### Poster session 1

predictors are stable over different observation periods or if they are changing. The aim of our study was to assess the change in genderrelated predictors of mortality over 20 years of follow-up. Baseline data for this analysis come from epidemiological study of 2472 elderly residents of Krakow (age 65+) conducted in years 1986-1987. The multivariate Cox proportional hazard model was used to assess the changes of the role of predictors over of 20 years. In the male group, we have observed that the effect of coronary heart disease and diabetes mellitus on mortality were decreased with time. The importance of asthma as predictor of death was growing from 1.07 to 1.40 for the full follow-up. In the female group, protective effect of care about health and high functional activity were observed, however their impact decreased with increase of length of follow-up period. Poor SRH increase the mortality risk by 46% during the 5 years period and it decreased to 24% for 20 years of follow-up. Out of analysed chronic diseases the strongest predictor of mortality was diabetes mellitus with the over 60% increased mortality risk. We were able to show that the prognostic value of care about own health and healthy life-style, and high functional activity for women as well as chronic conditions present during the baseline study for men were changing with the length of observation

### PREVALENCE AND PREDISPOSING FACTORS FOR MALOCCLUSION AMONG BRAZILIAN PRESCHOOL **CHILDREN**

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**Introduction** The aim of this study was to assess the prevalence of malocclusion in primary teeth and its predisposing factors.

**Methods** A randomised representative cross-sectional study was carried out in Belo Horizonte, Brazil, with 1069 preschool children between 60 and 71 months of age. A questionnaire addressing individual and behaviour characteristics of children was selfcompleted by parents. The oral examination was performed by a single dentist calibrated ( $\kappa \ge 0.82$ ) for the diagnosis of the following types of malocclusions: posterior crossbite, overjet (>2 mm), anterior crossbite, anterior open bite and deep overbite. The chi-square and Fisher's exact tests were used, with the level of significance set at 5%. The study was approved by the Ethics Committee of the Federal University of Minas Gerais.

Results The overall prevalence of malocclusion was 46.2%. The specific prevalence of each malocclusion type was 13.1% for posterior crossbite, 10.5% for overjet, 6.7% for anterior crossbite, 7.9% for anterior open bite and 19.7% for deep overbite. No statistically significant associations were found between malocclusion and breast feeding, bottle feeding, pacifier sucking, finger sucking or nail biting (p>0.05). No statistically significant associations were found between malocclusion and the presence of these habits after 2 years of age (p>0.05). No statistically significant associations were found between malocclusion and parents' report of the occurrence of stuffy nose, open mouth, nose operation, throat operation or sinusitis (p>0.05).

Conclusion The prevalence of malocclusion was high, but the predisposing factors investigated were not associated to the presence of malocclusion.

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# P1-275 HEARING HEALTH IN ELDERLY: A POPULATION-BASED STUDY IN SÃO PAULO CITY, BRAZIL

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Introduction Hearing loss in older people is one of the most prevalent chronic conditions. In 2004, was implemented in Brazil the Hearing Health Attention National Policies. This policy contains programs for prevention, diagnostic and rehabilitation, including donations of hearing aids and providing education about hearing

Methods Data are from the Survey of Health of São Paulo (ISA-Capital, 2008), a population-based cross-sectional study (n=3271). This survey utilised the same methodology the previous surveys conducted at 2001 and 2003. We analysed the subgroup of elderly (60 years and above—n=924). We used the  $\chi^2$  test of association and analysis of Poisson regression (significance level: 0.05).

**Results** The prevalence of self-reported hearing loss in elderly in this study was 12.4%. This prevalence was higher in men than women (RP: 1.5; p=0.01) and in higher ages (more 80 years) than in 60-69 years (RP: 2.2; p=0.00). 24,4% of them did not know the cause of hearing loss and 42% related that old age is cause of this deficit. 38.8% of interviewed said that they do not need medical assistance or treatment rehabilitation.

Conclusion The unknowledge of the elderly about the causes of hearing loss and the need to assistance suggests that the government's policies needs to evaluate and improve the process of assisting in these people with hearing impairment, assuring its effectiveness. Since ageing is getting wide, developing countries like Brazil, need to meet new demand from this segment of the population.

# P1-276 | A HISTORICAL COHORT STUDY TO DETERMINE THE PREVALENCE OF COMMON CHRONIC RESPIRATORY **DISEASES AND MEDICATION USE IN DRUG** MISUSERS

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 $\boldsymbol{Introduction}$  A local substance misuse study and anecdotal evidence from primary care suggested many methadone patients have respiratory disease and/or respiratory prescriptions.

**Method** This exploratory study used a historical cohort design with matched controls. Analysis of PCCIU (Primary Care Clinical Informatics Unit) GP consultation data were conducted. The prevalence of respiratory diseases and respiratory prescriptions between drug misusers and controls were compared.

Results The PCCIU consultation data were taken from a cohort of 18570 patients (9285 per group), of whom, 64% (n=11885) were male and 75.7% (n=14060) were aged 31-59 years. The results revealed an increased prevalence of chronic respiratory disease in drug misusers vs controls. Drug misusers were more likely to be prescribed chronic respiratory disease medications than controls. Adjustment for smoking status revealed drug misusers still have significantly increased odds of having respiratory disease and/or receiving respiratory prescriptions. (Abstract P1-276 table 1).

Abstract P1-276 Table 1 Respiratory diagnoses and prescriptions

	Drug misusers	Controls	Crude OR (95% CI)	Adjusted OR (95% CI)
Asthma‡	1590 (17.1%)	1009 (10.9%)*	1.695 (1.557 to 1.845)†	1.633 (1.485 to 1.796)†
COPD (chronic obstructive pulmonary disease)‡	219 (2.4%)	74 (0.8%)*	3.007 (2.307 to 3.920)†	1.752 (1.336 to 2.297)†
SABA (short acting beta agonist) prescribed§	1520 (16.4%)	736 (7.9%)*	2.274 (2.071 to 2.496)†	1.998 (1.803 to 2.214)†
LABA (long acting beta agonist) prescribed§	92 (1%)	39 (0.4%)*	2.373 (1.630 to 3.454)†	1.883 (1.255 to 2.825)†
ICS (inhaled corticosteroid) prescribed§	987 (10.6%)	702 (7.6%)*	1.454 (1.314 to 1.609)†	1.500 (1.339 to 1.681)†

<sup>\*</sup>p < 0.0001,  $\chi^2$ .

Conclusion These data suggest drug misusers have a significantly higher prevalence of respiratory diseases and are prescribed significantly more respiratory medications than matched controls. This exploratory study has set the scene for future work to explore possible reasons for this association.

### P1-277 THE FRACTION OF CANCER ATTRIBUTABLE TO LIFESTYLE AND ENVIRONMENTAL FACTORS IN THE UK IN 2010

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**Introduction** We estimate the percentage of cancer in the UK in 2010 resulting from exposure to 14 major lifestyle, dietary, and environmental risk factors.

Methods RRs and prevalence of exposure to tobacco, alcohol, four dietary components (fruit and veg, meat, fibre, salt), overweight, physical exercise, occupation, infections, radiation, hormone use, and reproductive factors were used to estimate the number of cancers occurring in 2010 attributable to sub-optimal exposure levels

Results The 14 exposures were responsible for 42% of cancer in UK in 2010 (males 44%, females 40%). Tobacco smoking is the most important, responsible for about 60 000 new cancers (18.5% of all cancer - 22% in men, 15% in women); <2% being the result of exposure to ETS. The four dietary components account for 9.4% of cancer (10.7% in men, 7.1% in women). In men, alcohol (5.1%) and occupational exposures (4.7%) are next in importance; in women, it is overweight and obesity (almost 7% of cancers).

Conclusions Such estimates provide a quantitative appraisal of the impact of different exposures. They are not synonymous with the fraction of cancers that might reasonably be prevented by their modification. This requires scenario modelling, with assumptions on a realistically achievable population distribution of risk factors, and the timescale of change. Thus, although 50% of colorectal cancer can be attributed to lifestyle (diet, alcohol, inactivity and overweight), only about half of this number is preventable in a reasonable (~20 year) timescale.

### P1-278 ASSOCIATIONS BETWEEN SOCIOECONOMIC POSITION AND ASTHMA- FINDINGS FROM A HISTORICAL COHORT

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Introduction The association between asthma and socioeconomic position (SEP) is not well understood. This study aims to assess the variation in asthma across SEP in a historical cohort before the rise in asthma prevalence.

Methods Students participating in a health survey at Glasgow University from 1948 to 1968 (11274 men; 3502 women) completed a medical history of bronchitis, asthma, hay fever, eczema/urticaria, and reported early life SEP. A subsample responded to a postal follow-up in adulthood (4101 men; 1411 women) including respiratory diseases and early life and adult SEP.

Results Among men, lower early life SEP was associated with higher risk of non-atopic asthma (asthma without eczema/urticaria or hay fever) (trend aOR=1.25 95% CI 1.05 to 1.48). Lower early life SEP was associated with a lower risk of hay fever (trend aOR=0.76 95% CI 0.68 to 0.85) and atopic asthma (asthma with eczema/ urticaria or hay fever) (trend aOR=0.63 95% CI 0.50 to 0.78). No associations were seen for women. Early life SEP, adult household crowding, adult occupation, income and car ownership were not associated with adult onset asthma (onset >30 years) for men or women. Household amenities (<3) in early life was associated with higher risk of adult onset asthma for men (OR=1.48 95% CI 1.07 to 2.05).

**Conclusion** Lower SEP in early life was associated with a higher risk of non-atopic asthma but a lower risk of hay fever and atopic asthma among men in a cohort that preceded the 1960s rise in asthma prevalence in the UK. Adult onset asthma was associated with early life household amenities but not adult SEP.

# P1-279 Trend analysis of hiv/tuberculosis co-infection in SÃO PAULO STATE (SPS), BRAZIL, FROM 1998 TO 2009

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Introduction SPS notified 18228 cases of tuberculosis (Tb) in 2009. The study of endemia trend since 1998 (49.3/100 000 inhabitants) points towards declining incidence rates (IR) of 37.9/100 000 inhabitants, showing a decrease of 23.7% up to 2009. In 1998, 16% of Tb cases were HIV+; in 2009, the co-infection fell to 12%.

**Objectives** Study TB/AIDS co-infection trend in SPS, 1998–2009. Methodology Case numbers were found on SPS/Tb information database system.

**Results** The co-infection IR decreased from 7.3 in 1998 to 4.2 in 2009 showing a linear declining trend (R2=0.89). This trend was maintained for clinical forms, with the extra-pulmonary (EP) having declined from 1.74 (1998) to 1.33 (2009) (R2=0.77) and the pulmonary decreasing from 5.56 to 2.83 (R2=0.95). The 15-49 years old group was the most affected. Male co-infection IR was twice the female. Treatment outcomes in co-infected patients in spite of having improved, the cure rates in 1998 (37.2%) compared to 2009 (54.4%)—were well below the non co-infected patients (78% in 2009). Default rates of co-infected also declined from 23.3% (1998) to 18.7% in 2009. Although showing a slight

<sup>†</sup>p<0.001 binary logistic regression.

<sup>‡</sup>Diagnosis ever recorded.

<sup>§</sup>Prescriptions in 2008.