## P1-404 THYROID CANCER INCIDENCE IN BRAZIL: AN APPROACH **USING POLYNOMIAL MODELS**

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**Introduction** Thyroid cancer represents almost 1% of malignant neoplasms, corresponding to 0.5% of total deaths caused by cancer. Despite a low and progressive reduction in mortality rate, thyroid cancer is a public health issue because of its increasing incidence, as shown in various studies worldwide.

**Methods** This ecological study to estimate thyroid cancer incidence according to age and sex in Brazil in 2006. We employed polynomial models, which take into account age and birth cohort effects in estimate process.

Results We estimated 6066 new cases of thyroid cancer, of which 1065 among men and 5001 among women. The incidence rates were, respectively, 1.16 and 5.27 per 100 000 inhabitants. There was an increase in rates according to age for both sexes, especially from 30 years old onwards.

Conclusion The rates' magnitude and profile according to age and sex suggest the method employed yields plausible estimates.

## P1-405 JOB STRESS, WORKPLACE SOCIAL SUPPORT AND OCCUPATIONAL ACCIDENTS IN THE PRO-SAUDE STUDY, **BRAZIL**

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Introduction The objective of this study was to investigate the association between job stress and the occurrence of occupational accidents using multilevel modelling in order to take into account clustering of participants at their workplaces.

Methods Analyses were based on 3572 university employees ≤70 years of age during the second phase of data collection of a longitudinal study (Estudo Pró-Saúde). The period of recall for accidents was the 12 month before answering the self-reported questionnaire. Psychosocial stress at work was approached considering the interplay between high psychological demand and low control over the labour process. These dimensions were taken by means of the summarised version of the Karasek scale, which also contains information about the social support at work. Isolated dimensions of job stress (demand and control), the ratio between scores of psychological demand and control over the work process (ratio D/C) and social support at work were measured at individual level and at the level of the workplace.

Results The total prevalence of accidents in the 12 month period was 26%. Results indicate that high psychological demands measured at the individual level was an important factor associated to the occurrence of occupational accidents, particularly among those with scores above the population average, independently of the level of control that the subject might have over the work process. Social support at work was inversely associated to the prevalence of occupational accidents. At the workplace level, this association was characterised by a curvilinear relationship more evident among female worker.

## P1-406 CHARACTERISTICS OF INDIVIDUALS "LEFT BEHIND" IN **DEPRIVED AREAS IN SCOTLAND**

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Introduction Previous work in Scotland has shown that within deprived areas, declining populations have higher illness and mortality rates than stable or increasing populations. One possible explanation is that as healthy individuals move out, they are replaced by individuals in poorer health or not replaced at all, producing areas with higher concentrations of poor health. Little is currently known about the characteristics of migrants to and from these deprived areas or the populations remaining.

**Methods** Using data from the Scottish Longitudinal Study (SLS), which links individual level Scottish census data to vital events, we examine the socio-demographic characteristics and health status of individuals aged 16-74 who moved in and out of deprived areas with declining populations in the year prior to the 2001 census. We also examine the characteristics of those left behind.

**Results** 1771 SLS members remained living in a deprived, declining area while 242 individuals moved in and 466 moved out. Compared to the residentially stable, those moving were more likely to be from a non-White ethnic group (p<0.001), unemployed but seeking work (p=0.001) and single (p<0.001) while those who moved out were more likely to be from a higher social class (p<0.001). Rates of poor general health, long term illness and some causes of death were highest for those who remained in these

**Conclusion** People who remain in deprived and declining areas have a different socio-demographic and health profile from those who move into and out of these areas; non-migrants were in worst overall health.

## P1-407 THE EMERGING EPIDEMIC OF OBESITY IN PUNJAB (INDIA): A POPULATION BASED STUDY

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Introduction Obesity is a complex, multifactorial chronic disease involving genetic, physiological, metabolic, behavioural, psychological and environmental components. The global epidemic of overweight and obesity—"globesity"—is rapidly becoming a major public health problem. It has reached epidemic proportion in India in the 21st century.

**Methods** The present population based study has been conducted in rural and urban areas of Ludhiana district, Punjab State (India). The study included 1615 Punjabi adults comprising 875 from rural and 740 from urban area. Demographic variables (age, sex, SES, lifestyle) and anthropometric parameters-height, weight, waist circumference and hip circumference were recorded. Biochemical analysis viz. cholesterol, Na and K were also done.

Results Out of 1615 subjects, 44% were males and 56% were females. Half of the subjects were in the age group of 20–40 years. Overall prevalence of overweight and obesity has been found be 18.8% and 46.6%, respectively. Prevalence of obesity is slightly higher in rural subjects than the urban. The percentage of obese subjects is 54%, 55.35% and 56.44% in the age groups of  $\leq$ 30 years, 31–40 years and 41–50 years, respectively. Prevalence of obesity has been computed in relation to sex, SES and lifestyle. Serum