

Risk factors for Type 2 diabetes in children and adolescents attending schools in Trinidad.

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Objective: To assess the prevalence of *acanthosis nigricans* (AN), obesity and a family history of T2DM in children ages 7-18 years attending schools in Trinidad.

Design and Methods: A cross-sectional survey using a questionnaire, skin examination for AN and anthropometric measurements for obesity.

Subjects and Sampling: A random sample of 32 schools was selected. A convenience sample of school children participated. Family history was determined using self administered questionnaires, AN was identified and staged by examination of the neck and obesity was determined by conducting anthropometric measurements. Analysis was conducted in STATA 9.0.

Results: 2130 ages 7-18 years participated in the study. Overall prevalence of AN (Grades 2-4) was 18.4 % (female 19.5% and males 17.0%). Prevalence for a family history of diabetes in 1st and 2nd degrees relatives was 11.0 % and 1.4% respectively. Fifteen percent were obese while 17 % were overweight. More children (ages 7-11) were obese (23%) and overweight (20.0%) compared with adolescents (>11 -18 years) (11%) and (15.6%), $p = 0.000$. Males (36.5%) had a higher BMI than females (29.7%), $p = 0.001$. Forty three percent had one risk factor for diabetes, 23.1% had two while 2.9% had 3.

Conclusion: The frequency of risk factors for T2DM among school children in Trinidad is alarming. A multisectorial approach is urgently needed.