

non-STEMI (1.93; 1.64–2.28), and unheralded coronary death (1.58; 1.42–1.76).

**Conclusion** The substantial difference in the hazard of smoking between STEMI and other initial presentations suggests a specific role for smoking in the aetiology of STEMI. One limitation of this study is unrecorded risk factor data, with the potential for bias in the complete-case analysis reported here. The strengths of the study are the large cohort size with the associated large number of person years of observation and events, the clinical detail allowing typing of coronary phenotypes, the likely completeness of event capture through multiple sources of data, and the range of phenotypes compared within a single study.

## Mental Health II

### OP89 THE ASSOCIATION OF PARENTAL FATAL AND NON-FATAL SUICIDAL BEHAVIOUR WITH OFFSPRING SUICIDAL BEHAVIOUR AND DEPRESSION: A SYSTEMATIC REVIEW AND META-ANALYSIS

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**Background** Children whose parents die by, or attempt, suicide are believed to be at greater risk of suicidal behaviours and affective disorders. We systematically reviewed the literature on the association of parental fatal and non-fatal suicidal behaviours with offspring suicidal behaviour and depression and, using meta-analysis, estimated the strength of these associations. We further investigated the role of parental and offspring gender, and offspring age at exposure as potential effect modifiers.

**Methods** We carried out a comprehensive literature search using Medline (1950–April 2011), PsycINFO (1876–April 2011), EMBASE (1980–April 2011) and Web of Science. Twenty eight articles met our inclusion criteria, 14 of which contributed to the meta-analysis. Crude odds ratio (OR) and adjusted odds ratio (AOR) were pooled using fixed-effects models.

**Results** Controlling for relevant confounders, offspring whose parents died by suicide were more likely than offspring of two living parents to die by suicide [AOR 1.94, 95% confidence interval (CI) 1.54–2.45] but there were heterogeneous findings in the two studies investigating the impact of parental suicide on offspring suicide attempt (AOR 1.31, 95% CI 0.73–2.35). Children whose parents attempted suicide were more likely than unexposed children to attempt suicide (AOR 1.95, 95% CI 1.48–2.57). However, compared with offspring of parents who died by other causes, the risk of suicidal behaviour was only slightly elevated for offspring of suicide decedents (suicide: OR 1.81, 95% CI 1.56–2.10; suicide attempt: OR 1.73, 95% CI 1.63–1.83); no adjusted analyses were available. Limited published research indicated that offspring exposure to parental death by suicide is associated with subsequent increased risk of affective disorders compared to offspring of two living parents. Maternal suicidal behaviour was associated with larger effect estimates compared to paternal suicidal behaviours. There was some evidence that younger age at exposure to parental suicidal behaviours was associated with greater risk than exposure in later childhood/adolescence. There was no evidence that the association differed in sons versus daughters.

**Conclusion** Parental suicidal behaviour is associated with increased risk of offspring suicidal behaviour, above and beyond the risk associated with a loss of a parent to a cause other than suicide. Findings suggest that maternal suicidal behaviour is a more potent risk factor than paternal suicidal behaviour. Limited evidence suggests that children are more vulnerable than adolescents and adults. However,

there is no evidence of a stronger association in either male or female offspring.

### OP90 EVALUATING MENTAL WELLBEING IN CHILDREN WITH HEALTH RELATED BARRIERS TO LEARNING: RESULTS OF A QUASI-EXPERIMENTAL BEFORE AND AFTER INTERVENTION

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**Background** Clear associations have been demonstrated between poor mental health, behavioural problems and low educational attainment in secondary school children while negative self-perceptions are associated with truancy and classroom disruption at secondary school level. The majority of research in this field focuses on measures outcomes in terms of mental illness. Fewer interventions have been evaluated using positive mental health/mental wellbeing measures, though the body of evidence is growing.

We aimed to evaluate the effect of targeted school counselling or 'Wellbeing Mentorship' on mental wellbeing in children with health related barriers to learning at risk of low educational attainment and attendance. Health related barriers to learning included medical issues, mental health, sexual health, bullying, family challenges and emotional and behavioural barriers.

**Methods** The Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) was used to evaluate mental wellbeing in pupils seen by Wellbeing Mentors. WEMWBS is validated for use in populations aged 13+. Gender, age, school deprivation, attainment and attendance were measured. Mentors at eight diverse schools collected data from April 2011 to February 2012. A power analysis was conducted. Given the risk of high attrition, pupils were sampled within a designated time frame wherein Mentors evaluated every eligible pupil. Pupils completed WEMWBS at the beginning, end, and 6–10 weeks after their last mentoring session. Interventions comprised 6 sessions of weekly one-to-one health and wellbeing support.

**Results** Ninety-six eligible pupils undertook and completed WEMWBS, out of 160 estimated mentoring referrals. Using paired t-tests and ANOVA, we assessed changes in WEMWBS scores between time points. Pupils' mental wellbeing significantly improved (95% Confidence) from baseline to completion. Girls' baseline mean WEMWBS score (43.3) increased by 7.4 points to 50.7 at completion; boys baseline mean (44.2) increased by 6.2 to 50.4. These changes were sustained at follow up. Boys and girls results demonstrate statistically and clinically meaningful change. We compared our results with WEMWBS data collected in 2008 from two of the same and one similar school (n=753). The comparator mean for girls (47.4) and boys (49.8) indicate that mentored pupils improved their mental wellbeing to a similar level (boys) or a significantly higher level (girls).

Cooperation, process measures, attainment and attendance reporting varied greatly between schools; these data are still being collected.

**Conclusion** Both before and after and population controls suggest that mentoring is a worthwhile intervention for improving mental wellbeing in secondary school pupils identified with health related barriers to learning.

### OP91 DOES ANONYMITY INCREASE THE REPORTING OF MENTAL HEALTH SYMPTOMS?

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**Background** There is no doubt that the perceived stigma of having a mental disorder acts as a barrier to help seeking. It is possible that individuals may be reluctant to admit to symptoms suggestive of