

## ABSTRACT CIOI 2011

### INFLUENCE OF CHILD AND MATERNAL VARIABLES ON CHILDHOOD OBESITY IN THE MUNICIPALITIES OF FUNDÃO, MONTIJO, OEIRAS, SEIXAL AND VIANA DO CASTELO

F. Coelho<sup>1</sup>, A. L. Silva<sup>1</sup>, C. Ramos<sup>1</sup>, M.A. Carvalho<sup>1</sup>, A. Rito<sup>1,2</sup>

<sup>1</sup>University Atlântica, Oeiras, Portugal

<sup>2</sup>National Institute of Health Dr. Ricardo Jorge, Lisbon, Portugal

**BACKGROUND:** Childhood obesity has been considered a global epidemic and its prevalence has increased worldwide in the last decades. Such trends as gain special interest in the scientific community and their causes have been large studied. In this context it is recognized the importance of more study on obesity' influences. According to the literature childhood obesity is linked with some child and maternal features. This study aims to evaluate the relationship between child and maternal variables and childhood obesity in school aged children from Fundão, Montijo, Oeiras, Seixal and Viana do Castelo municipalities. **METHODS:** Longitudinal study developed into three periods (2008-2011). The present data results from the first stage. 167 public schools were selected from the 5 municipalities, where 3851 children were included. The nutritional status was evaluated according the Centers for Disease Control and Prevention (CDC, 2000) growthcharts criteria percentiles of Body Mass Index (BMI) and the child and maternal variables was obtained from a self-response family' questionnaire. The statistics analysis was obtained through descriptive analysis and Binomial Logistic Regression Model was used and the odds ratios for confidence intervals were set at 95 %.

**RESULTS:** 3173 children was evaluated, 50.6% were female with a mean age of 7.5 years ( $\pm dp=0.8$ ). The prevalence of overweight was 32.1% ( $BMI \geq P85$ ) and 14.3% was obese ( $BMI \geq P95$ ). Childhood breastfeeding occurred in almost children (90.1%) and showed a protective association with childhood obesity (childhood not-breastfeeding  $OR=1.6$ ; 95%CI: 1.1-2.2). High children birthweight was positively associated with childhood obesity ( $OR=2.5$ ; 95%CI: 1.3-4.6). The durability of breastfeeding, maternal weight, gestational age and maternal age did not show relevant link with childhood obesity. **CONCLUSION:** The child and maternal variables are associated with the development of childhood obesity, however in the present study, just not-breastfeeding and children birth weight showed a statistic link with childhood obesity. Furthermore investigation is useful in order to validate these results, and better understand the influence of child and maternal factors on child development.