

SP1-113 CLINICAL CORRELATION OF NON-ALCOHOLIC FATTY LIVER DISEASE IN A CHINESE TAXI DRIVERS POPULATION IN TAIWAN: EXPERIENCE AT A TEACHING HOSPITAL

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^{1,2}T H Lin,* ^{1,2}T H Tung, ^{3,4}W H Chiu. ¹Department of Public Health, College of Medicine, Fu-Jen Catholic University, Taipei, Taiwan; ²Cheng-Hsin General Hospital, Taipei, Taiwan; ³Department of Biomedical Imaging and Radiological Sciences, School of Biomedical Science and Engineering, National Yang-Ming University, Taipei, Taiwan; ⁴Central Clinic and Hospital, Taipei, Taiwan

Introduction To explore any gender-related differences in prevalence of and condition-associated factors related to non-alcoholic fatty liver disease (NAFLD) among Taiwanese taxi drivers in Taipei, Taiwan.

Methods We studied 1635 healthy taxi drivers (1541 males and 94 females) voluntarily admitted to physical check-up in 2006. Blood samples and ultrasound-proved fatty liver sonography results were collected.

Result The prevalence of NAFLD was 66.4% and revealed no statistically significant decrease with increasing age ($p=0.58$). Males exhibited a greater prevalence of NAFLD than did females (67.5% vs 47.9%, $p<0.0001$). Gender-related differences as regards associated factors were revealed. For males, hypertension, hyperuricemia, higher AST, higher ALT, hypertriglyceridemia, and higher fasting plasma glucose were significantly related to NAFLD but these were not so for females.

Conclusion Several gender-related differences were noted pertaining to NAFLD among taxi drivers population.

CUTTING EDGE METHODOLOGY

SP2-1 ROSE ANGINA QUESTIONNAIRE: ACCURACY FOR DIAGNOSING CORONARY HEART DISEASE IN BANGLADESH

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¹M A Rahman, ¹N Spurrier, ¹M A Mahmood, ²M Rahman, ³S R Choudhury,* ⁴S Leeder. ¹Discipline of Public Health, The University of Adelaide, Adelaide, South Australia, Australia; ²IEDCR (Institute of Epidemiology, Disease Control and Research), Dhaka, Bangladesh; ³NHFGRI (National Heart Foundation Hospital & Research Institute, Dhaka, Bangladesh; ⁴The Menzies Centre for Health Policy, The University of Sydney, Sydney, New South Wales, Australia

Objective To determine accuracy of the Rose Angina Questionnaire (RAQ) for diagnosing coronary heart disease (CHD) among Bangladeshi adults, by comparing the classification based on the questionnaire with cardiologists' diagnosis.

Methods A case-control study of non-smoking Bangladeshi adults aged 40–75 years, was conducted in 2010. Cases were incident cases of CHD from two cardiac hospitals if diagnosed as such by the cardiologists; controls were non-cardiac patients from cardiac outpatient departments. One control was matched to each case on age and gender. Full version of the original RAQ questionnaire was used for study participants.

Results The sample comprised 302 CHD cases and 302 controls (mean age 53 ± 8.5 years). RAQ detected 194 cases (32%) and 409 controls (68%) from either hospital. RAQ categorised 17.5% of sample as having CHD who were considered not to have CHD by the cardiologists; RAQ categorised 34.5% of sample as not suffering from CHD, who were diagnosed as having CHD by the cardiologists. Among 301 CHD cases, 160 (53.2%) were diagnosed as CHD by both hospital cardiologists and RAQ. Among 302 controls, 268 (88.7%) were diagnosed as not having CHD by both hospital cardiologists and RAQ. CHD patients are five times more likely to have RAQ positive result compared to controls.

Conclusion The RAQ had sensitivity of 53%, specificity of 89% and likelihood ratio positive of 4.8 in diagnosing CHD among Bangladeshi adults compared with diagnosis by cardiologists. RAQ can be

used as an alternate tool for diagnosing CHD at field sites where there are limited resources.

SP2-2 COMMUNITY CONTROLS VS HOSPITAL CONTROLS: CHOICE FOR A CASE-CONTROL STUDY IN BANGLADESH

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¹M A Rahman, ¹N Spurrier, ¹M A Mahmood, ²M Rahman, ³S R Choudhury,* ⁴S Leeder. ¹Discipline of Public Health, The University of Adelaide, Adelaide, South Australia, Australia; ²IEDCR (Institute of Epidemiology, Disease Control and Research), Dhaka, Bangladesh; ³NHFGRI (National Heart Foundation Hospital & Research Institute), Dhaka, Bangladesh; ⁴The Menzies Centre for Health Policy, The University of Sydney, Sydney, New South Wales, Australia

Objective To determine whether hospital controls could be used in case-control studies where resource constraints limit recruitment of community controls.

Methods Hospital controls and community controls were compared in terms of socio-demographic and risk factor variables in a study of smokeless tobacco (SLT) and coronary heart disease (CHD) in Bangladesh 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. There were no differences between hospital controls and community controls with respect to age, gender, marital status, occupation, economic status and risk factors for CHD. Hospital controls were more educated but less active physically than community controls. Current use of SLT was similar among community controls (33%) and hospital controls (32%), which was also not significant statistically (adjusted OR 0.81, 95% CI 0.58 to 1.12, $p>0.05$). Current use of SLT was not associated with increased risk of CHD when data from community controls were used (adjusted OR 0.87, 95% CI 0.63 to 1.19, $p>0.05$), nor when data from hospital controls were used (adjusted OR 1.00, 95% CI 0.63 to 1.60, $p>0.05$).

Conclusion For comparable future studies in situations of resource scarcity or difficult socio-political context, it is possible to enrol hospital controls with careful planning which are similar to potential community controls minimising bias.

SP2-3 GENOCIDE AND HEALTH: CHALLENGE FOR PUBLIC HEALTH AND EPIDEMIOLOGY

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J Lindert,* O von Ehrenstein. Protestant University, Ludwigsburg, Germany

Background Violence is the main cause of preventable death, worldwide. Research has shown that violence may develop in consecutive stages from the first stage (loss of opportunities for the persecuted group) to the last stages (loss of existence, loss of memory) in the aftermath. Each stage of violence can be measured with indicators that is, changes in language, devaluation of others, polarisation, preparation and denial. Further known indicators are the readiness to accept violence as a means for solving conflicts, inequality in distribution of resources and opportunities, level of discrimination and change in the legal context, percentage of weapons in a country, number of riots, discriminating of others in science and within the medical profession.

Objective We intend to provide the set of indicators and to introduce epidemiological tools for describing and understanding development of violence.

Methods We present as indicators in the development of genocide: for example, language change, devaluation of others, polarisation, inequality, discrimination, riots, weapons available, medical experiments, and murdering without legal prosecution.

Results The development of genocide can be described with indicators. By using these indicators areas of differing risk for genocide could be defined in other regions of the world. We will apply these indicators to selected examples of countries.

Conclusion Indicators can be useful for scoring countries at risk. Violence control programmes could operate within this framework of stages for mapping violence.

SP2-4 IMPACT ASSESSMENT OF INSTITUTIONAL CAMPAIGNS COMPARED TO SUMMER MONTHS ON THE SEARCH FOR INFORMATION ABOUT SELF-EXAMINATION OF THE SKIN

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^{1,2}P R Vasconcellos-Silva,* ¹R H Griep, ¹L D Castiel. ¹Oswaldo Cruz Foundation, Rio de Janeiro, Brazil; ²National Cancer Institute, Rio de Janeiro, Brazil

Introduction The analysis of log files of qualified websites has become recently a simple way to estimate the collective demand for health information. We analysed the access to the Brazilian National Cancer Institute (INCA) website to estimate the impact of perception of sun exposure in summer as well as the influence of national campaigns on the search for information about self-examination of the skin (SES).

Methods The INCA's website was selected by its popularity and volume of qualified information. We studied 4800 pages over 4 years (January 2006 to December 2009) by means of a log analyser to estimate the access to pages related to SES during institutional campaigns compared with the summer months in southern hemisphere.

Results The average number of hits in the summer months were 1037; 1609; 2275 and 2529 hits (2006 to 2009, respectively) indicating an audience below the annual average (1131; 2013; 2741; and 2827). On the other hand, there was more access to pages about SES in the months of the national campaigns (1710; 2640; 3722 and 3197 hits) surpassing the annual average.

Conclusions In Brazil, the perception of sun exposure during the summer months seems to be not sufficient to arouse great interest in the SSE. We affirm the opposite in relation to institutional campaigns, which seem to arouse more interest about skin cancer early detection on the internet.

SP2-5 DIABETES IN ASIA: A HYPOTHESIS

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^{1,2}C M Schooling,* ²G M Leung. ¹CUNY, New York, USA; ²The University of Hong Kong, Hong Kong, China

Introduction With rapid economic development, diabetes is reaching epidemic proportions in Asia, even in relatively non-obese populations. Changing lifestyles, obesity and genetics undoubtedly play a key role, however it is increasingly recognised that causes of disease may extend over generations.

Methods The developmental origins of health paradigm has focused on the health consequences of constrained pre-natal or infant growth. Here we consider the complimentary question of constrained pubertal growth. Specifically, we examined the physiological and biological consequences for long-term health of constrained pubertal growth.

Results Generations of constrained environments, common in Asian countries such as China, Indonesia or India, may increase vulnerability to diabetes, via low pubertal sex-steroids and hence low muscle mass. Furthermore, this hypothesis is consistent with the observed negative associations of diabetes with some hormonally

related cancers and the sex-specific associations of diabetes with cardiovascular diseases.

Conclusion We offer a hypothesis for conceptualising diabetes in developing populations and the aetiology of diabetes in all populations with corresponding practical and testable implications for diabetes prevention.

SP2-6 MAINTAINING LOCAL PUBLIC HEALTH IN THE GLOBAL CONTEXT: A SUSTAINABLE IMMIGRANT HEALTH SCREENING SYSTEM IN A STATE WITH AN IMMIGRANT MAJORITY

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O Harrison,* F Ahmed, FAI Hosani, A Al Mannaie. Health Authority of Abu Dhabi, Abu Dhabi, United Arab Emirates

Introduction The 1981 Ministry of Health law of United Arab Emirates mandates health screening of all immigrant residents above 18 years of age at initial visa issuance and visa renewal every 3 years. Screening is done for five communicable diseases. The Health Authority of Abu Dhabi (HAAD) which is the healthcare regulatory body is responsible for implementation of the visa screening law in the Emirate. Annually, about one million applicants including new and old immigrants undergo screening at seven certified centers in Abu Dhabi. This report discusses the improvement in the health screening process and the 2010 prevalence of HIV infection among the immigrants in Abu Dhabi.

Methodology In 2009, HAAD upgraded the visa health screening system by issuing screening standards for the delivery of efficient and standardised clinical services. Concomitantly an Oracle-based information system was established for rapid and reliable data collection and generation of real-time reports.

Results Following system upgrades, the screening capacity increased from 1500 to 5000 applicants daily and time for issuance of fitness certificate decreased from 48 h to 2 h over 2 years.

There were 935 233 applicants screened in 2010 including 56% new visa applicants and 20% females. The prevalence of HIV infection was 25 and 7 per 100 000 among the new and old immigrants respectively ($p < 0.001$).

Conclusion The Abu Dhabi immigrant health screening has improved particularly the applicant turnaround time, data availability and reliability. The process could be adopted by health systems with similar visa screening requirements.

SP2-7 PRESCRIBING OMISSIONS OF CARDIOVASCULAR RISK MANAGEMENT THERAPY IN ELDERLY PATIENTS ADMITTED TO A STROKE UNITY

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¹E Borges, ¹A F Macedo.* ¹Faculty of Health Sciences, University of Beira Interior, Covilhã, Portugal; ²Health Sciences Research Centre, University of Beira Interior, Covilhã, Portugal

Introduction Drug-related problems (DRPs) are common in elderly patients, the majority being preventable. Several criteria have been published to help clinicians identify DRPs due to inappropriate prescribing. However, few studies provide criteria to help clinicians identify underuse of medication considered beneficial. This study aimed to quantify and characterise prescribing omissions of cardiovascular risk management therapy using START (Screening Tool to Alert Doctors to the Right Treatment) criteria.

Methods A descriptive study was conducted in the Stroke Unity of Hospital Center of Cova da Beira. During 3 months the medical files of all elderly patients (age ≥ 65 years) admitted with acute cardiovascular disease were reviewed and START criteria applied to the information of medication, at admission and clinic discharge.