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## P1-145 withdrawn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 ( $\mathrm{p}<0.0001$ ). Overall, OTR patients from Oxford where no dedicated skin clinic is available reported significantly ( $\mathrm{p}<0.05$ ) 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 <br> 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 $8 \% \mathrm{p}=0.008$ ), surprise ( $23 \%$ vs $9 \% \mathrm{p}=0.008$ ), 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.

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 $\chi^{2}$ 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 ( $66 \%$ ) ( $\mathrm{p}<0.05$ ). Weight lost ( $60 \%$ ) and fever of unknown cause ( $32 \%$ ) did not show statistical difference ( $\mathrm{p}=0.07$ and $\mathrm{p}=0.59$ ). Airborne transmission was correctly informed by $88.4 \%$ to $94.4 \%$ with no statistical differences ( $\mathrm{p}=0.19$ ) 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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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 comorbidities and occurrence of DHF.
Results 170 cases of DHF and 1175 controls were included. Significant associations were found between DHF and white ethnicity ( $\mathrm{OR}=4.7$; 2.1-10.2), high income ( $\mathrm{OR}=6.8 ; 4.0-11.4$ ), high education ( $\mathrm{OR}=4.7$; 2.35-9.27), reported diabetes $(\mathrm{OR}=2.7 ; 1.1-6.7$ ) and reported allergy treated with steroids $(O R=2.9 .0 ; 1.0-8.5)$. Black individuals who reported being treated for hypertension had 13 times higher risk of DHF then 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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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 $\backslash o r$ 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 $\backslash$ or hypertension and were on contin-uous-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 126203 eligible adults, $5.3 \%$ reported diabetes and $26.9 \%$ hypertension, being $86 \%$ and $81 \%$, respectively, on contin-uous-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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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

