

Association of obesity with hypertension among children in Aligarh City, India

Anisa M. Durrani
Aligarh Muslim University, India

The growing problem of childhood obesity brings with it a less well-known problem that can have serious ramifications for overweight children. To assess this problem a study was conducted to evaluate healthy school children of Aligarh city to examine the association between obesity and high blood pressure (BP) in school children. 701 school going children between 12 and 16 years of age group of both sexes were selected among all the 4500 children from selected four government and private schools by stratified random sampling. The weight (kg) was taken by a standardized weighing machine while height was measured using a calibrated bar. For diagnosing obesity, the body mass index (BMI) was calculated. Blood pressure (BP) measurements were taken by a mercury sphygmomanometer. Hypertension was defined as systolic and/or diastolic blood pressure over the 95th percentile. The distribution of blood pressure by anthropometric characteristic was examined. Mean, standard deviation, correlation coefficient was used for statistical analysis. The prevalence of high blood pressure was 9.4%. Out of 363 boys, 34 (9.36%) and out 338 girls 32 (9.46%) had high blood pressure. Risks of being overweight and excess weight were identified, respectively, in 6.41% and 2.13% of the children. High blood pressure was significantly more frequent among overweight children (26.66%) and among obese children (60%). The correlation between obesity and hypertension was statistically significant ($p < 0.01$). It is concluded that obesity in childhood has a significant association with hypertension. Both together may be risk factor in childhood can have enormous potential pay-off.

Biography

Anisa M. Durrani completed her Ph.D. in Home Science from Aligarh Muslim University. She has twenty five years of teaching experience in a central university. Guided and supervised more than forty post graduate projects dissertations and four Ph.D. students. She has published 23 research articles in national and international journals of repute. She has participated and presented papers in more than thirty national and international conferences, workshops and seminars.

anisamd@gmail.com