

non-fatal AMI within a population based case control study of urban Sri Lankans.

Methods Cases were patients consecutively admitted to the cardiology and general medical wards of the National Hospital of Sri Lanka with a confirmed diagnosis of AMI and discharged alive. Age and sex matched community controls were recruited within 20–30 km distance from National Hospital of Sri Lanka using the electoral lists. Basic demographic information, smoking habits, physical activity and dietary patterns, anthropometric indices, fasting glucose and serum lipid measurements were done on all participants.

Results During the study period, 262 cases and 246 controls were recruited. Of the non-fatal acute myocardial infarct patients, 18% were female. Compared to males, females with non-fatal events were significantly older (58 years, SD 6.6). Mean age among cases and controls were similar (~54 years). Cases were significantly more likely to have diabetes mellitus, a family history of AMI, abnormalities in lipid profile and report poor vegetable and fruit consumption (consumption was defined as “poor” if the individual did not usually consume some fruit/vegetable at least once on a given day). Physical activity patterns, education level and smoking habits were similar between cases and controls.

Conclusion Results indicate a high prevalence of modifiable risk factors among AMI patients. It is vital that the health system identify these patients early and provide them with optimal treatment.

P2-248 TRENDS IN PROSTATE CANCER MORTALITY RATES IN THAILAND, 1998–2006

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Introduction Prostate cancer is one of the leading cause of death among Thai males. In Thailand, whether mortality rates of prostate cancer have been increasing from 1998 to 2006. This study aimed to examine trends in age-specific and age-standardised mortality rates for prostate cancer among Thai population.

Methods Mortality data during 1998–2006 were analysed based on ICD-10 for prostate cancer from Bureau of Health Policy and Planning, Ministry of Public Health. Both 5-year age-specific and age-standardised mortality rates per 100 000 were calculated and descriptively analysed for trends.

Results The results have shown that during 1998–2006, age-standardised mortality rates for prostate cancer increased from 0.38 to 1.56 for males. For each year, prostate cancer mortality rates increased with age and peaked at age 70 and over. In 2006, the highest mortality rates were 45.76 for male.

Conclusion The prostate cancer mortality rates had increased at least fourfold in 8 years for both sexes. The increase in mortality might be explained by the increased in risk factors including increase in ageing of the population, eating habit characterised by high fat, obesity, and hormonal factors. Health policymakers should increase its effort in controlling and reducing the risk factors by promoting healthy behaviours such as healthy diet. It is also important to make an effort to inform the profile of prostate-specific antigen testing for screening prostate cancer.

P2-249 SMOKELESS TOBACCO AND CORONARY HEART DISEASE IN BANGLADESH: IS THERE ANY ASSOCIATION?

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Objective To determine the association between smokeless tobacco (SLT) use and coronary heart disease (CHD) among non-smoking adults in Bangladesh.

Methods A case-control study of non-smoking Bangladeshi adults aged 40–75 years, was conducted in 2010. Incident cases of CHD were selected from two cardiac hospitals. Hospital controls were selected from outpatient departments of the same hospitals. Community controls were selected from neighbourhoods matched to CHD cases. Four community controls and one hospital control were matched to each case on age and gender.

Results The study enrolled 302 cases, 1208 community controls and 302 hospital controls. Forty percent of the study subjects were current users of or had used SLT in the past. Current use of SLT was similar among cases (33%), community controls (33%) and hospital controls (32%). Current use of SLT was not associated with increased risk of CHD when community controls were used (adjusted OR 0.87, 95% CI 0.63 to 1.19, $p>0.05$), or hospital controls were used (adjusted OR 1.00, 95% CI 0.63 to 1.60, $p>0.05$), or when both controls were combined (adjusted OR 1.00, 95% CI 0.74 to 1.34, $p>0.05$). Risk of CHD did not increase with use of individual type, frequency, duration and past use of SLT products.

Conclusion In this study, there was no statistically significant association between SLT use and CHD among non-smoking adults in Bangladesh. If the findings can be replicated in prospective studies, it may well be that strategic focus for reducing CHD in Bangladesh should be upon smoking control rather than on SLT.

P2-250 OMEGA 3 POLYUNSATURATED FATTY ACIDS (PUFAS) AND RISK OF EARLY ONSET PROSTATE CANCER

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Introduction In the UK, approximately 11% of newly registered PrCa cases are under the age of 60 years. The unequal incidence across different countries suggests that modifiable factors, such as dietary intake of omega 3 polyunsaturated fatty acids (PUFAs) may be important.

Methods Data were analysed on 805 cases and 1283 controls of age <60 years. A food frequency questionnaire assessing typical diet 5 years previous to either diagnosis in the cases or returning questionnaire in controls was used to assess dietary PUFAs. Nutrient intake of specific PUFA derivatives was then calculated via a nutritional database. Unconditional logistic regression was used to calculate ORs and 95% CIs for the effect of omega 3 and its derivatives docosahexaenoic acid (DHA), eicosapentaenoic acid (EPA), α -linolenic acid (α LNA) and supplementation of total omega 3, DHA and EPA on PrCa risk after adjusting for confounders. Linear trend was also assessed.

Results For the highest compared with the lowest quartile of intake, total omega 3 dietary intake (OR=0.68, 95% CI 0.40 to 1.15, $p=0.14$), DHA (OR=0.71, 95% CI 0.48 to 1.05, $p=0.09$) and EPA (OR=0.72, 95% CI 0.46 to 1.14, $p=0.16$), all showed non-significant trends with decreased PrCa risk. However, increased supplement dosage of DHA and EPA both showed significant, protective dose-response relationships (p for trends=0.04).

Conclusion This study of early onset prostate cancer has shown protective trends for supplement intakes of DHA and EPA which if confirmed in other studies could have implications for prevention.

P2-251 INDUSTRIAL POLLUTION AND CANCER IN SPAIN; A SIMPLE INDUSTRIALISATION INDEX

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Introduction Our objective is to study the relation between industrial pollution and cancer in Spain by defining a simple industrialisation index (town level), using the information from the European Pollutant Release and Transfer Register (E-PRTR).

Materials and Methods We used data on industries from the PRTR-Spain for year 2007. We selected the 3458 facilities with positively validated co-ordinates. For the 8098 Spanish towns we defined the index as a factor with four levels based on the number of factories in a radius of 2.5 km from the centroid of each town: Value 0 for towns with no factory within the radius; 1 for those with 1 factory; 2 for those with 2, 3 or 4; and 3 for those with more than four factories. The index, along with socio-demographic indicators (potential confounders), was included in a spatial Poisson model (BYM) to estimate the cancer mortality risk associated with the index levels. We fitted models for 33 cancer causes. Also trend tests were computed.

Results Many causes, 19, showed statistical association with at least one level of the factor. Almost all tumours related to the digestive system and the respiratory system showed excess of risk and/or trend linked with the index.

Conclusions The proposed index is a useful tool to explore possible associations between the level of industrialisation of residential areas and its health outcomes, despite of its limitations. Digestive and respiratory system tumours could be associated to residence near to industrial areas.

P2-252 SHORT- AND LONG-TERM MORTALITY OF ABORIGINAL PEOPLE AFTER HOSPITAL ADMISSION FOR ISCHAEMIC HEART DISEASE: A DATA LINKAGE STUDY IN NEW SOUTH WALES, AUSTRALIA

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Introduction The health of Australian Aboriginal people is worse than that of non-Aboriginal people across every conceivable indicator. Ischaemic heart disease (IHD) is a leading cause of premature death. We aimed to determine whether short- and long-term mortality after hospitalisation for IHD was higher for Aboriginal than non-Aboriginal patients, in order to guide interventions to reduce the mortality gap.

Method New South Wales hospital data (July 2000–December 2008) were linked to mortality data (July 2000–December 2009). The first IHD admission per person was selected from January 2002. We ran multilevel logistic regression models for 30-day and 365-day mortality with 131 357 patients clustered within 193 public hospitals.

Results After adjusting for age, sex and a random hospital intercept, Aboriginal IHD patients had similar odds of dying within 30 days as non-Aboriginal patients (AOR: 1.1, 0.9–1.4). Using the same adjustments, odds of dying within 365 days were significantly higher for Aboriginal than non-Aboriginal patients (AOR: 1.4, 1.2–1.7). Adding the Charlson co-morbidity index and specific IHD diagnosis reduced this 365-day AOR to 1.2 (1.0–1.4). After adding the above variables, 2.4% of the unexplained variation in 365-day mortality was attributable to hospitals.

Conclusion Aboriginal IHD patients in NSW had similar odds of dying within 30 days of admission as non-Aboriginal patients, but were more likely to die within 1 year of admission. Increased long-term mortality was partly explained by individual risk factors. Tackling the mortality gap will require major efforts to boost primary and secondary prevention, as well as improving hospital care for IHD.

P2-253 ALCOHOL MISUSE AMONG PARTNERS: A POTENTIAL EFFECT MODIFIER IN THE RELATIONSHIP BETWEEN PHYSICAL INTIMATE PARTNER VIOLENCE AND POSTPARTUM DEPRESSION

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Introduction This study evaluated if the probability of postpartum depression (PPD) increases with an upward gradient of physical intimate partner violence (IPV) during pregnancy and whether substance use by any member of the couple modifies this relationship.

Methods The sample comprised 811 randomly selected mothers of children under five months old attending primary health services of Rio de Janeiro, Brazil. The Revised Conflict Tactics Scale (CTS2) gauged physical IPV, and the Edinburgh Postnatal Depression Scale (EPDS) assessed PPD. A hierarchical logistic regression model was employed to deal with confounding. Specific interaction terms between physical IPV and alcohol misuse or use of illicit drugs were also tested.

Results Physical IPV during pregnancy was reported by 37.8% of respondents and 24.3% were presumably depressed (EPDS score ≥ 12). Interaction between physical IPV and partners' alcohol misuse was statistically significant (p value=0.026). Although there was a significant rise of PPD with just one act of physical IPV in the absence of a partners' alcohol misuse, mounting acts did not have any further influence. Conversely, when partners misused alcohol, the probability progressively and steeply increased from two acts onwards, reaching almost sevenfold by six cumulative physical IPV events as opposed to none.

Discussion Results reinforce the relevance of physical IPV as a risk factor to PPD. They also suggest that context matters, partners' alcohol misuse acting as an important effect modifier. These evidences justify tailored preventive, screening and intervention procedures for IPV and alcohol misuse during pregnancy and the postpartum period.