P1-389 | COMMON MENTAL DISORDERS AMONG ELDERLY INDIVIDUALS: PREVALENCE AND ASSOCIATED FACTORS

F Borim, M Barros.* State University of Campinas, Campinas, São Paulo, Brazil

Introduction The elderly population in Brazil had grown significantly in recent decades. Brazilian studies involving adults report a high prevalence of common mental disorders (CMDs). The aim of the present study was to analyse the prevalence of CMDs (assessed using the SRQ-20) and associations with socio-demographic variables, health-related behaviour and illness among elderly individuals.
Methods A population-based cross-sectional study was carried out with two-stage conglomerate sampling, using data from a home survey carried out in Campinas, SP, Brazil in 2008/2009. Prevalence values were estimated and prevalence ratios were calculated and adjusted using Poisson regression. Data analysis considered the weights related to the sampling design.
Results The data from 1518 individuals aged 60 years or more were analysed. The prevalence of CMDs was 15.5% (12.9%−18.5%). Significantly higher prevalence values were found among women, older individuals, those with no occupation, sedentary individuals, those who consumed fruit and vegetables less than four times a week and those with a poorer self-assessment of health. The prevalence value increased significantly with the increase in reported illnesses. All diseases investigated were associated to CMDs, with the exception of asthma/emphysema. The conditions with the strongest associations to CMDs were rheumatism (PR=2.22; 1.73−2.83) and tendonitis (PR=2.22; 1.57−3.21).
Conclusion The findings of the present study contribute information for guiding the planning of interventions directed at health promotion for the elderly.

P1-390 | EARLY AND CONTEMPORARY DETERMINANTS OF COGNITIVE FUNCTION

A Barros,* I Santos, A Matijasevich. Federal University of Pelotas, Pelotas, Rio Grande do Sul, Brazil

Introduction The 2004 Pelotas (Brazil) Birth Cohort has put strong emphasis on child development and cognition. In this work we explore how early and contemporary determinants relate to cognitive ability measured by WPPSI IQ test at age four.
Methods Early determinants explored were wealth, maternal schooling, smoking during pregnancy, birth size and neonatal morbidity, based on information collected just after birth and at 3, 12 and 24 months of age. Contemporary determinants, assessed at age four, were child stimulation and malnutrition. Interviews were done by specially trained interviewers, the WPPSI test was done by psychologists that underwent a specific training. Analyses were carried out using IQ as a continuous standardised variable through linear regression models adding fractional polynomials when non-linear relationships were detected.
Results IQ mean was 100, with s.d. of 16.5; 3.4% of 3723 children assessed were below 70. Maternal schooling and wealth had independent and linear effects on IQ. Children from mothers 0−4 years of schooling were one full s.d. below children from graduate mothers. Children in the poorest wealth quintile presented an average IQ −0.5 SD compared to the richest. Birth weight presented different effects for children small (SGA) and adequate for gestational age, negligible effect in the latter group, but for SGA the effect was strong and non-linear with low birthweight children up to −1.7 SD below normal children. Children poorly stimulated had 0.5 SD disadvantage.

Conclusion Child IQ has complex biological and social determinants, reducing the disadvantage of vulnerable children requires integrated and coordinated action.

P1-391 | NO EXCESS MORTALITY IN PATIENTS OF 50 YEARS AND OLDER WHO RECEIVED TREATMENT FOR CARCINOMA IN SITU OF THE BREAST

[1]E Bastiaannet,* [1]W van de Water, [1]R Westendorp, [2]M Janssen, [1]C van de Velde, [1]A de Craen, [1]G J Liefers. [1]LUMC, Leiden, The Netherlands; [2]CCCS, Eindhoven, The Netherlands

Background The incidence of breast carcinoma in situ has increased at a fast rate. Most clinical series have focused on cancer recurrence, rather than risk of death per se. Aim of this study was to assess the incidence and treatment in the Netherlands and estimate the excess mortality risk of carcinoma in situ.
Methods From the Netherlands Cancer Registry, adult females with carcinoma in situ were selected. Treatment was assessed according to age. Relative mortality at 10 years of follow-up was calculated by dividing observed mortality over expected mortality and stratified for age and treatment. Expected mortality was calculated using the Dutch general population matched by age and year.
Results Overall, 8879 patients were included in this study. For patients aged 50−64 and 65−74 an increase in breast conserving surgery was observed over time (p<0.001). For patients over 75 years of age, 8.0% did not undergo surgery. For all ages adjuvant radiotherapy after breast conserving surgery increased. For patients who received no surgery, observed mortality exceeded expected mortality in all ages (excess ratio ranged from 2.5 to 8.7). Overall, treated patients aged 50 years and older experienced no excess mortality due to carcinoma in situ regardless of treatment (ratio of 1.0, 0.96 and 1.0, respectively).
Conclusion The present population-based study of almost 9000 patients showed no excess mortality in surgically treated women over 50 years with carcinoma in situ. The estimated risk of death from breast cancer within 10 years following diagnosis was low with every (surgical) treatment option.

P1-392 | THE EVALUATION OF A NOVEL GENERAL POPULATION SAMPLING FRAME: AN ONLINE SOLUTION FOR A PERSISTING PROBLEM?

[1]N Basu,* [1]L Swafe, [2]D Reid, [1]G Macfarlane, [1]G Jones. [1]University of Aberdeen, Epidemiology Group, Institute of Applied Health Sciences, Aberdeen, UK; [2]University of Aberdeen, Division of Applied Medicine, Aberdeen, UK

Introduction Due to increasingly restrictive privacy regulations, it has become difficult to access representative general population samples. In the UK, commercially available online datasets are available that pool data from several sources, but are generally untested in terms of completeness and accuracy.
Aim To evaluate the performance of a commercially available online dataset (192.com) as a population sampling frame.
Methods Firstly, 192.com was employed to identify age- and sex-matched population controls for a case-control study. Selected persons were sent a health questionnaire. Secondly, 192.com was challenged with a sample of consecutive hospital attendees whose NHS data allowed testing for coverage and accuracy. Population representativeness was assessed by comparing demographic characteristics of persons who were/were not identifiable via 192.com, using simple descriptive statistics.

Results From 814 age- and sex-matched controls identified, a 25% questionnaire response rate was achieved. 3% were returned with address inaccuracy, and no complaints were received from any recipient. Of the 163 hospital attendees, 135 (83%) were identified on the website. Comparing those who were/were not identified revealed no differences in mean age (identified=59 yrs, vs 60 yrs; $P_{Mann-Whitney}$=0.45), sex (identified=50% Female vs 57%; P_{χ}^2=0.51), deprivation ($P_{Mann-Whitney}$=0.71) or rurality (P_{χ}^2=0.11). Of those identified, an age estimate was quoted for 131 (97%) of which 113(86%) were accurate.

Conclusions This is the first evaluation of an online population sampling frame of which we are aware. The website, *192.com*, acted as a feasible sampling frame, demonstrating good participant acceptability, coverage, accuracy and representation. In the future, such resources could provide researchers with alternative sampling opportunities.

P1-393 | **COMMUNITY BASED NOISE INDUCED HEARING LOSS PREVENTION FOR TRIBAL CHILDREN**

[1]T Becker,* [1]W Martin, [1]W Lambert, [1]S Griest, [2]J Sobel. [1]*Oregon Health & Science University, Portland, Oregon, USA;* [2]*Portland State University, Portland, Oregon, USA*

Introduction The purpose of this study is to evaluate the effectiveness of a community based, multi dimensional noise induced hearing loss (NIHL) and tinnitus prevention program in American Indian elementary school children. NIHL is responsible for 30% of all hearing loss nationally and is almost 100% preventable with simple measures.

Methods Baseline questionnaires identifying knowledge, attitudes and behaviours regarding sound exposures of 4th and 5th grade student of an Oregon Tribal School were completed. Community intervention includes use of local media modalities, presentation of a classroom education program, and a community/family event and booster intervention with a web-based virtual museum exhibit. Post intervention and 3 month follow-up questionnaires will be collected to evaluate short and long-term changes in parameters

Results Information was provided to the community via Tribal newspaper, radio and web sources. Baseline questionnaires were completed by 130 students. 160 students received the Dangerous Decibels classroom program. 225 children, friends and family attended an evening event furthering the education. Students self-reported a wide range of hazardous sound exposures, most listening to loud music and fireworks. Over 31% reported regular exposure to live gunfire. 18% use hearing protection frequently. 53% reported being around sounds that were loud enough to cause pain or tinnitus.

Conclusions These results indicate that the target population of the study is at risk for NIHL and related tinnitus. This is a first attempt at improving hearing health in a Tribal community through community based intervention.

P1-394 | **HEALTHY COMMUTING: INDIVIDUAL COGNITIONS AND NEIGHBOURHOOD FACTORS ASSOCIATED WITH WALKING AND CYCLING TO WORK**

M Beenackers,* C Kamphuis, F van Lenthe. *Erasmus University Medical Center, Rotterdam, The Netherlands*

Introduction Physical inactivity is among the most important and prevalent risk factors of many major diseases in developed countries. Knowing why people are physically inactive is therefore of key importance in developing strategies to reduce these major diseases. Active commuting is a cheap and easy way to incorporate regular physical activity into daily life. The purpose of this study was to identify what individual and environmental factors are associated with active commuting.

Methods Cross-sectional data were obtained from residents (age 25–75) of 87 neighbourhoods in the city of Eindhoven, the Netherlands, who participated in the GLOBE study in 2004 (N=2474). We used multilevel logistic regression models to analyse associations of perceived neighbourhood factors (attractiveness, safety) and individual cognitions regarding physical activity (attitude, self-efficacy, intention, social influence) with active commuting (yes/no).

Results People with a positive attitude, a high self-efficacy, a strong intention to be physically active, and positive social support, were more likely to engage in active commuting. People reporting to sometimes feel unsafe in their neighbourhood were less likely to engage in active commuting compared to those who perceived their neighbourhood as safe. Perceived neighbourhood attractiveness was not significantly associated with active commuting.

Conclusion When stimulating active commuting, it is important to focus on changing individual cognitions towards physical activity. Environmental changes, for example, improving neighbourhood safety may also increase active commuting. Future studies should identify more potentially relevant neighbourhood factors.

P1-395 | **INEQUALITIES OF IODINE INTAKE IN PREGNANT WOMEN AFTER SALT IODISATION: LOW & HIGH QUANTILES AND CORRELATED FACTORS**

A Beiranvand,* S Salarilak, J Nouroozzadeh, H Khalkhali, M Aghasi, R Rostami. *Urmia University of medical science, Urmia, West Azarbaijan, Iran*

Introduction Iodine is scarcely found in food products of many regions through the world. Scientific findings have suggested that providing adequate iodine during pregnancy prevents many adverse effects of iodine deficiency (ID) in newborn babies. Therefore, Pregnant women are a special group in this context.

Material & method 1078 pregnant women at their first prenatal care from five districts of Urmia City, north west of Iran, were interviewed. Of these, 490 were qualified and followed until delivery. Urine and sera samples were collected at two stages (1st & 3rd trimester). Data of demographic features and iodised salt accessibility were gathered through a questionnaire.

Results Mean age (SD) of studied people was 25 (5.4) years. All households had proper access to iodised salt. Median of Urinary iodine excretion (UIE) was 73.5 µg/l as a whole at 1st trimester. This raised to 114 µg/l at 3rd trimester. According to WHO criterion, 87% and 70% iodine deficiency (ID) was detected at 1st & 3rd trimester, respectively. Quantile regression models for 1st` trimester showed educational status, way of using iodised salt, and geographical situation as determinant factors in first&third quartile of UIE. The same results were observed at 3rd trimester.

Conclusion Nearly 20 years after salt iodisation program in Iran, there are pockets of iodine deficiency even in a close vicinity. Education and knowledge about using iodised salt are major determinant factors in iodine intake of pregnant women. It seems that more practice on this context is needed to assure adequate access to iodine generally and for pregnant women specifically.