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Family intervention focused on effective parenting is associated with decreased child obesity prevalence 3–5 years later

Joseph Arnold Skelton

Department of Pediatrics, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA

Context

The aim of this study was to test the hypothesis that interventions promoting effective parenting in early childhood influence development of obesity.

Methods

Brotman and colleagues report on the long-term follow-up of two randomised controlled trials of parenting interventions. Weight and obesity were not an initial focus of the studies, so the authors used video archives and a validated rating system to account for missing baseline and early follow-up weight data. Children (N=186) aged 3–5 years considered to be at high risk for behaviour problems (poor, racial/ethnic minority, pre-existing or family history of behaviour problems) were assigned to either the intervention group (weekly parenting groups for 6 months) or the control group. The studies used different curricula but with similar objectives for enhancing parent effectiveness: improved parent–child interactions, positive reinforcement, social/behavioural competence and non-physical consequences for misbehaviour. Nutrition, activity and weight were not addressed. Follow-up assessments occurred on average 3–5 years after the intervention.

Findings

Weight status at follow-up was significantly lower in the intervention group: differences in Study 1 were not significant when controlled for initial weight status (obesity prevalence at follow-up in intervention and control groups was 21% and 39%, respectively, $p=0.27$), though they were in Study 2 (24% intervention, 54% in control, $p=0.002$).

Commentary

This study was not primarily designed to assess obesity prevention, as the initial focus was to evaluate family interventions on effective parenting behaviours. The authors were able to address research questions related to weight status by overcoming missing data and analysing conservatively. Due to the considerable lack of research in this area, this study

Correspondence to: Joseph Arnold Skelton, Department of Pediatrics, Wake Forest School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157, USA; jske lton@wakehealth.edu.

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provides insight for long-term obesity prevention in minority children, and provides useful information on the role of parenting, an under-studied area of obesity prevention.

Family-based interventions are an established approach to obesity treatment.¹ However, the field lacks evidence to determine the optimal level of parental involvement. There are associations between parenting style and obesity; a study by Rhee *et al*² highlights the influence of parenting style on a child's weight. This finding has been repeated by others. Using the classic model of parenting styles, children of authoritarian parents (strict disciplinarians) appear to have the highest risk of obesity, even when compared with the children of permissive and neglectful parents. Authoritative parenting (respectful of child's opinions but maintains clear boundaries) is associated with the lowest risk of obesity. While much work remains, it is intuitive that a family-based intervention will be either mediated or moderated by parents, who are charged with implementing behaviour change in the home. Increased focus on parents,³⁴ and even parent weight loss,⁵ holds promise. Brotman and colleagues give indirect evidence that interventions focused on parenting may successfully prevent obesity in high-risk youth. This study is titled 'Family Intervention', but could be more specifically be called 'Parenting Intervention,' as it highlights the potential impact of effective parenting on children.

Due to the narrow focus on children at high risk of behavioural issues, results of this study are limited in their application to other populations. The study was not designed to detect differences in weight status, and modifications to data collection and analysis were made to account for this. Additionally, measures of parental weight status would have been beneficial, as parental obesity strongly predicts childhood obesity.

There are many questions still remaining. This study indicates that effective parenting in early childhood may prevent behaviour problems and reduce the risk for obesity later; however, the key leverage points, such as parenting style, discipline, communication and role modelling, are still unknown. Increasingly, researchers are incorporating frameworks like Family Systems Theory into family-based interventions,⁶ recognising the interconnectedness of families. If clinicians hope to elicit behavioural change, accounting for this interconnectedness is likely to be important. Delving into family function holds great promise in identifying possible aetiologies of obesity development in children. Until these questions are answered, clinicians can consult parenting resources, improve their knowledge of parenting styles and interventions, and provide anticipatory guidance to all parents in the realm of parenting effectiveness. This is likely to improve the well-being of children regardless of their weight.

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