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

doi:10.1136/jech.2011.142976e.69

<sup>1,2</sup>D M Parkin,\* <sup>1</sup>L Boyd. <sup>1</sup>CTSU, University of Oxford, Oxford, UK; <sup>2</sup>EMS, Queen Mary University of London, London, UK; <sup>3</sup>Cancer Research UK, London, UK

**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

doi:10.1136/jech.2011.142976e.70

<sup>1</sup>S Patel,\* <sup>1</sup>J Henderson, <sup>2</sup>M Jeffreys, <sup>1</sup>G Davey-Smith, <sup>1</sup>B Galobardes. <sup>1</sup>MRC Causal Analyses in Translational Epidemiology Centre, School of Social and Community Medicine, University of Bristol, Bristol, UK; <sup>2</sup>School of Social and Community Medicine, University of Bristol, Bristol, UK

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

doi:10.1136/jech.2011.142976e.71

M J P Rujuila,\* V M N Galesi, N Goldgrub, L A R Santos, S Fukasava. Tuberculosis Division, Sao Paulo State Secretary of Health, Sao Paulo, SP, Brazil

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.

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decline from 23.9 % in 1998 to 21.8 % in 2009, mortality rates deserve our worries

Conclusions Overall, the results point out to a declining co-infection trend. However treatment outcomes are quite worrisome; the cure of co-infected patients, being lower than the non co-infected, demonstrate the need to create priorities and adequate strategies for this population, mainly regarding the follow-up of these cases.

# P1-280 ANALYSIS OF TUBERCULOSIS RESISTANCE IN SAO PAULO STATE (SPS), BRAZIL FROM 2007 TO 2008

doi:10.1136/jech.2011.142976e.72

M J P Rujula,\* V M N Galesi, A Guarnier, N Goldgrub, S Fukasava. Tuberculosis Division, Sao Paulo State Secretary of Health, Sao Paulo, Brazil

Introduction Tuberculosis (TB) remains a serious public health problem. The most serious aspect of this problem has been the appearance of TB drug-resistance (TBDR), mainly the multidrugresistance (TBMDR). One in five TB cases in Brazil occurs in Sao Paulo State, which has about 19000 cases per year. Since 1980, TB treatment in Brazil has been with rifampin, isoniazid and pirazinamid. Thus, TB-DR monitoring is essential to assess its trend, in order to better assist the TB Control Program (TCP).

**Objective** To analyse TBDR in Sao Paulo State during the 2007-2008 period.

**Methodology** Using 'population proportionate cluster sampling' we selected 30 randomised clusters to design the resistance survey. During the 2007–2008 period, all respiratory symptomatic patients of these clusters answered the questionnaire and were submitted to AFB culture and sensitivity tests (ST).

Results From the 1746 patients interviewed: 30.3% were female and 69.7% male, the mean age was 37 years, 20.0% of the patients were HIV-positive and 821 were submitted to culture and ST. The primary resistance to isoniazid and rifampin was 5.8% and 1.5%, respectively. MDRTB was 1.1% and any-resistance was 9.8%. The acquired-resistance was as follows: isoniazid, 20.4%; rifampin 12.2%; MDRTB 12.2% and any-resistance 22.4%.

Conclusions Data on TB-DR are essential to the TCP's improvement. Results of isoniazid (increase from 4.0% to 5.8% in 8 years) showed the necessity of addition of ethambutol to our treatment schedule.

## P1-281 ANTIOXIDANTS FOR PREVENTING PREECLAMPSIA: A **SYSTEMATIC REVIEW**

doi:10.1136/jech.2011.142976e.73

<sup>1</sup>A Magalhães, <sup>2</sup>L Motta, <sup>2</sup>T Galvao, <sup>2</sup>M Pereira.\* <sup>1</sup>Health Department, Brasilia, Distrito Federal, Brazil; <sup>2</sup>University of Brasilia, Brasilia, Distrito Federal, Brazil

Objective To investigate the effectiveness of antioxidants for preventing preeclampsia and other maternal and fetal complications among pregnant women with low, moderate or high risk of preeclampsia.

Methods We searched Medline, Embase, Cochrane Central, mRCT, CRD, ISI Web of Science, Lilacs, Scielo and Scopus databases, without language restriction or limits on date of publication. Randomised controlled clinical trials evaluating the use of antioxidants vs placebo or a group without antioxidants were considered eligible.

Results A total of 1120 articles were located, and 16 randomised clinical trials were analysed (20808 women). A meta-analysis did not show any statistically significant difference between women who received an antioxidant (vitamin C, vitamin E, lycopene, selenium, red palm oil) and women who received placebo, for the outcomes of preeclampsia (RR=0.92; 95% CI 0.80 to 1.06), severe preeclampsia (RR=1.03; 95% CI 0.87 to 1.22), preterm birth (RR=1.03; 95% CI 0.95 to 1.11), small-for-gestational-age infants (RR=0.95; 95% CI 0.86 to 1.05) and any baby death (RR=1.02; 95% CI 0.87 to 1.20). Side-effects (abdominal pain, itching, eczema, vomiting, diarrhoea, headache, constipation, malaise, decreased vision, skin rash and chest pain) occurred more frequently among the women who took antioxidants than among those who took placebo (RR=1.58; 95% CI 1.11 to 2.24).

**Conclusion** The evidence does not support the use of antioxidants during pregnancy. Not only are its benefits unclear, but also adverse effects occurred more frequently with its use.

Funding MS/SCTIE/DECIT, via CNPg (Edital 67/2009).

### SUBLINGUAL MISOPROSTOL FOR PREVENTING POSTPARTUM HAEMORRHAGE: A SYSTEMATIC REVIEW

doi:10.1136/jech.2011.142976e.74

<sup>1</sup>R Hoefler, <sup>1</sup>M Silva, <sup>1</sup>T Galvao, <sup>1</sup>A Zaconeta, <sup>1</sup>M Pereira.\* <sup>1</sup>University of Brasilia, Brasilia, Distrito Federal, Brazil; <sup>2</sup>Centro Brasileiro de Informação Sobre Medicamentos, Brasilia, Distrito Federal, Brazil; <sup>3</sup>Ministry of Health of Brazil, Department of Science and Technology, Brasilia, Distrito Federal, Brazil

**Objective** To assess the efficacy and safety of sublingual misoprostol for preventing postpartum haemorrhage.

Method MEDLINE, Embase, CRD, CENTRAL, mRCT, LILACS, SciELO, ProQuest and ISI Web of Knowledge databases were searched. There were no language, accessibility, or publication date restrictions. Randomised clinical trials of sublingual misoprostol in comparison with placebo or other uterotonics were eligible. The primary outcome was postpartum haemorrhage (blood loss ≥500 ml). Other outcomes were considered (see below). The heterogeneity was evaluated and, when possible, the data grouped into a meta-analysis using a random-effects model.

**Results** Of 682 references identified, only 15 were included in the analysis (5109 patients). Most of the studies were of low methodologic quality. Sublingual misoprostol, at any dose, was not more effective for reducing postpartum haemorrhage in comparison with standard treatment. Sublingual misoprostol, however, is effective for reducing haemorrhage greater than 1000 ml [600 mcg vs placebo; RR=0.66 (95% CI 0.45 to 0.98)] as well as the use of additional uterotonics [600 mcg vs methylergometrine; RR=0.04 (0.00 to 0.72)] and the duration of the third stage of delivery [50 mcg vs methylergometrine; MD=4.16 min (2.20; 6.12) or 600 mcg vs methylergometrine; RR=0.04 (0.00 to 0.72)]. The drug presented a worse safety profile, causing tremors and fever, especially at higher doses.

**Conclusion** Sublingual misoprostol aimed at preventing postpartum haemorrhage presents no benefits compared with the standard uterotonics. Its use should be restricted to clinics with adequate medical support, as a complement to other uterotonics.

Funding MCT/CT-Saúde, MS/SCTIE/DECIT.