DOES A MULTI-DISCIPLINARY INTERVENTION FOR CHILDREN AND ADOLESCENTS WITH WEIGHT ISSUES AFFECT ACCOMPANYING ADULT WEIGHT STATUS? A SECONDARY ANALYSIS OF A CLINICAL TRIAL

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Background: The high prevalence of childhood obesity internationally has prompted the World Health Organisation to publish guidelines, specifically recommending family-centred interventions. Whānau Pakari is a family-centred, community-based assessment and intervention programme that commenced in Taranaki, New Zealand in 2012 (Anderson et al., 2015). In international studies pertaining to family-based interventions, a decrease in body mass index (BMI) of the accompanying adults has been observed (Epstein, Wing, Koeske, Andrasik, & Ossip, 1982). Parent BMI has been shown to be a predictor of change in children’s BMI (Boutelle, Cafri, & Crow, 2012). The aim of this study was to examine whether parent/caregivers of children in the Whānau Pakari programme indirectly achieved reductions in BMI over time. Second, to assess whether change in BMI standard deviation score (SDS) in participants was associated with changes in parent/caregiver BMI.

Methods: Eligible participants (n=239) from Taranaki had a BMI ≥98th percentile (obese) or >91st percentile (overweight) with weight-related comorbidities and were aged 4.8-16.8 years. Height and weight data were collected for children and parent/caregiver in the home at baseline, 6-month and 12-month assessments, where consented (n=200).

Results: There was no change in BMI of the parent/caregiver of participants in the programme. Entry BMI was associated with child’s BMI SDS at baseline (r=0.25; p<0.001). At 24 months, every 1 kg/m² decrease in the parent/caregiver’s BMI at baseline was associated with a 0.01 SDS decrease in their child’s BMI [β=0.011 (95% CI 0.001, 0.022); p=0.039].

Conclusion: This family-centred home-based intervention programme for children and adolescents with obesity did not reduce caregiver weight status. Parent/caregiver weight at 24 months affected the child’s outcome in the programme. Given the intergenerational nature of obesity, future research as to whether additional parent/caregiver support or focus alongside such a programme may assist with improvements in weight status across the family unit.

