Findings: The final version of the standard HLQ collects demographic, family history and anthropometric data, and questions around daily consumption of fluids, breakfast, vegetables and fruit, weekly consumption of discretionary foods, physical activity, screen time and sleep habits and family meal consumption behaviours. This standard questionnaire is being used to collect data from parents of children and adolescents at enrolment and at 3- and 6-months into their care at seven paediatric weight management clinics across NSW using REDCap.

Conclusion: This standard tool will be used to collect data on the long-term lifestyle habits and anthropometry of children and adolescents enrolled in paediatric weight management services. We will use these data to assess and monitor paediatric weight management services, supporting continued service development and improvement.

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Body satisfaction in children and adolescents undergoing weight management treatment: systematic review and meta-analysis

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Introduction: Children and adolescents with overweight or obesity have reduced body satisfaction. The aim of this systematic review was to investigate the impact on body satisfaction of weight management interventions for children and adolescents with overweight or obesity.

Methods: Four databases were searched in May 2017 to retrieve and identify eligible peer-reviewed articles. Eligible studies included: (1) children and adolescents (<18-years) with overweight or obesity, (2) weight management intervention with a nutrition component, (3) case studies, pre-post studies and randomised controlled trials, (4) pre- and post-intervention assessment of at least one measure of body satisfaction. Meta-analysis was completed where possible.

Results: Of 2799 articles screened, 39 studies met the inclusion criteria. Nineteen reported on body satisfaction/dissatisfaction, six on body esteem, 15 on physical appearance, and five each on shape and weight concern. Meta-analysis indicated that weight management interventions led to an improvement in physical appearance (12 studies, small to medium effect size, SMD (SE) 0.390 (0.067), $p < 0.001$) equivalent to an increase in 0.32 (0.066) points on a scale of 1–4. Weight concern did not change (five studies, −0.223 (0.161), $p = 0.166$) and there was a reduction in shape concern (five studies, small effect size, −0.34 (0.156), $p = 0.029$). Although statistically significant, changes may not be clinically significant. Fourteen of 19 studies measuring change in body dissatisfaction and four of six studies measuring change in body esteem reported significant improvements immediately following the weight management intervention. No study reported worsening of body satisfaction measures.

Conclusion: This review demonstrates that engagement in weight management interventions does not have a detrimental impact on body satisfaction. In fact, weight management may lead to mild improvements in measures of body satisfaction, including physical appearance and shape concern, in children and adolescents with overweight or obesity.

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Health related quality of life measures and weight change in a clinical paediatric population with obesity

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Background: Poor quality of life has been shown to occur in youth with obesity. This study aimed to assess associations between health-related quality of life (HRQOL) measures with weight outcomes in a busy paediatric weight management service.

Methods: A cross-sectional longitudinal clinical cohort, 'Childhood Overweight BioRepository of Australia (COBRA)', was used ($n = 250$, median age 11, range 2–18 year, mean BMI z-score 2.5 ± 0.2). Clinical data was collected and HRQOL questionnaires; Pediatric Quality of Life (PedsQL), 'Sizing Me Up' (SMU), and psychological well-being questionnaires; Strengths and Difficulties Questionnaire (SDQ) and Kessler 10 (K10) were completed by the child and primary caregiver. HRQOL results were compared to age and sex adjusted BMI z-score at baseline and follow-up. Direct logistic regression modelling was performed to assess the impact of HRQOL factors on the likelihood of successful weight reduction over a period of $\geq$12 months.

Results: Mean self-report HRQOL scores were; 68.0 ± 15.28 (PedsQL, range 0–100), 64.8 ± 15.8, (SMU, range 0–100), 17.3 ± 4.4 (SDQ, range 0–40) and 20.0 ± 7.7 (K10, range 0–50). A significant negative correlation was observed between HRQOL scores and childhood obesity (baseline BMI z-scores ($p < 0.01$)). No correlations were observed between psychological well-being measures and BMI z-scores. Higher subscale scores of the PedsQL and SDQ, which measure impaired psychosocial health and less difficulties with hyperactivity and inattention, significantly predict weigh loss in obese children after 12 months.

Conclusion: HRQOL questionnaires may be useful in identifying individuals who require additional support to achieve weight loss goals in a tertiary weight management service.

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