

Methods 400 addicts were recruited from methadone clinics in 2009–2010. A self-designed questionnaire with excellent reliability was used to determine those with and without high risk behaviours. ORs with 95% CIs were estimated by logistic regression. Ethics approval was obtained from Tehran University.

Results There was significant difference between the two study groups (with and without high risk behaviours) in economic status, drug type, administration route, age, and drug abuse onset age. Education level was significantly lower in women. One quarter experienced homeless, 62% had no support from any insurance or supportive organisations, only 26% had constant employment and over 50% had prison history. 12.5% were injection users and 14% shared syringes. One quarter reported high risk sexual behaviour and 69.4% had not used condoms in last their last sex encounter (significantly lower in women). A decrease of one year in age was associated with decreased drug use onset age and increased sexual risk behaviours by 6% (AOR=0.94, 95% CI 0.91 to 0.98) and 10% (AOR=0.91, 95% CI 0.85 to 0.97) respectively. Poor economic status reduced risk sexual behaviour (AOR=0.35, 95% CI 0.13 to 0.96). Prison history increased injection behaviour more than twice (AOR=2.89, 95% CI 1.4 to 5.95).

Conclusions These findings illustrate that interventions are needed in young heroin users even in those with a good economic state.

P2-258 EVALUATION OF THE EFFECTIVENESS OF THE PHARMACOTHERAPY FOLLOW-UP ON THE TREATMENT OF HYPERTENSIVE PATIENTS: A COHORT STUDY

doi:10.1136/jech.2011.142976j.91

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Introduction The control rate of hypertension in the population is fair. Pharmaceutical Care is a recent approach, seeking to magnify therapeutic results.

Objective To evaluate the effectiveness of the pharmacotherapy follow-up conducted by the Pharmacist on hypertension management.

Methods The study is a historical cohort with a dynamic population of patients referred to an outpatient hypertension clinic. Patients were followed for 12 months. Those difficult-to-control referred by the physician to pharmacotherapy follow-up were compared with patients under conventional treatment. Endpoints included blood pressure (BP) variation and the rate of control (<140/90 mm Hg). General Linear Model, modified Poisson Regression, and segmented regression were used in the data analysis.

Results Of 993 patients, 150 were referred for pharmacotherapy follow-up. Patients in the pharmacotherapy follow-up were older, with lower education level, longer diagnoses of hypertension and significantly higher levels of BP. The deltas of SBP were 7.4 ± 1.9 vs 10.3 ± 0.8 mm Hg ($p=0.16$) and diastolic 6.7 ± 1.0 mm Hg vs 5.9 ± 0.4 ($p=0.45$) for pharmacotherapy follow-up and conventional treatment groups, respectively, adjusted for initial pressure. The control rate was 45.3%, being 28.1% in the exposed and 48.6% in the unexposed ($p<0.001$). Comparing the BP of the same patients before and after exposure to pharmacotherapy follow-up showed a change in the trend of SBP and DBP ($p<0.001$).

Conclusion Hypertensive patient difficult-to-control under pharmacotherapy follow-up showed a reduction in BP similar to patients who received only conventional treatment. The study suggests that pharmacotherapy follow-up is effective in the management of selected hypertensive patients.

P2-259 CANCER RISK IN CHILDREN WITH BIRTH DEFECTS: A LONGITUDINAL, POPULATION-BASED ASSESSMENT AMONG 2.7 MILLION BIRTHS

doi:10.1136/jech.2011.142976j.92

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Introduction The published literature, to date, is largely inconclusive regarding cancer risk among children with birth defects. To improve knowledge of such risk, we studied population-based (statewide) birth cohorts from Arizona, Iowa, and Utah selected from among 2.7 million births delivered from 1983 to 2006.

Methods Birth defect and cancer diagnoses were identified from linked population-based surveillance systems. A population-based cohort of over 43 000 children with major birth defects (including trisomies 13, 18, and 21) was compared to a cohort of nearly 148 000 births without birth defects, randomly sampled from the same underlying birth population and frequency-matched to the birth defects cohort by birth year. Kaplan-Meier time-to-event analysis, accounting for censoring by death, was used to estimate cancer risk up to age 15 years.

Results Compared to the reference cohort, children with birth defects had a statistically significant increase in cancer risk (RR, 2.73). Risk was highest among children with Down syndrome (RR, 13.2), and was driven largely by leukaemias. Cancer risk was moderately increased among children with a birth defect but without chromosomal anomalies (RR, 1.82). In this group, cancer risk was driven largely by brain tumours and embryonal tumours, and occurred mainly in children with brain defects, cleft palate, rectal defects, and some heart defects.

Conclusion These population-based findings support and extend previous findings that suggest increased cancer risk in children with birth defects, including non-chromosomal defects, and suggest selected defect groups in which further research could help identify a common genetic susceptibility to cancer and birth defects.

P2-260 POPULATION-BASED PREVALENCE OF DUCHENNE/BECKER MUSCULAR DYSTROPHY (DBMD) IN THE USA

doi:10.1136/jech.2011.142976j.93

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Introduction DBMD has an estimated prevalence of 1/3500 male births. Worldwide, this estimate varies, likely due to differences in diagnostic criteria, ascertainment, and survival. To date, no U.S. population-based DBMD prevalence data by race/ethnicity have been published.

Methods In 2002, the Centers for Disease Control and Prevention established the MD STARnet to conduct population-based DBMD surveillance in four U.S. sites. Each site conducts active surveillance to identify males with DBMD born since January 1982. Using these data, we calculated DBMD prevalence by race/ethnic subgroups and birth intervals (1986–1990; 1991–1995; 1996–2000). Prevalence was calculated as: [number of DBMD males age 5–9 years/number of male residents, age 5–9 years]. With the average age at DBMD

diagnosis about 5 years, census data used to identify male residents per birth interval were those published for the following interval (eg, 2005 estimates used for 1996–2000 births).

Results From 1986 to 2000, 321 DBMD males resided in an MD STARnet site during one or more birth intervals, which produced a prevalence of 1/5000 residents. Race/ethnic-specific prevalence tended to be higher for Hispanics than non-Hispanic whites or African-Americans. Prevalence tended to be decreased for the most recent birth interval.

Conclusion Our results are the first U.S. population-based report of race/ethnic-specific DBMD prevalence. Expansion of MD STARnet to two additional sites will permit computing prevalence for additional race/ethnic subgroups and birth intervals.

P2-261 FACTORS ASSOCIATED WITH OVERWEIGHT IN CHILDREN: CASE STUDY IN THE SOUTHERN BRAZIL

doi:10.1136/jech.2011.142976j.94

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Excess weight in childhood is a predictor of co morbidity in adulthood. This research aimed to identify factors associated with overweight among schoolchildren. This cross-sectional study involved children of both sexes aged between six and 10.9 years of age, enrolled in 24 public and private schools in the urban region of Maringá, Paraná, southern Brazil. The collection were done in the school environment, with measurement of the weight and height defined by calculating the Body Mass Index (Cole *et al* 2000; 2007). The socioeconomic status of families was considered the guidelines of ABEP (2008). For the statistical analysis it was used the variance analysis model and the χ^2 test, considering $p < 0.05$. The total evaluation of variables was done getting adjusted to a model of Multinomial Logistic Regression considering the nutritional condition as response variable and the age, gender, socioeconomic status and Body Mass Index as explanatory variables. This project was approved by the Permanent Ethic Committee of Researches involving human beings from UEM. From 5037 schoolchildren, 53.2% were female, age range 8.7 ± 1.3 years old and 24.1% presented excess weight. Overweight children from private schools and better socio-economic conditions showed positive relation with the excess weight ($p < 0.001$) and children younger than 8 years old have more chances of being overweight ($p = 0.038$). The impact of these results accelerates the urgency of preventive actions towards overweight and its intercorrences in prececo ages.

P2-262 GREEN TEA CONSUMPTION REDUCES CANCER MORTALITY IN JAPAN: THE JICHI MEDICAL SCHOOL COHORT STUDY

doi:10.1136/jech.2011.142976j.95

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Introduction Previous studies have shown that Green tea consumption reduces colon cancer mortality and the risk of liver cancer. However, no studies have examined the association between green tea consumption and all-cancer mortality.

Methods A multi-centre population based prospective cohort study in 12 districts in Japan collected baseline data on 12 490 participants from 1992 to 1995. Individuals for whom a history of green team

consumption was missing were excluded as were individuals with a past history of any cancer, myocardial infarction and stroke. Green tea consumption was measured using self-report questionnaires. Date and cause of death were determined by death certificates review. Data were analysed using Cox proportional hazards modelling.

Results In total 10 197 Japanese adults aged 40–89 years old, 3936 men and 6261 women, were included in the study. Over 11.9 years of follow-up 887 individuals died; 352 from cancer. In men, the hazard of all-cancer mortality relative to those who reported drinking < 1 cup/day of green tea was 0.50 (95% CI 0.27 to 0.93) for 1–2 cups/day, 0.75 (0.46 to 1.21) for 3–4 cups/day, 0.61 (0.38 to 0.99) for ≥ 5 cups/day, respectively ($p = 0.22$ for trend). Corresponding values in women were 0.60 (0.29 to 1.20), 0.59 (0.34 to 1.02), 0.48 (0.27 to 0.84), respectively ($p = 0.02$ for trend).

Conclusion Green tea consumption is associated with a reduced hazard of all-cancer mortality.

P2-263 EPIDEMIOLOGY OF CHRONIC RENAL FAILURE AMONG ADMITTED PATIENTS TO THE MILITARY HOSPITAL, TAIZ (YEMEN)

doi:10.1136/jech.2011.142976j.96

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Objective This study was conducted with the principal objective of contributing to the study of the problem of renal failure in Yemen and the factors related to it.

Material and Methods All the files of the patients diagnosed as chronic renal failure being admitted to the military hospital in Taiz Governorate (Yemen) for haemodialysis during the period June–Nov 2010 representing 99 cases from Taiz, Ibb and Hodeidah Governorates were systematic reviewed and statistically analysed using simple percentage.

Results The results showed that the males were affected more than females with a ratio of 6:4 with a peak incidence group above 40 years for both sex, and most of the admitted patients were farmers being all chat chewers (70%). Malaria was reported among 30% of the admitted patients while another 30% of them were having a history of renal paranchymal diseases several years before. Death was reported in 27% of the cases and the outcome was unknown in most of the patients.

Conclusions High number of cases were reported in the last years in different governorates of Yemen which could be regarded as an alarming situation.

Recommendations An urgent need for further studies to explore deeply the associated factors to this problem for possible interventions actions to control it as well as improving the facilities for renal dialysis in different hospitals.

P2-264 POTENTIAL LIVES SAVED BY CHRONIC DISEASE PREVENTION AND CONTROL IN LATIN AMERICA AND THE CARIBBEAN

doi:10.1136/jech.2011.142976j.97

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Introduction Chronic noncommunicable diseases are the major cause of death and disability in all regions of the world, with the exception of sub Saharan Africa, with particularly high levels in parts of the Caribbean and Latin America (LAC). The WHO has shown conservatively that a 2% reduction per year for 10 years in mortality from chronic noncommunicable diseases is achievable from a combination of population wide measures and targeting individuals at high risk. Our aim was to inform public health priority setting