

Accessibility to clean water was difficult. 96% individuals reported not practicing any preventive measure for malaria. Inadequate Chloroquine was available in the medical camps, arthrometer was not available. The doctors reported, visiting of 8–10 patients daily with malaria symptoms.

Conclusion Malaria is a major epidemic and public health concern particularly during flood catastrophe. Transparent policy making is required to design strategies for the preparedness of malaria in Pakistan.

SP3-20 MATERNAL IRON DEFICIENCY ANAEMIA DURING LABOUR AND ITS IMPACT ON BIRTH OUTCOMES IN WESTERN IRAN

doi:10.1136/jech.2011.142976o.20

N Esmailnasab,* A Afkhamzadeh. *Kurdistan University of Medical Sciences, Sanandaj/ Kurdistan, Iran*

Introduction Iron deficiency anaemia is one of the most common blood disorders across the world. According to the WHO, more than half of pregnant women and one third of non-pregnant women of childbearing age suffer from anaemia. The present cross-sectional study aimed to determine prevalence of maternal iron deficiency anaemia during labour and its impact on birth outcomes.

Methods A sample of 600 mothers with live births who referred to the Besat hospital in Sanandaj city western Iran was randomly recruited. Blood samples were taken and measured for Maternal CBC and neonatal CBC as well as Feretin laboratory tests.

Results Prevalence of iron deficiency anaemia among mothers and their neonates was 22.7% and 5.8% respectively with a significant correlation ($p=0.001$). The mean haemoglobin levels were 11.95 and 11.8 in mothers who received iron supplements during pregnancy and those who did not with no significant association. Moreover, no significant relationship was observed between maternal iron deficiency anaemia and birth outcomes of LBW, prematurity, preterm labour and Apgar score.

Discussion Maternal iron deficiency anaemia was not significantly associated with adverse birth outcomes of LBW, prematurity and low Apgar score in the present study. Laboratory based interventional programs are recommended to improve prenatal care for pregnant women in developing countries' surveillance system.

SP3-21 LANDMINE VICTIMS IN IRAN KURDISTAN; DEMOGRAPHIC FEATURES AND ACCIDENT CHARACTERISTICS

doi:10.1136/jech.2011.142976o.21

¹A Afkhamzadeh,* ²A Delpisheh, ³H Mohammadzadeh. *¹Kurdistan University of Medical Sciences, Sanandaj/Kurdistan, Iran; ²Ilam University of Medical Science, Ilam, Iran; ³Payam Nour University of Kamyaran, Kamyaran, Iran*

Background Iranian civilians living in border areas are still victims of un-neutralised war mines. This cross-sectional study aimed to assess demographic characteristics and features associated with the incident in a representative group of victims.

Materials and Methods Overall, 300 civilian mine victims in Kurdistan Province western Iran during 1991–2005 through a cluster randomised sampling method were recruited. The documentary data for those who lost their lives was gathered from the archives of local police, Red Crescent and War-disabled Organisation. Other survived mine-injured victims were interviewed for data collection using a validated checklist. SPSS was used for all analyses.

Results Overall, 17.7% of victims ($n=53$) have been killed immediately after explosion and 82.3% ($n=247$) were injured. Of those survived, 40% ($n=99$) had an amputation surgery of lower limb in particular. Majority of victims were either farmers, shepherd mans,

or children. Among risk factors investigated, victims' job and age were significantly correlated with mine accidents in Kurdistan province after adjusting for other factors including gender, education level and socioeconomic status (Adjusted OR 2.1, 95% CI 1.1 to 3.2, $p<0.01$ and AOR 1.7, 95% CI 1.1 to 2.5, $p=0.04$ respectively).

Conclusions Young civilians living in border areas between Iran and Iraq with certain jobs are still affected by un-neutralised war mines despite the grate efforts made by the government. Struggling efforts are required to avoid and minimise the adverse effects of mine expulsions in border areas in west of country and in Kurdistan in particular.

SP3-22 CHILD INJURY PREVENTION IN VIETNAM: ACHIEVEMENTS AND CHALLENGES

doi:10.1136/jech.2011.142976o.22

¹S Boufous,* ¹M Ali, ²H Nguyen, ³M Stevenson, ¹R Ivers, ²C P Viet, ⁴A Nguyen. *¹The George Institute for Global Health, University of Sydney, Sydney, New South Wales, Australia; ²Hanoi School of Public Health, Hanoi, Vietnam; ³Department of Epidemiology and Preventive Medicine, Monash University, Melbourne, Australia; ⁴The United Nations Children's Fund, Hanoi, Vietnam*

Introduction As with other South Asian countries, injury is becoming a leading cause of death and morbidity among children in Vietnam. In response, government and non-government agencies in Vietnam have combined efforts during the last decade to develop and implement various child injury prevention strategies and programs. This study provides an overview of the burden of child injury, reviews relevant prevention strategies, and makes recommendations for child injury prevention in Vietnam.

Methods A review of available information related to child injury prevention in Vietnam, including peer reviewed studies, policy documents and reports from various sources, was conducted using commonly utilised databases (Medline, CINAHL, Cochrane Library, etc). Relevant grey literature was also solicited during semi-structured interviews with representatives of key stakeholders, including Ministry of Health, Ministry of Labor, WHO, UNICEF, Vietnam Red Cross, Counterpart International, Hanoi School of Public Health.

Results Drowning is the leading cause of fatal injury in Vietnamese children followed by road traffic crashes, falls, poisoning, burns and animal bites. There have been notable achievements in terms of increasing awareness of injury facing children at all levels in the community and developing a sound injury prevention policy framework in a relatively short period of time. However, much needs to be done to implement necessary environmental and legislative changes, strengthen child injury surveillance and injury prevention research; and to improve access to health services.

Conclusion The insight into the experience of Vietnam could benefit other low and middle income countries with a high burden of child injury.

SP3-23 RECOGNITION OF THE OCCURRENCE OF STROKE FROM AMBULANCE CALLS

doi:10.1136/jech.2011.142976o.23

K Ohshige.* *Yokohama National University, Yokohama, Kanagawa, Japan*

Introduction Intravenous administration of tissue plasminogen activator (tPA) is effective for acute ischaemic stroke. Since there is a critical time of only a few hours to start such therapy, it is important to identify patients with stroke as soon as possible. This study aimed to establish a recognition algorithm for stroke occurrence at the time of emergency calls.

Methods The data used in the study was collected from the Yokohama emergency triage system from 1 January to 30 June 2010. In

the system, emergency call workers asked ambulance callers for the patient's age, chief complaint, speaking ability and previous history of illness. We analysed the relation between this information and the disease classification (ICD-10) coded by physicians in the emergency department at each patient's destination. A logistic model was used to estimate the probability of stroke occurrence at the time of emergency calls.

Results There were 66744 patients who were transported by ambulance during the study period. Among the 66744 cases, this study targeted 60791 patients whose triage data were complete. Out of these 60791 cases, 2496 were coded as suffering a stroke (ICD-10: I60–I69) by emergency department physicians. The probability of stroke occurrence from the information given at the time of the emergency call was estimated quantitatively.

Conclusion Stroke occurrence can be expressed as a probability (%) at the time of the emergency call. The probability can be used to establish a quick and smooth transport of patients to appropriate medical facilities.

SP3-24 SOCIOECONOMIC DETERMINANTS OF SPORADIC *CAMPYLOBACTER JEJUNI* INFECTIONS AMONG CHILDREN IN GREECE

doi:10.1136/jech.2011.142976o.24

¹K Mellou,* ^{1,2}G Saroglou, ²E Velonakis. ¹Hellenic Centre for Diseases Control and Prevention, Athens, Greece; ²National and Kapodistrian University of Athens, Athens, Greece

Introduction *Campylobacter* spp. is a common cause of acute bacterial gastroenteritis worldwide but the source of the infection in many human sporadic cases remains unknown. Many case-control studies have been conducted, however, little has been published about socioeconomic differences in the incidence of *Campylobacter* infection.

Methods From December 2004 to December 2006 a prospective matched case-control study was conducted, in the urban area of Attica, Greece, in order to identify risk factors for sporadic *Campylobacter jejuni* infections in children aged <15 years.

Results A total of 205 bacteriologically confirmed cases and 205 controls matched by age group (<1 year, 1 to 4, 5 to 9 and 10 to 14 years) and gender were included in the study. After univariate analysis two conditional logistic regression multivariate models were fitted. The first included "protective" variables, whereas these were ignored in the second. Apart from the consumption of chicken the week prior to disease onset, some socioeconomic risk factors of the disease were also recognised. Ethnicity, mother's employment status and, living in a house with a garden were found to be independently associated with the disease occurrence in both models. Domestic travel was correlated to the frequency of the disease only in model II.

Conclusion Apart from the dietary determinants of *Campylobacter* infection that have been studied thoroughly in a number of studies, there are specific socioeconomic characteristics that could either be risk factors of the disease or just hide other behavioural and eating risk factors.

SP3-25 PAROXYSMAL ATRIAL FIBRILLATION PICTURED BY IMPLANTABLE DEVICES WITH REMOTE MONITORING

doi:10.1136/jech.2011.142976o.25

N Varma.* Cleveland Clinic, Cleveland, Ohio, USA

Background Atrial fibrillation (AF) is an epidemic disease. Outcomes and treatment are determined by symptoms and risk posed.

These may be influenced by absolute AF burden, degree of temporal dispersion of episodes, and/or progression to persistent arrhythmia. Characterisation is challenging with traditional intermittent ECG monitoring because the arrhythmia is evanescent and largely asymptomatic. Implanted devices with remote monitoring (RM) mechanisms may enable automatic continuous monitoring with accurate arrhythmia resolution. This was tested.

Methods and Results 276 consecutive patients with RM pacemakers were followed for 12±2 months, 29 experienced at least 1 day with AF. In each patient, AF days were classed by mode switch duration (irrespective of mode switch number) according to >6, >12, >18 and >24 h/day. AF burden differed among and within individuals for example, one patient had only one AF day contrasting with 93 in another. In patient 15, 81/93 days were associated with >18 h of AF that is, AF burden was heavy when it occurred, but patient 20 had 7 AF days but none exceeded 18 h duration per day. Similar variabilities were observed in heart failure patients (TRUST trial). Though conventionally considered at high risk for AF, <10% patients developed AF of >2 h/day in 1 year.

Conclusion Wide diversity in AF arrhythmia load likely impart different risks and require different treatment. Understanding may be enhanced by continuous remote monitoring and permit reevaluation of current clinical management guidelines.

SP3-26 PREVALENCE AND CONSULTATION RATES OF LIFE-STYLE RELATED DISEASES IN JAPANESE MIDDLE-AGED AND ELDERLY WOMEN

doi:10.1136/jech.2011.142976o.26

^{1,2}F Ando,* ²M Takemura, ²Y Matsui, ²H Shimokata. ¹Aichi-Shukutoku University, Nagakute, Japan; ²National Center of Geriatrics and Gerontology, Obu, Japan

Introduction Prevalence rates (PR) and consultation rates (CR) of life-style related diseases are very important for public health but studies for them in women are far less than those in men in Japan.

Purpose To estimate the PR and CR of life-style related diseases in Japanese middle-aged and elderly women.

Methods The subjects were 1194 women aged 40 to 87, randomly selected from a resident registration. Japanese diagnosis criteria for diseases were used to determine the PR. The CR was defined as the ratio of the number of subjects consulting medical doctor regularly to the whole subjects. The PR, CR and the ratio of CR to PR (CR/PR) of diseases were calculated in the whole subjects and by age-decade groups.

Results The PR of anaemia, diabetes, dyslipidemia, hypertension, osteoporosis, urinary incontinence, obesity and emaciation were 0.105, 0.082, 0.556, 0.328, 0.208, 0.341, 0.195 and 0.075, while CR of the first six diseases were 0.016, 0.053, 0.140, 0.263, 0.079 and 0.009, respectively. The CR/PR distributed widely from 0.026 (urinary incontinence) to 0.803 (hypertension). The PR of dyslipidemia, diabetes and obesity were the highest in the 60s and 70s, whereas those of hypertension and osteoporosis increased exponentially with ageing. The PR of anaemia showed U-shape but the CR/PR decreased with ageing. The PR of urinary incontinence were over 0.30 in all age-decade groups but no one consulted medical doctors in the 40s and 50s.

Conclusion The PR of diseases and the attitude to medication change with ageing in Japanese middle-aged and elderly women.