## CHRONIC DISEASE

# SP1-1 <br> THE TREND OF AGE STANDARDISED INCIDENCE RATE OF LUNG CANCER IN FARS PROVINCE, A POPULATION BASED STUDY 

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Introduction Lung cancer is the most common cancer worldwide. However, there are differences in the incidence and prevalence rates between countries. The aim of this study was to determine the trend of crude and age standardised incidence rates of lung cancer in Fars province, southern Iran, between 2001 and 2009.
Materials and Methods Crude incidence rates were calculated per 100000 persons per year and age standardised incidence rate per 100000 persons per year, performed by direct method using the world standard population. Data were analysed using SPSS version 16 (SPSS Inc.) and M.S. Excel 2007.
Results There were 918 lung cancer cases ( $71.1 \%$ male). Over the 9 years period, age standardised incidence rates increased 3.52 times, from 1.50 to 5.29 per 100000 persons per year.
Conclusion Similarly to the majority of countries, lung cancer incidence rates in Fars province have increased. This rate is higher in male and elderly age groups.

## SP1-2 PREVALENCE AND CORRELATES OF SUSTAINED HYPERTENSION IN ADOLESCENTS OF RURAL WARDHA, CENTRAL INDIA

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Rationale Several studies have provided ample evidence that hypertension in adults has its onset in childhood. There is wide variation in prevalence of hypertension in children in India. Most of the studies were from urban areas and school based. However, there is a paucity of data on adolescent hypertension especially from rural India.
Objective To study the prevalence of hypertension and its determinants among adolescents.
Methods The cross-sectional study was carried out in villages under PHC Talegaon of Wardha district of central India. Out of 7435 adolescents, 1055 adolescents were selected by simple random sampling method. Among sampled adolescents, 990 were interviewed and examined. Hypertension was defined as raised BP (average SBP and/or DBP $>95$ th percentile) for age, sex and height on two additional occasions.
Results The prevalence of hypertension and pre-hypertension was found to be $3.4 \%$ and $10.6 \%$ respectively. Bivariate analysis showed significant association ( $\mathrm{p}<0.05$ ) of hypertension and prehypertension with age, education, occupation, type of family, use of smokeless tobacco, amount of salt consumption, nutritional status, education level of mother and blood pressure level of mother, and father. On multivariate analysis of the present study, the final model by ordinal logistic regression showed significant association of hypertension/pre-hypertension of adolescents with age, type of family, BMI of adolescent and blood pressure of mother and father.
Conclusion The prevalence of hypertension and pre-hypertension was $3.4 \%$ and $10.6 \%$ respectively. The significant correlates of hypertension were age, type of family, BMI of subject and blood pressure of mother and father.

## SP1-3 ARE THE DISABLED AT RISK FOR DEVELOPING NON-COMMUNICABLE DISEASES?

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Introduction Chronic diseases were studied to cause lifelong disability, but no focus was made to find out whether disabled by other causes were predisposed to develop chronic diseases due to their disability. The objective of this study was to explore the association between physical disability and the chances of developing noncommunicable diseases (NCD).
Methodology A retrospective cohort study done in the year 2008 in South Kerala, India. The physically disabled were identified from a baseline health survey done in 2005-2006 which identified 283 households with disability. A total of 125 individuals having physical disability for more than 5 years were compared with 125 age and sex matched individuals with no disability selected from the neighbourhoods. Data were collected using WHO STEPS questionnaire for NCD surveillance and disability was assessed using Indian HAQ version (Health Assessment Questionnaire). Bivariate and multivariate analyses were done.
Results NCD risk factor prevalence among disabled was higher for hypertension ( $43.2 \%$ ), alcohol use ( $12 \%$ ), tobacco use (20.8\%), Obesity ( $33.6 \%$ ) and lack of physical activity ( $89.6 \%$ ). Significant difference from the comparison group were found only for Hypertension with a RR of 1.32 (1.04-1.6) and lack of physical activity 5.01 (2.54-9.8). After logistic regression analysis, the physically disabled were found to have NCD risk factors such as lack of physical activity [OR 3.94, 95\% CI (1.9 to 8.18)] and hypertension [OR 1.76, 95\% CI (1 to 3.13)]. Conclusion Hypertension screening for the physically disabled could help in early identification and treatment. Disabled friendly initiatives for promoting physical activity should be a part of NCD prevention interventions.

## SP1-4 HEALTH STATUS, THE LOCAL WISDOM IN FOLK MEDICINE, AND COMMUNITY-BASE HEALTH PROMOTION OF AKHA IN THAILAND

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Introduction This quasi-experimental design aimed to investigate the health status and local wisdom in folk medicine, in order to develop a health promotion model for Akha in Thailand. The study sites were Abae village, Huan Nam Rin village, and Lau Cha village, Chiang Rai Province, Thailand.
Methods Data were collected using a questionnaire (pre-tested for validity and reliability). A 5 ml blood sample and 5 g stool sample were collected for biomarker identification.
Results In total 1008 subjects were recruited into the study; 493 male, and 515 female. $42.8 \%$ were agriculture workers, $56.7 \%$ were illiterate, $44.6 \%$ could not speak Thai, $63.9 \%$ could not read Thai, and $63.9 \%$ could not write in Thai. $44.6 \%$ lived in unsafe houses, $72.7 \%$ drank untreated mountain piped water. $25.0 \%$ of children below aged 5 year had not received any vaccinations. Of those aged $13-25$ years, $30.7 \%$ smoked, $25.2 \%$ drank alcohol, $5.9 \%$ used amphetamine, $10.5 \%$ used opium, and $40.8 \%$ used marijuana, $44.2 \%$ had had sexual experience, $20.0 \%$ had first sexual experience at the aged 15 years, and $35.0 \%$ did not get married to their first sexual partners. Biochemistry results among aged 30, showed that $31.2 \%$ had Triglyceride $\geq 171 \mathrm{mg} / \mathrm{dl}, 31.2 \%$ had Uric acid $\geq 7.1 \mathrm{mg} / \mathrm{dl}$. Ahka people also lack knowledge in agriculture practices, and still grow un-economic crops bringing less family income. Most young children ate insufficient protein and had malnutrition.

Conclusions The Akha healthcare system is closely related to their religions practice and local wisdom. Any model of health promotion development needs to take into account such issue.

## SP1-5 ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES AS ASSOCIATED CAUSES OF DEATH IN OLDER WOMEN IN RIO DE JANEIRO, BRAZIL

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Introduction Changes in lifestyle contributed to an increased incidence and mortality from endocrine, nutritional and metabolic diseases in developing countries. The aim of this study was to evaluate the burden of these diseases as a cause of death in older women in a Brazilian city.
Methods All deaths of women aged 70 years or older, occurring in Rio de Janeiro, between 2003 and 2006, were identified in the Mortality Information System, a population-based nationwide registry. Death certificates with an ICD 10 Chapter IV code (E00-E90) were selected. When the code corresponded to the underlying cause, its subgroup was determined (endocrine, nutritional or metabolic diseases) and the associated causes were ascertained. When these codes corresponded to associated causes, the ICD chapter of the underlying cause was identified.
Results There were 55331 deaths, of which 7686 (13.9\%) had E00E90 codes as underlying (50.4\%) cause. Endocrine diseases predominated among underlying causes. Diabetes was the leading cause of death ( $76.4 \%$ ) and circulatory and respiratory diseases the main associated causes. As for deaths for other underlying causes, 20.7\% of the circulatory system, $9.5 \%$ of the respiratory system, $6.0 \%$ of the neoplasms and $3.3 \%$ of the infectious diseases had Diabetes as an associated cause.
Conclusion Endocrine diseases, particularly Diabetes, are major causes of mortality in older women in Rio de Janeiro, representing an important public health problem. Urbanisation and socio-cultural influences of the occidental way of life led to changes in dietary patterns and an increased sedentary lifestyle. In order to modify the present patterns, health promotion strategies must be emphasised.

## SP1-6 NO EFFECT OF HORMONAL EXPOSURES ON UVEAL MELANOMA

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Introduction Several studies suggest that hormonal mechanisms may be associated with the development of uveal melanoma.
Objectives To study the association between the risk of uveal melanoma and exposure to hormonal exposures in a case-control study from nine European countries.
Methods Incident cases of uveal melanoma were frequency-matched to population and hospital controls by country, age and sex. Female subjects were asked about their reproductive history, use of menopausal hormone replacement therapy and oral contraceptives. Among males, occupational handling of oils while working with transformers or capacitors which contain polychlorinated biphenyls (PCB) was solicited. Unconditional logistic regression analyses were calculated, adjusting for several potential confounders. Analyses were stratified by sex.
Results 293 cases ( 165 men, 128 women) and 3198 control subjects ( 2121 men, 1077 women) were interviewed. Among women, no associations were observed with hormonal status variables, intake of hormonal therapy or intake of oral contraceptives. Males showed an increased risk with occupational exposure to transformer/capacitor oils (OR 2.74; Bonferroni-corrected 99.3\% CI 1.07 to 7.02). However, these results were based on few exposed subjects only.
Conclusions The results of this study do not support the hypothesis of a hormonal influence in the carcinogenesis of uveal melanoma. Our finding of a potentially increased risk with PCB-containing oils requires further research.

## SP1-7 PESTICIDE EXPOSURE IN FARMING AND FORESTRY AND THE RISK OF UVEAL MELANOMA

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Introduction Since pesticides are disputed risk factors for uveal melanoma, we studied the association between occupational pesticide exposure and uveal melanoma risk in a case-control study from nine European countries.
Methods Incident cases of uveal melanoma and population as well as hospital controls were included and frequency-matched by country, 5 -year age groups and sex. Self-reported exposure was quantified with respect to duration of exposure and pesticide

