Obesity-2013

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference and Exhibition on
Obesity & Weight Management

December 02-04, 2013 Hampton Inn Tropicana, Las Vegas, USA

Influence of BMI, waist and hip circumferences on some risk markers for cardiovascular diseases in adolescents living in Mthatha

Benedicta Nkeh-Chungag

Walter Sisulu University, Mthatha

Abstract

The prevalence of obesity and cardiovascular diseases (CVDs) is on the rise in developing countries as people tend to adopt more urban lifestyles. Recent reports however indicate that waist and hip circumferences (WC and HC) may be better indicators of CVD risk. The aim of the current study was to evaluate the relationship between BMI, WC and HC on blood pressure, lipid profiles and some markers of CVD risk in female adolescents in Mthatha. 76 female high school learners, 13-17 years old were recruited into this study: 38 were lean (BMI≤75th percentile) and 38 overweight/obese (O/O) (BMI≥85th percentile). Anthropometric and blood pressure measurements were performed for all participants, after which fasting blood samples were collected for biochemistry. Lean learners had higher triglyceride and HDL-C while O/O learners had significantly lower HDL-C and higher total cholesterol. Mean systolic blood pressure (MSBP) but not mean diastolic blood pressure (MDBP) was significantly higher in the O/O group. Higher WC and HC were independently associated with significantly higher MSBP and MDBP. Serum hs-CRP but not adiponectin levels were significantly higher in O/O group compared to the lean though adiponectin correlated negatively with WC and HC. Increased HC and not only BMI and WC are risk factors for increased blood pressure in female adolescents living in Mthatha.

Biography

Benedicta Nkeh-Chungag completed her PhD at the age of 39 from University of the Witwatersrand, South Africa. She is an Associate Professor of Physiology in the Walter Sisulu University. She has published 30 papers in peer reviewed journals and serves as a reviewer for several journals.