Working with Children Above a Healthy Weight: Nurse-led interventions

KEY STATEMENT

Despite solid policy development, the proportion of children above a healthy weight continues to rise. Nurses, comprising over 50% of the health workforce, are uniquely positioned to identify at-risk children, educate families, and combat weight stigma. Nurse-led interventions, proven effective in various settings, offer a flexible and cost-effective solution. Supporting nurses with training, resources, and leadership opportunities is crucial to optimise impact. The Australian College of Nursing (ACN) supports policies ensuring every school-aged child has access to a qualified nurse and recommends reforms to prioritise nurse-led care models. This position statement builds on ACN's previous publications in this space.

BACKGROUND

In 2022, 26% of Australian children and adolescents were reported to be above a healthy weight (AIHW, 2024), and there are cultural patterns and significant disparities across priority populations in Australia (Lung et al., 2024; AIHW, 2024). AIHW data demonstrates that most Australian twoto 14-year-olds did not meet both the physical activity and screen-based activity guidelines (based on data from 2011-12), and in 2022, 83% of 15 - 17 year-olds did not meet physical activity guidelines. Globally, children meeting BMI standards for overweight or obese is predicted to reach 400 million by 2035 (World Obesity Federation, 2023). The World Health Organisation (WHO) set a target of no rise in childhood obesity between 2010-2025. However, few countries have a 50% chance of meeting this target (World Obesity Federation, 2020).

The costs to the Australian healthcare system associated with treating children aged two to four above a healthy weight range are estimated to be over \$18 million (Brown et al., 2017). Costs associated with weight-related health impacts totalled \$11.8 billion in 2018 and are projected to exceed \$87 billion in 2032 without community and governmental improvements (Commonwealth of Australia, 2022). There is a strong correlation between health effects for children above a healthy weight that continue into adulthood and the development of chronic diseases such as diabetes, asthma, obstructive sleep apnoea, joint issues and cardiovascular disease (Balasundaram & Krishna, 2023) in addition to social and mental health impacts (The Obesity Collective, 2024).

The understanding of obesity has evolved significantly over the past decade, recognising it as a complex condition influenced by genetic, biological, social, economic, historical, and environmental factors rather than merely individual choices about diet and physical activity (The Obesity Collective, 2024). Research indicates that the rise in obesity is primarily a biological response to modern environments that promote unhealthy food consumption and physical inactivity, highlighting the systemic nature of obesity beyond personal responsibility. Addressing obesity effectively requires combating weight stigma, which is rooted in misconceptions about obesity's drivers and results in negative stereotypes, discrimination, and barriers to equitable healthcare and evidence-based treatment (Obesity Collective, 2024).

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Despite strong national and state policy development at a population level, the proportion of children above a healthy weight continues to rise. While strong national and state policies to address the obesity epidemic are required at a population level, significant environmental changes take time to be implemented. Meanwhile, the proportion of children above a healthy weight continues to rise. Familylevel interventions that support achieving or maintaining a healthy weight, either through one-on-one sessions with health professionals or as part of a community group, seek to improve health outcomes at a local level (McDarby & Looney, 2024). There are many international examples of such interventions. However, the effectiveness of these individual programmes on population behaviour changes has yet to be tested on a mass scale (Salam et al., 2020). Nurses are well-positioned to play a pivotal role in identifying at-risk children, educating families on health promotion strategies, and addressing weight stigma in our communities.

With almost 450,000 nurses in Australia (Australian Government, 2024), nurses make up more than 50% of the health workforce, and of all health professions have the widest distribution across Australia. In 2022, only 1755 nurses were recorded to work primarily in school settings (ANMF, 2024). Nurses working in schools and community settings are exceptionally well placed to provide support to children and families in achieving and maintaining weight in a healthy range (Whitehead et al., 2021) and present an opportunity to bridge the gap between government recommendations, such as the National Obesity Strategy 2022 to 2023 (Commonwealth of Australia, 2022) and interventions in practice.

Clinical interventions to support children in maintaining a healthy weight range can potentially reduce the prevalence of obesity in adults, improve long-term quality of life, and reduce healthcare costs (Bae & Lee, 2020). Comprehensive, high-intensity behavioural interventions for childhood obesity, compared with usual clinical care, have been evidenced to reduce the prevalence of overweight children. However, the adoption of expert recommendations and nationally standardised performance measures for the prevention and management of overweight and obese children and young people has been limited. This underscores the need for practical, evidence-based approaches to address the issue.

A systematic review of the effectiveness of nurse-led interventions found that nurse-led interventions are run in the home, childcare facilities, primary care and school settings (Cheng et al., 2021), and such interventions are flexible, responsive, and achieve long-term improvements (Moore, 2021). These interventions have seen nurses deliver counselling and motivational interviews, develop nutritional and physical activity guidelines, and conduct stigma-neutralising workshops to promote lifestyle and behaviour change in children and their families. Many of these studies reported minor to moderate decreases in overweight and obese children, success in improving diet and nutritional choices and increased physical activity. Nurse-led interventions, particularly in the school setting, were described as highly acceptable among children and families regarding behaviour change strategies (Whitehead et al., 2021). This suggests the capability of nurses to provide quality treatment strategies to target obesity.

Evidence suggests that nurse-led interventions to reduce childhood obesity are feasible, acceptable, and effective. However, limited economic evidence has been put forward to evaluate these strategies. Given the adaptability of nurses to the home, school and primary care settings, the size and geographical spread of the workforce, and the low cost relative to other health care providers, nurses are well positioned in many ways to provide a cost-effective solution to tackle this issue. This requires a workforce with the knowledge and skills necessary to work in a complex environment and support to reduce the harmful effects of an obesogenic environment. Further opportunities for training, resources to support practice and opportunities for leadership in the prevention and management of overweight and obese youths are urgently needed. The Australian College of Nursing commends state-level initiatives to reduce the promotion of junk food at government-owned sites (QLD) and on public transport (ACT); however, further intervention and action are needed to reduce the immediate and longterm health impacts for children above a healthy weight.

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RECOMMENDATIONS

ACN commends and supports the recommendations from The Obesity Collective, published in the March 2024 report "Obesity in Australia: A Time for Action," which covers prevention, treatment, and tackling stigma while working within existing policy frameworks.

Additionally, ACN recommends:

- Every school-aged child in Australia has access to a suitably qualified registered nurse.
- · Reform of current healthcare funding models to prioritise nurse-led models of care for areas that intersect nurses and children
- · The normalisation of collection and discussion of height and weight data of all children, with longitudinal mapping on WHO recommended growth charts, as outlined in the "Working with Children Above a Healthy Weight: An ACN Toolkit for Nurses."
- Empowering the nursing workforce via professional development to identify children at risk and provide timely, sensitive interventions targeting a whole-family approach to improve eating and activity behaviours

REFERENCES

Australian Bureau of Statistics. (2023). Waist circumference and BMI. https://www.abs.gov.au/statistics/health/healthconditions-and-risks/waist-circumference-and-bmi/latestrelease#:~:text=Children%20and%20Body%20Mass%20 Index%20(BMI),-In%202022%2C%20of&text=Over%20a%20 quarter%20(27.7%25),12%20to%2064.4%25%20in%202022

Australian Government. (2024). Health Workforce Data. https://hwd.health.gov.au/

Australian Institute of Health and Welfare (2024). Overweight and obesity, Summary. Australian Government, accessed 19 July 2024. https://shorturl.at/9wnsk

Australian Institute of Health and Welfare. (2017). A picture of overweight and obesity in Australia. https://www.aihw. gov.au/reports/overweight-obesity/ a-picture-of-overweightand-obesity-in-Australia/contents/table-of-contents

Australian Nursing and Midwifery Federation. (2024). The Nursing and Midwifery Workforce in Australia - An Overview. nursing-and-midwifery-workforce-overview.pdf (anmf.org.au)

Bae, J. & Lee, H. (2020). The effect of diet, exercise, and lifestyle intervention on childhood obesity: A network metaanalysis. Clinical Nutrition 40 (5). https://doi.org/10.1016/j. clnu.2020.11.006

Brown, V., Moodie, M., Baur, L., Wen, L. & Hayes, A. (2017). The high cost of obesity in Australian pre-schoolers. Australian and New Zealand Journal of Public Health. 41(3). https://doi.org/10.1111/1753-6405.12628

Balasundaram, P. & Krishna, S. (2023). Obesity Effects on Child Health. StatPearls Publishing. https://www.ncbi.nlm. nih.gov/books/NBK570613/

Commonwealth of Australia (2022). The National Obesity Strategy 2022-2032. Health Ministers Meeting. https:// www.health.gov.au/sites/default/files/documents/2022/03/ national-obesity-strategy-2022-2032_0.pdf

Cheng, H., George, C., Dunham, M., Whitehead, L., & Denney-Wilson, E. (2021). Nurse-led interventions in the prevention and treatment of overweight and obesity in infants, children and adolescents: A scoping review. International journal of nursing studies, p. 121, 104008.

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Commonwealth of Australia 2022. The National Obesity Strategy 2022-2032: At a Glance. Health Ministers Meeting. https://www.health.gov.au/sites/default/files/ documents/2022/03/national-obesity-strategy-2022-2032-ata-glance-summary-with-a-logic-framework_0.pdf

Department of Health Western Australia - DoH WA (2019). Sustainable Health Review. https://ww2.health.wa.gov. au/~/media/Files/Corporate/general%20 documents/ Sustainable%20Health%20Review/Final%20report/ sustainable-healthreview-final-report.pdf.

Lung, T., Killedar, A., Taki, S., Wen, L. M., Dickson, M., Howard, K., Baur, L., Kelly, P., Sherriff, S., & Hayes, A. (2024). Differences in weight status among Australian children and adolescents from priority populations: a longitudinal study. International journal of obesity (2005), 48(5), 702-708. https:// doi.org/10.1038/s41366-024-01471-0

Moore, G., Du Toit, A., Thompson, S., Hutchinson, J., Wiryoatmodjo, A., Prakash Sivaprakash, P., & Gordon, R. The effectiveness of school-located nurse models on student health, education and wellbeing: a Rapid Evidence Summary prepared by the Sax Institute (www.saxinstitute.org.au) for the NSW Ministry of Health, 2021. doi:10.57022/gmwr5438

The Obesity Collective. (2024). Obesity in Australia: A Time for Action. https://theobesitycollective.org.au/wp-content/ uploads/2024/03/WOD-A-time-for-Action-Final.pdf

Public Health Association Australia (2022). Prevention and Management of Overweight and Obesity in Australia https://www.phaa.net.au/common/Uploaded%20files/ SIG%20documents/FAN%20SIG/2022%20policy%20 review%20-%20final%20-%20 Prevention%20and%20 Management%20of%20Overweight%20and%20Obesity.pdf

Salam, R. A., Padhani, Z. A., Das, J. K., Shaikh, A. Y., Hoodbhoy, Z., Jeelani, S. M., ... & Bhutta, Z. A. (2020). Effects of lifestyle modification interventions to prevent and manage child and adolescent obesity: A systematic review and meta-analysis. Nutrients, 12(8), 2208. https://doi. org/10.3390/nu12082208

UNICEF (2020). UNICEF advocacy strategy guidance for the prevention of overweight and obesity in children and adolescents. https://www.unicef.org/media/92331/file/ Advocacy-Guidance-Overweight-Prevention.pdf

Whitehead, L., Kabdebo, I., Dunham, M., Quinn, R., Hummelshoj, J., George, C., & Denney-Wilson, E. (2021). The effectiveness of nurse-led interventions to prevent childhood and adolescent Overweight and obesity: A systematic review of randomised trials. Journal of Advanced Nursing, 77(12), 4612-4631. https://doi.org/10.1111/jan.14928

World Obesity Federation. (2020). Obesity: Missing the 2025 Targets. WOF-Missing-the- 2025-Global-Targets-Report-FINAL-WEB.pdf

World Obesity Foundation (2023). Global Atlas on Childhood Obesity. World Obesity Atlas 2023 | World Obesity Federation

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