019 SOCIAL CLASS DIFFERENCES IN ANXIETY AND DEPRESSION ACROSS THE LIFE-COURSE: EVIDENCE FROM THREE COHORTS IN THE WEST OF SCOTLAND

MJ Green, M Benzeval. *Medical Research Council Social and Public Health Sciences Unit, Glasgow, UK*

doi:10.1136/jech.2009.096701s

Background: Studies of social inequalities in common mental disorders – anxiety and depression – often use measures that do not discriminate between conditions, but these disorders may differ from one another in their social patterning across the lifecourse. The Twenty-07 Study includes the Hospital Anxiety and Depression Scale (HADS), which has sub-scales for each condition, allowing possible differences in patterning to be examined.
Objective: To investigate the age trajectories for anxiety and depression by social class.
Design and Setting: Prospective cohort study of 4150 men and women, living in Clydeside, aged 15, 35 and 55 at baseline in 1987/8 and interviewed at five-year intervals for 20 years. HADS scores were obtained at each of four follow-up visits and growth curve modelling was used to assess the relationship between HADS caseness, age, sex and baseline social class across 10 629 measurement occasions from 3846 respondents. This sample is representative of those interviewed at baseline.
Results: There was a higher prevalence of anxiety than depression: 39.4% of the measurement occasions were defined as anxiety cases, 12.5% as depression cases, and 10.4% as cases for both disorders. There were significant non-linear age trajectories in caseness. The probability of anxiety caseness was relatively high in youth to middle-age and decreased with age thereafter. This age-related improvement was slower for those in manual, compared to non-manual, classes, and this class difference was larger for females. The probability of depression caseness was low in youth, and increased with age with a steeper increase for those in manual classes than for those in non-manual classes. The probability of having both anxiety and depression exhibited an inverse U-shaped trajectory, peaking in middle age, with a class difference in the age gradient similar to that for depression. Sensitivity analyses indicated that these findings were robust to period and cohort effects as well as sample attrition.
Conclusion: Anxiety and depression exhibit quite different trajectories across the lifecourse; the probability of anxiety reduces with age, whilst depression becomes more probable. There is a significant interaction between social class and age in both conditions, with those in manual classes having a slower reduction in anxiety and a faster increase in depression as they age than more affluent respondents. Future work should be sensitive therefore to how the social patterning of the two disorders differs across the lifecourse.

020 SUICIDE IN ENGLAND AND WALES 1861–2005: A TIME TRENDS ANALYSIS

K Thomas, D Gunnell. *University of Bristol, Bristol, UK*

doi:10.1136/jech.2009.096701t

Background: Suicide is amongst the three leading causes of death in 15–44-year-olds worldwide. A detailed assessment of secular trends in its incidence in England and Wales over the last 145 years has not previously been conducted; such an assessment may shed light on the potentially preventable factors and provide pointers concerning likely trends in suicide in the world's emerging economies.
Aim: To investigate age-, sex- and method-specific trends in suicide from 1861 to 2005.
Methods: Suicide and population data were obtained from the ONS. Overall age-standardised rates using the European Standard Population and age-, sex- and method-specific suicide rates were calculated for ages 15 and over.
Results: Rates in males (M) were consistently higher than females (F) throughout the 19th and 20th centuries, although the sex ratio fluctuated from 11M:2F in the 1880s to 8M:5F in the 1960s. The highest male rates (28 per 100 000) were recorded in the 1890s. Female rates peaked in the 1930s and 1960s (10 per 100 000). In both sexes the lowest recorded rates were in the 21st century. Suicide rates increased in all age groups in the 1930s, coinciding with the Great Depression. Over the period studied, rates fell by 87% in men aged 65+, by 66% in women ages 65+, but rose in younger men (aged 15–44). There was a rapid rise in the use of domestic gas as a method of suicide in both sexes following its introduction at the end of the 19th century. By the 1950s it had become the most commonly used method of suicide, before its use declined after the 1960s. Self poisoning also increased in popularity from the 1860s (5% of suicides, mainly ingestion of hydrochloric, oxalic and carbolic acid) to the 1990s (22% of suicides: mainly analgesics and antidepressants). The sex ratio was consistently lowest for suicides by poisoning and highest for suicides by hanging for most of the time period.
Conclusions: The rapid rise in gas suicide deaths in the 1920s highlights how quickly a new method of suicide can be established in a population when it is easily available. The increase in suicides during the Great Depression has implications in relation to the current economic crisis. The striking changes in suicide rates over time remain largely unexplained. Differences in the acceptability of various suicide methods are likely to account for the differences in sex ratios seen for hanging and poisoning.

Cancer I

021 SEASONAL VARIATION IN BIRTH AND DIAGNOSIS OF CANCER IN CHILDREN AND YOUNG PEOPLE IN NORTHERN ENGLAND, 1968–2005

[1]NO Basta, [1]PW James, [2]AW Craft, [1]RJQ McNally. [1]*Institute of Health and Society, Newcastle University, Sir James Spence Institute, Royal Victoria Infirmary, Newcastle upon Tyne, UK;* [2]*Northern Institute of Cancer Research, Newcastle University, Sir James Spence Institute, Royal Victoria Infirmary, Newcastle upon Tyne, UK*

doi:10.1136/jech.2009.096701u

Objectives: To investigate seasonal variation in the incidence of cancer in children and young people, using population-based data.
Setting: Northern England, UK.
Design: Data on all cases were extracted from the Northern Region Young Persons' Malignant Disease Registry (NRYPMDR). The NRYPMDR is a specialist registry that records cancer cases in children and young adults covering the counties of Northumberland, Tyne and Wear, Durham, Teesside, and Cumbria (excluding Barrow-in-Furness).
Participants: All cancer cases aged 0–24 diagnosed during the period 1968–2005 and registered by the NRYPMDR.
Methods: The following diagnostic groups were analysed: leukaemia (acute lymphoblastic, acute non-lymphocytic), lymphoma (Hodgkin, non-Hodgkin), central nervous system tumours (astrocytoma, primitive neuroectodermal tumours (PNETS)), sympathetic nervous system tumours, retinoblastoma, renal tumours, hepatoblastoma, bone tumours (osteosarcomas, Ewing sarcoma), soft tissue sarcoma, germ cell tumours (gonadal, non-gonadal) and carcinomas (thyroid, skin, malignant melanoma, breast, cervical). The chi-squared heterogeneity test was used to test for departure from the uniform distribution. Poisson regression analysis was used to fit sinusoidal (harmonic) models to the data, using month of birth and month of diagnosis, respectively, as covariates in separate models. Analyses were carried out separately by gender and age group (0–14, 15–24 years).