Adjusting for socioeconomic status revealed reduced ORs for mental health problems in the Pakistani group (girls 0.63, 0.41–0.99; boys 0.49, 0.27–0.89), as well as Black African boys (0.10, 0.02–0.38), Indian boys (0.40, 0.21–0.77), and Bangladeshi girls (0.18, 0.05–0.65), compared to their White peers. After adjusting for social support, participation, and adversity factors, significantly reduced odds for mental health problems remained only for Black African boys (OR 0.16, 0.04–0.72).

Conclusion Socioeconomic status (SES) confounds resilience factors against mental health problems apparent in young people from some ethnic minority groups. Despite greater socioeconomic disadvantage, there was reduced prevalence of mental health problems for these young people after adjustment for SES. Furthermore, the changes to ORs after adjusting for social support, participation, and adversity factors suggest ethnic inequalities in mental health outcomes in this sample could be partly explained by these social factors. Further analysis is needed to test mediating mechanisms operating here. Social interventions may help foster resilience in young people against mental health problems, irrespective of ethnicity.

Rationale Suicide is a major public health concern and Northern Ireland (NI) has the highest rate of both self-harm and suicide in the UK and Ireland. In order to target prevention strategies effectively it is vital to understand who is most at risk. Those who present with self-harm offer a prime opportunity for intervention. The aim of this study is to examine the risk factors for completed suicide following presentation with self-harm.

Data The Northern Ireland Registry of Self-Harm (NIRSH) collects information on all self-harm and suicide ideation presentations to all Emergency Departments in NI. NIRSH data for the four years 2012–2015 was linked to centralised electronic data relating to primary care, social services and prescribed medication and mortality records.

Methods Initial analyses describing the profile of those who present with self-harm was followed by logistic regression to quantify the likelihood of mortality with adjustment for factors associated with mental ill health and suicide risk.

Results The cohort consisted of all 1,483,435 individuals born or resident in NI from 1st January 1970 until 31st December 2015 (maximum age in 2015, 45 years). During the follow-up period, 11,371 (0.8%) individuals presented with self-harm and 1,719 (0.1%) died by suicide. Rates of self-harm were equivalent for males and females with highest rates observed in the 18–24 years age group, and more common in deprived than affluent areas (OR=3.34, 95%CI 3.12, 3.57). Rates of self-harm was highest among those who were (or ever had been) in the care of social services (OR=12.06, 95%CI 11.26, 12.93). Most individuals self-harm via self-poisoning with psychotropic medications (70.9%), followed by self-injury with a sharp object (21.6%). Although only 142 (1.3%) of those who presented with self-harm went on to die by suicide, in the unadjusted model those who self-harmed were almost 12 times more likely to do so. Among men. In the full model, an interactive effect between unemployment and living arrangements (living alone) was not shown among men. However, there was a significant interactive effect for women, demonstrating that unemployed women who do not live alone were 1.429 times more likely to complete suicide than employed women living with others, but women living alone and unemployed were 2.125 times more likely to do so.

Conclusion While SEP had more independent impacts from social integration on suicide among men, there were significant synergistic effects on suicide mortality among women in Canada.
Further analysis is underway to explore which particular traits and characteristics of those who self-harm are most associated with risk of suicide using Cox regression in order to inform intervention targeting.

Thursday 5 September

Cancer 2

OP31 MEAT INTAKE AND CANCER RISK: PROSPECTIVE ANALYSES IN UK BIOBANK


10.1136/jech-2019-SSMabstracts.31

Background The latest meta-analysis from the World Cancer Research Fund/American Institute for Cancer Research concluded that red meat was a probable cause and processed meat a convincing cause of colorectal cancer. However, evidence for associations between red and processed meat intake and other cancer sites is limited. Furthermore, few studies have examined the association between poultry intake and cancer risk. Therefore, the aim of this study was to examine the associations between red, processed meat and poultry intake and incidence for 20 common cancer sites.

Methods We analysed data from 475,488 participants (54% women) in UK Biobank. Participants were aged 37–73 years and cancer free at baseline. Cancer diagnosis and death due to cancer during follow-up were determined using data-linkage with cancer and death registries (with follow-up until 30 November 2014 for England and Wales and until 31 December 2014 for Scotland, respectively). Information on meat consumption was based on a touchscreen questionnaire completed at baseline covering type and frequency of meat intake. We used multivariable-adjusted Cox proportional hazards models to determine the association between baseline meat intake and cancer risk. Incidences of lung cancer risk were restricted to never smokers. All analyses were adjusted for socio-demographic, lifestyle and women-specific factors.

Results Over a mean 5.7 (SD 1.1) years of follow-up 23,117 participants were diagnosed with any type of malignant cancer. Red meat intake was positively associated with colorectal cancer (Hazard ratio (HR) per 50 g/day increment in intake 1.20, 95% Confidence Interval (CI) 1.02–1.41), breast cancer (1.13, 1.01–1.27) and prostate cancer (1.14, 1.00–1.29). Processed meat intake was positively associated with risk for colorectal cancer (HR per 20 g/day increment in intake 1.16, 95% CI 1.04–1.30). Poultry intake was positively associated with risk for malignant melanoma (HR per 30 g/day increment in intake 1.20, 95% CI 1.00–1.44), prostate cancer (1.11, 1.02–1.22) and non-Hodgkin lymphoma (1.26, 1.03–1.55).

Discussion Higher intakes of red and processed meat were associated with a higher risk of colorectal cancer. Red meat consumption was also positively associated with risk of breast and prostate cancer, but these associations are not supported by most previous prospective studies and may be affected by residual confounding. The positive associations of poultry intake with prostate cancer and non-Hodgkin lymphoma require further investigation.