Health literacy: The earlier the better

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The current health ranking for the state of South Carolina is 19th out of 50 states. According to DHEC (2013), a rural county in South Carolina health care expenditures allocated to treat preventable diseases such as hypertension and cardiovascular disease totaled approximately $410,198,600 for hypertension and $138,300,500 for heart disease. The purpose of this action research project was to increase health literacy levels of South Carolina adolescents through the integration of a state-wide, internet, objective-based, health-related curriculum. The planned curriculum would use resources obtained from the CDC youth website, BAM. Implementing a structured curriculum across the state of South Carolina would be an effective and efficient method to ensure adolescents have an equal opportunity to increase his/her health awareness and disease prevention knowledge levels. Quantitative data was collected from the Short Assessment Health Literacy survey, SAHL, and used for analysis. The project investigated the impact of an increase in internet-based, health-related exposure at the secondary educational level would have health literacy levels of the targeted population. The project demonstrated the positive impact frequent of structured health-related information on the health literacy levels.

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Cardiometabolic risk factors and epicardial adipose tissue in overweight and obese children and adolescents

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Background: Epicardial adipose tissue (EAT) is the visceral fat deposit around the heart and is commonly increased in obese subjects. EAT is related to cardiometabolic risk factors and non-alcoholic fatty liver disease (NAFLD) in adults, but this relationship is not well known in children.

Objectives: The aim of our study was to assess by echocardiography the EAT in overweight and obese children and its relationship to cardiometabolic risk factors, insulin resistance, NAFLD markers and hyperuricemia.

Study Group & Methods: In 25 (mean age 13.0 ± 2.3) overweight and obese subjects and 24 lean controls, blood pressure (BP), WC, fasting plasma glucose and insulin, lipids, uric acid and hepatic enzymes were established and EAT thickness was measured by transthoracic echocardiography.

Results: In overweight and obese subjects, EAT was significantly higher compared to normal weight children. Overweight and obese children had significantly higher body mass index (BMI), WC, BP, triglycerides (TAG), low-density lipoprotein and total cholesterol, hepatic enzymes alanine aminotransferase (ALT) and g-glutamyl transferase, and lower high-density lipoprotein cholesterol (HDL-C). EAT correlated significantly with BP, TAG, uric acid, HDL-C, apoprotein B and ALT. Correlation coefficients were similar or better than for WC, but similar or lower than for BMI.

Conclusion: EAT thickness in children is associated with an unfavorable cardiometabolic risk profile including biochemical signs of NAFLD and hyperuricemia, but is not a stronger indicator than BMI.

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