University of St Andrews

Gender inequality in general health among young people: measures of socioeconomic position in the 2021 Census microdata

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Young people:10-24-year-olds

- Adolescents: 10-19-year-olds
- Youth: 15-24

- 25–29-year-olds included to investigate the effect of qualifications and individual-level socioeconomic position (SEP)

Infographic: A call to action: the second Lancet Commission on adolescent health and wellbeing. The Lancet 2025. Published online May 20.

Measuring health inequalities in young people

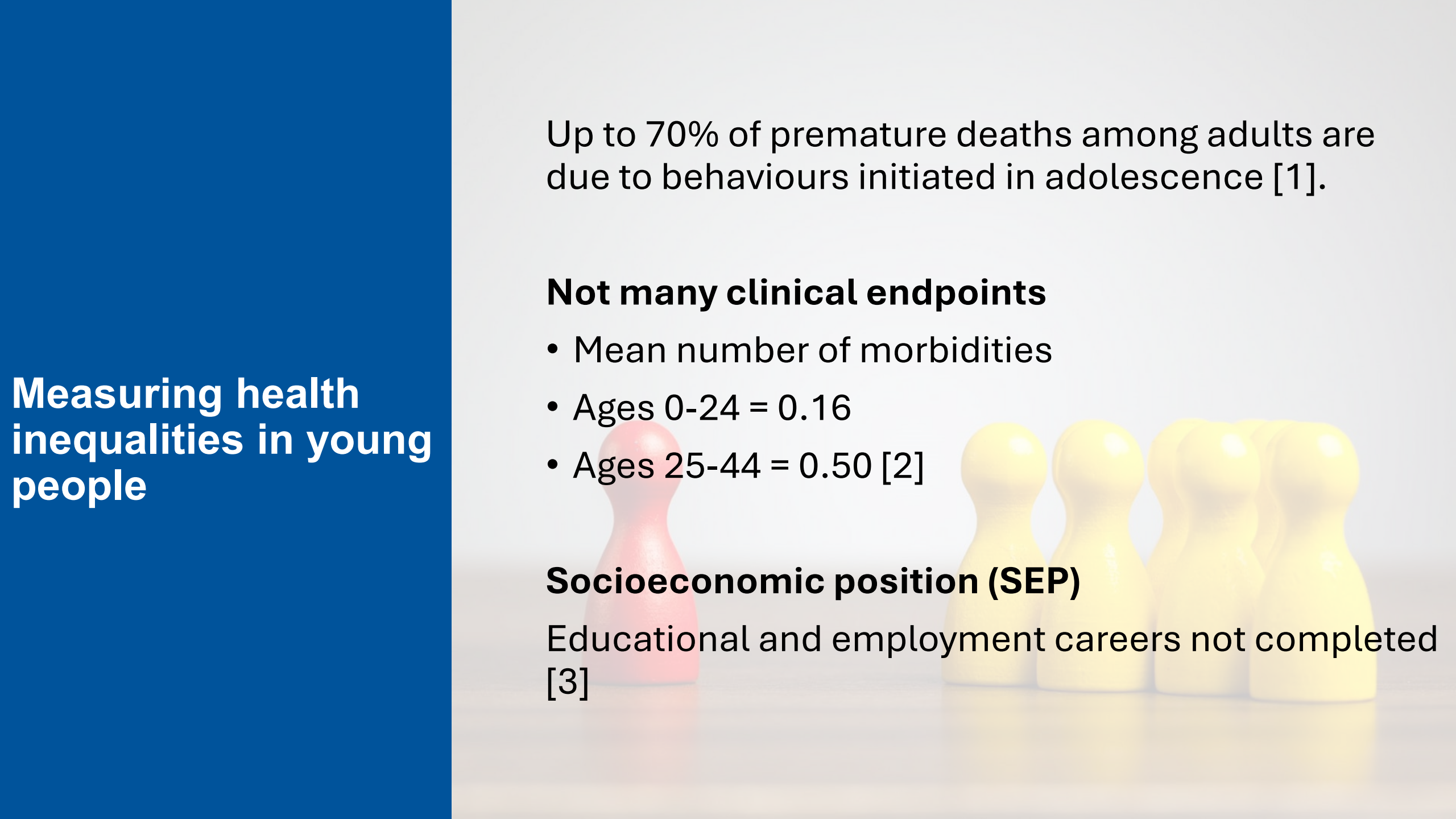
Up to 70% of premature deaths among adults are due to behaviours initiated in adolescence [1].

Not many clinical endpoints

- Mean number of morbidities
- Ages 0-24 = 0.16
- Ages 25-44 = 0.50 [2]

Socioeconomic position (SEP)

Educational and employment careers not completed [3]



Self-rated general health measure

Predicts morbidity and mortality

Health ratings are multifactorial

Chronic conditions have a long latency period [1,4-6]

Socioeconomic position

National Statistics Socio-economic Classification (NS-SEC)

- Employment conditions and relations: material resources, social standing
- Household reference person (HRP): family's resources and decision-making unit [7]

The highest level of qualifications

- Individual's knowledge-related assets

Aim: to investigate the effect of three SEP measures on general health

NS-SEC of the household reference person (HRP)

Individual NS-SEC

Highest level of qualifications

How is your health in general?

Very good
Good
Fair
Bad
Very bad

Study design

Cross-sectional study

Safeguarded Individual Microdata Sample at Region Level (England and Wales) [8]

Study population

- NS-SEC of the HRP: 10–29-year-olds
- Individual NS-SEC and highest qualifications: 19–29-year-olds

Methods

- Sex-stratified analysis
- Bivariate analysis and chi-square test to assess the association between SRH and covariates
- Logistic regression analysis: Odds ratios and 95% confidence intervals

How is your health in general?

NS-SEC five-class version and three residual categories

1. Managerial and professional occupations
2. Intermediate occupations
3. Small employers and own account workers
4. Lower supervisory and technical occupations
5. Semi-routine and routine occupations

- Never worked
- Long-term unemployed
- Full-time students

Covariates: household-level deprivation of education, housing, and region

How is your health in general?

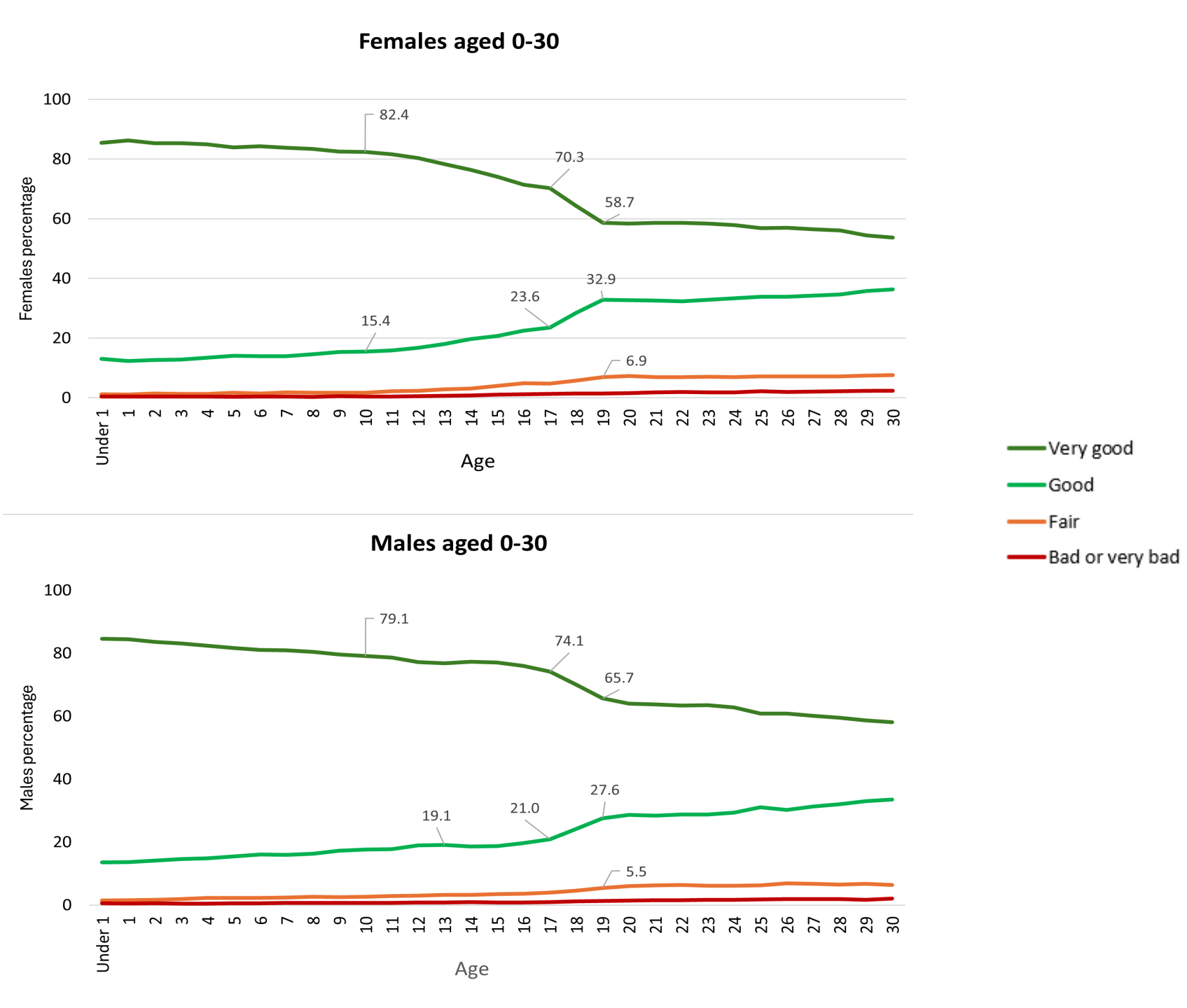
Highest qualifications

1. No qualifications
2. Level 1 and entry level qualifications
3. Level 2 qualifications: 5 or more GCSEs
4. Apprenticeship
5. Level 3 qualifications
6. Level 4 qualifications: degree (BA, BSc), higher degree (MA, PhD, PGCE), or professional equivalent
7. Other

Covariates: household-level deprivation of education, housing, and region

Results

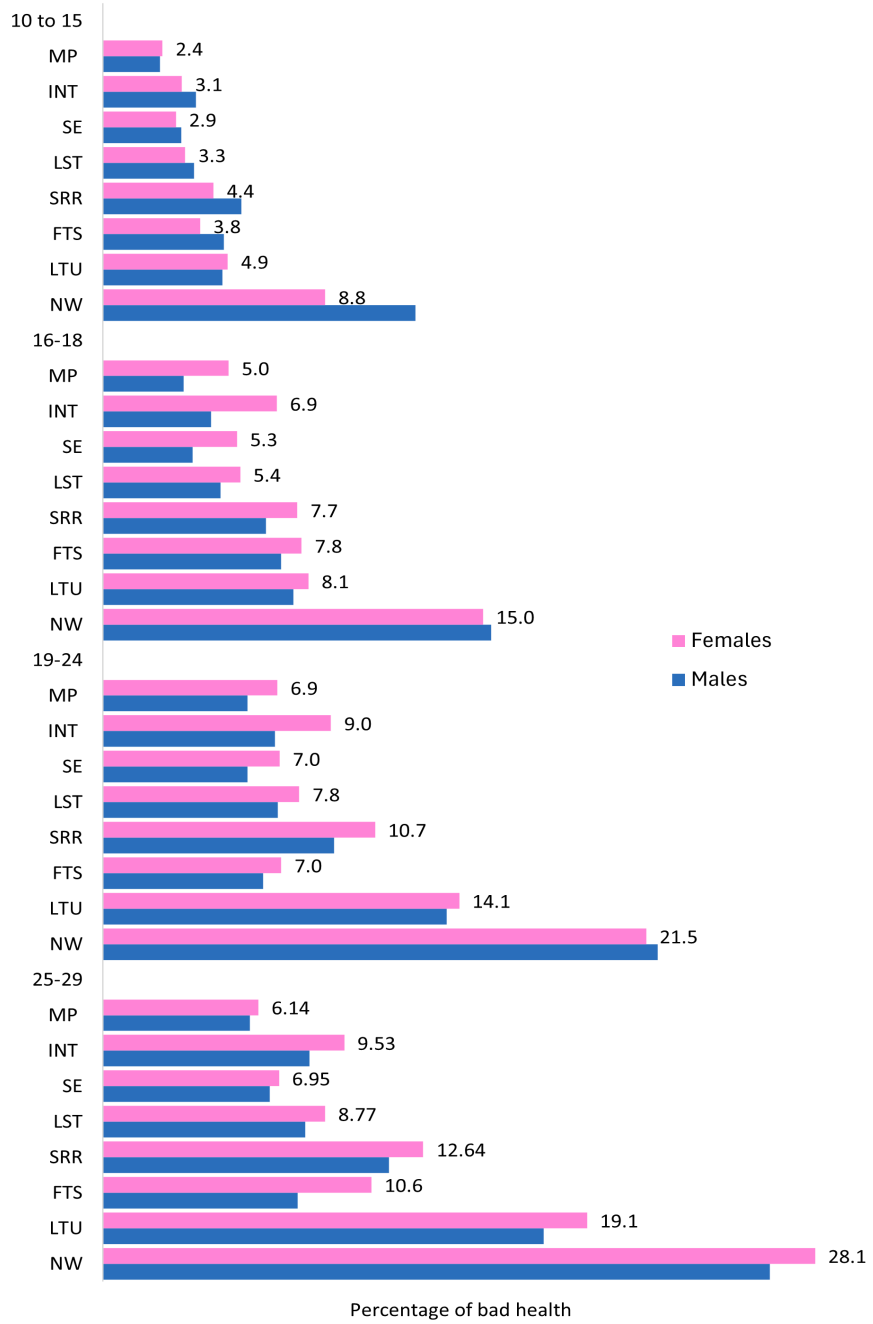
General health by age and sex

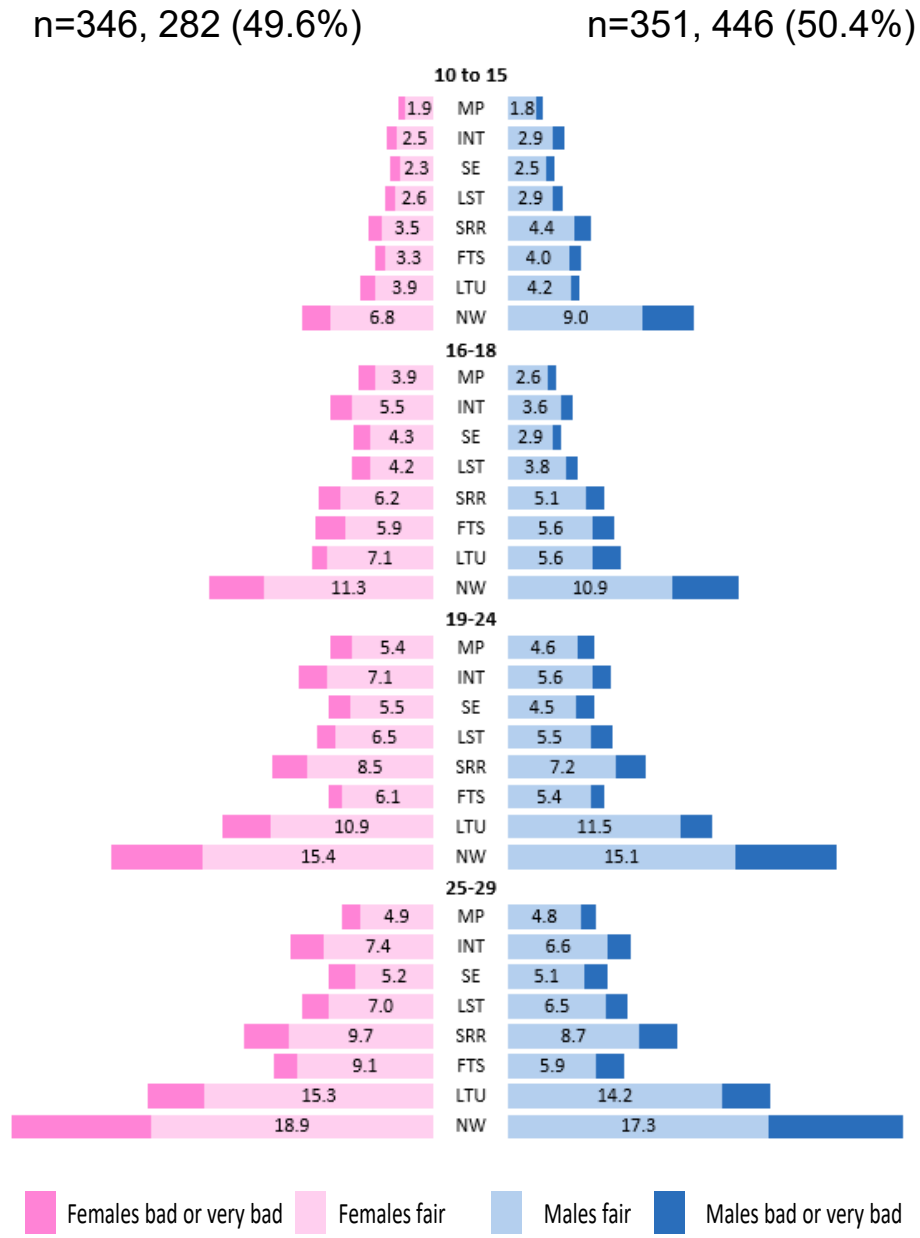


Bad health

NS-SEC of the HRP

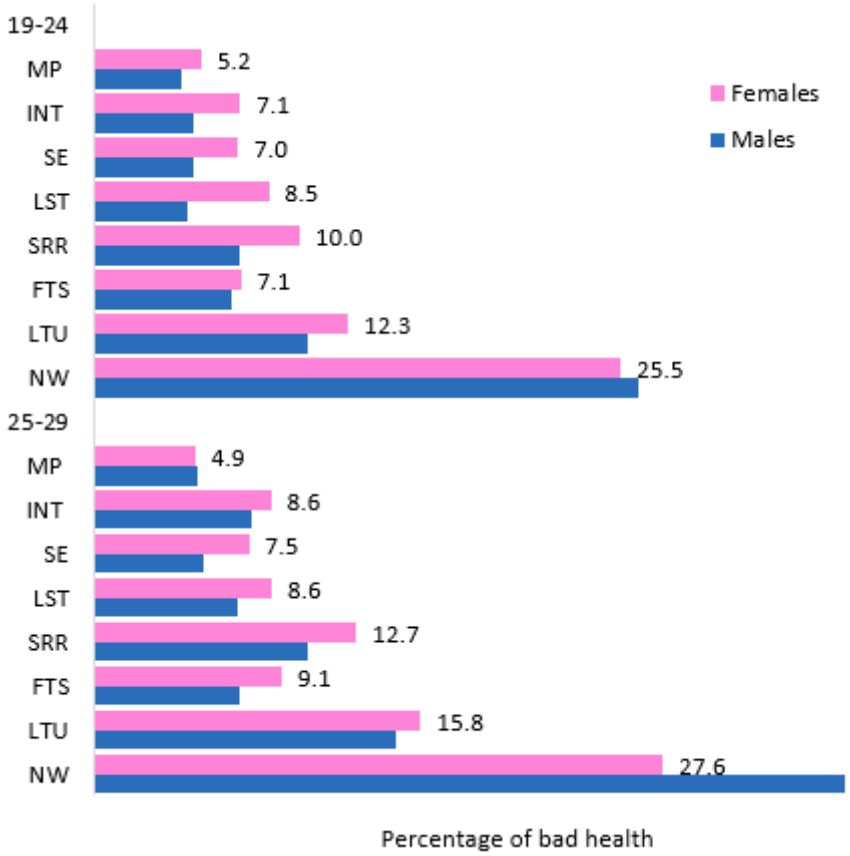
Legend
MP: Managerial and professional
INT: Intermediate
SE: Self-employed
LST: Lower supervisory technical
SRR: Semi routine and routine
FTS: Full-time students
LTU: Long-term unemployed
NW: Never worked



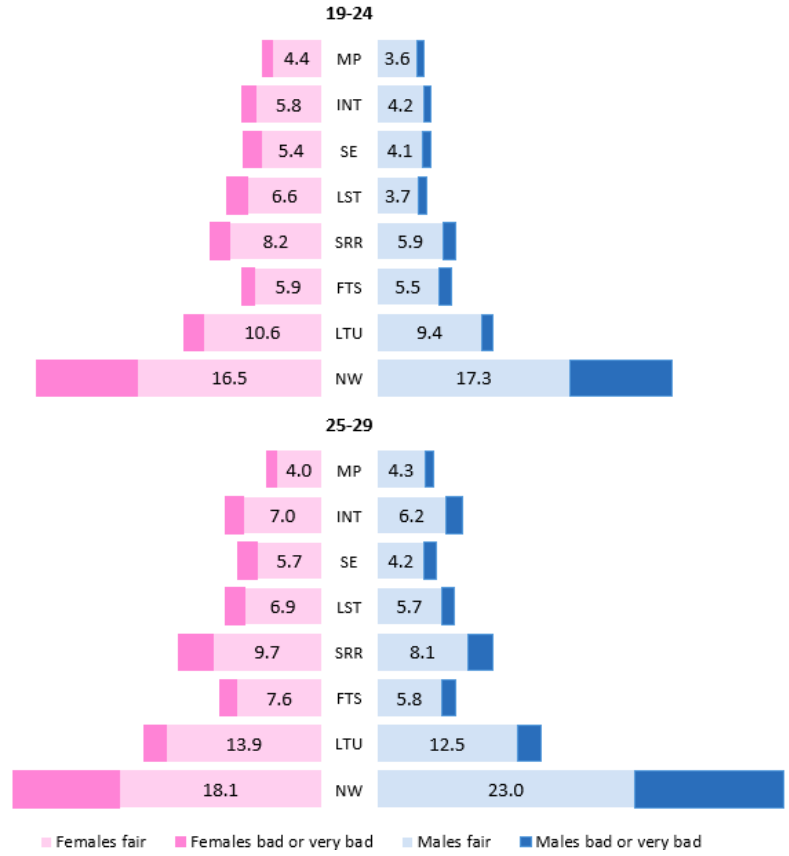


Bad health

Individual-level NS-SEC



n=196,652 (50.4%) n=193,286 (49.6%)



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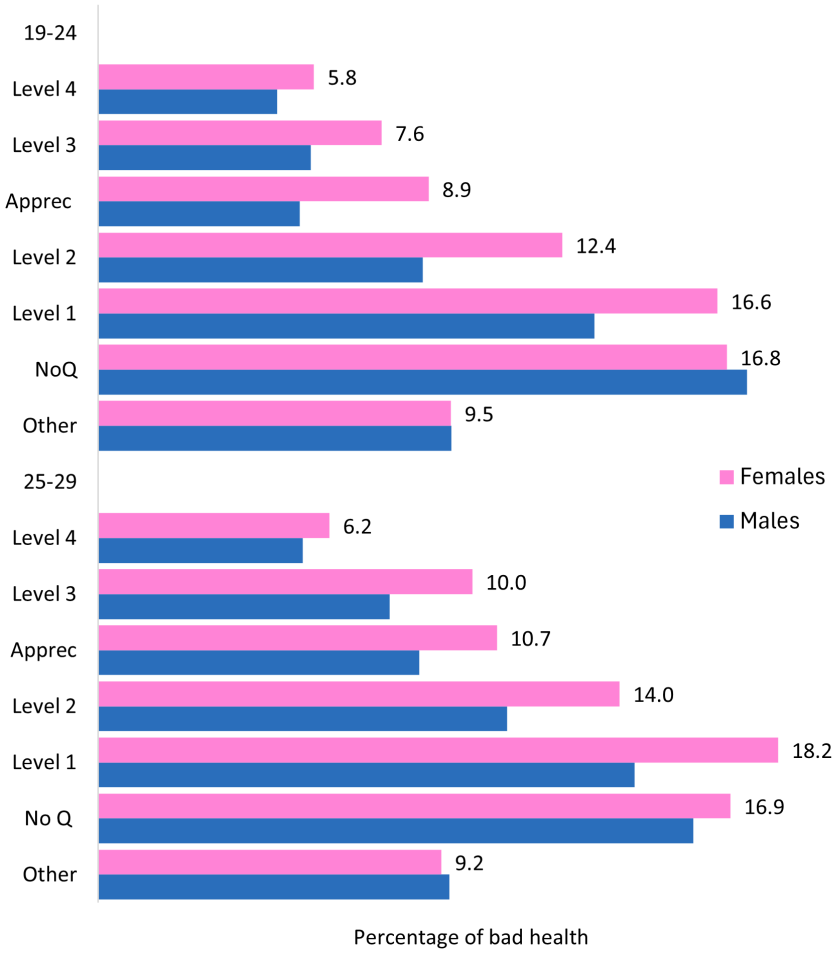
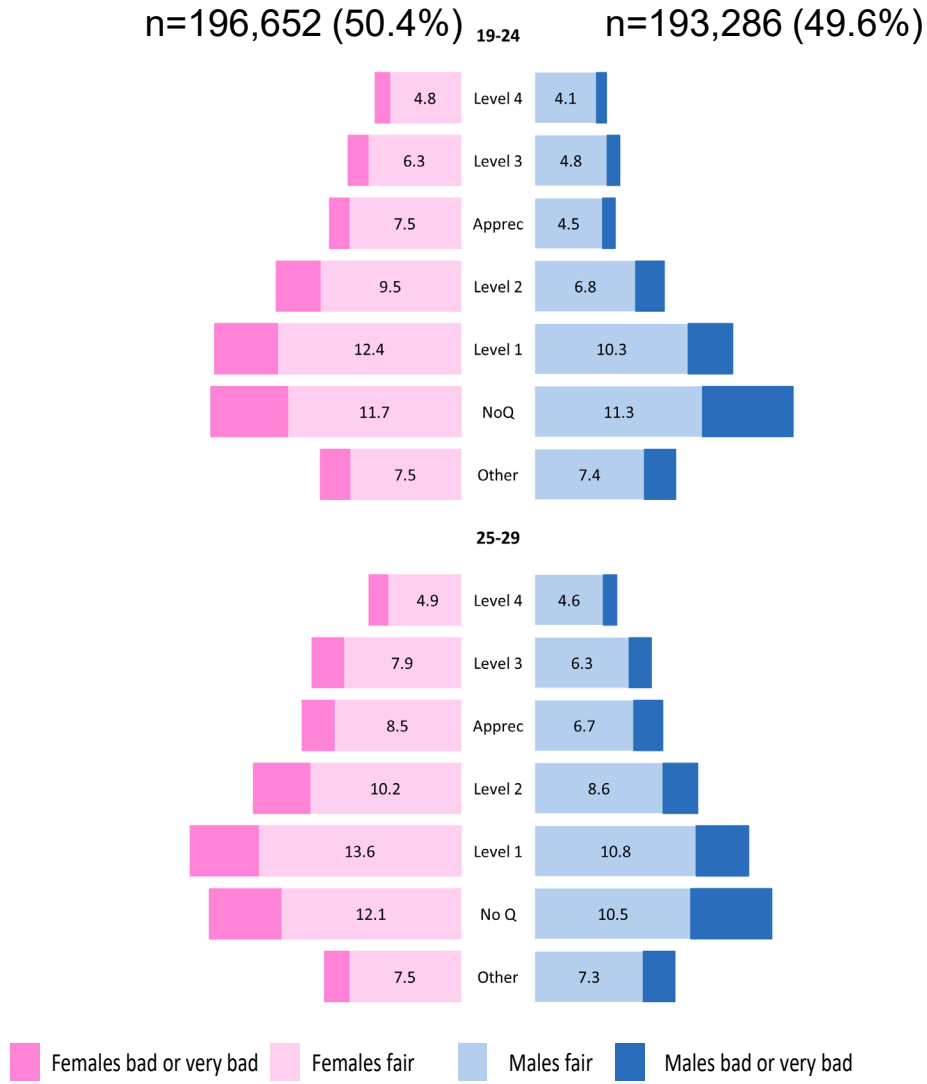
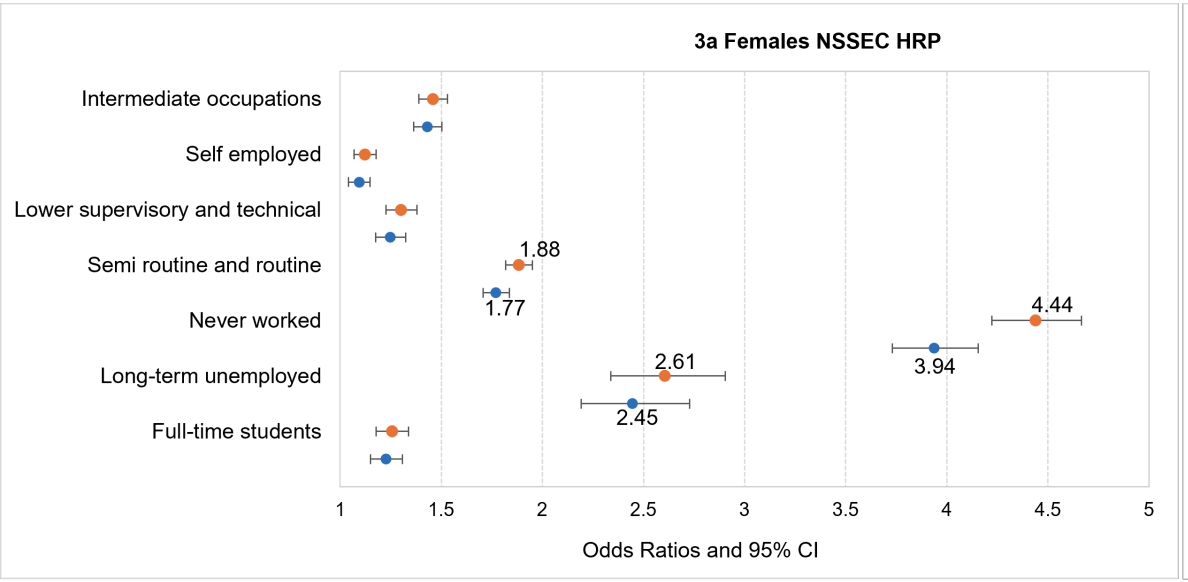
Bad health

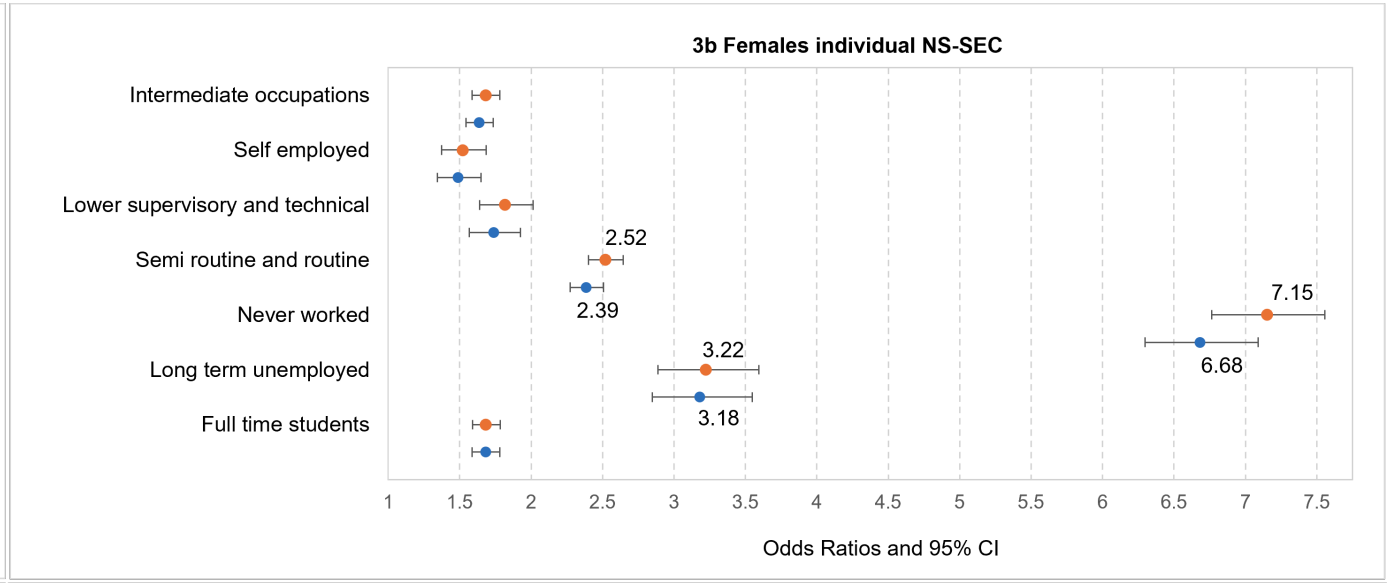
The highest level of qualifications

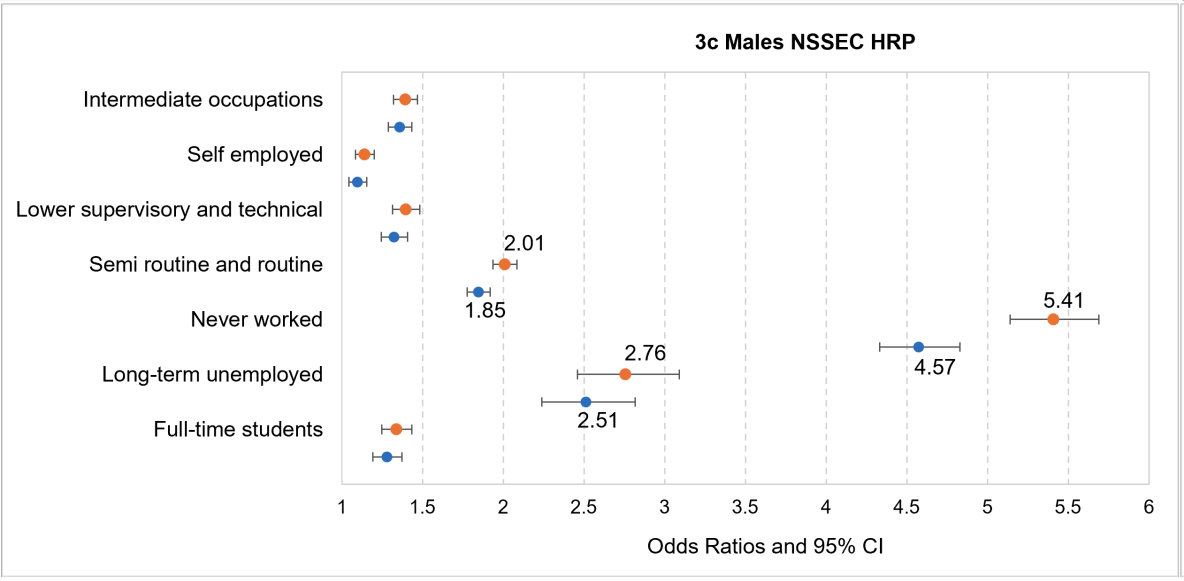
Legend
Level 4: degree and equivalent
Level 3: A levels
Apprec: Apprenticeship
Level 2: 5 or more GCSEs
Level 1 and entry-level qualifications
NoQ: No qualifications

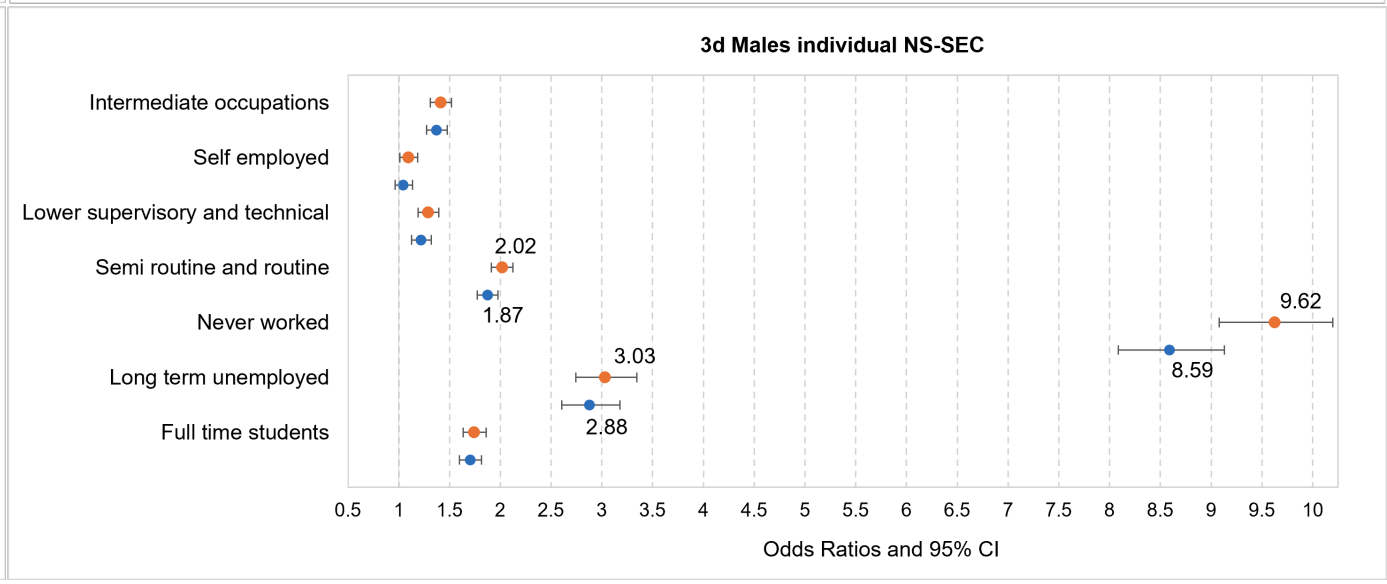






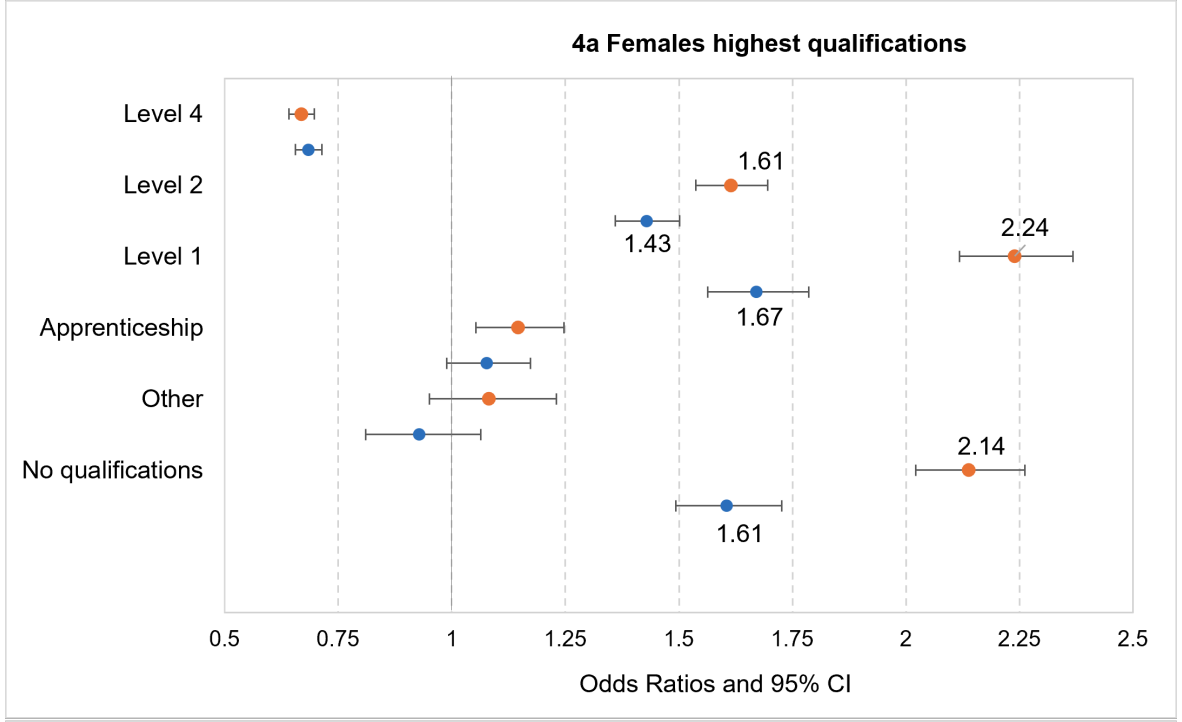


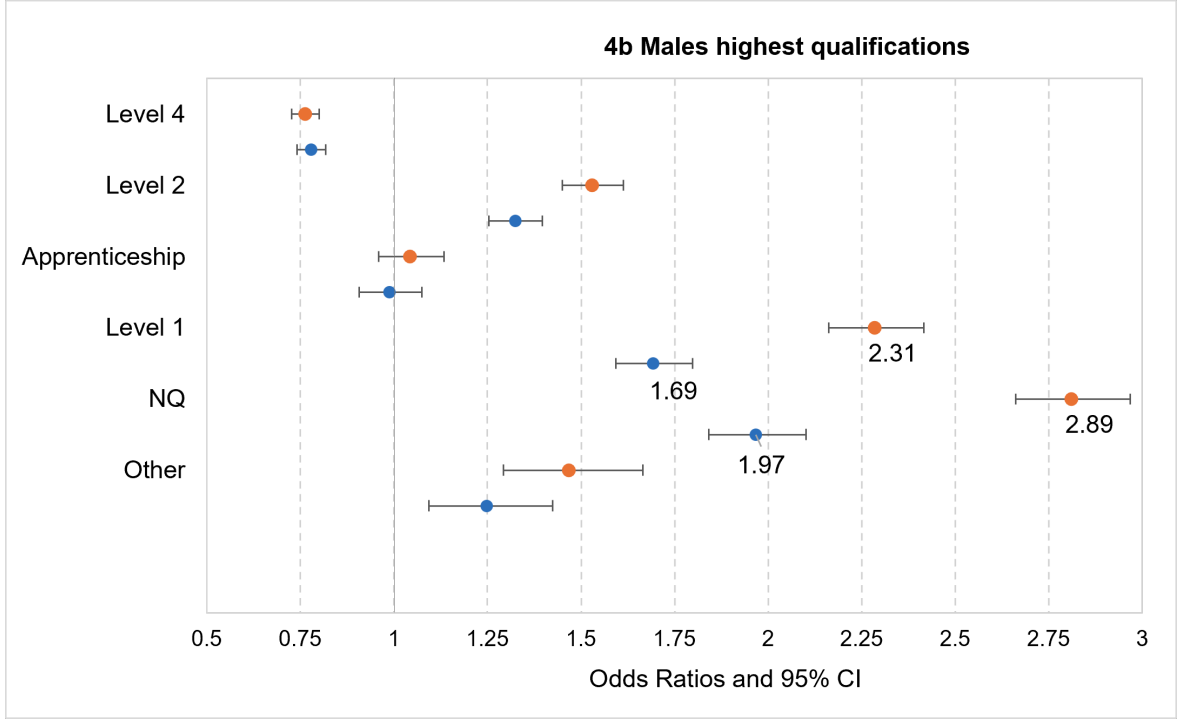




Odds ratios and 95% confidence intervals of reporting poor health. Occupation-based indicators of NS-SEC of the HRP and individual-level NS-SEC. Unadjusted and adjusted models. Reference group: Managerial and professional occupations.

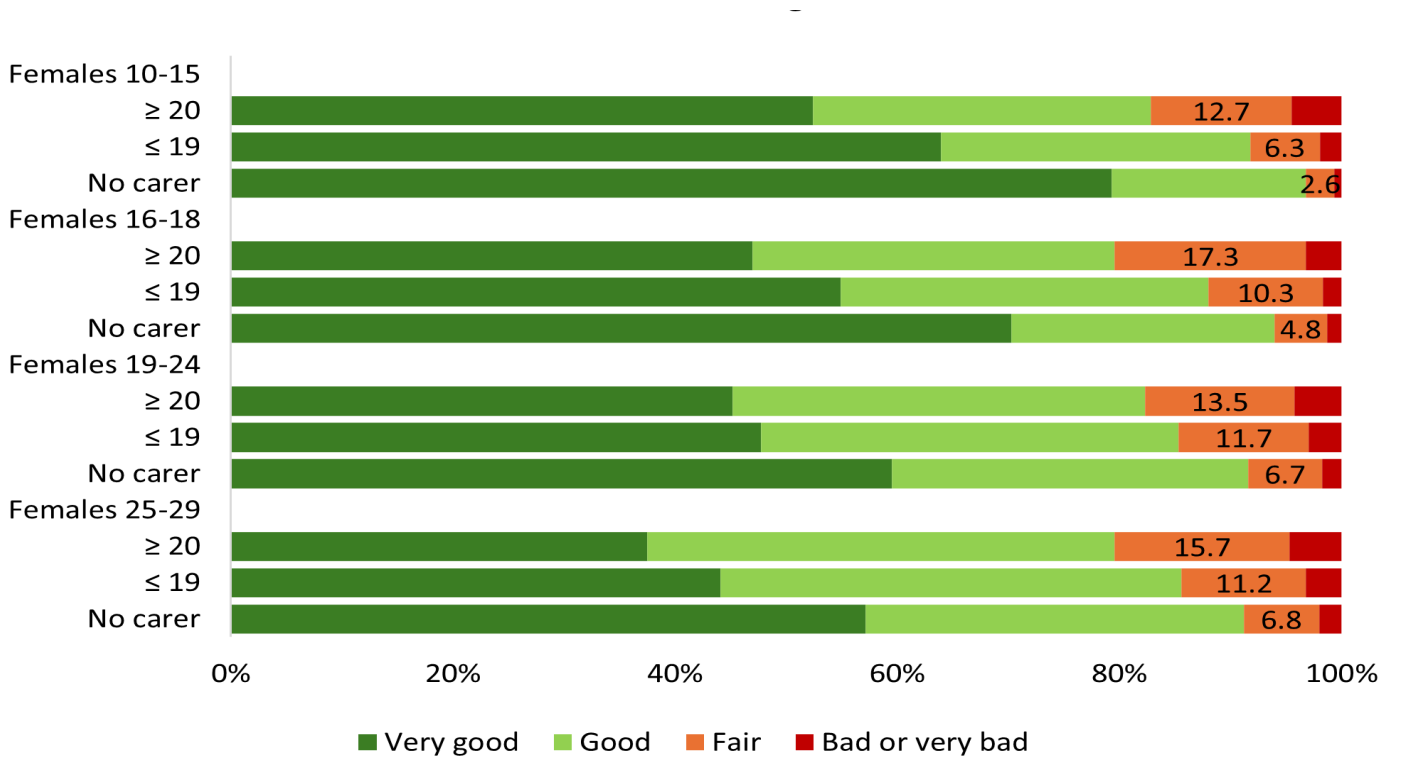
Odds ratios and 95% CI of reporting bad health by level of qualifications

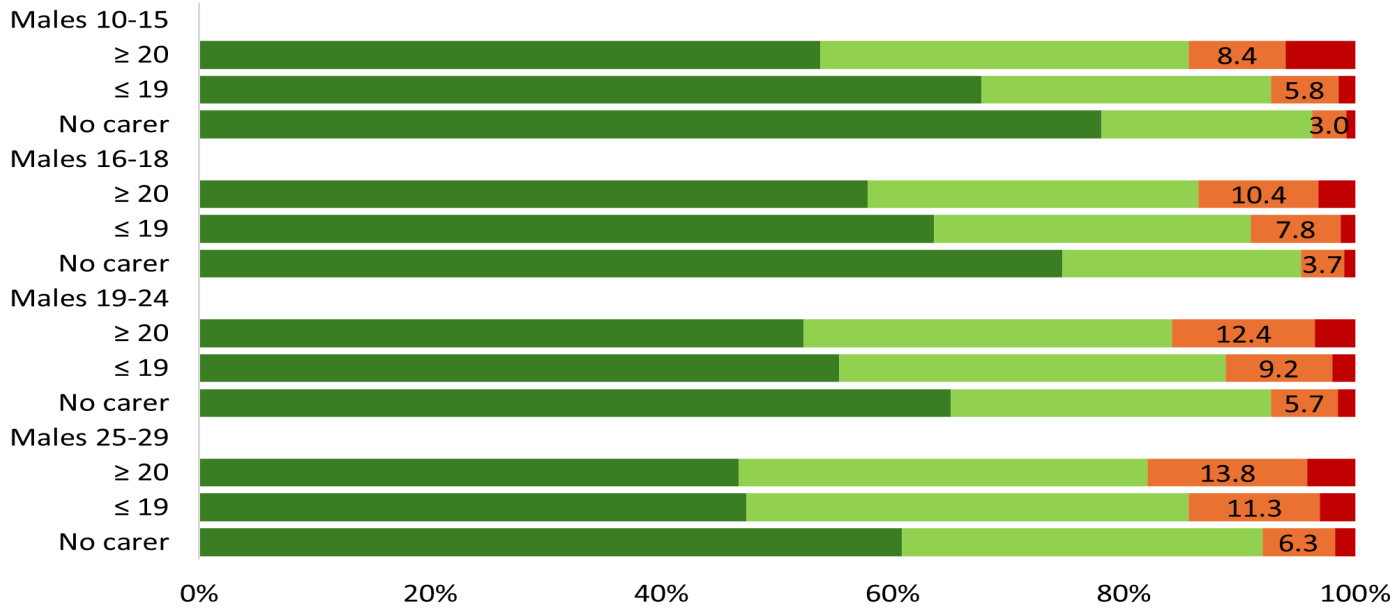




Caring hours and health

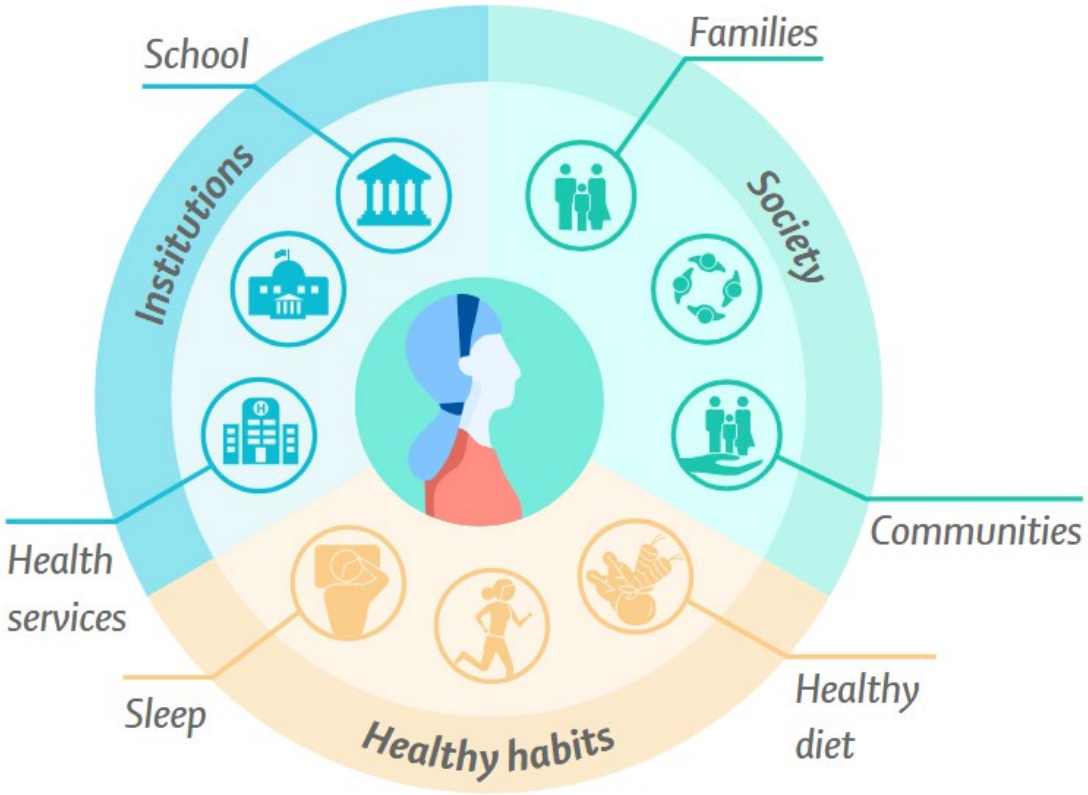
Legend
≤ 19: 19 hours or less
≥ 20: 20 hours or more





Conclusions

- Health inequality was observed across all three SEP measures.
- At ages 10-15, girls have a lower rate of poor health compared to boys. At ages 10-19, girls experience a sharper decline in very good health and a rise in good and fair health
- Among both males and females, groups with limited labour market contact and low educational attainment are the most disadvantaged.



Infographic: A call to action: the second Lancet Commission on adolescent health and wellbeing. The Lancet 2025. Published online May 20.

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