
POSTER ABSTRACT

Expanding the role of dental practitioners to address childhood overweight and obesity

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Amy Villarosa^{1,2,3,4}, Lucie Ramjan^{1,2,3,4,8}, Della Maneze^{1,2,3,4}, Michelle Camilleri⁵, Ravi Srinivas^{1,2,3,4,6}, Ajesh George^{1,2,3,4,6,7,8}

- 1: Centre for Oral Health Outcomes and Research Translation (COHORT), Liverpool, NSW, Australia;
- 2: School of Nursing and Midwifery, Western Sydney University, Penrith, NSW, Australia;
- 3: South Western Sydney Local Health District, Liverpool, NSW, Australia;
- 4: Ingham Institute for Applied Medical Research, Liverpool, NSW, Australia;
- 5: Population Health, South Western Sydney Local Health District, Liverpool, NSW, Australia;
- 6: University of Sydney, Camperdown, NSW, Australia;
- 7: University of New South Wales, Sydney, NSW, Australia;
- 8: Translational Health Research Institute, Sydney, NSW, Australia

Introduction: It is a priority in Australia to address the increasing prevalence of overweight and obesity among children. While present guidelines suggest the involvement of dental practitioners in addressing childhood overweight and obesity, there is a lack of evidence regarding their role and how this is best implemented in practice. Two comprehensive reviews were conducted to:

1. Determine the role of dental practitioners in addressing childhood overweight and obesity
2. Identify effective guideline implementation strategies that would facilitate role expansion in the dental setting

Methods: A scoping review and a systematic review were undertaken involving extensive searches across multiple databases including Scopus, CINAHL, Medline, PsycINFO, Embase, Cochrane and Google Scholar. To address the study objectives, customised search strategies were developed for each database, using combinations of Boolean operators, truncations and Medical Subject Headings. Studies included in the scoping review explored weight interventions for children in the dental setting, while the systematic review sought studies which evaluated the effectiveness of guideline implementation strategies in the dental setting.

Results: Eleven studies were included in the scoping review, which identified a clear role for dental practitioners in addressing overweight and obesity among children. However, empirical research was scarce, with only three studies evaluating existing interventions, of which two found improvements in children's dietary and physical activity behaviours. In addition, two other studies found that parents would be accepting of such interventions if they were implemented. The systematic review identified 16 studies regarding guideline implementation strategies, which reported audit and feedback, reminders, education, patient-mediated interventions, pay for performance and multifaceted interventions as effective. However, when compared to other settings, research highlighted pay for performance might be superior in the dental setting.

Conclusion: Current evidence suggests a clear role for dental professionals in addressing childhood overweight and obesity and highlights potential implementation strategies that could effectively facilitate role expansion.

Lessons learned: Evidence from the scoping review suggests that dental practitioners have a role to play in addressing overweight and obesity among children. In addition, findings from the systematic review highlight effective implementation strategies for dental practitioners, which can serve to inform future adoption of clinical guidelines in this sector. However, as no studies explored the use of implementation strategies for childhood overweight and obesity guidelines in the dental setting, further research is required to determine if implementation strategies can be effectively used to facilitate the adoption of such guidelines by dental practitioners.

Limitations: The transferability of findings from the scoping review might be limited as all but two included studies were from either Canada or the United States. In addition, data from included studies in the systematic review were of variable quality and had high heterogeneity, thus meta-analysis could not be conducted.

Suggestions for future research: The findings highlighted a need for empirical research that evaluates the effectiveness of dental practitioners in performing weight and height screening, and counselling interventions. Future research should focus on high quality empirical evidence that combines childhood overweight and obesity interventions in the dental setting with effective guideline implementation strategies.