with representative Japanese data report from National Health and Nutrition Survey.

**Results** 243 participants, 117 males and 126 females, completed questionnaire and measurements. Elderly people aged 65 and over were 58.2% in males and 61.9% in females. Prevalence (%) of overweight, BMI>25.0, were 36.3/24. for males/females, whereas 28.6/20.6 in Japan. Waist circumference more than 85 cm for male and 90 cm for female, were 80.2/38.4 whereas 52.9/17.9 in Japan. Hypertension, SBP>140 and/or DBP>90, were 60.9/57.4, whereas 42.8/31.5 in Japan. Probable diabetes, FBS>126 mg/dl, and high triglyceride, >150 mg/dl, were almost same. Metabolic syndrome were noted 41.8/12.6 whereas 25.3/10.6 in Japan.

**Conclusion** High prevalence of MetS among Japanese Immigrant Population with big dietary change in South Brazil was indicated.

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P2-195 | **A PROPENSITY SCORE FOR PREDICTING MAJOR ADVERSE OUTCOMES AFTER TOTAL JOINT REPLACEMENT IN MEN**

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**Objective** Prioritisation of patients for total joint replacement (TJR) represents a challenge. The objective of this study was to construct a propensity score (PS) that both predicts and informs prioritisation of TJR among elderly men.

**Methods** Clinical data from 11 388 men were integrated with hospital morbidity data and mortality records. A PS quantifying each individual's probability of having TJR was calculated using multivariable competing risk regression models. The PS was then used to assess risk of incident in-hospital complications and mortality following TJR.

**Results** Younger and healthier patients were selected for TJR. Comorbidities such as diabetes mellitus, peripheral vascular disorders, and cancer lowered the probability of having TJR. Among men who had TJR, 25% developed a major in-hospital complication. The PS independently predicted both major complications and short- and long-term mortality. Patients with low PSs who nonetheless underwent TJR were more likely to experience an adverse outcome. After adjusting for risk factors, patients who were in the lowest tertile of the distribution of the PS were 67% more likely to develop a major complication (p=0.023), and 2.2 times more likely to die within 10 years after TJR (p=0.035). Other predictors of major complications following TJR included weight, injury, and having a minor complication. In-hospital complications independently increased the risk of mortality after TJR.

**Conclusion** In the presence of clinical indications for TJR, this PS informs clinical decision making about selecting patients who are most likely to benefit and least likely to be harmed as a consequence of TJR.

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P2-196 | **SMOKING, BODY WEIGHT, PHYSICAL EXERCISE AND RISK OF LOWER LIMB TOTAL JOINT REPLACEMENT IN A POPULATION-BASED COHORT OF MEN**

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**Objective** To assess the associations of smoking, body weight and physical activity with the risk of undergoing total joint replacement (TJR) in a population-based cohort of men.

**Methods** A cohort study of 11 388 men that integrated clinical data with hospital morbidity data and mortality records. In three separate age groups we modelled the risk of TJR on weight, height, co-morbidity, injury, socioeconomic status, years of smoking and exercise, using Cox proportional hazards regressions and competing risk regressions.

**Results** A dose-response relationship between both weight and smoking, and risk of TJR was observed. Being overweight independently increased the risk of TJR, while smoking lowered the risk. The decreased risk among smokers was demonstrated in both Cox and CRR models and it became apparent after 23 years of exposure. Men who were in the highest quartile (48+ years of smoking) were 44%−52% less likely to undergo TJR than never-smokers. Tests for trend in the log HRs across both smoking and weight quantiles yielded p<0.001. Vigorous exercise increased the hazard of TJR, however, the association reached statistical significance only in the 70−74 year-old age-group (adjusted-hazard ratio: 1.71, 95% CI 1.26 to 2.33). Adjusting for Deyo−Charlson Index or Elixhauser's co-morbidities did not eliminate these associations.

**Conclusion** Being overweight and reporting vigorous physical activity increased the risk of TJR. This study is the first to demonstrate a strong inverse dose-response effect of duration of smoking and TJR. More research is needed to better understand the role of smoking in the pathogenesis of osteoarthritis.

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P2-197 | **CASE-CONTROL ANALYSIS OF THE EFFECTS OF AGE AND GEOHELMINTH INFECTION ON WHEEZE AND ATOPY IN THE RURAL TROPICS**

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**Introduction** Epidemiological data suggest that a minority of asthma cases in Latin America may be associated with allergic sensitisation which could be explained by the effect of environmental factors. The aim was to explore the relationship between levels of IgE specific for allergens (asIgE), skin prick test responses (SPT) and recent wheeze and the effect of age and geohelminth infections on these associations.

**Methods** A case-control study was conducted among 376 children aged 7−19 yrs living in Afro-Ecuadorian rural communities in tropical Ecuador. Asthma cases were selected based on the presence of recent wheeze and controls as a random sample of those without symptoms by questionnaire. Atopy was measured either by asIgE or SPT. Geohelminth infection was determined by both eggs in stools and anti-Ascaris IgE.

**Results** There was a significant positive association between the markers of atopy and recent wheeze in the older (7−11 yrs) but not in the younger (12−19 yrs) age group. A positive association between anti-Ascaris IgE and wheeze was observed in both the younger (adj. OR 2.06, 95% CI 1.05 to 4.03) and the older age groups (adj. OR 3.00, 95% CI 1.37 to 6.56). Having SPT responses was significantly associated with wheeze among children with no active geohelminth infection (adj. OR 3.52, 95% CI 1.05 to 11.79), while