

9<sup>th</sup> International Conference on

## ENDOCRINOLOGY AND DIABETES SUMMIT

September 13-14, 2017 Singapore

**Targeting parents and children at schools in the treatment of childhood obesity: Short-term results, Dubai 2016****Hamid Yahya Hussein and Waleed Al Faisal**  
University of Baghdad, UAE

**Introduction:** Obesity and overweight among children and adolescents is continuously worldwide increasing problem, which put this vital segment of population at greater risk for health problems compared with their normal-weight counterparts and are more likely to become obese adults. Obese children and adolescents are more likely to have serious health conditions, such as cardiovascular, metabolic and psychosocial illnesses, type-2 diabetes, hypertension, high cholesterol, stroke, heart disease, nonalcoholic fatty liver disease, certain cancers and arthritis. Other reported health consequences of childhood obesity include eating disorders and mental health issues, such as depression and low self-esteem.

**Objectives:** To measure the short-term impact of a multi-functional childhood obesity intervention program in Dubai.

**Methodology:** The study has been carried out in two private schools of Dubai. The total population was 2890 for the first school and 1077 for the second, with age range 5-18 years of both males and females. Initial weight assessment was carried out in both schools using WHO chart for males and females. Prevalence of obesity and overweight were recorded in both school as base-line data. This was followed by 6-month duration intervention conducted by multi functions governmental team, which applied three health initiatives: Student Health File Initiative by Dubai Health Authority, Food Labeling Initiative by Dubai Municipality and Happy Schools Initiative by Dubai Knowledge and Human Development Authority along with Ministry of Health and Dubai Sport Council. All three initiatives targeted all students in schools regardless of the weight. After 6 months of intervention second body weight assessment has been carried out with the same tool.

**Results:** The study showed that the pre-intervention prevalence of obesity among students in the first school was 14.4%, while the pre-intervention prevalence of overweight was 15.9%. After intervention, the prevalence of obesity was 13.9% and the prevalence of overweight was 15.4%. The study showed obesity and overweight reduction of 1% after the intervention. As for the second school, the prevalence of obesity and overweight among students before intervention were 14.8% and 15.6%, respectively, while they were 14.2% and 14.7%, respectively after the intervention, which revealed 1.5% reduction of the prevalence and overweight among student of this school. The reduction in both schools was 1.1%.

**Conclusion:** The effectiveness of school-based interventions that treat childhood obesity is questionable. Student health file with a family component, food labeling and physical activity interventions in a school-based setting may have impact. This needs more studies and further application in order to have evidence on the effectiveness of such a program. Trials evaluating promising interventions applied over a long period, using responsive outcomes, with longer measurement timeframes are urgently needed. Applying the program component at wider scale to cover other schools in Dubai for the coming five years is needed to be taken into consideration.

hussainh569@gmail.com