

adjustment for sociodemographic characteristics, behavioural risk factors and health condition of individuals. But, the association between unemployment and poor self-rated health was not modified by neighbourhood socioeconomic indicators.

Conclusion Results confirm the association between unemployment and poor self rated health, regardless the personal or contextual characteristics studied here. Similarly, they show a clear independent association between self rated health and neighbourhood context. But, they do not show that the neighbourhood contexts investigated modify the associations between unemployment and poor self rated health.

SP6-19 SERUM CONCENTRATION OF HCH, DDT AND METABOLITES IN ADOLESCENTS EXPOSED TO ORGANOCHLORINE PESTICIDE RESIDUES IN BRAZIL

doi:10.1136/jech.2011.142976p.90

R Guimarães,* I Braga, A Vianna, C Asmus. *Federal University of Rio de Janeiro, Institute of Studies in Public Health, Rio de Janeiro, Brazil*

Objective To evaluate the concentration of biomarkers of exposure to residues of organochlorine pesticides in adolescents in Rio de Janeiro, Brazil.

Methods We obtained laboratory results of serum concentrations of the isomers of HCH and DDT metabolites from the data collection from medical records at a local health unit from a previous screening.

Results We observed concentrations were considered well above the tolerance limits allowed. The distribution shows typical asymmetrical pattern, because of the presence of individuals with concentrations outliers distribution. Deserve special attention from the HCH congeners, the p,p'DDT and p,p'DDE; whose serum concentration mean and median are much higher than the level of tolerance permitted. Concentration obtained were from a HCH (115.81 Mean \pm SD 1438.529), b HCH (1616.266 Mean \pm SD 135.15), g HCH (Mean \pm 5373.357 SD 447.66), p, p'DDE (Mean 94.92 \pm 884.979 SD), p, p'DDD (5:23 Mean \pm 43.350 SD), o, p'DDT (3596 Mean 1.82 \pm SD) and p, p'DDT (45.61 Mean \pm SD 464.389). In measuring the correlation between different types of organochlorine compounds evaluated, it is observed that the majority has mayor correlation ($r = 1.000$), or nearly so, with great statistical significance ($p < 0.0001$).

Conclusion There is needing for monitoring and periodic evaluation of health of this population, considering that the blood is altered especially at this critical period of development.

SP6-20 OCCUPATIONAL HEALTH RISKS: RELIABILITY TEST FROM INGECTH-SUS STUDY

doi:10.1136/jech.2011.142976p.91

¹M Y Mauro, ²R Guimarães,* ³L Santiago, ⁴C Mauro. ¹University of State of Rio de Janeiro, Rio de Janeiro, Brazil; ²Federal University of Rio de Janeiro, Institute of Studies in Public Health, Rio de Janeiro, Brazil; ³Oswaldo Cruz Foundation, Rio de Janeiro, Brazil; ⁴MIZ Ergonomics, Rio de Janeiro, Brazil

The goal of this study is to present the reliability test of Boix and Vogel's risk assessment scale in work environments for health area in Brazil. For this, 73 nursing professionals from Brazil answered the scale version, and replied the instrument with a range of 15 days. For internal consistency evaluation of dimensions it was used the Cronbach's α ; to assess the strength of association between the constructs was used the intraclass correlation coefficient (ICC); and to evaluate the consistency of response in two times interview was used the weighted κ . The ICC showed excellent correlation between

dimensions, ranging from 0.87 and 0.96. About internal dimensions consistency, Cronbach's α values varied from 0.64 to 0.85. On the items, the weighted κ varied from 0.66 (95% CI 0.52 to 0.81, and 0.93 (95% CI 0.87 to 0.99). The results of this study indicate that the scale shows high reproducibility for all dimensions evaluated.

SP6-21 PATTERNS OF BREASTFEEDING AND DETERMINANT FACTORS IN BRAZIL

doi:10.1136/jech.2011.142976p.92

¹P Pinto, ²R Guimarães,* ³L Rangel, ⁴M Ribeiro. ¹Gaffrée Guinle University Hospital, Rio de Janeiro, Brazil; ²Federal University of Rio de Janeiro, Institute of Studies in Public Health, Rio de Janeiro, Brazil; ³Rio de Janeiro University, Rio de Janeiro, Brazil; ⁴Federal University of Rio de Janeiro, Rio de Janeiro, Brazil

Breastfeeding has innumerable advantages on the child, its family and society. Although the governmental efforts, of the professionals of health and the society in the direction to promote, to protect and to support this practical, the prevalence of exclusive breastfeeding until 6th life month remains less than ideal. The objective of this study is to determine the correlation of exclusive and non-exclusive breastfeeding with some basic health indicators, supplying data that they may be able to help for the development of interventions that include breast-feeding overall its conjuncture. An ecological study has been carried through using secondary data from DATASUS will be, from the period of 1999 to 2000's. The correlation has been esteemed through Pearson's coefficient. Is was observed a statistically significant correlation to variables related to marital status, education, coverage of prenatal, delivery characteristics and infant mortality rate after neonatal and proportional for IPD. It is observed therefore that the actions, especially in prenatal and multiple-patient room, must be prioritised in these groups which showed an inverse correlation.

SP6-22 STUDY OF INFRASTRUCTURE AND MANPOWER OF PHCS AND SUB-CENTRES IN NELLORE DISTRICT, ANDHRAPRADESH, INDIA

doi:10.1136/jech.2011.142976p.93

S Sriram,* V Chandrasekhar. *Narayana Medical College, Nellore, Andhrapradesh, India*

India has a vast public health infrastructure in the country with 23391 primary health centres and 145894 sub-centres providing health services to 72.2% of the country's population living in rural areas. Although the numbers look impressive their functional status needs to be improved in terms of physical infrastructure, manpower, equipment, drugs and other logistic supply that are very much needed for ensuring quality services. National Rural Health Mission (NRHM) launched aims to restructure the delivery mechanism for health towards providing universal access to equitable, affordable and quality healthcare, as a result of which Indian Public Health Standards (IPHS) were formulated. The present work aims to study the infrastructure facilities and manpower in a sample of Primary Health Centres (PHCs) and their subcentres in the district of Nellore in the state of Andhra Pradesh in the east coast of India. A randomly selected sample of health institutions have been studied using structured and pre-tested performance. The data have been analysed with reference to Indian Public Health Standards (IPHS). It is a cross-sectional community based study done over a period of 1 year in Nellore district in the study setting of primary health centres and sub-centres. There are 62 primary health centres in Nellore district distributed in three divisions (Gudur, Nellore and Kavali). 25% of the primary health centres have been selected randomly that is, 15 PHCs taking five from each division randomly. Each PHC consists of

a minimum of 6 sub-centres. 2 sub-centres from the PHCs which are already selected for the study is selected randomly and studied.

SP6-23 UNINTENTIONAL CHILDHOOD HOME INJURIES: A CASE STUDY FROM KARACHI, PAKISTAN

doi:10.1136/jech.2011.142976p.94

¹N Zia, ¹U R Khan, * ¹J A Razzak, ²P Puvanachandra, ²A Hyder. ¹Aga Khan University, Karachi, Pakistan; ²Bloomberg School of Public Health, Johns Hopkins University, Baltimore, Maryland, USA

Introduction Unintentional injuries are a leading cause of death among children and young adults. Over 875 000 children ≤ 18 years of age die annually in the world as a result of injuries, mostly in low- and middle-income countries. Objective is to describe epidemiology of childhood unintentional home injuries in Karachi, Pakistan.

Methods This was secondary analysis of a childhood unintentional injury surveillance database setup in the emergency department of four major hospitals of Karachi Pakistan for 3 months. Karachi, the largest city of Pakistan, has a population of about 17 million (43.8% are children). Caretakers of children under 12 years of age presenting to emergency department with an unintentional injury were interviewed. Analysis was done on the number of home injuries in this sample and the associated risk factors.

Results The surveillance included 566 injured children of which 409 (72%) injuries had taken place at/around home. Of 409 children, 66% were males; 54% were between 5 and 11 years of age. Injuries commonly occurred during play time (51%). Fall (59%), dog bites (11%) and burns (9%) were the commonest mechanisms of injury. Falls occurred most often from stairs/steps and burns due to hot liquids. The majority of the children (78%) were directly discharged from emergency room with predicted short term disability (42%). There were 2 deaths in the ED both due to falls.

Conclusion A majority of these unintentional childhood injuries occur at home frequently involving males. Falls, dog bites and burns are the most common types of unintentional childhood home injuries.

SP6-24 SOCIAL INEQUALITIES IN ADULT MORTALITY IN BRAZIL

doi:10.1136/jech.2011.142976p.95

A P Belon, M B de Azevedo Barros,* L Marin-Leon. State University of Campinas Medical School, Campinas, São Paulo, Brazil

Introduction To assess health inequalities is an important issue in a country like Brazil with one of the highest income inequities in the world. The aim of this study was to analyse the magnitude of social inequalities in mortality among population aged 20 and older, living in a city of one million people in Southeastern Brazil, in 2004–2008.

Methods The 49 areas of healthcare units were classified into 3 homogeneous strata using 2000 Census small-area socioeconomic indicators. Mortality rates by age group, cause of death (ICD10 codes) and sex were calculated for each stratum. Rates ratio (RR) and 95% CIs were estimated for low and middle stratum in relation to the highest.

Results In general, age-group-specific rates had a social gradient with declining risks of death from higher to lower stratum. In overall mortality, inequalities among strata were statistically significant. Inequalities between Low and High stratum were higher among females, except for external causes of injury. The greatest differences among males were recorded for homicides (RR=2.4), traffic accidents (RR=1.6) and cerebrovascular diseases (RR=1.6). Among women, cerebrovascular and chronic lower respiratory diseases showed the greatest inequalities, both with risk of death 2.2

times higher in the lower stratum. Only breast cancer had a reversed social gradient.

Conclusion Since unfavourable living conditions are related to unhealthy behaviours and to difficulties in access to health services, to reduce the health disparities, the National Health System should assure greater access to health services and promotion of healthier lifestyle among vulnerable groups.

SP6-25 PREVALENCE OF ANXIETY AND ASSOCIATED FACTORS IN BRAZILIAN ADULTS: A POPULATION-BASED STUDY

doi:10.1136/jech.2011.142976p.96

¹R Bielemann,* ²M R Azevedo, ^{1,2}P C Hallal, ²A J Rombaldi. ¹Post-Graduate Program in Epidemiology, Federal University of Pelotas, Pelotas, Rio Grande do Sul, Brazil; ²Post-Graduate Program in Physical Education, Federal University of Pelotas, Pelotas, Rio Grande do Sul, Brazil

Introduction Anxiety is currently one of the most prevalent mental health problems. Depression and binge eating are both associated with it. The aim of this study was to evaluate the prevalence of anxiety and associated factors in Brazilian adults.

Methods and Materials A population-based cross-sectional study in Pelotas, southern Brazil. The sample was selected using a multiple stage protocol and included adults aged 20–69 years.

Results We interviewed 972 individuals, 57.0% were female. The prevalence of anxiety was 57.6%. Women ($p=0.001$) and individuals aged 20–29 years ($p=0.003$) were more likely than their counterparts to have anxiety. No associations were found according to marital status, socioeconomic status, physical activity and body mass index. The prevalence of anxiety in current smokers was 67.5% whereas the prevalence among non-smokers was 53.6% ($p<0.001$). Individuals with self-rated fair or poor health were more likely to have anxiety ($p<0.001$) as compared to those with better self-rated health.

Conclusions Knowing the population groups at higher risk for anxiety is important for the promotion of positive mental health actions. The association we found between anxiety and smoking is consistent with the recent literature.

SP6-26 AN EPIDEMIOLOGICAL STUDY AND SURVIVAL ANALYSES OF COLORECTAL CANCER IN A HOSPITAL OF TEHRAN (2004–2009)

doi:10.1136/jech.2011.142976p.97

A A K Zarchi,* A Saadat, H Galalian, M Smaili. BMSU, Tehran, Iran

Aims The aim of this study was to investigate the epidemiologic features, survival analyses of colorectal cancer (CRC) and some related factors in a hospital of Tehran.

Subjects and Methods The type of study is case series descriptive study. 241 patients who registered from 2004 to 2009 were identified. Data collection was based on medical records and was completed using phone call. Survival analyses were constructed using the Kaplan–meier method. Multivariate analyses of related factors were conducted using Cox-regression analyses.

Results Mean age of participants was 59.7 year (SD=14.7), 22.4% were smoker and 24.5% have had family history of CRC. The rectum cancer was the common anatomic site of CRC and the majority of cancer grading were well differentiated status. 83.8% of participants were alive. The mean survival time for all patients was 56.5 months (± 1.9). The lowest and highest mean survival time were 47.7 (± 5.8) for cancer of secum and 61.1 (± 3.2) for non-smokers respectively. The highest OR of survival 2.12 (95% CI 0.28 to 15.87) belongs to patients with rectum cancer.