

P2-316 ADULT HEIGHT IN RELATION TO CANCER MORTALITY IN THE EUROPEAN PROSPECTIVE INVESTIGATION INTO CANCER AND NUTRITION (EPIC) COHORT

doi:10.1136/jech.2011.142976k.49

P Wark,* T Norat, E Riboli, on behalf of the EPIC investigators. *Imperial College London, School of Public Health, London, UK*

Introduction Adult height is a marker for genetic factors as well as for environmental, hormonal and nutritional factors occurring early in life. Evidence so far suggests that taller people are more likely to be diagnosed and die from cancer than shorter people, which we verify in a large multicentre prospective cohort study.

Methods Within the European Prospective Investigation into Cancer and Nutrition (EPIC), standing height was measured in adults (216280 women and 131544 men) from nine countries between 1991 and 1999. Within the follow-up period that comprised 9.8 years on average, 2716 men and 2692 women died of cancer. HRs of cancer mortality according to height were estimated from Cox proportional hazard models adjusted for smoking status, educational level, alcohol consumption, physical activity, weight and waist circumference.

Results Preliminary analyses showed that cancer mortality rates were higher among taller than among shorter men and women. Among men, a 6% increase in the hazard rate was observed for every 5 cm increase in height (HR=1.06, 95% CI 1.03 to 1.10). A very similar increase was seen in women (HR=1.06, 95% CI 1.02 to 1.10).

Conclusions These initial findings suggest that factors leading to higher attained adult height or its consequences affect cancer mortality rates in Europeans. Further work will include analyses on cancer incidence and site-specific risks. Our observations do not have direct implications for cancer prevention but could point to underlying mechanisms and thereby trigger further research. The latter may lead to public health interventions on the long term.

P2-317 UTILISING MOBILE HEALTH TO COLLECT EPIDEMIOLOGICAL DATA AND SUPPORT CLINICAL CARE FOR CHRONIC DISEASES; CASE PRESENTATION

doi:10.1136/jech.2011.142976k.50

J Wawira.* *Moi University, Eldoret, Kenya*

Introduction Mental healthcare remains a challenge in developing countries due to associated stigma, lack of specialists and facilities; and misdiagnosis of such illnesses. This results in inadequate care of patients with increased morbidity and mortality and high cost of care. The chronic nature of mental illnesses makes the little available care insufficient with loss of follow-up. As a result, it is difficult to specifically determine the epidemiology of mental illnesses worsening delivery of mental care. This abstract describes a project that utilises mobile health and OpenMRS to develop a community based treatment and data collection tool for mental healthcare.

Methodology A mental health project was developed based on OpenMRS to be used in rural Kenya and Ghana. The mobile component is based on ODK running on android phones and used by community health workers (CHW) to undertake rural data collection and care. The CHW perform daily visits to patients at designated health delivery sites and the psychiatrist reviews data collection to assess clinical decisions made.

Results Using clinical data algorithms to aid diagnosis and epidemiological studies on various mental health illnesses, the ratio of access to mental care was increased. There was reduced dropout rates from the program thus supporting long term care that characterises the chronic nature of mental illnesses.

Conclusion Mobile health and ehealth technologies provide a platform for continued collection of epidemiological data while supporting clinical care by merging clinicians and CHW roles. This is crucial in developing countries with few health workers.

P2-318 LONG-TERM (5–10 YRS) RESULTS OF BALLOON MITRAL COMMISSUROTOMY FOR RHEUMATIC MITRAL STENOSIS

doi:10.1136/jech.2011.142976k.51

¹Y P Devi,* ²P N S Haritha, ³D Rajasekhar, ³G Subramanyam, ³P Vanajakshamma, ³V Kumar, ³N reddy, ³P K Rao. *¹Kakatiya University, Warangal, India; ²Jawaharlal Nehru Technological University, Hyderabad, India; ³SVIMS, Tirupati, India*

Introduction Percutaneous mitral commissurotomy (PTMC) has been known as an effective therapeutic modality for moderate to severe mitral stenosis. However, long-term results and factors influencing late outcome after PTMC remain to be elucidated.

Methods Retrospective study of symptomatic severe MS patients who underwent PTMC from 1994 to 1999 in our cardiology unit to evaluate the immediate and long term echocardiographic results of PTMC in 158 patients was conducted. We did transthoracic and transoesophageal echocardiographic study of all symptomatic severe mitral stenosis patients. Those patients who underwent PTMC were selected for the study.

Results Males constituted 31% and Females were 68% of total patient population. The mean age of patients was 31.09±9.7 years. Peak mitral valve gradients increased from 8.9 mm Hg±4.3 at day one to 14.6 mm Hg±9.8 and 18.5±8.2 at 5 years and 10 years respectively. Mean MVG was 4.7±2.4 mm Hg on day one and 9.18±5.62 and 11.8±6.66 at 5 and 10 years respectively. All patients in AF were above 40Yrs. Successful PTMC was done in 94.89%. Acute complications were anterior leaflet tear, cardiac tamponade. Mortality immediately after PTMC (1- during MVR), at 10 yrs (3 - one case secondary to severe MR, one patient stroke related, one patient no cardiac cause). Emergency MVR was done in two patients. Failed PTMC was present in five cases; CMV was done in those cases.

Conclusion Restenosis after 10-year follow-up after successful PTMC, was influenced more by Pre PTMC LA size, mitral valve area, subvalvular fusion than on immediate post PTMC parameters.

P2-319 CORD BLOOD VITAMIN D LEVELS ARE ASSOCIATED WITH EARLY LIFE ATOPIC DERMATITIS

doi:10.1136/jech.2011.142976k.52

¹G Wegienka,* ¹S Havstad, ²D Ownby, ¹E Zoratti, ¹C C Johnson. *¹Henry Ford Hospital, Detroit, Michigan, USA; ²Medical College of Georgia, Augusta, Augusta, USA*

Introduction Vitamin D deficiency (25-hydroxyvitamin D [25(OH)D]<50 nmol/l) is epidemic in many regions. Recent evidence indicates a possible association between low vitamin D levels and early life allergic disease.

Methods We examined the relationship between cord blood 25(OH)D and atopic dermatitis (AD) in the first 2 years of life in our birth cohort of children born to a predominantly African American population (67.7%) of mothers. Pregnant women living in Detroit, Michigan, USA, and its suburbs were enrolled and their children underwent a standardised physician exam at age 2 years. AD was evaluated by trained physicians.