

(60.6% vs 36.7%) and those without evidence of disease at 12 months post transplantation (67.5% vs 5.7%) had higher survival. In multivariate analysis, evidence of disease at 12 months after HSCT (HR 5.22), chemo-sensitivity to the last regimen (HR 6.81) and systemic symptoms (HR 2.60) were associated to survival. **Conclusions** We found that the most well recognised disease characteristics and overall survival in this cohort were similar to those found for patients with NHL undergoing haematopoietic stem cell transplantation in other countries.

#### SP1-42 PREVALENCE OF OVERWEIGHT AND ASSOCIATED FACTORS IN UNDER-5-YEAR-OLD CHILDREN IN BRAZIL

doi:10.1136/jech.2011.142976n.19

<sup>1</sup>R Müller, <sup>2</sup>E Tomasi, <sup>2</sup>L Facchini,\* <sup>2</sup>R Piccini, <sup>2</sup>D Silveira, <sup>2</sup>F Siqueira, <sup>2</sup>E Thumé, <sup>2</sup>S Silva, <sup>2</sup>A Dilélio. <sup>1</sup>Universidade Católica de Pelotas, Pelotas, Rio Grande do Sul, Brazil; <sup>2</sup>Universidade Federal de Pelotas, Pelotas, Rio Grande do Sul, Brazil

**Introduction** The aim of the study was to determine the prevalence of overweight among under-5-year-old children in Brazil and investigate its associations with sociodemographic characteristics, exclusive breastfeeding, number of siblings and birth weight.

**Methods** Cross sectional population based study, conducted in the five geopolitical regions of Brazil, with a sample of 6397 children. The nutritional classification was done using the 2006 WHO growth curves. Were considered overweight the children with a z-score higher than two SDs above the weight for height median.

**Results** The prevalence of overweight among under-5-year-old children in Brazil was 12%. The outcome was 22% higher in males (RP=1.22; 95% CI 1.02 to 1.47; p=0.030). There was a linear inverse association: the younger the child, the higher the prevalence of overweight (p=0.032). The white children had a prevalence of overweight 22% higher than the non-white ones. The higher the birth weight, the higher the prevalences of overweight (p=0.000). Children who were breastfed up to 120 days had a prevalence of overweight 34% higher compared to the ones who were breastfed for more than 120 days.

**Conclusion** The prevalence of obesity was higher in males, in under-1-year-old, white, with a birth weight of <3500 g, exclusively breastfed up to 120 days children.

#### SP1-43 CLASS-BASED RESIDENTIAL SEGREGATION AND SOCIOECONOMIC DISPARITIES IN ASTHMA PREVALENCE

doi:10.1136/jech.2011.142976n.20

K Kershaw,\* M Carnethon. Northwestern University, Chicago, Illinois, USA

Socioeconomic disparities in asthma prevalence are well established in the US. Evidence suggests environmental factors may play a role, but no studies have examined the role of class-based residential segregation. We investigated whether class-based residential segregation attenuated the association between individual-level income and asthma prevalence among 164 143 non-Hispanic (NH) white, 19 493 NH black, and 14 399 Hispanic participants of the 2009 Behavioural Risk Factor Surveillance System aged 18 years and older. Current asthma was based on self-report. Class-based segregation was measured at the metropolitan level using the poverty isolation index, a measure of the extent to which individuals with incomes below the poverty threshold are spatially isolated from non-poor individuals. Each metropolitan area was given an index score ranging from near 0 to 1, with lower scores indicating less segregation. Among blacks, odds of asthma was 0.84 times lower per quartile higher income (95% CI 0.77 to 0.91) after adjusting for

age and gender. However, this association varied by level of segregation (p for interaction=0.07). Income was more weakly associated with odds of current asthma at low segregation (10th percentile; OR 0.90; 95% CI 0.78 to 1.03) vs high segregation (90th percentile; OR 0.74; 95% CI 0.66 to 0.82). For whites, income was also inversely associated with odds of current asthma, but adjustment for segregation did not attenuate this relationship. Neither income nor segregation was associated with current asthma among Hispanics. These findings suggest that among blacks, class-based segregation may help explain individual-level income disparities in asthma prevalence.

#### SP1-44 ASSOCIATION BETWEEN ALLERGIC DISEASES AND NUTRITIONAL STATUS AMONG CHILDREN IN BANGLADESH

doi:10.1136/jech.2011.142976n.21

<sup>1</sup>H M D Hossain,\* <sup>1</sup>E Noguchi, <sup>2</sup>S E Arifeen, <sup>2</sup>R Raqib, <sup>3</sup>L A Persson, <sup>1</sup>Y Wagatsuma. <sup>1</sup>Department of Epidemiology, University of Tsukuba, Tsukuba, Japan; <sup>2</sup>International Centre for Diarrhoeal Diseases Research, Bangladesh (ICDDR,B), Dhaka, Bangladesh; <sup>3</sup>Department of International Women and Child Health, Uppsala University, Uppsala, Sweden

**Introduction** Interest has been arisen whether nutritional status is related to development of allergic diseases in children. Our aim was to investigate the association between nutritional status and serum IgE level in the developing country.

**Methods** This cross-sectional study was nested into a large scale nutrition intervention trial among pregnant women in rural Bangladesh. In this follow-up study, we collected venous blood to measure serum total and specific IgE. Serum total IgE was measured by human IgE quantitative ELISA. And IgE specific to dust-mite and ascaris were measured by the CAP-FEIA system. Weight and height have been measured and stunting, wasting, under weight and overweight were calculated by WHO Anthro. Specific IgE >0.70 UA/ml was considered as positive.

**Results** A total of 912 children of 4.5 years of age was successfully completed the study. Anthropometric indicators revealed wasting in 17%, stunting in 32%, underweight in 41% and overweight in 0.2% of the children. Log total IgE was 2.69+0.27 IU/ml (mean+SD). Mean anti-DP specific IgE was 3.33 (range: 0.00->100) UA/ml. Mean anti-ascaris specific IgE was 11.89 (range: 0.00->100) UA/ml. Stunting was significantly associated with increased total IgE (OR (95% CI) 1.59 (1.01 to 2.50)) and anti-ascaris IgE (OR (95% CI) 1.65 (1.18 to 2.29)). The association remained statistically significant after adjustment for mother's BMI, sex, health status and current illnesses (p=0.044 and p=0.003 respectively).

**Conclusion** The total and specific IgE level was high among children in Bangladesh. Nutritional status had an association with increased total and anti-ascaris IgE antibody.

#### SP1-45 PREVALENCE OF DEPRESSION IN PATIENTS WITH IDIOPATHIC PARKINSON'S DISEASE IN KOREA

doi:10.1136/jech.2011.142976n.22

W C Kim,\* H S Kim, S H Oh, O J Kim. Department of Neurology, CHA Bundang Medical Center, Seongnam, Gyeonggi-do, Republic of Korea

**Introduction** Depression is one of the most common non-motor symptoms of Parkinson's disease (PD). The prevalence rates vary widely according to the diagnostic criteria. However, in Korea, there are very few epidemiologic data concerning the prevalence of depression in PD. The aim of this study is to investigate the prevalence of depression and factors influencing depression in patients with PD.