Prediction instrument for obesity in adolescents at the Policlinico Universitario “Manuel Gonzalez Diaz” (2013-2014)

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Obesity is one of the principal non-declarable diseases affecting children and adolescents. With the objective of developing a predictive instrument to identify high-risk adolescents with obesity, a cohort prospective study was carried out at the Policlinic “Manuel Gonzalez Diaz”, Bahia Honda City from 2013-2014. It was developed in three stages; in the first stage, 1800 adolescents from 10-19 years of age were included. The prevalence was identified and the most relevant characteristics of obesity were described (defined as body mass index >97th percentile according to age and sex). In the second stage, we identified the possibility of the diagnosis of factors that increase the probability of obesity. The third stage elaborated and validated an obesity predictor instrument from the results of initial stages. To apply the instrument to sample A for internal elaboration and validation, sensitivity was 77.78% and specificity was 86.11%. Area under the curve (AUC) receiver operating characteristic (ROC) was 0.86, whereas for sample B the sensitivity was 79.63% and specificity was 92.13%. Positive predictive value (PPV) was 83.5% and negative predictive value (NPV) was 90.05%. The instrument allows predicting the risk for developing obesity in adolescents with acceptable sensitivity and high specificity. Hence, its routine application will be interesting in pediatric health consultations.

Biography
Carlos Enrique Pina Borrego has completed his Medicine and Post-graduation studies in Neonatology. He did his Specialization of First degree in Family Medicine from University in Havana, Cuba and Specialization of Second degree in Pediatrics. He has done his Master’s degree in Integral Attention of Child from Pinar del Rio University, School of Medicine. He is an Aggregate Investigator and Assistant Professor from Artemisa School of Medicine, Havana University School of Medicine, Cuba. He has published more than 10 articles in reputed journals.

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