

circulatory system was greater in mothers aged 20–34 years compared to mothers under 19 years of age (HR 5.64 95% CI 1.65 to 19.27; $p=0.01$) and in babies with low birth weight (HR 3.09; 95% CI 1.27 to 7.51). For digestive system anomalies mortality was associated with complications during pregnancy (HR 1.67; 95% CI 1.11 to 2.52; $p=0.01$). For musculoskeletal system malformations mother's disease in pregnancy (HR 11.04; 95% CI 1.31 to 9.30; $p=0.03$) and complications during delivery (HR 18.98; 95% CI 2.39 to 15.04; $p=0.00$) were associated with mortality.

Conclusions The risk factors identified highlight the importance of careful antenatal care.

SP6-64 MORTALITY IN THE ELDERLY, DUE TO PROXIMAL FEMUR FRACTURE: 1-YEAR FOLLOW-UP STUDY

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Objectives Identify risk factors for mortality after hip fracture.

Material and Methods Patients admitted in the orthopaedics service of the main hospital in Porto city, from 1 May 2008 to 30 April 2009, with a low-energy hip fracture were selected. During admission a questionnaire was applied and phone interviews to the patients or a close relative were done at 3, 6, 9 and 12 months after the fracture. From hospital registers, fracture type, surgery date, surgical treatment, co-morbidities and ASA score were obtained.

Results At admission, patients ($n=252$, 79% women, mean age of 80.3 ± 9.5 years and 76.3 ± 11.3 years ($p<0.05$), women and men respectively) lived mainly with someone (67%); 1% were confined to bed, 65% had difficulties in walking or doing daily activities and 34% had a life without restrictions. The most common co-morbidities were hypertension for women (52% vs 38%) and respiratory disease for men (36% vs 11%), $p<0.05$. Death was 22%, 25%, 30% and 37% for men and 8%, 14%, 20% and 23% for women, respectively at 3, 6, 9 and 12 months of follow-up. Death was higher among institutionalised patients. Survival analysis using Kaplan–Meier curve and Cox regression analysis showed that the risk of death increased 6% for each age-year older, 151% if patient was a man, 94% for ASA score III/IV and 7% for each day of delay to the surgery.

Conclusion Older age, male sex, ASA scores III/IV and delay to surgery are good predictors of mortality after a hip fracture.

SP6-65 EMERGENCY MEDICAL SERVICE THROUGH COMMUNITY BASED VOLUNTEERS IN RURAL AREAS BANGLADESH

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Background Emergency medical service (EMS) cannot only lessen the severity of an illness but can also save lives. In this study we accessed the emergency medical services provided by trained community based volunteers in rural areas of Bangladesh. The objectives of this study were (1) To access the volunteer based emergency medical services and (2) To describe the types of emergency medical care services provided by the volunteers.

Methods In 2008, we trained community volunteers to deliver EMS within limited areas. A special emergency medical service manual

was developed. We selected volunteers from the community and trained them for 3 days intensively. After training all volunteers were provided a first aid box fully equipped with medicine and materials. The first 1 to 3 months of data about medical services were collected from the volunteers.

Results A total of 136 volunteers worked and 1403 patients were provided emergency medical services. After burn injuries all patients were treated first with water, 72 patients mostly injured with cuts and falls were treated with clean water before starting other treatment. 1175 patient received an antiseptic wash among them 75% had a cut injury and 11.5% a fall injury. Among all patient 58% were provided with bandage and these patients mostly had a cut injury. The volunteers treated 8 patients with Cardiopulmonary Resuscitation. Analgesia was given mostly in cuts (60.2%), falls (15.1%) and RTI (3.5%) patients and patients with fever (5.3%). About 249 (18%) of all patients were referred for further treatment.

Conclusion Expanding emergency medical service through community volunteers will be very effective in reducing mortality, morbidity and progression of any complications after injury.

SP6-66 THE RELATIONSHIP BETWEEN DENTAL DECAY AND CAREGIVER NEGLECT IN CHILDREN

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Despite all the public health policies, dental decay continues to be one of the most prevalent diseases in children (Siqueira *et al*, 2009). Among the factors related to dental decay in children is the lack of care from caregivers towards their children (Talekar *et al*, 2005), which can be seen as neglect (Chaves *et al*, 2003). However, not much is known regarding the relationship between dental decay and neglect, which is the aim of this research.

Methods 5-year-old children in a small city (Pacoti, Ceará, Brazil) with a public and well organised dental care assistance program were evaluated for dental problems, utilising the dmft index (number of decayed, missing, or filled teeth in a person), and signs of neglect (general hygiene: dental, hair, fingernail hygiene), through a visual inspection by the same investigator.

Results All 5-year-old children from the municipality were included. A total of 149 children (with parents and their children's consent), from all socio-economic levels, were examined. Only 34.9% were caries free, and more than 20% had five or more cavities. 32.9% had a dmft index of 4 or more. 64.5% had bad or partially bad oral hygiene. There was a strong and significant relationship between bad oral hygiene and dental decay experienced (dmft) ($p=0.001$). There was also a relationship between general hygiene and hair and fingernail hygiene ($p<0.005$).

Conclusion These findings suggest that children that are not properly taken care of (that have neglected their general hygiene) are more prone to have dental decay.

SP6-67 TB TRAINING ON DOTS STRATEGY FOR PRIMARY CARE'S HEALTHCARE WORKERS IN 2010, SAO PAULO STATE, BRAZIL

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Introduction Since establishment of DOTS Strategy in 1998, the Sao Paulo State TB Control Program has always been emphasising the need to sensitise and train healthcare workers (HCWs) in

primary care with the purpose to expand and strengthen DOTS in TB high burden municipalities aiming the decentralisation of TB care.

Method Two TB burdened metropolitan regions were chosen for TB Training: (a) Metropolitan Area of Sao Paulo (approximately 20 million inhabitants) and (b) Sao Paulo Atlantic Coast (approximately 2 million inhabitants) with 18 high TB burden municipalities. Sao Paulo State has a huge population distributed in its 645 municipalities with 73 high TB burden cities. The training model used a framework consisting of classes and workgroups for 5 workdays (20 h), with a participative methodology to propitiate an interaction between trainees and tutors generating discussions and allowing the consensus in TB-related matters.

Results The training activities took place in 2010 sponsored by Sao Paulo State Secretary of Health and Global Fund TB Brazil. The TB training has been accomplished successfully with 1256 HCWs from May to October 2010. The 2009 epidemiological evaluation achieved active case findings rates from 0.9% to 126.6% of goal which is to examine 1% of inhabitants of each municipality, and treatment coverage rates on DOT from 7.8% to 96.8%, demonstrating the need of improving rates in some TB high burden municipalities regarding TB trainings of HCWs.

Conclusions Training activities must be understood as a planning and follow-up resource in order to improve TB control activities.

SP6-68 MALARIA IN PREGNANT WOMEN IN HIGH AND MEDIUM INCIDENCE AREAS IN NIAS DISTRICT, INDONESIA, 2005

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Background Malaria is a major problem which is serious in pregnancy. Pregnant women are more often exposed to malaria infection compared to non-pregnant women. The prevalence of malaria in pregnant women around the world is 10%–65%. In pregnancy malaria on the pregnant women are that it can cause anaemia, death, infant miscarriage, infant death, and low birth weight. The aim of this research was to describe the proportion of pregnant women with malaria and describe the influence of factors on high incidence areas and medium incidence areas in Nias district, Indonesia.

Methods This research used a cross-sectional design with primer data. A sample was taken from pregnant women who had not taken anti-malaria medication with the last month. 440 pregnant women were sampled, 220 pregnant women in a medium incidence area and 220 in high incidence area. The sample was taken by multistage random sampling. Analyses were conducted to describe the proportion and determinant factors in each area. Research variables were malaria, gravity, parity, stage of pregnancy age, mother's age, occupation, knowledge about malaria, usage of insect killers and closed outputs.

Results The proportion of pregnant women with malaria in the High Incidence Area (HIA) was 36.36% and Medium Incidence Area (MIA) 31.36% and HIA+MIA 33.86%. The proportion of pregnant women that had suffered a clinical symptom in the last month in HIA was 10.90% and in MIA 35.45%.

Conclusion Factors determining malaria prevalence in pregnant women in HIA and MIA are gravity, knowledge, usage of insect killer and closed outputs. The importance of treatment and how to protect from malaria can be achieved by having a standard book on malaria, blood examination during antenatal care and health promotion.

SP6-69 A STUDY OF REPORTED SICKNESS PATTERN OF AIR PASSENGERS AT INDIAN AIRPORTS

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There are 58 million air passengers using 125 airports in India in 2009–2010. Out of which 58% are in domestic sector 42% in international sector. There is no centralised data of morbidity of air travellers. Air passengers request for medical assistance are given free help at all airports managed by AAI. Other 7 joint venture airports charge for medical assistance.

Method Records of Air passenger asking for help their disposal has been analysed for year 2009.

Result Pattern is one reported sick passenger per 23 000 in international travel and 1 in 44 000 in domestic sector. Most of passengers (50%) of reported sickness were seen in departure in domestic while arrival cases (55%) were more in international sector. 10% cases were sent to hospitals for opinion and treatment. There were 67 non-schedule landing due to medical reasons at all airports. There were three emergency landing due to disruptive air passenger in Indian Sky. There were 12 deaths at airports. On analysing symptoms Diarrhoea, Giddiness, Chest pain, Choking, Fits, earache, toothache, bleeding from natural orifices, minor injuries, accidents, others. Gender wise males were more. Age wise middle and geriatric age group asked for medical help.

Cause Probably Nomadic Stress Complex and tolerance limit played some role.

Conclusion Air travel morbidity pattern is not fully known till date. A need for Tele Medicine for international air passengers is felt. A proper protocol for handling disruptive air passenger at airports/in sky is felt especially for international citizen.

SP6-70 NATIONAL HEALTH INSURANCE SCHEME, MDG AND MATERNAL AND CHILD HEALTH IN OYO STATE, NIGERIA

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Lack of adequate healthcare financing is one of the factors that prevent women from getting the healthcare they need. To remove the financial barrier to maternal and child health services for women in the non-formal sector, the National Health Insurance Scheme—Millenium Development Goal and Maternal and Child Health Project established. The study was to determine the factors affecting the coverage and utilisation of the NHIS-MDG MCH project in Oyo State, Nigeria. A cross sectional facility—based empirical study was carried out. Both secondary and primary data were collected through the assessment of non-confidential records such as NHIS and hospital records and oral key informant interviews with coordinators of NHIS-MDG/MCH project in three selected local government areas. Presently, only 100 000 potential beneficiaries are expected to be covered in Oyo State, which has a population of women in the child bearing age as 1 269 514 and that of children under 5 years as 1 154 104. Lack of adequate skilled personnel at the health facilities, poor infrastructure, delay in counterpart funding by the state government, political influence, poverty, as well as poor community awareness are factors affecting the coverage and utilisation of the NHIS-MDG/MCH project. Level of coverage and utilisation of the NHIS-MDG/MCH services was low. Strategies to improve awareness, coverage and utilisation of these services among women and children in the non-formal sector should be implemented.