

# Poverty, adversity and the life course development of physical and mental health

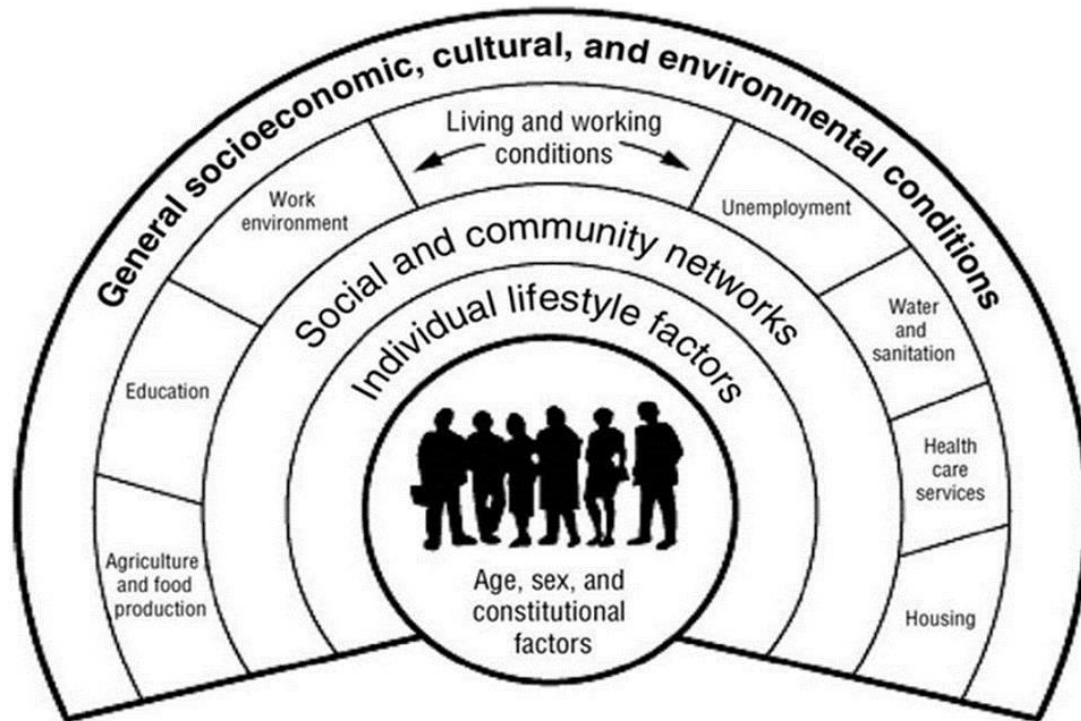
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# Adverse Childhood Experiences (ACEs)



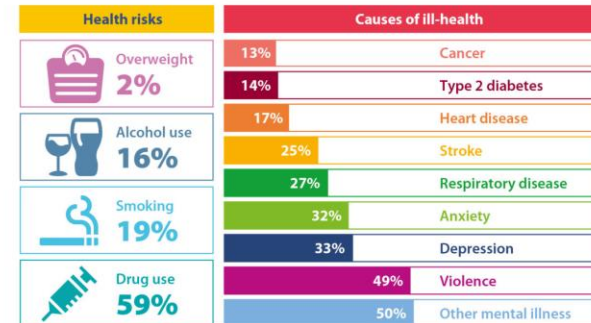
# Poverty and adversity - research silos



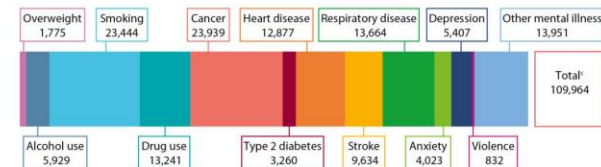
## The annual costs of adverse childhood experiences (ACEs) in Wales

Adverse childhood experiences (ACEs) increase individuals' risks of adopting health-harming behaviours and developing ill health. ACE survey data was used to calculate the proportion of key health risk behaviours and health conditions attributable to ACEs and estimate the associated annual costs to Wales.\*

What proportion of health risks and causes of ill-health are attributable to ACEs in Wales?



How many years of healthy life lost<sup>b</sup> does this account for annually?



\*Full methodology is published in Hughes K, Ford K, Kadel R, Sharp C A, Bellis M A. Health and financial burden of adverse childhood experiences in England and Wales: a combined primary data study of five surveys. *BMJ Open* 2020. Population attributable fractions were calculated using Welsh ACE prevalence data and relative risks calculated from five UK ACE studies.  
<sup>b</sup>Disability Adjusted Life Years (DALYs) lost, 2017 Global Burden of Disease Study; <sup>c</sup>Excluding DALYs for health risks linked to included causes of ill health.

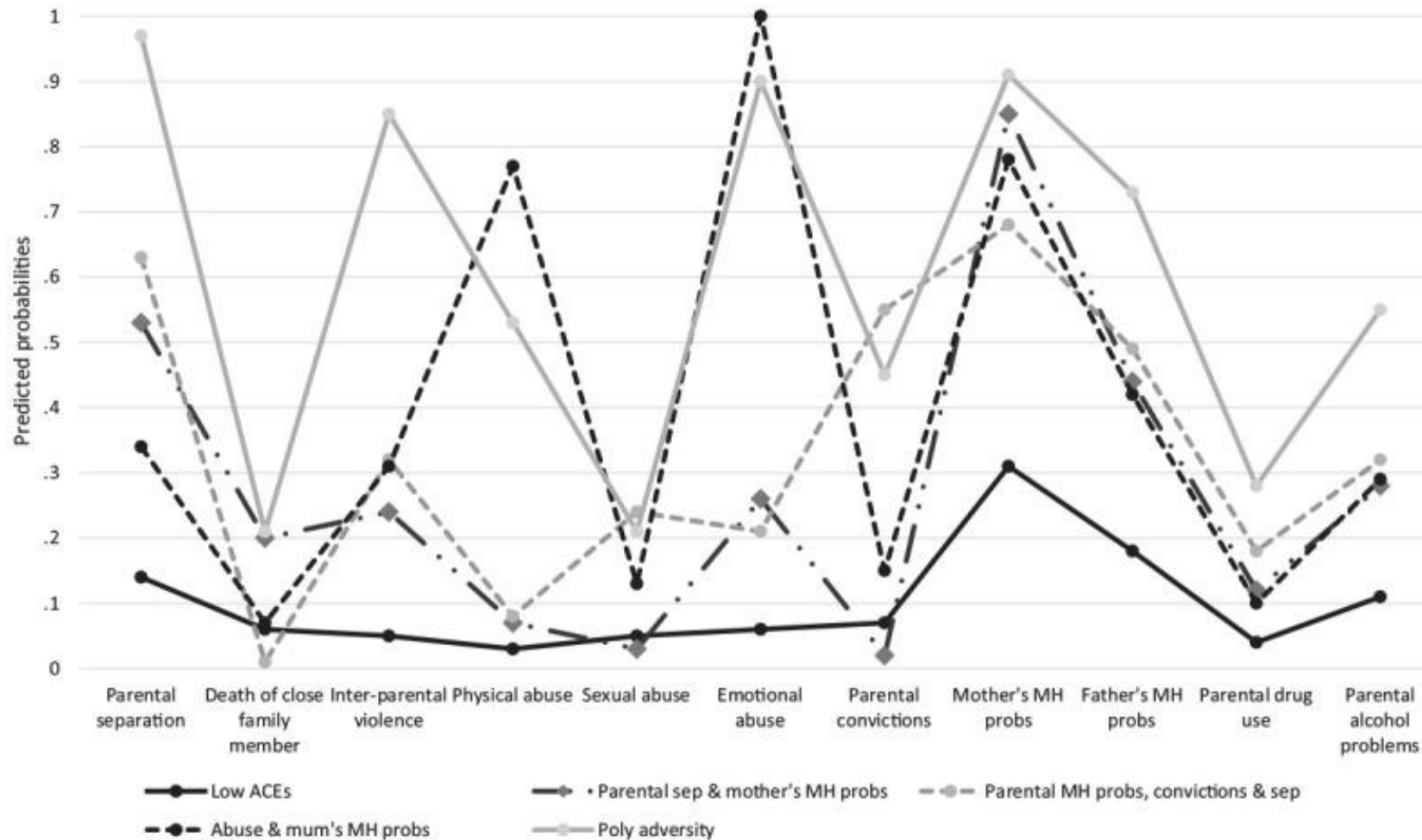
# Avon Longitudinal Study of Parents and Children (ALSPAC)

- Former county of Avon (Bristol)
- >13,000 pregnant women 1991/2
- Questionnaires, clinics, links to routine data



	%
<b>ACE-score: 0</b>	16.1
<b>1</b>	23.6
<b>2 to 3</b>	36.5
<b>4+</b>	23.8
<b>Physical abuse</b>	19.0
<b>Sexual abuse</b>	4.1
<b>Emotional abuse</b>	23.9
<b>Emotional neglect</b>	23.9
<b>Bullying</b>	26.2
<b>Violence between parents</b>	25.3
<b>Parental substance abuse</b>	15.1
<b>Parental mental health problems or suicide attempt</b>	48.6
<b>Parental criminal conviction</b>	10.5
<b>Parental separation</b>	33.8

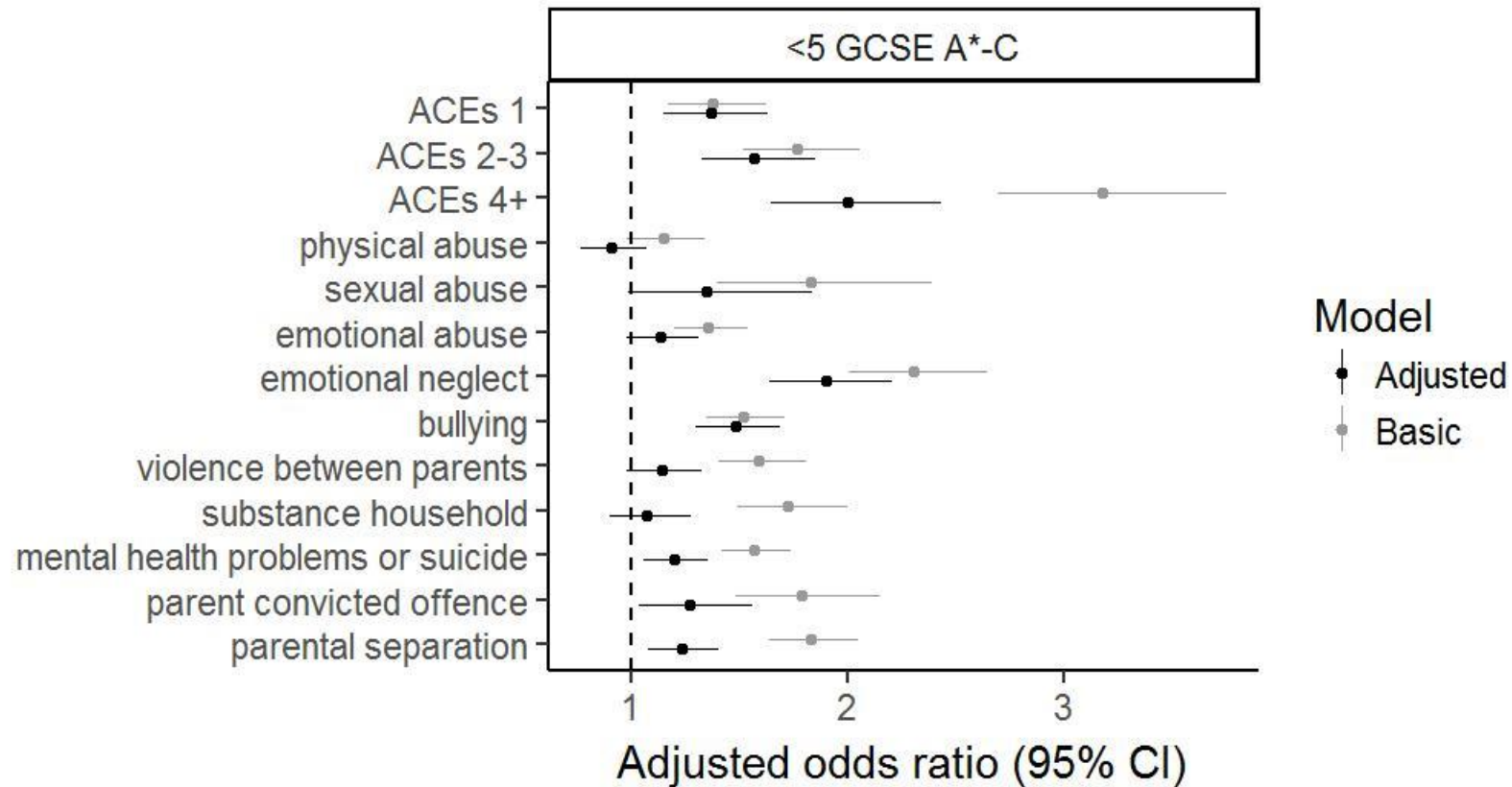
# Poverty is a risk factor for adversity



# Poverty is a risk factor for adversity

- 15% of participants experienced poverty (difficulty affording basic items/services)
- Poverty increased the risk of every type of childhood adversity:
  - 2x risk of sexual abuse: OR = 2.4, 95% CI 1.6 to 3.5
  - 2x risk of mother's mental health problems: OR = 2.3, 95% CI 1.9 to 2.7
- Poverty increased the risk of adversity clusters:
  - 9x risk of 'poly-adversity': OR = 9.2, 95% CI 5.8 to 14.5

# Adversity reduces socioeconomic chances

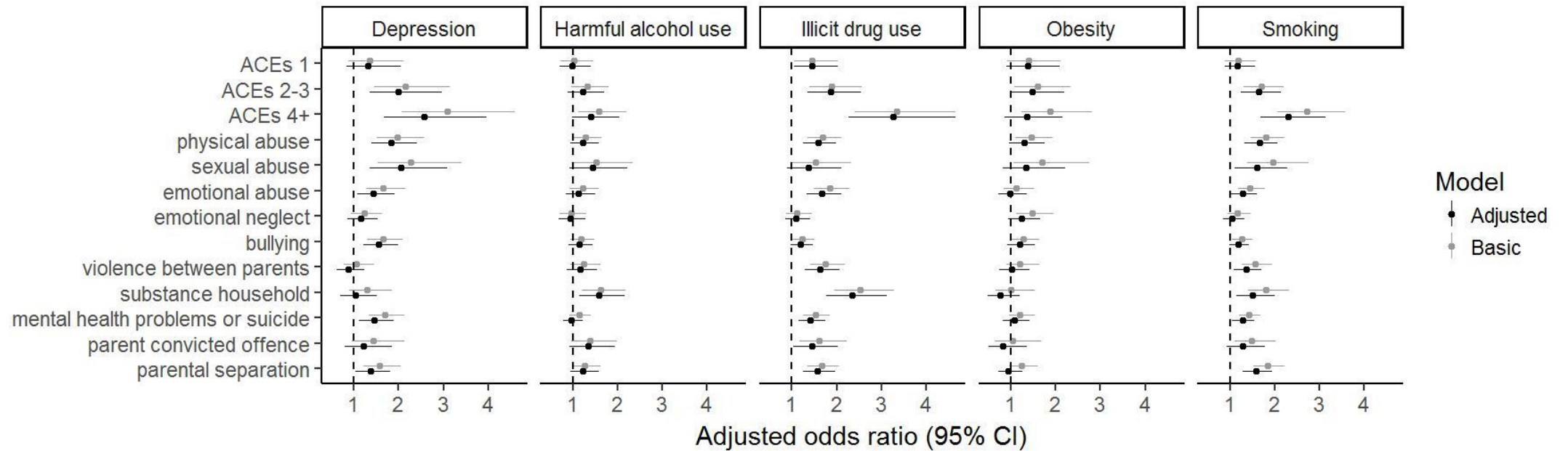




# Adversity and financial hardship in the pandemic

- Young adults who experienced childhood adversity were more likely to experience financial hardship during the pandemic lockdowns:
  - 2x risk of furlough or unpaid leave (OR = 1.9, 95% CI 1.4 to 2.7)
  - 1.4x more likely to be 'worse off' (OR = 1.4, 95% CI 1.0 to 2.0)
  - [1.4x more likely to stop working (OR = 1.4, 95% CI 0.7 to 2.7)]
  - [1.3x more likely to use mortgage/rent deferral (OR = 1.3, 95% CI 0.7 to 2.3)]

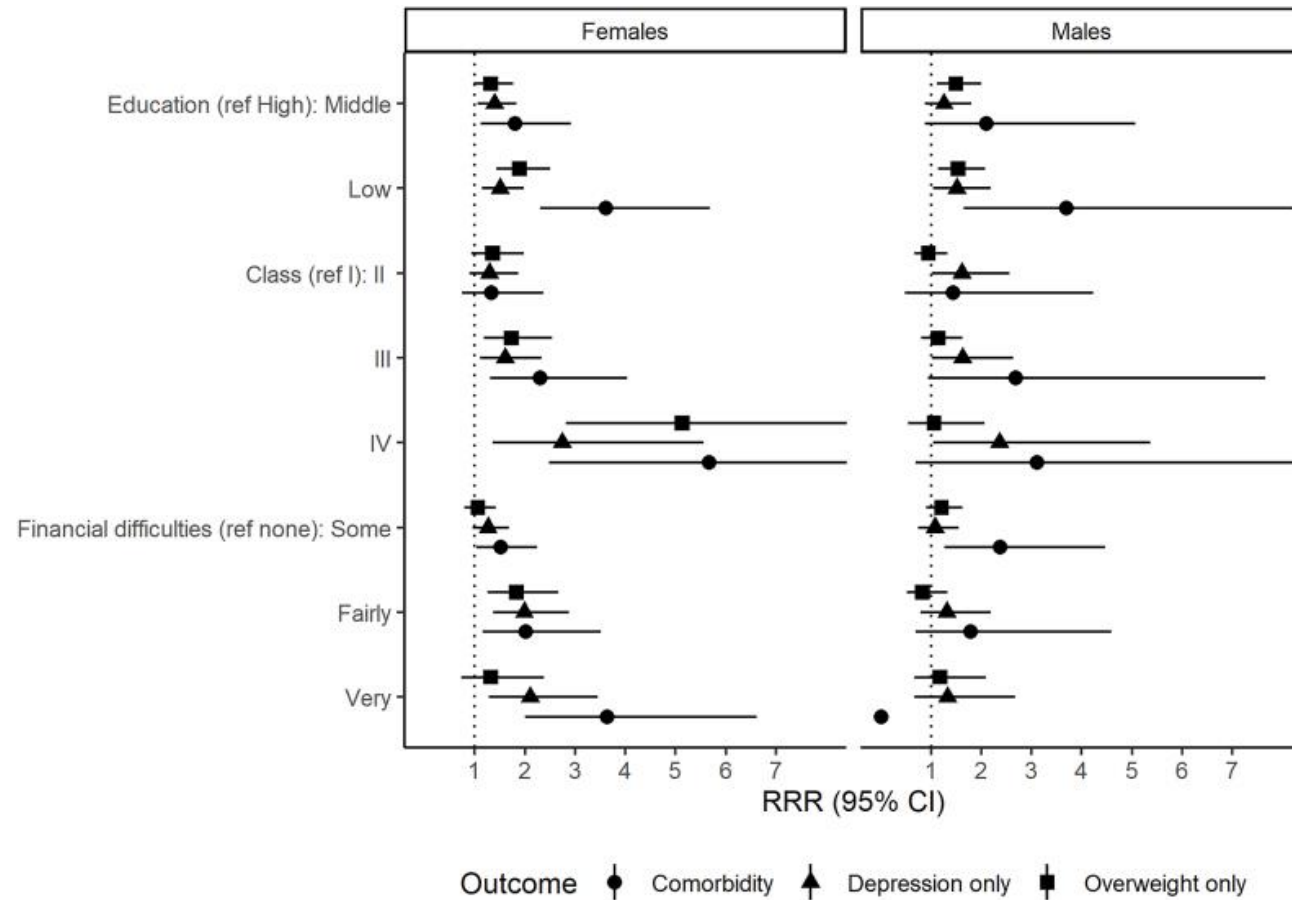
# Poverty, adversity and adolescent health



# Obesity and depression co-occur

	Females		Males	
<b>Age 17</b>	<b>OR</b>	<b>95% CI</b>	<b>OR</b>	<b>95% CI</b>
Underweight	1.39	1.00, 1.92	1.17	0.76, 1.82
Normal weight	ref		ref	
Overweight	1.31	1.02, 1.69	0.79	0.54, 1.16
Obesity	1.95	1.38, 2.75	0.79	0.43, 1.43
<b>Age 24</b>				
Underweight	1.01	0.60, 1.70	0.94	0.38, 2.35
Normal weight	ref		ref	
Overweight	1.37	1.06, 1.78	0.97	0.67, 1.40
Obesity	1.88	1.38, 2.57	1.24	0.74, 2.08

# SEP and depression-overweight comorbidity



# Adversity and depression-overweight comorbidity



# Poverty and adversity – independent risk factors for health?

- Can high levels of socioeconomic advantage mitigate the impact of adversity on physical health, mental health, or their comorbidity?
  - ALSPAC data suggest not – similar associations in high and low SEP groups

# Conclusions and knowledge gaps

- Poverty and adversity affect each other – cycles of advantage/disadvantage.
- Both poverty and adversity influence health, even in early life.
- Particularly strong effects on physical-mental health comorbidity – an early life course marker of severe health disadvantage and complex health care needs.
- Health effects of poverty and adversity seem to be independent.
- The pandemic's socioeconomic effects were hardest felt by people with pre-existing and long-lasting disadvantage

## **Knowledge gaps:**

- Do these relationships differ across ethnicities?
- Do these relationships look similar in LMIC?



Becca Lacey, SGUL



Lotte Houtepen



Bushra Farooq



Fanny Kilpi

# Acknowledgements