

P1-240 WITHDRAWN

P1-241 HIGH DRUG-RELATED DEATH RATE SOON AFTER HOSPITAL DISCHARGE FOR DRUG-TREATMENT CLIENTS IN SCOTLAND

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Background Leading causes of death for drug-treatment clients across Scotland, 1996–2006, were drug-related (1383 DRDs) and non-drug-related suicides (269). We investigate DRD-risk by time since most recent hospital stay.

Methods Drug-treatment records were linked to national registers of deaths, hepatitis C virus (HCV) diagnoses, and hospital/psychiatric episodes. We calculated DRD-rates (and suicide-rates): during hospitalisation, within 28 days, 29–90 days, 91 days -1 year, >1 year since discharge from most recent hospital stay vs never admitted. Proportional hazards analysis adjusted for demographic and other time-specific influences on DRD-risk.

Results The cohort comprised 69 457 individuals, 350 317 person-years (pys) and 90 314 hospital-stays. DRD-rate per 1000 person-years (pys) was: 87 (95% CI 72 to 103) during hospitalisation, 21 (18 to 25) within 28 days, 12 (10 to 15) during 29–90 days and 8.5 (7.5 to 9.5) during 91 days to 1 year after discharge vs 4.2 (3.7 to 4.7) when >1 year after most recent hospitalisation and 1.9 (1.7–2.1) for those never admitted. Adjusted HRs by time since hospital-discharge (vs never admitted) were: 10 (95% CI 8 to 12) within 28 days, 5.6 (4.6 to 6.8) during 29–90 days, and 4.0 (3.5 to 4.7) vs 2.3 (2.0 to 2.7) when >1 year after most recent hospital stay. Alcohol misuse increased HR (1.5, 1.3 to 1.7) and female, never injector, and no HCV diagnosis decreased it: 0.56 (0.49 to 0.64), 0.62 (0.52 to 0.73), 0.74 (0.65 to 0.85).

Conclusions Hospital discharge marks high DRD-risk periods. Doctors should consider prescribing Naloxone when discharging patients with opiate-dependency, and emailing discharge summary to alert the patients' general practitioner or drug treatment agency.

P1-242 IMPACT OF WORK PLACE POLICIES AND EDUCATIONAL ATTAINMENT ON WOMEN'S CHILDBEARING DECISIONS IN CANADA

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Under Canada's Employment Insurance (EI) system, parents are entitled to receive up to 50 weeks of parental leave at 55% of salary to a maximum of \$413/week. In addition, many companies "top-up" these EI benefits so parents receive their full salary during parental leave. Despite this national policy, women with higher education are more likely to delay childbearing. Women who delay childbearing, particularly past age 35, are at increased risk of infertility, pregnancy and birth complications. This analysis aimed to assess whether workplace support impacted women's decisions regarding when to have their first baby and how educational attainment affected this relationship. Within 3 months of delivery, women who had given birth to their first live-born infant in 2002/2003 within two large urban regions in Alberta, Canada, were randomly selected to participate in a telephone survey. Logistic regression was used to assess the relationship between workplace support, educational attainment and timing of first pregnancy. Among 836 women with a planned pregnancy, 26% agreed that the support or lack of support for pregnant women at their workplace affected their decision about when to

begin their family. After controlling for age and income, women who had completed a post-graduate degree were three times (OR=3.39, 95% CI 1.69 to 6.81) more likely to indicate that the support or lack of support for pregnant women in the workplace affected their child-bearing decisions. In spite of national policies, and the potential risks associated with delayed childbearing, workplace support impacts timing of pregnancy, particularly for highly educated women.

P1-243 CAUSE SPECIFIC MORTALITY AND SURVIVAL FOR PEOPLE WITH A POSITIVE HIV RESULT IN SCOTLAND RECRUITED FROM 1981 TO 2009

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Objectives To assess trends in the demography, survival and mortality for people with a positive HIV result over four eras of Highly Active Antiretroviral Treatment between 1981 and 2009, and to describe trends for death from AIDS defining and non AIDS defining causes.

Design Secondary data analysis using data linkage and multivariate survival analysis.

Methods Of 5873 case records for people with a positive diagnosis of HIV in Scotland from 1981 to 2009 recorded on the Health Protection Scotland HIV database, 1593 people were known to be deceased. Of these 1191 were linked successfully to cause of death data held by the General Register Office (Scotland) by various means including probabilistic matching. Kaplan-Meier survival time curves and Cox Proportional Hazards (adjusted for covariates) were calculated for four treatment eras. Proportions in broad cause of death groups were compared between eras.

Results While overall survival time from first report increased over the eras, survival time decreased for those dying with an AIDS defining condition. Hazards by era showed patterns in accordance. Mean age and age at first report increased. Among AIDS defining primary conditions the proportion of respiratory and neurological and eye reduced to zero, and the proportion of infections increased from 37% pre-1997 to 81% 2005–2009. Within non AIDS defining conditions there was no clear pattern of change.

Conclusions Late diagnosis implied a need for opportunistic HIV testing, targeted prevention, and better follow-up. Data issues needed to be addressed.

P1-244 THE COGNITIVE FUNCTION AND AGEING STUDY (CFAS) II: NEUROBIOLOGY, COGNITIVE IMPAIRMENT AND DEMENTIA STUDY PROTOCOL STUDY PROTOCOL

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Background The increasing number of people with cognitive decline and dementia are consequences of the population ageing. The Cognitive Function and Ageing Study (CFAS), initiated 20 years ago, has informed understanding of the prevalence of cognitive decline and dementia, the costs they generate, as well as implications for policy regarding projections for the future. CFAS is being replicated, as far as possible, in the current generation of those aged 65 years and over. Information in health and cognitive status across the two cohorts will demonstrate the impact of generational changes on the prevalence of age related diseases and their influence on life expectancy.

Methods A target sample of 12 500 individuals aged 65+ is being recruited in five centres (Cambridgeshire, Newcastle upon Tyne,

Nottingham, Gwynedd and Neath Port Talbot). Eligible individuals were randomly selected from primary care trusts to health board registries. Assessment consists on multi-dimensional aspects of health, collection of saliva samples, and permission for review of general practice medical records. Those, who consent, will be flagged with the National Health Service central register to provide details of the date and cause of death.

Results Collection of data are still ongoing and we will present what was collected up until December 2011.

Conclusions CFAS II, in combination with its parent study will address key questions about health, diseases, associated disability, policy projections across generations of older people, who will reach the age of greatest frailty in the 2020s when the peak in numbers of 85 and over is expected.

P1-245 CAMBRIDGE CENTRE FOR AGEING AND NEUROSCIENCE (CAMCAN) STUDY PROTOCOL

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Background As the world population is ageing, and ageing is often stereotyped as a time of mental restriction and inflexibility, individuals make flexible use of available resources, including recruiting regions and other cognitive processes. Our aim is to identify what determines successful ageing across the adult lifespan into old age of cognitive abilities such as memory, attention, emotion, language and action.

Methods A population-based cohort of 3000 adults, aged 18+, will be recruited with demographic and basic cognitive assessments. Of these, 700, aged 18–87 with 100 per decile, will be selected for comprising structural and functional neuroimaging [MRI and magnetoencephalography (MEG)] and neuropsychological tests. We will measure neural integrity and integration across cortical regions. On a subset of 280 adults further investigations will use functional MRI, MEG and electroencephalogram, and further behavioural testing. Formal statistical models will be used to examine the changes that occur with healthy ageing, and the reorganisation in terms of strategies and structures invoked to compensate for them. This approach offers hypothesis-driven insights into healthy ageing that are relevant to the general population.

Results Collection of data started in Jan-11, with the initial cohort taking 2 years to recruit and a further 3 years for all detailed investigations.

Conclusions Our research will generate a unique resource of neuroimaging and cognitive measures about change across the adult lifespan. Our analysis will help us to identify what characterises older adults with preserved performance and how normal ageing differs from pathological ageing in conditions such as Alzheimer's disease.

P1-246 NATIONAL PREVALENCE AND RISK BEHAVIOURS OF CHLAMYDIA TRACHOMATIS INFECTION AMONG PREGNANT WOMEN AGED 15 TO 24 IN BRAZIL

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Introduction *Chlamydia trachomatis* (CT) is a sexually transmitted infection having repercussions on reproductive health and impact on the fetus.

Purpose To estimate *Chlamydia trachomatis* prevalence and risk factors in pregnant women aged 15 to 24 in Brazil.

Methods A national cross-sectional study among pregnant women attending Brazilian public maternity units in 2009. The participants were screened for CT and *Neisseria gonorrhoeae*, using polymerase chain reaction in urine, and also answered a questionnaire including demographic, behavioural and clinical data.

Results A total of 2071 (86.3%) of 2400 pregnant women selected took part in the study. Their mean age was 20.2 years (SD 2.7). Chlamydia and Gonococcus infection prevalence was, respectively, 9.8% (95% CI 8.5 to 11.1) and 1.0% (95% CI 0.6% to 1.4%). Four per cent of women infected with Chlamydia also had simultaneous Gonococcus infection. CT associated factors were being aged between 15 and 19 [OR=1.6 (95% CI 1.15 to 2.17)], first sex intercourse before 15 years of age [OR=1.4 (95% CI 1.04 to 6.24)], having had more than one sex partner in their lives [OR=1.6 (95% CI 1.13 to 2.26)], having undergone oncologic cytology more than 1 year ago [OR=1.5 (95% CI 1.08 to 2.05)], and having had gonococcal infection [OR=7.6 (95% CI 3.05 to 19.08)].

Conclusions Health programmes need to pay attention to the need to screen for easily curable sexually transmitted infections, such as *Chlamydia trachomatis*, in populations that are more vulnerable and at greater risk. This study suggests that CT diagnosis should be included as part of the antenatal routine of young pregnant women, since infection prevalence found in this group was high.

P1-247 CEREBROVASCULAR DISEASE IN 48 COUNTRIES: SECULAR TRENDS IN MORTALITY 1950–2005

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Cerebrovascular disease (stroke) is the second cause of death and among the top five causes of morbidity in many developed and developing countries. The coincidence of trends of stroke and coronary heart disease mortalities is of question in different countries. This study aims to investigate patterns of increase and decrease of stroke mortality in 48 different countries. The mortality curves of stroke for 48 countries that had reliable data and met other selection criteria were examined using age-standardised death rates for 35–74 years from the WHO. Annual male mortality rates for individual countries from 1950 to 2005 were plotted and a table and graph were used to classify countries by magnitude, pattern and timing of stroke mortality. The natural history of stroke epidemics varies markedly among countries. Different stroke patterns are distinguishable; including “declining” (since the inception of data or 1950), “rise and fall”, “rising” (first part of epidemic), and “flat” (no epidemic yet). Further, epidemic peaks were higher in Asia, in particular Japan at 433/105, the former Soviet states at 388/105 and East Europe at 301/105 and lowest in Canada and Australia at 29/105. The different dates of mortality downturn could reflect the times when pharmaceutical treatment of hypertension started to be effective in sufficient numbers of the high risk population and/or there were significant changes in salt consumption. This could be translated to policy interventions for stroke control in countries with rising trend of the disease.