P2-268 RISK OF CARDIOVASCULAR DISEASE IN DIABETICS WITH SYMPTOMS OF CARDIAC ISCHAEMIA IN WESTERN REGION OF NEPAL: A HOSPITAL BASED STUDY

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Background The cardiovascular (CV) risk in patients with diabetes is estimated to be two or three times higher than in the non-diabetic population. The prognosis of patients with diabetes following myocardial infarction (MI) remains poorer in comparison with non-diabetics.

Objective To find out the relationship between Diabetes and MI in patients with symptoms of cardiac ischaemia.

Materials and Methods It was a retrospective study carried out from the data maintained in the Department of Biochemistry of the Manipal Teaching Hospital, Pokhara, Nepal between 1 January 2008 and 1 January 2009. Data of 422 patients with symptoms of cardiac ischaemia who underwent both Troponin and lipid profiles tests were collected. Descriptive statistics and testing of hypothesis were used for the analysis using SPSS V. 16 software.

Result Of the 422 subjects, 10.4% were Troponin positive, 62.1% Diabetic, 51.4% greater than 60 year old. Average age of Troponin positive was 67.2 and negative was 58.3 years. A relationship was found to exist between Diabetes and MI (OR=15, $p<0.0001$), especially in age group greater than 60 year old (OR=10, $p<0.0001$).

Conclusion CV risk should be assessed in all patients with diabetes. Those with a high risk should be treated intensively, and this needs to be clearly explained by their doctors in order to improve compliance.

P2-269 REGIONAL DIFFERENCES IN THE PREVALENCE OF TYPE 2 DIABETES MELLITUS: RESULTS FROM FIVE POPULATION-BASED COHORT STUDIES IN GERMANY (DIAB-CORE CONSORTIUM)

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Introduction In Germany, regional data on the prevalence of type 2 diabetes mellitus (T2DM) are lacking for use in healthcare planning. We analysed regional differences in the prevalence of T2DM and treatment with antidiabetic agents.

Methods Data from five regional population-based studies and the German National Health Interview and Examination Survey (GNHIES98) conducted between 1997 and 2006 were analysed. Estimates of self-reported diabetes, treatment, and onset of diabetes were compared. T2DM prevalence (95% CI) for the five regional studies was directly standardised to the German adult population (31 December 2007).

Results From 11 688 participants aged 45–74 years, 1008 had prevalent T2DM, corresponding to a prevalence of 8.6% (8.1%–9.1%). For the GNHIES98 a prevalence of 8.2% (7.3%–9.2%) was estimated. Prevalence was higher in men (9.7%; 8.9%–10.4%) than in women (7.6%; 6.9%–8.3%). The age-standardised regional prevalence was highest in the East with 12.0% (10.3%–13.7%) and lowest in the South with 5.8% (4.9%–6.7%). The mean age of onset of T2DM was lower in Northeast (53+9SD) than in West-Germany (57+10SD). Treatment with oral antidiabetic agents was more frequently reported in the South (56.9%) than in the Northeast (46.0%), whereas treatment with insulin alone was more frequently reported in the Northeast (21.6%) than in the South (16.4%).

Conclusion The prevalence of T2DM showed a Northeast and Southwest gradient within Germany with the highest standardised prevalence in the East, which is in accordance with regional differences in the distribution of risk factors for T2DM. Furthermore, the treatment with antidiabetic agents showed regional differences.

P2-270 HABIT OF REMOVING VISIBLE FAT FROM MEATS BY ADULTS AND ELDERLY: A POPULATION-BASED STUDY IN SOUTHERN BRAZIL

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Introduction International and Brazilian Health Agencies point to healthy eating as an important aspect of life quality and several studies have shown that a diet rich in fat increases the risk of cardiovascular diseases. In this context, we aimed to describe the prevalence of the habit of removing visible fat from meats before consumption according to socio-demographic characteristics in adult and elderly.

Methods Cross-sectional population-based study with 2706 individuals aged 20 years or more living in the urban area of Pelotas, Rio Grande do Sul, Brazil. The habit of removing visible fat from meats before eating it, defined as trimming apparent fat red meats and poultry skin, was assessed through interview reporting meat consumption considering a 12 months recall period. The socio-demographic variables were gender, skin colour, age, education and family income in tertiles.

Results Approximately 58% of interviewees were women, 81% Caucasians and about 50% reported nine or more years of study. The prevalence of the habit of removing visible fat from meats before consumption was 48% (95% CI: 45.2 to 50.2%), higher among women (71%). This habit was more frequent among the Caucasians respondents (83%), aged 60 years or older (29%), who studied for nine to eleven years (30%) and belonging to the highest tertile income (37%).

Conclusion The men and individuals with lower family income and education presented the smaller prevalence of the habit of removing visible fat from meats before consumption. These results can guide public policy health for promoting strategies in this group.

P2-271 SOCIOECONOMIC DEVELOPMENT AND SEX DIFFERENCES IN ISCHAEMIC HEART DISEASE MORTALITY. AN AGE-PERIOD-COHORT ANALYSIS OF THE HONG KONG CHINESE

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Introduction An epidemic of premature ischaemic heart disease (IHD) in men usually emerges with economic development. The

Hong Kong Chinese population experienced abrupt macro-environmental change generated by mass migration in the late 1940s from pre-industrial China to economically developing Hong Kong. We took advantage of this natural experiment to test whether a “step-change” in living conditions in early life had sex-specific cohort effects on IHD mortality.

Methods We used sex-specific age-period-cohort models to identify cohort effects in adult IHD mortality from 1976 to 2005 overall and by migrant status. To check for specificity, we examined mortality from lung cancer and renal diseases.

Results Birth cohort effects varied with sex, with a marked upturn in IHD mortality for the first generation of men born into the comparatively developed environment of Hong Kong. The upturn occurred first in non-migrants and later in migrants. There were no such upturns in women or such sex-specific changes for lung cancer or renal diseases.

Conclusion Men's vulnerability to premature IHD may be actuated in early life, perhaps mediated by inter-generationally and nutritionally driven levels of pubertal sex-steroids. This has considerable public health implications for the large population of young males in countries undergoing rapid economic transition.

P2-272 WITHDRAWN

P2-273 TRENDS IN CARDIOVASCULAR MORTALITY AMONG ADULT POPULATION IN RUSSIA

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Changes in cardiovascular mortality (CVM) among adult population of Russia in 2005–2009 were analysed in order to evaluate the efficiency of government program to reduce CVM adopted in 2008. During the period of 2005–2009, CVM of Russian population decreased by more than 25% in adult age group (20–59 years) and by more than 15% in old age group (60+ years). The highest decline was observed at the beginning of the studied period. For males, CVM declined by 11.5% from 2005 to 2006 and by 0.7% from 2007 to 2008 among adult age group and by 6.5 and 1.5% among old age group respectively. For adult females, CVM declined by 12.5% from 2005 to 2006 and increased by 0.4% from 2007 to 2008; for older females, CVM declined by 4.2 and 2.5% respectively. During the period of 2008–2009, mortality decline significantly accelerated: by 8.2 and 9.0% for adult and by 4.2 and 5.6% for old men and women respectively. For population of working age, these trends are related to mortality decline from three major causes of death: cerebrovascular diseases, ischaemic heart disease, “other heart diseases” according to the Russian abridged classification. For older population, the highest decline is observed for cerebrovascular mortality; mortality from ischaemic heart disease slightly decreased and mortality from “other heart diseases” (determined predominantly by cardiomyopathies of alcohol origin) increased. The efficiency of this program can be substantially increased by introducing specific measures to reduce risks of ischaemic heart disease and behavioural risks related to alcoholism in particular.

P2-274 TREND OF MATERNAL MORTALITY RATE IN IRAN FROM 1970 TO 2007; A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction Recently, Iran has experienced a rapid improvement in socio economical status and improved to upper-low economic countries. The trend of maternal mortality rate (MMR) as one of the main indicators for development and health has been reviewed systematically from 1970 to 2007.

Methods A systematic search was performed in PubMed, Embase database, Cochrane library, WHO-EMR Library and local medical databases to identify all articles and reports on the MMR in Iran. Well qualified documents were selected for data extraction and Meta analysis. Weighted linear regression was applied for exploring the trends.

Results For the 5-year intervals between 1970 and 2007, MMR was estimated as 237, 140, 100.3 (95% CI 83.65 to 117.00), 54, 56.2 (95% CI 39.72 to 72.70), 40.6 (95% CI 21.70 to 59.65), 24.1 (95% CI 20.66 to 27.67) per 100 000 live births. MMR has been decreased by 40 per decade. The most heterogeneous factors were the year of the study/report and the type of the report (from inside or outside of the country).

Conclusion It's obvious that the MMR trend was significantly downward in recent decades. And it's expected with such trend, Iran will achieved the millennium development target at 2015. Although the decreasing rate is considerable among the developing countries; however, it is comparable to the increasing rate of developed countries in 1920s–30s. More reduction in MMR is achievable only other related factors such as health social determinants are considered.

P2-275 CHOLESTEROL AND THE RISK OF GRADE-SPECIFIC PROSTATE CANCER INCIDENCE: EVIDENCE FROM A LARGE PROSPECTIVE COHORT WITH 37 YEARS FOLLOW-UP

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Introduction Associations between cholesterol and prostate cancer have been inconsistent and limited to a small number of studies with significant methodological limitations.

Methods We conducted a prospective cohort study of 12 933 men who were enrolled in two of the Midspan studies (took place in Scotland) between 1970 and 1976 with follow-up to 31 December 2007. We used Cox-Proportional Hazards Models to evaluate the association between baseline plasma cholesterol and Gleason grade-specific prostate cancer incidence.

Results 676 men developed prostate cancer in up to 37 years follow-up. We found no association between cholesterol level and overall risk of prostate cancer incidence. However, cholesterol was positively associated with hazard of high grade (Gleason score ≥ 8) prostate cancer incidence ($p < 0.05$). The association was greatest among men in the 4th highest quintile for cholesterol, 6.1–<6.69 mmol/l (HR 2.30, 95% CI 1.27 to 4.10) compared with the baseline of <5.05 mmol/l. Exclusion of incident cancers up to 5 years after baseline cholesterol assay did not significantly affect the observed associations.

Conclusions Men with higher cholesterol are at greater risk of developing high-grade prostate cancer but no overall association between cholesterol and prostate cancer risk was found. Further research is needed to determine the underlying biological mechanisms for the association.