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Background People with high body mass index (BMI) suffer elevated rates of mortality from a variety of causes, particularly from cardiovascular disease (CVD). Some studies have also found elevated mortality at low BMI, but it is unclear whether this represents a causal association. Potential confounding by existing ill-health is of particular concern. To avoid this problem, we used the BMI of an offspring as an instrument for the parent's BMI, as well as conducting conventional analyses of parental mortality against their own BMI.

Methods We extracted 33,011 mother-offspring and 28,142 father-offspring pairs from HUNT, a large prospective cohort study conducted in Nord-Trøndelag county, Norway. Participants' BMI was adjusted for age, sex, secular trends and smoking status. Associations of parental mortality rates with their own BMI were estimated as hazard ratios using Cox regression. Age was the time axis, and we adjusted for smoking, alcohol, exercise, education and employment. Additionally, adjusted causal hazard ratios between parental mortality and BMI were estimated using offspring BMI as an instrument for parental BMI and cubic splines were fitted to all associations to assess their linearity.

Results There were 9,271 maternal and 9,889 paternal deaths within the follow-up period of 1984–2009. The associations of all-cause, CVD and cancer mortality with parents' own BMI were substantially non-linear, with elevated mortality at both extremes and minima at 21–25 kg m⁻². Hazard ratios for all-cause mortality per standard deviation (4.1 kg m⁻²) of own BMI were 1.04 (95% CI: 1.02, 1.06) and 1.05 (1.02, 1.08) in mothers and fathers, respectively. In contrast, associations of mortality with offspring BMI were approximately linear and positive. Causal hazard ratios per standard deviation of BMI estimated from the instrumental variable analyses were 1.20 (1.11, 1.30) and 1.11 (1.02, 1.22) for all-cause mortality in mothers and fathers, respectively. For CVD they were 1.26 (1.13, 1.41) and 1.15 (1.01, 1.30), and for cancer they were 1.23 (1.05, 1.45) and 1.07 (0.90, 1.27).

Conclusion These results confirm the elevated mortality from all causes, CVD and cancer in subjects with high or low BMI. The use of an offspring's BMI as an instrument suggests that the elevated mortality at low BMI in this and other studies may be the result of confounding by existing ill-health, and that the causal relationship between BMI and mortality is positive and approximately linear.

OP64 PARENTAL SUICIDE ATTEMPT AND OFFSPRING SELF-HARM AND SUICIDAL THOUGHTS: RESULTS FROM THE ALSPAC BIRTH COHORT

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Background Exposure to parental self-harm has been linked to an increased risk of self-harm and suicidal thoughts in their offspring. Much of the available evidence is from population registers or clinical samples and relates to parental death by suicide; few studies have investigated associations of non-fatal suicide attempts in parents with community presenting non-fatal self-harm and suicidal thoughts in offspring. We studied the association of parental suicide attempt (SA) with offspring self-harm and suicidal thoughts using a large two-generational prospective cohort.

Methods The sample comprised 4,396 children, their mothers and 2,541 of the mothers' partners from the Avon Longitudinal Study of

Parents and Children (ALSPAC). Parents were asked to report on incident episodes of SA on 10 separate occasions from pregnancy until the children were 11 years old. Information on lifetime childhood self-harm, with and without suicidal intent, and suicidal thoughts, with and without suicidal plan, was collected through child-completed questionnaires at the age of 16–17 years.

Results Based on preliminary results, SA was reported by 1.5% of the mothers and 0.7% of the partners. Adjusting for sociodemographic factors and parental depression, maternal SA was associated with 3-fold increased risk of self-harm with suicidal intent in their children [Adjusted odds ratio (AOR) 3.0, 95% confidence interval (CI) 1.4–6.1] but not with self-harm with no suicidal intent (AOR 0.8, 95% CI 0.3–1.9). Children exposed to maternal SA were more likely than unexposed children to report both suicidal thoughts with and without suicidal plan (AOR 5.2, 95% CI 2.3–11.6; AOR 2.2, 95% CI 1.1–4.4, respectively). Partner SA was associated with 2.3-fold increased risk of self-harm with suicidal intent (95% CI 0.5–10.6) and with an increased risk of suicidal thoughts with suicidal plan (AOR 3.5, 95% CI 0.8–16.0) but these results are consistent with chance. There was no evidence of an association between partner suicide attempt with offspring self-harm with no suicidal intent (AOR 0.4, 95% CI 0.1–3.5) or with offspring suicidal thoughts without a suicidal plan (AOR 0.6, 95% CI 0.1–4.5).

Conclusion Parental SA in childhood increases the risk of self-harm with suicidal intent in offspring but is unrelated to risk of self-harm without suicide intent. Parental SA is associated with larger effect size on suicidal thoughts with a suicidal plan than without a plan. Findings provide limited evidence that maternal SA is a more potent risk factor than partner SA.

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OP65 PARENT UNDERSTANDING AND MANAGEMENT OF RTIs IN CHILDREN: IMPLICATIONS FOR HEALTH PRACTITIONER COMMUNICATION

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Background Respiratory tract infections (RTIs) are among the commonest reason parents consult their GP, representing a significant burden on primary health care services. Many of the symptoms associated with RTIs are a cause of anxiety for parents, but they are often unsure when to consult. This study investigated parents' experiences of consulting for RTI in their child as part of a wider TARGET programme to improve the care of children with RTIs.

Methods Parents were recruited through 6 practices in areas of high, middle and low deprivation to capture a range of patient populations. Parents with a child aged between 3 months and 12 years who had consulted for acute RTI within the previous 3 months (excluding children with serious or chronic health problems) were invited to participate. Sampling ensured that parents with younger and older children and parents who were more or less frequent consulters were sampled. Semi-structured interviews explored parent's experience of consulting for RTIs in their children, information and advice needs; and their understanding of RTIs and treatment options. Interviews were audio-recorded, transcribed and imported into NVivo8 for coding. A thematic analysis was conducted using constant comparison techniques.

Results Thirty parents were interviewed and the sample captured a range of socio-economic backgrounds, both single and double parent families, with between 1 and 4 children. Consultation rates ranged from 1 to 24 times per year. New parents often had little knowledge of RTIs in children; felt uncertain about which