

Conclusion This study indicated that Ca level in breast milk might be associated with the underweight at 6 months old in rural Bangladesh.

P2-389 USE OF HEALTHCARE IN A SOCIAL NETWORK OF MEN WHO HAVE SEX WITH MEN IN BRAZIL

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¹S Brignol, ¹I Dourado, *²M Mello, ²A Pinho, ³L Kerr. ¹Public Health Institute, Federal University of Bahia, Salvador, Bahia, Brazil; ²Fiocruz Foundation, Ministry of Health, Rio de Janeiro, Rio de Janeiro, Brazil; ³Medical School, Federal University of Ceara, Fortaleza, Ceara, Brazil

Introduction It is known that men access health services less frequently than women. According to WHO it is even less frequent among men who have sex with men (MSM) which increases the vulnerability of this group to HIV/AIDS and other STD.

Methods To describe the use of healthcare on HIV/STD among MSM, data were collected using respondent driven sampling as part of the baseline of the Brazilian behavioural and serologic surveillance survey of 3859 MSM in 10 cities in 2009. The analyses, conducted with 383 MSM from a major capital city-Salvador, Northeast Brazil, used a complex network theory, specifically two-mode networks with bipartite graph, classic statistics analysis of networks and projection.

Results Among the participants, 57% referred to have access to general health services, with 55% of them having had at least one medical appointment within the past 2 years. Over half (56%) did not know where to go for an HIV test; and 44% had an HIV test in the past year. Among those, 23% tested in a public health clinic, and 64% were given free condoms on the same facilities.

Conclusion To improve access to healthcare and to HIV testing among MSM is crucial to tackle the epidemic in Brazil, especially with the high HIV prevalence (12.6%) reported in the country among this population group.

P2-390 CARDIOVASCULAR AND DIABETES RISK IN PERSONS WITH PREDIABETES

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T Dzebisashvili.* Moscow Regional Research Clinical Institute, 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, the 3-year risk of T2DM, overall and acute cardiovascular mortality and cardiovascular events (fatal and nonfatal myocardial infarction and stroke, coronary heart disease) was estimated in people with glucose metabolism abnormalities (GMA): IFG, IGT, IFG+IGT diagnosed in 2006 in comparison with normal glucose tolerance. RR and regression coefficient (B) was calculated using Cox-regression analysis. RR of T2DM, cardiovascular events was adjusted for age, sex, BMI, systolic blood pressure (SBP), smoking.

Results Highest adjusted RR of T2DM were in IFG+IGT (11.2 [3.93–31.65], $p<0.01$). Lowest RR of T2DM were in isolated IGT (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 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 T2DM is not equal at different early GMA: highest one—in IFG+IGT, lowest—in isolated IGT. IFG increased 3-year risk of acute cardiovascular mortality. There was not linear association between blood glucose levels and cardiovascular mortality risk.

P2-391 HBA1C FOR DIABETES MELLITUS DIAGNOSIS

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T Dzebisashvili.* Moscow Regional Research Clinical Institute named, Moscow, Russia

Aims To evaluate diagnostic strategy with OGTT and/or HbA1c for lowing number of people with undiagnosed T2DM.

Materials and Methods Population-based screening for glucose metabolism impairments (GMI) among 661 adults in Moscow Country was conducted in 2009. HbA1c was determined in 39 subjects with GMI.

Results Based on OGTT and HbA1c, 6 and 11 people had T2DM; 33 and 23 people had prediabetes. Mean HbA1c (SD) was 7.9 (2.8) for T2DM, 6.0 (0.5) for IGT and 5.8 (0.7) for IFG and 6.5 (0.5) for IGT+IFG. The sensitivity/specificity (Sn/Sp) of HbA1c >6.5 for T2DM were 66%/78%, Sn/Sp of HbA1c $>5.7-6.4\%$ for IGT were 68%/64%, for IFG were 50%/42% and for IGT+IFG were 50%/42%. Using Roc curve analysis, the single optimal HbA1c cut-point for detecting T2DM was $>6.0\%$, (Sn/Sp: 50%/100%), for IFG was $<5.0\%$ (Sn/Sp: 50%/100%) in normal weight (BMI 18–25) individuals. RR of T2DM was 7 (1.18–42.9) with HbA1c values 6.0–6.4% and $>6.5\%$, than those with <6.0 in normal weight individuals. 33.0% of undiagnosed T2DM had HbA1c levels $<6.5\%$ (95% CI 0% to 71%) and 17% of people with T2DM had HbA1c levels $<6.0\%$.

Conclusion OGTT and HbA1c are both relevant diagnostic criteria for dysglycemia as they correlate with the risk for developing T2DM. Choosing the HbA1c strategy rather than the OGTT strategy leads to diagnose more diabetes, although the consistency of both diagnostic criteria is low. The optimal HbA1c cut-point to detect T2DM was lower than HbA1c of 6.5% in normal weight individuals.

P2-392 RISK FACTORS FOR DIABETES AND PREDIABETES

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T Dzebisashvili.* Moscow regional research clinical institute of M.F.Vladimirsky, Moscow, Russia

Aim To estimate risk factors for developing type 2 diabetes (T2D), impaired glucose tolerance (IGT), impaired fasting glucose (IFG) and combination IGT+IFG.

Material and Methods A population-based screening for glucose metabolism impairments using standard 2-h OGTT among 2508 adults in Moscow County was conducted. BMI, waist circumference (WC), systolic and diastolic blood pressure were estimated. Lipids (total, LDL, fasting triglycerides (TG)) measurements were performed among 661 persons. Also participants fill forms about other risk factors. RR of T2D, IFG, IGT and unstandardised regression coefficient (B) was calculated using Cox-regression analysis SPSS V.13.0 (adjusted for BMI and age). RR was considered significant if confidential interval was not included 1 and $p\leq 0.05$.

Results Risk factors for T2DM and prediabetes was age, BMI, systolic blood pressure. Also risk factors for T2DM was ischaemic heart disease, family history of diabetes, alcohol consumption, diastolic blood pressure (DBP), waist circumference (WS), raised triglycerides, reduced smoking ($B=-0.374$, $p=0.032$). Risk factors for IGT was DBP, oral contraceptives. Risk factors only for IFG was physical inactivity, gender. Risk factors for IGT+IFG was budget, DBP, WS in men.

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