

Methods We searched the literature for documents from the relevant organisations, and communicated with officials involved in the eradication efforts.

Results Some of the major lessons we identified for successful eradication efforts in this country were:

- ▶ Having a clear goal of achieving eradication.
- ▶ The disease/vector ecology and the points of intervention.
- ▶ Having effective tools available to achieve eradication
- ▶ Multidisciplinary funding from, and collaboration across, government agencies (agricultural, biosecurity, health) especially for hydatids control and SSM eradication.
- ▶ Having well-planned and well-resourced campaigns that could continue for 10+ years.
- ▶ Having detailed surveillance systems to guide refinements of eradication efforts and to confirm success.

Conclusions New Zealand has been able to eradicate some zoonotic diseases and exotic disease vectors with well-designed campaigns. Lessons from such control efforts may be relevant to other countries (especially island nations) to protect human health, animal health and ecosystem health. Such tools, skills and collaborative efforts will be useful in facing the challenges of the future such as disease and vector eradication in the face of climate change.

P1-371 WHAT'S POLITICS GOT TO DO WITH GLOBAL HEALTHCARE? A MULTILEVEL EXAMINATION OF INDIVIDUAL-PATIENT REPORTS OF HEALTH SYSTEM RESPONSIVENESS IN 45 LOW, MIDDLE AND HIGH INCOME

doi:10.1136/jech.2011.142976f.63

¹M Witvliet, ¹A Kunst, ¹K Stronks, ²T Mahapatra, ²C A Thompson, ^{1,2}O A Arah. ¹Academic Medical Center (AMC), University of Amsterdam, Department of Public Health, Amsterdam, The Netherlands; ²UCLA School of Public Health, Los Angeles, California, USA

Introduction Patient responsiveness, often measured as patient experiences of healthcare, is a core dimension of health system functioning. Seldom is this investigated globally, with little known about the influence of politics on how different national systems are responsive to their patients. Therefore, we investigate (1) the associations between patient responsiveness and political factors, and (2) the extent to which health system inputs and outputs might further explain associations.

Methods World Health Survey data were analysed in 45 countries (n=195 891). Main outcomes included eight responsiveness indicators for both in-and out-patient experiences. Multilevel linear regression was used to assess associations of individual patients' responsiveness with policy metrics (ie, civil liberties, political rights), general development (ie, per capita GDP and female literacy), health system inputs (ie, health spending and human resource capital), and health system outputs, measured by maternal mortality. We also adjusted for individual-level socioeconomic factors.

Results Political factors are associated with patient responsiveness. Measured on a 0–5 scale, political rights are more positively related to patient responsiveness than civil liberties. For example, betas and SE show that an increase in political rights indicates a 0.05 (SE 0.04) increase in attention, and a 0.02 (SE 0.05) increase in autonomy and choice, respectively. Associations with political factors are not greatly modified by general development indicators, nor by health system input or output.

Conclusion The manner in which a country is organised politically influences patient responsiveness. Strengthening a country's political infrastructure, might improve patient responsiveness, which may enhance health system functioning.

P1-372 AN AGE-PERIOD-COHORT ANALYSIS OF MORTALITY ASSOCIATED WITH BACTERIAL DISEASES IN HONG KONG

doi:10.1136/jech.2011.142976f.64

I O L Wong,* B J Cowling, G M Leung, C M Schooling. *School of Public Health, The University of Hong Kong, Hong Kong SAR, Hong Kong*

Introduction We aim to investigate longitudinal trends in bacterial disease related mortality in HK in order to describe how socio-economic transition affects mortality due to infections and to provide generalised aetiological insights. We use one of the major bacterial disease related death, septicaemia, as an exemplar.

Methods We used local data on mortality due to septicaemia and mid-year population figures (1976–2005). We fitted Poisson age-period-cohort models on the age, period and cohort effects. We also looked for any possible difference in age, cohort or period effects by sex assessed from the model fit using the deviance information criterion (DIC).

Results Septicaemia-related deaths increased exponentially with age in both sexes, while there was a down turn in the period effects in both sexes (peaked in the 1991–1995 for females, and in the 1986–1990 for males). The birth cohort curves mainly had downward inflections in both sexes, however there was a steeper deceleration in women after 1945s, which was confirmed by the model fit as shown by the DIC.

Conclusion Sex difference in birth cohort effects might reflect changes which affect mortality risk due to septicaemia in a given birth cohort throughout their lifetime. The observed changes could be living conditions of the individual at different stages in life, and better immunity against bacteria in women born in HK but not in men. It is compatible with our hypothesis that the gonadotropic axis upregulation with better early living conditions enhance immunity in women but not men.

P1-373 USING EPIDEMIOLOGICAL DATA TO INFORM SERVICE PLANNING: A LESSON FROM THE SCOTTISH HOME OXYGEN SERVICE

doi:10.1136/jech.2011.142976f.65

R Wood,* I Grant, M Bain. *NHS National Services Scotland, Edinburgh, UK*

Introduction Increasing demand for home oxygen in Scotland has resulted in a shortfall in the budget for this service. In 2009, discussions began to identify financial solutions. There was a lack of understanding about what was driving increasing demand and an assumption that this reflected inappropriate over-provision. A national home oxygen needs assessment was undertaken. This considered the epidemiology of underlying conditions to examine this assumption and contribute to planning.

Methods Analysis of routinely available data to examine the epidemiology of four conditions underlying home oxygen use: chronic neonatal lung disease, cystic fibrosis, chronic interstitial lung disease, and chronic obstructive pulmonary disease. Trends in risk factors, disease incidence, prevalence and mortality, and hospital admissions were examined.

Results The prevalence of all the conditions studied has increased in Scotland over recent years due to increased incidence, increased survival, more active case finding, and/or demographic changes. Trends towards considerably shorter hospital stays and hence more community based care were noted.

Conclusions The need for home oxygen is likely to continue to increase over coming years. It will encompass all age groups and a complex range of conditions. Initial planning assumptions anticipating reducing demand for home oxygen were unsound and adjusted accordingly. Routine data, particularly in linked format, is

fit for purpose in examining the epidemiology of specific conditions and contributing to planning decisions. Public health needs to be proactive in providing relevant needs assessment information to ensure that planning within financial constraints is appropriately informed by population needs.

P1-374 QUALITY OF LIFE OF ADULTS AND ASSOCIATED FACTORS, BRAZIL

doi:10.1136/jech.2011.142976f.66

¹F Floriano,* ¹M da C Costa, ²M I Vianna, ²M B Cabral, ¹G Santos, ²M dos Santos, ³M R Santos. ¹ISC-UFBA, SSA, Bahia, Brazil; ²FO-UFBA, SSA, Bahia, Brazil; ³UCSAL, SSA, Bahia, Brazil

Introduction The objective of this study was to assess quality of life (QoL) among adults in Salvador-Bahia, Brazil, and identify potential factors related to its domains.

Methods Cross-sectional study in 501 adults between 35 and 59 years, living in five different areas covered by the Community Health Agents Program/Family Health Strategy (CHAP/FHS), from July to October, 2008. Data were collected through interview using a questionnaire including social-economic variables and oral health status and the WHO Quality of Life questionnaire (WHOQOL-Bref) validated in Brazilian population to measure QoL. Descriptive and exploratory analyses were carried out and differences in scores were tested by Mann-Whitney and Kruskal-Wallis tests.

Results Mean scores of WHOQOL-Bref were 58.5 ± 19.8 and 59.0 ± 27.3 to the general issues of quality of life and satisfaction with health, respectively. The social relationships domain had the highest mean scores (69.3 ± 18.4) and the environment domain had the lowest mean scores (49.8 ± 14.5). The WHOQOL-Bref domains showed that QoL is perceived better by male, having the highest mean scores (71.8 ± 12.8) on the psychological domain and the lowest mean scores (53.8 ± 13.1) on the environmental domain. Variables predicted for QoL were: years of education, monthly individual income, treated water at home and mucosal damage.

Conclusions Evaluate QoL is very important for adult and it showed associated with current social-economic conditions and with oral health status. WHOQOL-Bref proved to be an efficient tool and useful for a better evaluation approach of the subjective aspects of QoL.

P1-375 MELANOMA IN SWITZERLAND: AN UNMET NEED FOR PREVENTION?

doi:10.1136/jech.2011.142976f.67

N Wyss,* E Roy. Office fédéral de la statistique, Neuchâtel, Switzerland

Introduction Cutaneous malignant melanoma incidence rate has been increasing in Caucasian populations in the last decades. This trend is also observed in Switzerland where one of the highest incidence rates in the world is registered. This paper examines time trends in incidence, mortality and prevention practices in Switzerland over the last decades.

Methods Epidemiological data from 1983 to 2007 is based on the cantonal cancer registries and the Federal Statistical Office's (FSO) Cause of Death Statistics. Scientific publications are used to put Switzerland's data into an international context and to discuss risk factors and prevention measures. The Swiss Health Survey of the FSO, conducted in 1997, 2002 and 2007, assesses prevention in Switzerland by two questions: One about the use of sun protection and the second on skin examination frequency.

Results For the period 2003–2007, Switzerland's incidence rate of melanoma was of 22.3 and 20.8 per 100 000 inhabitants respectively

among men and women. Incidence and mortality trends over the last 25 years are analysed by gender, age, birth cohort and region to identify particularly affected groups. Statistical information about primary prevention shows altogether little alteration in sun protection habits. Secondary prevention (screening) has increased from 2002 to 2007 and shows important variation by educational level.

Conclusion Differences in prevention practice by socio-demographic characteristics indicate that prevention activities have had a variable impact on different population groups. Prevention measures could be more focused. More detailed statistical data on prevention practices would allow a better evaluation of prevention in Switzerland.

P1-376 IMPACT ASSESSMENT OF ICDS FOOD FORTIFICATION IN THE STATE OF UTTAR-PRADESH, INDIA

doi:10.1136/jech.2011.142976f.68

¹R J Yadav,* ²P Singh, ³A Nigam, ¹A Pandey, ⁴D Gulati. ¹National Institute of Medical Statistics, Indian Council of Medical Research, New Delhi, India; ²Ex. Indian Council of Medical Research, New Delhi, India; ³IASDS, Lucknow, India; ⁴World Food Programme, New Delhi, India

Objective We planned to assess the impact of fortified food through a community based research study of children aged 12–59 months in Uttar Pradesh.

Methods We used a quasi experimental design in Kanpur dehat district where fortified food was to be initiated. Sample size calculation required 750 participants. 30 villages (matched for socio-economic and demographic factors) from each block (intervention, control and benchmark) were selected. From each village 25 children were selected for anthropometrics and dietary intake recording, 10 children for clinical examinations and five for biochemical examinations. Base line assessment was completed in all blocks. The follow-up survey was completed after 1 year of intervention.

Results The majority of children belonged to lower socio-economic groups and underprivileged areas. Considerable improvements in anaemia and serum retinol occurred. The prevalence of severe malnutrition declined considerably in the intervention and control blocks.

Conclusion We found that fortified panjiri was effective in improving anaemia, serum retinol and nutritional status. Short duration of intervention was as effective as prolonged interventions.

P1-377 TRENDS AND INCIDENCE OF AND MORTALITY AFTER FIRST MYOCARDIAL INFARCTION IN A NATIONAL-WIDE COHORT OF MEN AND WOMEN WITH DIVERSE SOCIOECONOMIC POSITION AND COUNTRY OF BIRTH, 1987–2007

doi:10.1136/jech.2011.142976f.69

D Yang,* D Dzayee, O Beiki, L Alfredsson, U de Faire, T Moradi. Karolinska Institutet, Stockholm, Sweden

Introduction Myocardial Infarction (MI) is a major cause of mortality and morbidity worldwide and one of the dominating burden of diseases in Sweden. We evaluated the incidence and survival of first MI in subgroups of social position and sex and compared immigrants with Sweden-born population.

Methods We followed a nation-wide cohort of more than seven million men and women ages 35 to 89 years through linkages between Swedish National Registers from 1987 to 2007. Incidence rate ratio (IRR) was estimated using Poisson regression. Of which, 347 834 non-fatal first MI patients were studied for their prognosis using Cox proportional hazard model.