

Objectives The aim of this study is to evaluate the differences in knowledge about TB among prison workers and workers of the basic health services (administrative and health professionals).

Method It was designed a cross-sectional study with 115 guards and health professionals of a prison, 121 administrative workers of the health services and 125 health professionals of the health services. Knowledge about diagnosis symptoms, prevention and treatment was sought using a questionnaire based on KAP (knowledge, attitude and practice) survey. Differences among the proportion of affirmative answers were estimated using χ^2 test with significance level of 0.05.

Results Although the most important symptom for all three groups was cough for more than 2 weeks, administrative and health professionals mentioned it in a higher proportion (84 and 85%) than prison workers (66%) ($p < 0.05$). Weight lost (60%) and fever of unknown cause (32%) did not show statistical difference ($p = 0.07$ and $p = 0.59$). Airborne transmission was correctly informed by 88.4% to 94.4% with no statistical differences ($p = 0.19$) and sharing plates (41%) and shaking hands (5%) were incorrectly mentioned as forms of transmission, also without differences among groups. Supervised treatment (74%–80%) also did not have statistical difference.

Conclusions Although health professionals showed a higher knowledge, 15% gave incorrect answers, thus continued education is needed to improve TB diagnosis and prevention.

P1-150 ALLERGIES AND DIABETES AS RISK FACTORS FOR DENGUE HEMORRHAGIC FEVER: RESULTS OF A CASE CONTROL STUDY

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¹M Figueiredo, *²L Rodrigues, ³M Barreto, ⁴W Lima, ⁵C Costa, ⁶V Morato, ⁷R Blanton, ⁸P Vasconcelos, ⁹M Nunes, ¹⁰G Teixeira. ¹State University of Bahia, Salvador, Bahia, Brazil; ²London School of Hygiene & Tropical Medicine, London, UK; ³Federal University of Bahia, Salvador, Bahia, Brazil; ⁴State University of Ceará, Fortaleza, Ceará, Brazil; ⁵Case Western Reserve University, Cleveland, Ohio, USA; ⁶Evandro Chagas Institute, Belém, Pará, Brazil

Introduction The physiopathology of dengue hemorrhagic fever (DHF), severe form of Dengue Fever, is poorly understood. We are unable to identify patients likely to progress to DHF for closer monitoring and early intervention during epidemics, so most cases are sent home. This study explored whether patients with selected co-morbidities are at higher risk of developing DHF.

Methods A matched case-control study conducted in a dengue seropositive population in two Brazilian cities. For each case of DHF, 7 sero-positive controls were selected. Cases and controls were interviewed and information collected on demographic and socioeconomic status, reported co-morbidities (diabetes, hypertension, allergy) and use of medication. Conditional logistic regression was used to calculate the strength of the association between the co-morbidities and occurrence of DHF.

Results 170 cases of DHF and 1175 controls were included. Significant associations were found between DHF and white ethnicity (OR=4.7; 2.1–10.2), high income (OR=6.8; 4.0–11.4), high education (OR=4.7; 2.35–9.27), reported diabetes (OR=2.7; 1.1–6.7) and reported allergy treated with steroids (OR=2.9.0; 1.0–8.5). Black individuals who reported being treated for hypertension had 13 times higher risk of DHF than black individuals reporting no hypertension.

Conclusion This is the first study to find an association between DHF and diabetes, allergy and hypertension. Given the high case fatality rate of DHF (1%–5%), we believe that the evidence produced in this study, suggests that screening criteria might be used to identify adult patients at a greater risk of developing DHF with a recommendation that they remain under observation and monitoring in hospital.

P1-151 FREE ACCESS TO MEDICINES FOR HYPERTENSION AND DIABETES IN THE POPULATION COVERED BY THE FAMILY HEALTH PROGRAM

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R Figueiredo, * L Giatti, S Barreto. UFMG, Belo Horizonte, Minas Gerais, Brazil

Introduction Access to medicines is an indicator of the quality and effectiveness of the health system and essential to hypertension and diabetes patients.

Objective Estimate the factors associated with lack of free access to continuous-use medicines by individuals with diabetes and/or hypertension.

Methodology Study is based on the 2008 National Household Survey (PNAD) in Brazil. Data included individuals aged 20+ years who lived in households covered by the Family Health Program (FHP) who reported diabetes and/or hypertension and were on continuous-use medicines. Those who did not receive any free medicine in the last required occasion were defined as lacking free medicine. Analysis based on prevalence ratios.

Results From 126 203 eligible adults, 5.3% reported diabetes and 26.9% hypertension, being 86% and 81%, respectively, on continuous-use medicines. Among these individuals 21.9% and 28.9% did not receive free medicines. Lack of free medicines increased with rising income and education, and was more common among individuals with private health insurance and those living in the poorer regions of the country. It was less frequent among people who generally attend the same healthcare.

Conclusions Considering that Brazilian Public Health System is committed to provide free access to medicines for diabetes and hypertension and that the studied population is 100% covered by the FHP, the prevalence of no access to free medicines is quite high. However, such failure is not penalising the mostly needed group, as lacking free medication is more common among better off individuals. However, results show persistence of regional inequality in health.

P1-152 WITHDRAWN

P1-153 ASSESSMENT OF THE LEADING CAUSES OF INFANT MORTALITY IN BRAZIL IN 1998 AND 2008

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¹E França, *²S Lansky, ²E Drummond, ¹M A Rego, ³A M Nogales. ¹Federal University of Minas Gerais, Belo Horizonte, MG, Brazil; ²Municipal Health Department of Belo Horizonte city, Belo Horizonte, Minas Gerais, Brazil; ³University of Brasília, Brasília, Distrito Federal, Brazil

Brazil had an estimated infant mortality rate (IMR) of 30.4 per 1000 live births in 1998 which declined to 19.8 in 2008; in the latter 68% of all infant deaths occur in the neonatal period, with perinatal causes responsible for 80% of these deaths. This study aims to compare leading causes of infant mortality in Brazil in 1998 and 2008 using a detailed classification of perinatal causes based on similar potential strategy for care or prevention. All the four-digit ICD-10 codes from Brazilian infant deaths due to perinatal causes were collapsed into a modified Wigglesworth classification list which considered five defined groups: prematurity and related conditions, birth asphyxia, perinatal infections, maternal conditions and respiratory distress. Other selected groups of causes were congenital anomalies, nonperinatal infections (mainly pneumonia and diarrhoea), malnutrition and injury. IMR levels by cause were calculated by applying indirect demographic methods estimates to the proportional distribution of defined causes by age after redistribution of ill-defined causes. In 2008, mortality risks due to almost all causes decreased substantially, particularly when related to infections and malnutrition. Infections (nonperinatal) were the

leading cause of death in 1998, with rate of 5.8 per 1000 live births. Although the IMR due to congenital anomalies was almost the same in 1998 and 2008, this cause ranked first as cause of death in 2008 together with prematurity. In conclusion, the reduction of IMR in Brazil implicates in a different distribution of causes of death and different challenges to the health system.

P1-154 GUIDELINES FOR MONITORING SOCIOECONOMIC INEQUALITIES IN HEALTH: LESSONS FROM SCOTLAND

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^{1,2}J Frank,* ^{1,2}S Haw. ¹Scottish Collaboration for Public Health Research and Policy, Edinburgh, UK; ²University of Edinburgh, Edinburgh, UK

Introduction This paper presents 'best practice' guidelines for population monitoring of health status by socio-economic position (SEP), using routinely collected data.

Methods We reviewed published sources to identify best practices in analytic methods and reporting of population health inequalities by SEP. We selected as our case-study three recent "cutting-edge" reports on health inequalities from the Scottish Government, analysing the following categories of routinely collected outcomes: natality (low birth weight rate—LBW); adult mortality (all-cause, coronary heart disease (CHD), alcohol-related, cancer); cancer incidence; healthy life expectancy at birth; and "mental health & well-being score".

Results The most commonly unmet criterion, across these routinely collected outcomes, was 'prompt reversibility/sensitivity to change.' This is because most mortality events occur in later life, and LBW rate has now become obsolete as a sole indicator of perinatal health. Other outcomes were judged to fail other criteria: alcohol-related mortality after mid-life (probable 'reverse causation'); all cancer sites' incidence and mortality (heterogeneity of SEP gradients across sites, as well as long latency); and mental health & well-being (uncertain responsiveness to feasible interventions).

Conclusions Even state-of-the-art reports on health inequalities by SEP are losing their relevance for most policy-makers, because they focus on routinely collected outcomes that are not very sensitive to change. We argue that more 'upstream' outcomes are required, which: occur earlier in the life course; can be changed within a half-decade by feasible programmes and policies of proven effectiveness; accurately reflect individuals' future life-course chances and health status; and are strongly patterned by SEP.

P1-155 LIFE-LIMITING & LIFE-THREATENING ILLNESS IN CHILDREN AND YOUNG PEOPLE IN ENGLAND: HOSPITAL USAGE BY ETHNICITY

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¹L Fraser,* ²M Miller, ³R Hain, ²J Aldridge, ¹P McKinney, ¹R Parslow. ¹University of Leeds, Leeds, UK; ²Martin House Children's Hospice, Wetherby, UK; ³University of Cardiff, Cardiff, UK

Aims To develop an ICD10 coding framework to identify children and young people with life-limiting or life-threatening disease (LLLT). To use this framework to estimate hospital usage of patients with LLLT using Hospital Episodes Statistics (HES).

Methods Data from Martin House Children's Hospice was used to develop an ICD10 coding framework. A four digit ICD10 code was then assigned to each diagnosis and a final list of codes was compiled and completed by adding other appropriate codes including all malignant oncology codes. An extract of inpatient (2000–2010) HES data were requested where one of these ICD10 codes appeared in any diagnostic category in any patient aged under 25 years at admission.

Results The final ICD10 framework compiled consisted of 781 four digit ICD10 codes. Malignant oncology codes accounted for 445

codes with congenital malformations, deformations and chromosomal abnormalities having 90 codes. This was a marked year on year increase in episodes with a diagnosis of LLLT from 142 614 episodes in 2000/1 to 210 748 episodes in 2009/10 and the proportion of episodes for patients of a South Asian background increased from 8.6% in 2000/1 to 12.4% in 2009/10 while the black minority patients remained static (4.5% to 4.3%).

Conclusion Children and young people with a LLLT have a marked increase of inpatient hospital stays from 2000 to 2010. There is an increase in the proportion of these episodes from children and young people with a South Asian background.

P1-156 FALLS RISKS FACTORS AT HOME IN CHILEAN OLDER PEOPLE LIVING IN THE COMMUNITY

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¹A F García,* ²H Sánchez, ²L Lera, ²X Cea, ²F Salas, ²C Albala. ¹School of Public Health, University of Chile, Santiago, Chile; ²Institute of Nutrition and Food Technology, University of Chile, Santiago, Chile

Introduction Older adult (OA) falls are a major public health problem being a main cause of disability and morbidity (30% of prevalence around the world), involving an extensive use of health services, and higher costs. Latin American data (2000) show higher prevalence of multiple falls among Chilean (20.3%) and Mexican (19.5%) elders than in the Region (10%–15%). In Chile (2006), major part of the accident among elderly occurs at home (56%). The aim is to study the association between risks factors at home and falls among Chilean OP.

Methods Data are from National-Survey-of-Dependency-Chilean-OP. 4762 representative sample community dwelling adults 61–101 y (38.8% men; 18% rural) were interviewed in 2009/2010. Logistic regression analysis was used to estimate association between falls and risks factors at home.

Results Falls prevalence in the last year is 27.7% (CI 25.4 to 30.1); higher among women (31.9%; CI 28.6 to 35.4), and those with poor eyesight (31.4%; CI 28.4 to 34.6). Falls risks factors most present at home were insufficient light (94.5%; CI 92.7 to 95.8) lack of handle in the toilette (89.3%; CI 87.5 to 90.9), and in the shower (81.9%; CI 78.7 to 84.7). Around 40% of the interviewed perceived the need to have a handle in both toilette and shower. After adjusting by age (OR=1.01; p=0.003), being female (OR=1.77; p<0.001), living in rural-area (OR=1.14; p=0.117), poor eyesight (OR=1.39; p<0.001); falls were significant associated to insufficient light at home (OR=1.44; p=0.021); and the perception of need handle in the shower (OR=1.29; p=0.026) and toilette (OR=1.40; p=0.004).

Conclusion Prevention recommendations for falls among non-institutionalized OP not only should include reduction of hazards (such as insufficient light) but also the installation at their homes of devices to avoid falls.

P1-157 ARTERIAL HYPERTENSION: PSYCHOSOCIAL FACTORS AND RISK OF DEVELOPMENT DURING THE PERIOD OF 20 YEARS IN MEN 25–64 YEARS OF AGE IN RUSSIA

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^{1,2}V Gafarov,* ^{1,2}E Gromova, ^{1,2}I Gagulin, ^{1,2}A Gafarova. ¹Collaborative laboratory of Epidemiology Cardiovascular Diseases Siberian Branch of the Russian Academy of Medical Sciences, Novosibirsk, Russia; ²Institute of Internal medicine the Siberian Branch of Russian Academy of Medical Sciences, Novosibirsk, Russia

We aimed to investigate the influence of psychosocial factors on the risk of arterial hypertension (AH) development over a 20 year period in men aged 25–64 years in Russia.

Materials and Methods Within the WHO program 'MONICA' psychosocial factors were examined in a representative sample of