex differences
• Cross-cohort comparisons, addressing generational change
Changing health exposures: childhood

- **measles by age 10/11**
  - 2000/1: 92%
  - 1970: 50%
  - 1958: 100%

- **breast-fed**
  - 2000/1: 67%
  - 1970: 38%
  - 1958: 69%

- **smoking during pregnancy**
  - 2000/1: 35%
  - 1970: 41%
  - 1958: 29%
Rising tide of obesity

![Graph showing the increase in obesity rates from 1958 to 2000/1 for both males and females. The graph indicates a significant rise in obesity across all age groups, with particularly steep increases in later decades.]
Trajectories of psychological distress – Midlife peak - Gen X doing worse than previous generations

Males

Females
Childhood and early adult health and subsequent outcomes

• What is the role of both parental and child physical and mental health in:
  • education and social mobility chances?
  • socio-emotional outcomes?
The standard social mobility model: OED
Taking health into account: the missing link in social mobility research?
Dynamic interrelationships: health, education and SES
Mid-life health and later outcomes

- Depression
- Poor life satisfaction
- Obesity
- Declining physical functioning

- Labour market participation
- Wages
- Social participation
- Relationships
Policy aims

• Understanding the wider costs of poor health and wider benefits of good health can give impetus to greater investment in tackling health problems.

• Understanding the wider costs of health challenges that are increasing across generations (obesity, depression) should spur action.

• Information on critical life stages and vulnerable groups can be used to inform targeting of resources.
Methodological approach to key challenges in observational data

• Causal inference
  ✓ Mendelian Randomisation/Instrumental Variables
  ✓ Negative controls
  ✓ Sensitivity analysis for departures of the “no omitted variables” assumption

• Missing Data
  ✓ Multiple Imputation
  ✓ Full Information Maximum Likelihood
  ✓ Inverse Probability Weighting

• Measurement Error
  ✓ Latent variables
  ✓ Sensitivity analysis/Simulations
  ✓ Regression calibration
Team

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Thank you

Any questions?