

in men and women, followed almost equally by powered wood cutters in men. Doors were the most frequent objects of amputation in children, followed by powered wood cutters.

**Conclusion** Education, enforcement, and improved engineering are the keys to prevent amputations. Precluding illegal child labour is essential.

**P1-141 MYOCARDIAL RE-INFARCTION: COUNTRY OF BIRTH, GENDER, SOCIO-ECONOMIC POSITION (SEP), AND AGE TO BE CONSIDERED**

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**Introduction** Myocardial re-infarction is common and carries a high mortality rate. The risk of myocardial re-infarction in Sweden is less known, and no studies are conducted to consider re-infarction among immigrants in Sweden. We are aimed to compare the risk of myocardial re-infarction among foreign-born to the risk among those born in Sweden.

**Methods** We followed a cohort of 330 thousand men and more than 180 thousand of women ages 30 to 85 years between 1987 and 2008 through linkages between Swedish National Registers. HR is adjusted for age, calendar year of diagnosis of first MI and education. The main outcome measure was second myocardial infarction in relation to main exposure which is country of birth.

**Results** We observed an overall higher risk of second MI among immigrants compared to Swedes, the risk was statistically significantly 5% higher (HR 1.05; 95% CI 1.02 to 1.09) among women foreign-born and 7% higher (HR 1.07; 95% CI 1.04 to 1.10) among men foreign-born. The risk decrease with increasing level of education for both Swedes and immigrants and with increasing age the risk will increase.

**Conclusion** The higher risk of second myocardial infarction among immigrant in Sweden apart from common risk factors (life style, stressful migration, problem in communication) also might be due to differences in access and utilisation of care after MI. It is important for healthcare providers to guarantee the equality of healthcare and to be directed by medical requirements.

**P1-142 PREVALENCE OF MULTI-DRUG RESISTANT TUBERCULOSIS IN KARACHI PAKISTAN: IDENTIFICATION OF AT RISK GROUPS**

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**Background** Multidrug-resistant tuberculosis (MDR-TB) is a possible threat to global tuberculosis control. Despite a disease prevalence of 263/100 000 population Pakistan lacks information on prevalence of drug resistant TB.

**Objective** Our objective was to estimate prevalence of MDR and associated risk factors in patients with Pulmonary Tuberculosis in Karachi.

**Methods** 640 adult consenting patients were enrolled from field clinics (July 2006 to August 2008) through passive case finding. Prevalence of MDR-TB with 95% CI was calculated with Epi-Info. Logistic Regression analyses were performed for risk factors associated with MDR.

**Results** Overall MDR rate was 5.0%, 95% CI 3.3% to 6.6% (untreated 2.3%, treated 17.9%). Mean age was 32.5 ( $\pm$ 15.6) years. With 45.6% (n=292) females and 54.4% (n=348) males. Factors independently associated with MDR were; female gender (OR 3.12;

95% CI 1.40 to 6.91), and prior history of incomplete treatment (OR 10.1; 95% CI 4.71 to 21.64). Ethnic groups at higher risk for MDR included Sindhis (OR 4.5; 95% CI 1.42 to 14.71) and Pashtoons (OR 3.6, 95% CI 1.12 to 11.62).

**Conclusion** This study reports an over all MDR rate of 5.0% in our study population. It further highlights the need for MDR prevention through re-focusing DOTS delivery with emphasis on women and certain high risk sub groups.

**P1-143 ETHNIC INEQUITIES IN HEALTHCARE CONSUMPTION: DATA REQUIREMENTS FOR FUTURE RESEARCH**

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**Introduction** Ethnic variations in healthcare consumption do not necessarily reflect inequities (variations that are avoidable, unfair and unjust). We analysed the usefulness of the literature for interpretation of ethnic variations in healthcare consumption, and the data requirements for further research.

**Methods** Conceptual review of empirical studies based on healthcare registry data.

**Results** Studies documenting ethnic variations in healthcare consumption, and studies using healthcare consumption data to define quality of care indicators and subsequently comparing these across ethnic groups, are not conclusive on (in)equity of care. If such studies include analysis of the impact of ethnic variations in consumption on health outcomes, and if medical need and other explanatory variables are taken into account, conclusions on (in) equity of care are possible. Following Andersen's model and its clinical adaptation by Rathore (2004), we specified the explanatory variables needed to understand ethnic variations in healthcare consumption and their effect on health outcomes as: objective medical need, socio-economic factors, patient preferences, lifestyle and therapy adherence. We found no published studies or datasets allowing for comprehensive analyses of causal associations of healthcare consumption and health outcomes.

**Conclusions** The literature does not provide sufficient evidence to distinguish between ethnic variations in healthcare consumption reflecting systemic inequities and those reflecting ethnic variations in medical need. The distinction has important policy implications, because the first requires measures to overcome ethnic bias in care, the second ethnic targeting of services.

**P1-144 FOOD INSECURITY IN PREGNANT WOMEN: SOCIOECONOMIC DETERMINANTS AND ASSOCIATION WITH DIETARY PATTERNS**

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**Introduction** In Brazil, 37.7% of all households are food insecure (FI). The prevalence is high not only in North-46.4% and Northeast-53.6% regions, but also in the South-23.5% and Southeast-27.1%.

**Objectives** Describe socioeconomic characteristics of FI and investigate the association of FI with dietary patterns.

**Methods** Longitudinal study was carried out with 1482 pregnant in two cities of Rio de Janeiro State, Brazil. Women were interviewed during the first trimester of pregnancy where FI was assessed and at postpartum when a frequent food questionnaire was applied. Principal components analysis was used to identify dietary patterns. Multiple logistic regression was performed to study the association of socioeconomic characteristics and FI and multiple linear regression to study the association of FI and dietary patterns.

**Results** Lower socioeconomic status, lower per capita income and presence of <20 years old in the household were associated with FI. Of the four dietary patterns identified, “prudent” (dairies, cracker, fruits and meat), “traditional” (rice, beans, vegetables, bread, butter and sugar), “snack” (salty snacks, sandwich cookies and chocolate) and “western” (fast food, processed meat, eggs, sweet-drinks), FI was associated positively with “snack” and negatively with “prudent” and “traditional”. After controlling for potential confounders, FI remained associated positively with “snack” pattern and negatively with “prudent” pattern.

**Conclusion** In pregnant women, FI play an important role on the food choices. Identifying high risk groups might be useful to trace public health policies concerning nutritional education and supplementation.

#### P1-145 WITHDRAWN

#### P1-146 THE IMPACT OF DEDICATED DERMATOLOGY SERVICES ON THE AWARENESS OF CUTANEOUS CANCER RISK AND ON ATTITUDES TOWARDS UV EXPOSURE AMONG TRANSPLANT RECIPIENTS

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**Introduction** Skin cancers, in particular squamous cell carcinoma and basal cell carcinoma, are the most frequent malignancies in organ transplant recipients (OTR). However, it is unclear if specialist OTR dermatology clinics increase the knowledge and attitude towards ultraviolet protection.

**Methods** Using the same questionnaire on skin cancer awareness, history of ultraviolet exposure and use of protection measures before and after transplantation we compared two centres with a dedicated dermatology clinic (London) and with a fortnightly OTR dermatology clinic attended only by patients referred by the renal team (Oxford).

**Results** Overall, 288 and 274 Caucasian transplant patients from Bart's and the London NHS trust and from Oxford Radcliffe Hospitals were recruited, respectively. As expected, 57% of OTR patients in Oxford had never seen a dermatologist compared to 17% in London ( $p<0.0001$ ). Overall, OTR patients from Oxford where no dedicated skin clinic is available reported significantly ( $p<0.05$ ) higher UV exposure, lower compliance to sunscreen use and lower knowledge on skin cancer than OTR patients from London where this facility is provided.

**Conclusions** We found that dedicated OTR dermatology clinic improve substantially skin cancer awareness and photoprotective measures. However, this study could not estimate the impact of these clinics on skin cancer incidence, morbidity and mortality.

#### P1-147 FOLLOWING PUBLIC HEALTH PROTOCOLS DURING 2009 PANDEMIC INFLUENZA A (H1N1)

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Learning about monitoring of public health recommendations is very important, especially in situations as pandemic (H1N1) 2009. By this, the Health Regional Ministry of Castilla y León (Spain) carried on a study to assess the compliance with Public Health

indications of the cases studied. Protocols recommended asking for laboratory diagnostic only in cases with serious illness. We analysed requests from epidemiological weeks 44 to 50, both included, and studied different variables. In this period, 588 cases were asked for laboratory diagnostic. Only 247 (42%) applications fulfilled serious ill criterion. Most of them were men (153, 62%). The average age was 41.1 years old in serious illness (SI) and 29.5 years old in non serious illness (NSI). SI was more frequent between 15 and 44 years old and NSI between 0 and 4 years old. Pneumonia was the main reason (27%) for hospitalisation in SI and febrile syndrome (23.5%) was in NSI. 25% of SI and 2.7% of NSI ( $p$  value=0.0000) were hospitalised in the ICU. Treatment was given to 26.8% of SI and 13% of NSI ( $p$  value 0.0001). Pregnancy was more common in NSI (3%). More than 65% of SI presented any illness risk factor. Smoking, morbid obesity, Diabetes and chronic kind illness were more frequent in SI. 31% of SI and 25% of NSI were AH1N1 2009 positive. Protocols were followed by doctors in <50%. Because of this, a better understanding between Public Health and Sanitary Care System is necessary.

#### P1-148 TUBERCULOSIS ATTITUDES AMONG PRISONERS AND GUARDS IN BRAZIL

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Backward Prison guards may limit the access of prisoners to health service and thus contribute to tuberculosis (TB) diagnosis and treatment delays.

**Objectives** To compare the attitudes about TB among prisoners and guards.

**Method** It was designed a cross-sectional study with 140 prisoners and 71 guards from a big male prison in Brazil. All prison guards were interviewed. Among prisoners nearly 20% were randomly selected for interview based on KAP (knowledge, attitude and practice) survey on symptoms, prevention attitudes and treatment knowledge.

**Results** Close to 100% know that TB is curable and 72% would seek treatment at a health service unit ( $p>0.05$ ). Emotions related to the possibility of having TB differ, guards have higher proportion of thread (20% vs 8%  $p=0.008$ ), surprise (23% vs 9%  $p=0.008$ ), but sadness (38%) and other emotions do not vary significantly among both groups. Although nearly all would speak about their illness, the proportion of guards who would speak to several people was higher (to doctor 54% vs 18%), wife (66% vs 9%), parents (63% vs 7%), children (63% vs 4%) and other family members (58% vs 12%). Higher proportion of prisoners was acquainted with someone with TB (82% vs 58%). Also higher was the proportion that has already had TB (15% vs 3%).

**Conclusions** No differences on preventable attitudes were observed, although the guards' knowledge is higher than prisoners and their negative attitudes are low. They still have mistaken ideas about TB which can be corrected and thus improve diagnosis, treatment and prevention.

#### P1-149 TUBERCULOSIS KNOWLEDGE DIFFERENCES AMONG SEVERAL PROFESSIONALS IN A BRAZILIAN CITY WITH A BIG PRISON

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**Background** As tuberculosis (TB) is highly prevalent among prisoners, it is important that health service professionals and professionals in close contact with prisoners are acquainted with diagnostic, prevention and control basic concepts.