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

