Conclusions Risk factors for prediabetes are the same as those for T2DM, this findings suggest that common pathophysiological basis underlies the two diseases.

P2-393 CARDIOVASCULAR AND DIABETES RISK IN PERSONS WITH EARLY GLUCOSE METABOLISM IMPAIRMENTS

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T Dzebisashvili.* *Moscow Regional Research Clinical Institute named by M.F.Vladimirskiy, Moscow, Russia*

Aim To assess RR of type 2 diabetes (T2DM), overall and acute cardiovascular mortality and cardiovascular events in persons with impaired fasting glucose (IFG) and impaired glucose tolerance (IGT).

Materials and Methods According to population based study among 2508 adults, 3-year risk of T2DM, overall and acute cardiovascular mortality and cardiovascular events (myocardial infarction and stroke, coronary heart disease) was estimated in people with IFG, IGT, IFG+IGT diagnosed in 2006 in comparison with normal glucose tolerance. RR and regression coefficient (B) was calculated. RR of T2DM, cardiovascular events was adjusted for age, sex, BMI, systolic blood pressure, smoking.

Results Highest percent of transformation to T2DM and adjusted RR of T2DM was in IFG+IGT (33.3% and 11.2 [3.93–31.65], $p<0.01$). Lowest percent of transformation to T2D and RR of T2DM was in isolated IGT (10.3% and 3.92 [1.11–13.90], $p=0.034$). Adjusted RR of cardiovascular mortality was significantly 3.2-fold higher in IFG. IGT and newly diagnosed T2D had significantly 3.6-fold and 2.3-fold greater risk of overall mortality. RR of cardiovascular events was significantly increased 2.2-fold in IFG and 2.7-fold in newly diagnosed T2D. There was not linear association between blood glucose levels and cardiovascular mortality risk ($p=0.095$) in contrast to the continuous linear relationship observed between blood glucose levels and coronary heart disease risk $B=0.273$ ($p=0.001$).

Conclusion 3-year risk of developing T2DM is not equal at different early glucose metabolism impairments. IFG increased 3-year risk of acute cardiovascular mortality. These may provide insights, that hyperinsulinemia influence on acute cardiovascular mortality risk.

P2-394 INFECTION CONTROL PRACTICES AT THE MINISTRY OF HEALTH DENTAL CLINICS IN ALEXANDRIA

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¹N El-Nimr,* ¹A Hasab, ¹M Arafa, ²M A Salam, ¹M Shama. ¹*High Institute of Public Health, Alexandria, Egypt;* ²*Faculty of Dentistry, Alexandria, Egypt*

Introduction Infection control (IC) is a priority consideration in dentistry. Dental procedures are done in a septic environment posing significant hazards to dentists and patients. The Aim was to assess the dentists' IC practices at the MOH dental clinics.

Methods A cross-sectional design was used and the researcher visited 29 dental care facilities, selected randomly from Alexandria seven health districts. Two data collection tools included: 1- An IC checklist to study the six IC practices. Two data collection tools included: 1- An observational IC checklist to study the six IC practices (232 observation for each practice). 2- Dental clinic checklist. The score percent was calculated for each observation.

Results Gloves and masks were the most commonly available personal protective equipment. Handwashing sinks were not dedicated for handwashing. Dry heat ovens were the most commonly used sterilisation device. In only 4.3% and 32% of the observations, hand hygiene was performed before donning and after removal of gloves respectively. In 81%, new pairs were used for each patient. In about one-quarter of the observations the dentists moved

away from the dental unit and touched other environmental surfaces while donning gloves. In almost all observations, used needles were discarded in the sharp container. The one hand scoop technique was used for recapping needles in about 34% of the observations. The environmental surfaces were neither wrapped nor disinfected in 78% of the observations.

Conclusion Most IC resources at the MOH dental clinics were available. The dentists' compliance with certain IC practices was found to be not satisfactory.

P2-395 SOCIOECONOMIC INFLUENCES AT DIFFERENT LIFE STAGES ON SELF-RATED HEALTH IN GUANGZHOU, CHINA

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¹T Elwell-Sutton,* ²C Q Jiang, ²W S Zhang, ³K K Cheng, ¹T H Lam, ¹G Leung, ¹C Mary Schooling. ¹*School of Public Health, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong;* ²*Guangzhou Occupational Diseases Prevention and Treatment Centre, Guangzhou Number 12 Hospital, Guangzhou, China;* ³*Department of Public Health and Epidemiology, University of Birmingham, Birmingham, UK*

Introduction In long-term developed countries socioeconomic position across the life course is positively associated with health. We examined these associations in a developing country with a history of efforts to reorganise social hierarchy.

Methods Taking a life course perspective, we used multivariable logistic regression to analyse the association of socioeconomic disadvantage at four life stages (measured by parental possessions, education, longest-held occupation and current household income) with self-rated health in 19 203 Chinese adults aged ≥ 50 years from the Guangzhou Biobank Cohort Study (2005–2008). Model comparisons were used to determine whether the number of exposures to disadvantage (accumulation of risk) was more important than the life stage of exposure (critical periods).

Results Among men and women, socioeconomic disadvantage in childhood and currently was associated with poor health, as was disadvantage in early adulthood for men. Adjusting for adult health-related behaviour (smoking, alcohol use and physical exercise) altered these associations very little.

Conclusion Associations between socioeconomic disadvantage and health in this Southern Chinese population were broadly similar to those found in Western countries in terms of the accumulation of disadvantage across the life course. However, there were also important differences. In particular, occupation (in both sexes) and education (in women) were not independently associated with adult health. This suggests that the mechanisms linking socioeconomic position to health in China may be different from those in Western populations.

P2-396 KAP ON ANAEMIA RELATED ISSUES AMONG THE ADOLESCENT GIRLS IN RURAL BANGLADESH: ANALYSIS AFTER A COMMUNITY BASED INTERVENTION

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¹D Farhana,* ¹S H Talukder, ¹S H Khan, ¹S Haque, ²Z Mahmud. ¹*Eminence, Dhaka, Bangladesh;* ²*MI, Dhaka, Bangladesh*

Introduction In Bangladesh a large population, especially adolescent girls are vulnerable to Iron Deficiency Anaemia (IDA). Around 3.9 million adolescent girls are affected by IDA. Thus, Eminence in collaboration with Micronutrient Initiative (MI) had piloted a project in rural context to improve KAP among them and reduce prevalence of anaemia.

Methods Total 600 adolescent's girls aged 16–19 years from five unions in northern part of Bangladesh were interviewed and follow-up them after supplementing Iron Folate Tablets and behaviour

change intervention by community volunteers for 12 months. A baseline, midterm and follow-up study were carried out during entire period of this intervention.

Results After 1 year of community based intervention, knowledge on iron richer food increased and causes of anaemia decreased from 62.9% to 82.2% and 86.1% to 71.5% respectively. Knowledge on symptoms and ways to prevent anaemia has also increased. It was found that more than two third (78.7%) of participants has the knowledge on number of iron tablets required per month. After the intervention ended around 16.7% adolescents were taking iron tablet regularly meanwhile when iron folate supplementation was distributed free of cost and after that when it was sold door to door by the Community Volunteers (CVs) the rate was 94% and 28.5% respectively.

Conclusions Despite of the knowledge and positive attitude towards taking iron tablets, practice is not quite satisfactory, which might be due to nature of consumer and psychological behaviour along with inaccessibility of pharmacy is far away from the villages.

P2-397 COLD SPELLS AND ASTHMA HOSPITALISATION IN NEW YORK STATE, USA: 1991–2006

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¹E Fitzgerald,* ²C Pantea, ^{1,2}S Lin. ¹University at Albany, School of Public Health, Rensselaer, New York, USA; ²New York State Department of Health, Center for Environmental Health, Troy, New York, USA

Introduction To help assess morbidity associated with cold spells, a study was conducted of cold temperature and asthma hospitalisations in New York State, USA.

Methods All hospital discharges among New York State residents with a diagnosis of asthma from November 1 to April 30 were obtained for 1991 to 2006. Temperatures were collected from stations in 13 weather regions in New York State. Universal Apparent Temperature was used to take into account wind speed and humidity, and a cold spell as defined as three consecutive days with a mean Universal Apparent Temperature <the monthly 10th percentile for each region. Percent change in asthma hospitalisation during and up to 4 days after each cold spell was evaluated using time series with Generalised Additive Models adjusting for temporal trends.

Results On a statewide basis, the results indicated that asthma hospitalisations decreased during cold spells for December through March by 4.84% (95% CI –7.70 to –1.89). After cold spells, there was no change in the asthma hospitalisations for December through March, but hospitalisations increased in November (9.98%, 95% CI 5.84 to 14.27) and April (4.99%, 95% CI 1.18 and 8.94). The point estimates for the winter decrease and the November/April increase were greatest for the colder regions.

Conclusion The findings suggest that asthmatics may have difficulty acclimating to cold during the transitional months immediately before and after winter; in contrast, during a winter cold spell they may spend more time indoors, thereby preventing exacerbations.

P2-398 FACTORS ASSOCIATED WITH MULTI-DRUG RESISTANT TUBERCULOSIS IN BANGLADESH

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¹M S Flora,* ¹M Nurul Amin, ¹M R Karim, ²S Afroze, ¹S Islam, ¹M Ashraf Alam, ¹M Motahar Hossain. ¹National Institute of Preventive and Social Medicine (NIPSOM), Dhaka, Bangladesh; ²Northern Medical College, Dhaka, Bangladesh

Introduction Despite success in tuberculosis control, multi-drug resistance tuberculosis (MDR-TB) in Bangladesh is increasing and

currently MDR-TB rate is 3.6% in new cases and 19% in re-treatment cases. This study focused determination of environmental and host factors of MDR-TB which is warranted for effective prevention strategy.

Methods A case control study was conducted between January and August 2010. Purposively recruited 136 culture-proved MDR-TB cases and 152 cured TB patients were interviewed and 10 cc of blood samples were taken. Associations between exposure and outcome variables were initially tested by χ^2 -test, t-test, ANOVA. A result was considered significant at p value <0.05. Effects of exposure variables were also assessed after adjusting for other variables by binary logistic regression models. Crude and adjusted OR with 95% CI was computed.

Results Younger age (p=0.008), peri-urban locality (p=0.002) associated with MDR-TB. History of contact (p<0.001) and tuberculosis in the past (p<0.001) were four and eight times, respectively, more likely to influence MDR-TB. Regularity [OR 0.05; 95% CI (0.01 to 0.39)] and always observation of treatment [OR 0.25; 95% CI (0.10 to 0.61)], sputum conversion [OR 0.02; 95% CI (0.01 to 0.08)] negatively associated with MDR-TB. Gender, socio-economic status and overcrowding did not show any influence. None was HIV positive, but its risk factors were more common in MDR-TB cases. Sputum conversion was the best predictor.

Conclusion Like other developing countries previous treatment status is the most important exposure variable. Strengthening of control activities might contribute in preventing development of resistance in tuberculosis patients.

P2-399 WITHDRAWN

P2-400 WITHDRAWN

P2-401 EFFECT OF THE AGE, GENDER AND DAY OF THE WEEK ON ULTRA-PROCESSED FOOD CONSUMPTION

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^{1,2}S C Fuchs,* ¹S L Rossato, ^{1,2}L B Moreira, ¹R L Henn, ²F D Fuchs. ¹Postgraduate Studies Program in Epidemiology, Universidade Federal do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil; ²Hospital de Clinicas de Porto Alegre, Porto Alegre, Rio Grande do Sul, Brazil

Introduction The consumption of the ultra-processed food items has emerged as a concern in public health.

Objective To assess the effect of gender, age and day of the week on consumption of ultra-processed food items among adolescents and adults from southern Brazil.

Methods A cross-sectional study investigated a population-based sample of 234 individuals, aged 11–90 years. Dietary data was obtained by 24-h recall. The food items were aggregated according to the level of processing as minimally (group 1), culinary or industry (group 2), and ultra-processed foods (group 3). The days of the week were categorised in weekend (Saturday and Sunday), beginning (Monday and Tuesday) and middle of the week (Thursday and Friday). The analysis was based on Generalised Estimated Equation (GEE).

Results Women consumed food items on average of 2.71 and men 3.22 times per day (p=0.007). The positive effect of age was observed for all processed foods. The number of food items of group 1 consumed for adolescents was 60% lower than for older individuals. On the other hand, adolescents consumed 40% more ultra-processed foods than older adults (p<0.001). Food items of group 3 were more consumed in the middle of the week (4.86 times per day; p=0.040) and by adolescents.

Conclusion The results show that ultra-processed foods consumed on weekends and by adolescents were an important problem of public health.