Treating Obesity in Pre-schoolers: A Review and Recommendations for Addressing Critical Gaps

While rates of overweight and obesity are falling in American children between 2 to 5 years of age, children from disadvantaged backgrounds are still impacted disproportionately. As a result, it is extremely valuable to determine the reach, efficacy, and best evaluation practices of previously published obesity interventions. The aim of this review is to identify issues within the treatment of obesity in American pre-schoolers and suggest solutions.

The authors examined 7 separate studies to determine the populations reached. Few studies “provided information on barriers to participation.” All saw “low representation of families from low-income (8.3%–29%) and minority (18%–43%) backgrounds.” As these groups tend to experience major disparities in the treatment of overweight and obesity, the authors recommend future studies educate parents about the dangers of childhood obesity, target settings used more frequently by lower-income families (such as emergency departments, recreation facilities and federally funded nutrition programs) and ensure that the intervention is acceptable.

All interventions in the meta-analysis used multiple components. Most involved changing food consumption, increasing physical activity, and decreasing sedentary activity. Diet interventions tended to be successful, while those targeting exercise or sedentary activity were generally not. However, future studies should design trials using frameworks like the Multiphase Optimization Strategy Trial (MOST) or Sequential Multiple Assignment Randomized Trial (SMART).

There is no current scientific consensus on what constitutes meaningful weight loss in children. Most studies measure obesity differently, using standardised BMI, waist circumference, percentage of body fat, BMI percentile or percentage over BMI. A consistent guideline would improve study quality and make them easier to compare.