

School Based Multicomponent Intervention for Obese Children in Udipi District, South India - A Randomized Controlled Trial

As between 50% and 80% of children who develop obesity continue to carry excess weight in adulthood, developing new interventions to address childhood obesity is a high priority. However, few studies on effective obesity interventions have been done in lower- and middle- income countries. Schools have been identified as an ideal setting for interventions they reach a large proportion of children. Eligible children were between 10-16 years of age and classified as overweight based on WHO guidelines for BMI for age and sex. A total of 90 children completed all parts of the intervention and an additional 104 were used as controls. The intervention included the following components:

- Parents of study participants “attended an awareness programme” and received an informational booklet about obesity “meaning and causes, assessment, consequence and weight reduction strategies and lifestyle modification”
- Small group activities for children consisting of a quiz, “snake and ladder games” to model healthy behaviour and a group discussion
- A physical education intervention following an aerobics video developed for the study every school day.

By the end of the study, researchers observed a significant decrease in “BMI, triceps, biceps and subscapular skin fold thickness” between both groups. While this study provides an important contribution to the literature regarding childhood obesity interventions in India, it was limited in that the study took place over only six months, it could only be delivered on school days, the sample size was too small to account for covariates and participants reported their own lifestyle changes instead of using a more objective measurement.

Reference: Nayak BS, Bhat VH. School Based Multicomponent Intervention for Obese Children in Udipi District, South India - A Randomized Controlled Trial. *J Clin Diagn Res.* 2016;10(12):SC24–SC28. doi:10.7860/JCDR/2016/23766.9116