

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 investigate mediating mechanisms operating here. Social interventions may help foster resilience in young people against mental health problems, irrespective of ethnicity.

OP29 INTERACTION BETWEEN SOCIOECONOMIC POSITION AND SOCIAL INTEGRATION IN SUICIDE MORTALITY: A NATIONALLY REPRESENTATIVE COHORT STUDY

¹C Kim*, ²J Dunn. ¹Health Policy, McMaster University, Hamilton, Canada; ²Department of Health Aging and Society, McMaster University, Hamilton, Canada

10.1136/jech-2019-SSMabstracts.29

Background A low level of social integration and lower socioeconomic position (SEP) are well-known risk factors for suicidal behavior. Most literature has suggested that the effects of family types as a proxy of social integration and SEP measures on suicide are merely additive. However, as social integration is not dependent on SEP, the association of these effects could be interactive. Since the protective effects of social integration vary by gender, so could this interaction. The aim of this study was to examine the interaction between social integration, SEP and gender on suicide mortality in the Canadian context.

Methods Using data from the 1991 Canadian Census Health and Environment cohort (CanCHEC) —which included 2.5 million Canadians over a 20-year follow up period - we applied Cox proportional hazards regression models to examine the association among living arrangements (lives alone versus single parent family versus others), education (secondary versus non-secondary), income (low income versus non-low income), and employment status (unemployed versus else) by gender. Models were developed to observe how living arrangements attenuated the association between SEP measures and suicide. In the full model, we added interaction terms between living arrangements and employment status.

Results In model 1, which was only adjusted for age and three SEP measures, both men and women with low income (Hazard Ratio (HR): 1.846 [women], HR: 1.278 [Men]) and who were unemployed (HR: 1.501 [Women], HR: 1.677 [Men]) were more likely to be exposed to completed suicide. In all models, lower education was associated with suicide risk among men, but not among women. In model 2, when living arrangements were added, the association between SEP measures and suicide was much attenuated among women, but not

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 synergetic effects on suicide mortality among women in Canada.

OP30 WHAT HAPPENS AFTER SELF-HARM? AN EXPLORATION OF SELF-HARM AND SUICIDE USING THE NORTHERN IRELAND REGISTRY OF SELF-HARM

¹A Maguire, ¹F Tseliou, ²D O'Hagan, ¹D O'Reilly, ¹S McKenna*. ¹Centre for Public Health, Queen's University, Belfast, UK; ²Public Health Agency, UK

10.1136/jech-2019-SSMabstracts.30

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 die by suicide compared to those who did not present with self-harm (OR=11.79, 95%CI 9.92,14.01). Suicide was more likely in individuals who self-harmed with more violent methods such as strangulation or drowning. After full adjustment for gender, age, social services care, area of residence and deprivation individuals who self-harm are still 7 times more likely to die by suicide (OR=7.05, 95%CI 5.88,8.45).