

followed did not progress to AIDS until 108 months. Independent prognostic factors for AIDS-free-time were: treatment with ART without HAART (HR 2.1; 95% CI 1.6 to 2.8), no treatment regimen (HR 3.0; 95% CI 2.5 to 3.6); age at HIV infection diagnosis between 30 and 49 years (HR 1.2; 95% CI 1.1 to 1.3), age over 50 years (HR 2.9; 95% CI 2.3 to 5.2); black race/colour (HR 1.4; 95% CI 1.1 to 1.7); MSM (HR 1.4; 95% CI 1.1 to 1.6) and IDU (HR 1.7; 95% CI 1.3 to 2.2) exposure categories; up to 8 years of schooling (HR 1.3; 95% CI 1.1 to 1.5) and no schooling (HR 2.0; 95% CI 1.4 to 5.6); and CD4 count between 350 and 500 cells/mm³ (HR 1.6; 95% CI 1.3 to 1.9).

Conclusions Increased AIDS-free-time was observed, with HAART. Decrease in the incidence rates were observed, Predictor factors to AIDS were treatment, age, race/colour, transmission categories, schooling and CD4 count.

SP3-46 AIDS SURVIVAL IN THE PRE AND POST-HAART ERAS IN THE SAO PAULO AIDS COHORT, BRAZIL

doi:10.1136/jech.2011.142976o.46

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Background AIDS remains a great public health problem and the effect of ART has been studied. The objectives were to estimate AIDS mortality rates, median survival time and to investigate death predictor factors.

Methods Retrospective cohort study, with 6594 adult patients followed from 1988 to 2005. The Kaplan–Meier estimator, the Cox proportional hazard model and HRs estimates were used.

Results In a follow-up of 203 008 persons-year, 2936 patients progressed to death. AIDS mortality rates were 17.6, 23.2, and 7.8 person-years in the 1988–1993, 1994–1996 and 1997–2003 periods, respectively. Median progression time from AIDS to death was 13.4 months in the 1988–1993 period; 22.3 months, between 1994 and 1996, and in the 1997–2003 period, over 50% of patients followed survived. Independent predictor factors for death were: AIDS diagnosis period 1994–1996 (HR 2.0; 95% CI 1.8 to 2.2) and 1988–1993 (HR 3.2; 95% CI 2.8 to 3.5); AIDS diagnosis age between 30 and 49 years (HR 1.4; 95% CI 1.2 to 1.5), age over 50 (HR 2.0; 95% CI 1.7 to 2.3); MSM (HR 1.1; 95% CI 1.1 to 1.2) and IDU (HR 1.5; 95% CI 1.3 to 1.6) exposure categories; up to 8 years of schooling (HR 1.4; 95% CI 1.3 to 1.5) and no schooling (HR 2.1; 95% CI 1.6 to 2.8); and CD4 count between 350 and 500 cells/mm³ (HR 1.2; 95% CI 1.1 to 1.2) and <350 cells/mm³ (HR 1.3; 95% CI 1.2 to 1.3).

Conclusions Increase in AIDS survival and decrease in the mortality rates were observed with HAART. Predictor factors to death were AIDS diagnosis period, age, transmission categories, schooling and CD4 count. The results show the great positive impact of the Brazilian National AIDS Program.

SP3-47 SPATIAL PROXIMITY AND CHILDHOOD HOSPITAL ADMISSIONS IN A DENSELY POPULATED CONURBATION: EVIDENCE FROM HONG KONG'S "CHILDREN OF 1997" BIRTH COHORT

doi:10.1136/jech.2011.142976o.47

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Introduction Physical distance is a barrier to hospital utilisation. In a very densely populated city in China, we examined whether use of public hospitals by children was associated with individual-level residential proximity, and whether these associations varied with type of admission.

Methods The authors used multivariable negative binomial regression in a large, population-representative birth cohort to examine the adjusted associations of proximity to hospitals with Accidents and Emergency services, proxied by distance to the nearest such hospital, with hospital admissions, bed-days and average length of stay from 8 days to 8 years of age.

Results Physical proximity was positively associated with emergency admissions in children (incidence rate ratio (IRR) 1.23, 95% CI 1.11 to 1.35 for <1 km compared to ≥2 km) and bed-days but not with average length of stay, adjusted for age, sex and socio-economic position. However, in a similar comparison there was no such association for other (ie, planned) admissions (IRR 1.04, 95% CI 0.85 to 1.27).

Conclusion Proximity was associated with hospital use for emergency admissions. Given the societal costs of such use and the risks of iatrogenesis, attention should focus on achieving a more effective use of scarce resources.

SP3-48 ROUTINE MORTALITY AND CAUSE OF DEATH REPORTING AND ANALYSIS SYSTEMS IN SEVEN PACIFIC ISLAND COUNTRIES

doi:10.1136/jech.2011.142976o.48

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Introduction Statistics on mortality levels and causes of death are essential for health planning. However, at the end of 2003, only 7 of 27 countries in the Western Pacific Region had data available on causes of death. Routine death reporting systems across seven Pacific Island Countries; Fiji, Kiribati, Nauru, Palau, Solomon Islands, Tonga and Vanuatu, are examined. Strengths and limitations common across national systems are identified, and system characteristics related to data availability and quality.

Methods System assessments included key informant interviews, observation of processes, and document review. Findings were grouped according to a framework that classifies system characteristics according to societal issues, the national administrative environment, administration, technical and ownership issues.

Results Routine reporting of deaths is predominantly managed through civil registration systems or within Health departments. Health reporting systems are critical in supporting the civil registration process. Significantly more information is available than currently used. Legislation on death reporting exists for all islands, but does not necessarily reflect current practices. Significant duplication of data collection and entry exists across all systems. The close interaction between health staff and local communities could provide a good foundation for further improvement in death reporting in these countries. Responsibility, authority and ownership were central to the sustainability of the reporting systems.

Conclusion For Pacific Island Countries to effectively address health challenges there is no substitute for routine mortality and cause of death data collections. Suitable systems exist, but need to be strengthened to improve the completeness and quality of the data available.

SP3-49 THE RELATIONSHIP OF CLASS CLOSURE LENGTH AND THE CHANGE OF ABSENTEES AT ELEMENTARY SCHOOLS IN THE 2009 A/H1N1 INFLUENZA EXPANSION IN JAPAN: THE ANALYSIS IN T CITY, IBARAKI PREFECTURE

doi:10.1136/jech.2011.142976o.49

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Introduction The 2009 A/H1N1 influenza spread also in Japan. Many students were absent in elementary schools, To prevent its expansion, many school decided class closure with their original length under rough guideline by local education board. However, its effect had not been clear. The objective was to examine whether or not the class closure length related to the change of absentees.

Methods Subject was all the classes in elementary schools in T city that class closure was carried in the period from 1 September to 24 December in 2009. We sent the questionnaire including the questions (1) the number of students in class, (2) the number of absentees on the day, (3) whether or not class closure was carried out on the day, to the school principal, and asked school nurses to write under each class attendance book and to return them by post mail. The length of class closure and the change of absentees before and after class closure was analysed by χ^2 test with statistical soft R2.11.1.

Results 16 of total 37 elementary schools replied (43.2%), and 103 classes of 15 schools with the closure were analysed. It revealed statistical associations between class closure length and the change of the proportions of absentee ($p<0.001$), and between class closure length and the proportions of class that absentee was decreased ($p<0.001$).

Conclusion There were tendencies that the number of absentee decreased after class closure, and the longer class closure days, the fewer absentees changed.

SP3-50 SERUM HEPATOCYTE GROWTH FACTOR LEVELS AND MORTALITIES FROM CANCER IN APPARENTLY HEALTHY GENERAL POPULATION

doi:10.1136/jech.2011.142976o.50

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Introduction Hepatocyte growth factor (HGF) is elevated in patients with cancer and is a predictor for prognosis. We investigated whether slight elevation of serum HGF level was a marker for subclinical cancer and death in a general population.

Methods Apparently healthy 1492 subjects had a health examination in 1999. Subjects with a history of liver disease or malignancies were excluded by a questionnaire. Finally, we measured plasma HGF levels in 1470 subjects. They were followed-up periodically for 10 years. The follow-up rate was 99.3%. We calculated mortalities from cancer by multivariate proportional hazards model.

Results At follow-up, 169 subjects had died (61 from cancer, 32 from cerebro-cardiovascular disease and 76 from others). The mean HGF level at baseline was significantly ($p<0.01$) higher among subjects who died than those who survived (0.26 ± 0.11 vs 0.23 ± 0.09 ng/ml). In a Cox proportional hazard model, age, systolic blood pressure, HGF (HR 1.270; 95% CI 1.059 to 1.523; $p=0.009$), low albumin and smoking were independent predictors for death from all causes. Age, HGF (HR 1.309; 95% CI 1.042 to 1.654; $p=0.02$) and low cholesterol were independent predictors for cancer death.

Conclusion Slight elevation of HGF may be an early marker of subclinical cancer.

SP3-51 ACCESS TO TB PATIENTS OF DIRECTLY OBSERVED THERAPY (DOTS) DURING NATURAL DISASTERS IN BIHAR, INDIA

doi:10.1136/jech.2011.142976o.51

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Introduction This pilot study attempts to look at pattern and problem of adherence to DOTS by TB patient during flooding in Bihar, India.

Methods A cross-sectional survey was undertaken among 21 (female $n=9$) TB patients who were participating in DOTS and faced the problem of flooding in Muzaffarpur district of Bihar, India. They were interviewed to collect information on age, sex, education, occupation, duration of flooding in the village, discontinuity period due to flooding and other factors, change in DOT provider, and knowledge on importance of continuing treatment using a semi-structured questionnaire.

Results Mean duration of flooding was 92.9 days (SD 32.4). Mean discontinuity period due to flooding was 26.9 days (SD 24.0). In the Fisher's Exact Test, Female TB treatment beneficiaries were found to more affected than males ($p<0.005$). Following discontinuing DOTS, 3 (14.3%) participants thought that their disease would not be cured, 8 (38.1%) participants thought their TB disease would come back, whereas and 9.5% said they did not know.

Conclusion Although flooding lead to discontinuity in treatment to many of the TB patients on DOTS. This may lead to anti-tuberculosis drug resistance. The finding that females discontinued treatment more frequently than males needs to be highlighted. The TB control programme should look further in to this and take appropriate measures to address the issue.

SP3-52 A DIFFERENCE IN ADRS (ADVERSE DRUG REACTIONS) MORTALITY RATE IN THAI TUBERCULOSIS PATIENTS BETWEEN YEAR 2008 AND 2009

doi:10.1136/jech.2011.142976o.52

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Background Surveillance of adverse drug reactions in Thailand is conducted through the spontaneous voluntary reporting system by hospital pharmacists and healthcare professionals. Adverse drug reactions reports have been collected in national spontaneous reporting database called Thaivigibase since year 1985. Public health program using medicine in AIDS, Tuberculosis (TB) control program have collected the patients' records. Integrating public health program in TB patients and spontaneous reporting system can receive ADRs mortality rate compare difference in anti-tuberculosis drug group. This ADR mortality rate may reflect TB drug group safety surveillance system.

Objective This study is aimed to compare difference in ADRs mortality rate in Thai tuberculosis patients, between year 2008 and 2009.

Study Design Descriptive observational study design is used for this study.

Materials and Methods Adverse reaction reports of patients to anti tuberculosis drugs from Thaivigibase and TB patient disease surveillance database from Bureau of Epidemiology during year 2008–2009 were retrieved and calculated. The pattern of spontaneous fatal adverse reactions to anti-tuberculosis drugs were described by analysing the data from Thaivigibase between year 2008 and 2009.

Results/Conclusion ADRs mortality rates to anti-tuberculosis drugs were 1.97 per 1000 patients in year 2009 compared with 4.35 per 1000 patients in year 2008. Stevens–Johnson Syndrome and