Results Data of 772.659 hospitalisations which happened from 1998 to 2007 were collected and 70 184 (9.1%) of them were due to malignant neoplasms; 45 167 (5.8%) were due to T2DM and 2204 (0.3%) were of patients with both, malignant disease and T2DM. The mean age was 61.3 ($\pm$13.4), 63.5 ($\pm$12.6) and 65.9 years ($\pm$11.4) respectively. 21% of admissions happened in university hospital of FMRP/USP. The PR of admissions by T2DM and neoplasms was 0.48 with a CI 95% [PR 0.48 (95% CI 0.46 to 0.50)] p<0.05. Subsequent case-control study has shown similar results [(OR 0.40 (95% CI 0.28 to 0.56)] p<0.05.

Conclusion These findings suggest a lower chance of hospitalisation of patients with diagnosis of T2DM and associated cancer. Currently a study to clarify these findings is underway.

SP1-96 | SYMPTOMS OF RESPIRATORY ALLERGY AND VEGETABLE AND FRUIT CONSUMPTION AMONG SCHOOLCHILDREN: THE PILOT STUDY IN KRAKOW, POLAND

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Introduction Increasing morbidity of respiratory allergy among children has been observed in the last decades in Poland and across developed countries. Several factors responsible for unfavourable trends were investigated and dietary factors among them. Little is known how the diagnosis of allergy may play a role in decision making regarding consumption of some foods. The aim of the current study was to investigate the frequency of allergy among schoolchildren and to explore potential relationship between respiratory allergy and consumption of vegetables and fruits.

Methods Dietary factors, the frequency of diagnosed allergy and allergy symptoms for the year prior to interview were investigated among schoolchildren in a cross-sectional study. The frequency and the portion size of 77 dietary items were evaluated. Food allergy cases were excluded.

Results Among 62 schoolchildren investigated 6.5% were diagnosed with asthma, 12.9% with eczema. More reported recurrent rush, cough without inflammation, and hay fever. Overall 50.0% of children reported allergy symptoms. The rare frequency of vegetable (<median=13.5 times/week) and fruit (<median=10.8 times/week) consumption was defined. The diagnosis of allergy showed decreased risk of having a vegetable rarely (OR 0.23, 95% CI 0.06 to 0.86), but an increase in BMI by 1 kg/m^2 increased this risk (OR 1.23, 95% CI 1.01 to 1.50). There was no significant relationship between allergy and rare fruit consumption.

Conclusion Data from a pilot study showed a possible effect of the diagnosis of allergy among schoolchildren on their dietary habits especially recommended consumption of vegetables. The results suggest that schoolchildren with allergy more frequently consume vegetables than their healthy peers.

SP1-97 | NONTUBERCULOUS MYCOBACTERIA: COMPARATIVE ANALYSIS WITH TUBERCULOSIS NOTIFICATION IN SãO PAULO STATE (SPS)

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Introduction Occurrence of NTM infections is increasing worldwide. Symptoms and radiological signs of NTM are similar to those of pulmonary tuberculosis (TB). When the TB diagnosis is based on AFB detection only, eventual NTM diseases can erroneously be treated as TB. The aim of this study is to identify pulmonary NTM notified as TB.

Methodology A database was constructed with NTM records during the 2008—2009 period. The records were compared with TB notifications in the SPS information system during the 2006—2010 period, using RecLink III. This software implements various file processing routines, specially the association with probabilistic record linkage.

Results During the 2008—2009 period, 6754 micobacterial cultures of pulmonary origin were performed, 4895 (72.5%) of which were identified as *Mycobacterium tuberculosis* Complex and 1259 (18.6%) as NTM. Among NTM patients, 449 were notified as TB, with 301 (26%) being considered as matching pairs. In 2009, the treatment outcomes revealed that 38.5% obtained TB cure and 15.4% had diagnosis change. In 2008, 56.8% obtained cure and 27.1% had diagnosis change. The most frequent NTM were *Mycobacterium kansasi*, *Mycobacterium avium* and *Mycobacterium fortuitum*.

Conclusions The data demonstrate that many patients notified and treated as TB had really NTM disease. Evidences support the urgent need of fast diagnosis and adequate information flow for accurate treatment.

SP1-98 | "A STUDY ON PREVALENCE OF CARDIOVASCULAR RISK FACTORS AMONG THE SEDENTARY WORKERS OF GOVERNMENT MEDICAL COLLEGE, JABALPUR, INDIA"

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Background and Objectives Urban Indians especially sedentary workers have a high prevalence of insulin resistance, hypertension and cardiovascular disease. We studied the prevalence of pre-hypertension and hypertension, as well their association with cardiovascular risk factors, in office staff of upper socio-economic population in Government Medical College, Jabalpur, India.

Methods A total of 100 adults (age $\geq$20 yr) working in administrative office of high-income group residents in the city of Jabalpur, central India, were invited to be enrolled for the study. The response rate was 100% (n=100). Socio demographic profile, Blood pressure, anthropometry, plasma glucose were measured. The variables contributing significantly to pre-hypertension and hypertension were analysed by appropriate tests of significance.

Results The prevalence of hypertension was 35%, pre-hypertension was 30% and for raised plasma glucose level was 40%. In contrast to hypertension, which was highest in the age group 60—69 yr (54%), prehypertension was highest (33%) in the group 30—39 yr. There was a high prevalence of cardiovascular risk factors in the sedentary workers [central obesity (46.7%) and smoking (30.3% of males)].

Interpretation and Conclusion A high prevalence of pre-hypertension and hypertension were noted in sedentary workers. Increasing age, body mass index, central obesity and diabetes were significantly associated with both hypertension and pre-hypertension. Pre-hypertension was associated with an increased prevalence of cardiovascular risk factors.

SP1-99 | DECLINE IN CARDIOVASCULAR MORTALITY AND SOCIAL INEQUALITIES IN THE MUNICIPALITY OF SãO PAULO: 1996—1998 AND 2003—2005

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Introduction Usually mortality coefficient and cardiovascular disease mortality in particular, have shown decreasing trends since around

1970. Mortality inequalities continue to exist between population sub-groups.

Methods Ecological study using data about mortality of the Improvement Program of Information on Mortality of São Paulo and population estimates by demographic census (IBGE—2000). Areas were drawn from the Social Inclusion Map for the City. The outline was based on territorial classification of the 96 administrative districts in five areas, according to the index of social districts: Areas 1 and 2 (inclusion) and 3, 4, 5 areas (exclusion). We examined cardiovascular mortality rates calculated for 3-year averages age-standardised, relative to differences and rates ratio between areas (CI of 95%).

Results Cardiovascular mortality declined in all areas and both male and female sexes in these periods. It was observed major decline (30%) between 1996—1998 and 2003—2005 in rich areas and it was smaller in poor areas (5%). The highest differential was among male, with rate ratio (A5/A1) that it changed from 1.02 (95% CI 0.99 to 1.05) in first period for 1.38 in the last period (95% CI 1.34 to 1.42). In the women this ratio changed from 0.79 (95% CI 0.77 to 0.81) for 1.07 (95% CI 1.03 to 1.09).

Conclusion Although overall decline in cardiovascular mortality in all socioeconomic status, it was observed increasing of the inequality in reduction of this death rates, which may reflect worsening living conditions or less access to the health services and to the development diagnostic and therapeutic methods.

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Introduction Rheumatic heart disease (RHD) is still prevalent in developing countries, with 332.000 annual deaths estimated worldwide. In Brazil, RHD remains a major problem, responsible for high mortality/morbidity and great social impact, with many patients requiring surgical intervention during childhood. Our aim was to investigate the time and risk factors leading to valve surgery in children and adolescents with RHD in a tertiary center in Rio de Janeiro.

Methods Data were reviewed on 137 patients followed-up between 1988 and 2007. RHD diagnosis was assigned with revised Jones criteria and/or Doppler-echocardiography indicating chronic mitral/aortic lesions. Kaplan—Meier method was used to determine time until surgery and Cox model to evaluate potential risk factors: age; gender; clinical status (acute; recurrence; chronic heart disease); recurrence rate; secondary prophylactic status and endocarditis.

Results The studied population was 52.5% female, median age 11.2 years. Median follow-up time 7.3 years. The proportions were 33.5% for non-adherence to prophylaxis, 31.4% for recurrence rate, 8.8% for endocarditis where most underwent surgery (83.3%). Surgical rate (41%) was different between male (53.8%) and female (29.2%). Survival curves showed most events on the first 2 years and none after 10 years. Cox analysis confirmed the male gender and endocarditis as significant factors.

Conclusion Brazilian RHD children and adolescents committed with endocarditis suffered more risk of having valve surgery. Although most patients underwent surgery in first 2 years, long-term surveillance of this population is necessary because of possible reintervention. Survival analysis for repetitive events should be applied to the evaluation of recurrent episodes and reoperation.

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The impact of chronic diseases continues escalating among populations in developing countries. In an effort to combat chronic cardiovascular and lung diseases globally, NHLBI and the United Health Chronic Disease Initiative support local research and training capacity building programs for a network of 11 collaborating Centers of Excellence (COEs) in low- and middle-income countries. Each COE plans to implement 1-4 projects; 20 projects are research-related [four focus on pulmonary diseases, eg, chronic obstructive pulmonary disease (COPD), and 19 focus on cardiovascular diseases (CVD), eg, hypotension and stroke] and others provide training, community outreach service, and institutional capability building opportunities. Six projects are conducted in multiple countries, involving 21 developing countries. Studies typically target adults, though two studies target children and adolescents. Projects adhere to the following study designs: qualitative assessment and focus group discussion, case-control, cross-sectional, prospective cohort, quasi-intervention, randomised clinical trial, and simulation. COEs primarily collect data on socio-demographics; anthropometry and blood pressure; lifestyle such as smoking, alcohol use, and physical activities; medical history and medication use; and nutrition. For other studies, COEs collect data on mental health, quality of life, health service utilisation, female reproductive history, spirometry, and biomarkers of CVD and pulmonary diseases. Collecting similar types of data may allow cross-study and cross-national data analysis. Each developing country is paired with at least one academic partner from a developed country to enhance sustainable research and training activities to tackle the complex challenges of the CVD and pulmonary non-communicable chronic disease burden.

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Introduction Evidence suggests that tooth loss may lead to changes in food choice due to eating difficulties. The relationship between use of dental prosthesis and changes in body mass index among elderly is still unclear. This study aimed at assessing the association between oral rehabilitation, self-perceived chewing ability and nutritional status in Brazilian elderly.

Methods This study is part of a major project—the FIBRA study—carried out in Campinas, Brazil. The sample of this cross-sectional study was composed by 900 independent-living older people. Complete data were available for 545 persons. Dental prosthesis was assessed in accordance with the WHO criteria. Height and weight were used to generate body mass index (BMI) data. The data regarding dental prosthesis use and self-perceived limitation in the type or amount of food intake due to problems with prostheses or their lack generated a new variable, oral status. Participants were categorised into eutrophic, underweight or