

doi: 10.1111/1753-6405.12288

Rates of overweight and obesity in a sample of Australian young people and their carers in out-of-home residential care

Rachael Cox,¹ Helen Skouteris,¹ Marita McCabe,¹ Matthew Fuller-Tyszkiewicz,¹ Amanda D. Jones,² Louise L. Hardy³

1. School of Psychology, Deakin University, Victoria

2. Berry Street, Victoria

3. Prevention Research Collaboration, School of Public Health, University of Sydney, New South Wales

Young people living in out-of-home care (OOHC) – alternative housing for young people who are unable to live with their parents, typically due to abuse and/or neglect – are one of the most disadvantaged population groups.¹ These young people face high physical, emotional, and behavioural health needs and poorer educational attainment.¹ While concerns about their physical health have been reported, information on the rates of overweight/obesity in this hard-to-reach population is limited.² Further, no studies have examined OOHC carer weight status. This is an important knowledge gap, given OOHC settings are designed to reflect a home-like environment and carers assume a 'pseudo' parenting role. Given there is evidence that children with overweight or obese parents have an increased risk of being overweight or obese themselves,³ the weight status of carers in the OOHC setting may reflect a home environment that facilitates and/or models behaviours that may lead to excessive weight gain among young people in care.

This study examined the rates of overweight/obesity in young people living in residential OOHC and their carers from three community service organisations in Victoria, Australia. Demographic information included young people's sex, date-of-birth and Aboriginality and carer's level of educational. Although no data on the young people's socioeconomic status (SES) were collected, research has shown that low SES is a key risk factor of substantiated child abuse and/or neglect.⁴ Hence, it is likely that a large proportion of children living in OOHC have a background of socioeconomic disadvantage; this is particularly the case for Indigenous Australians.⁴ Children's height (m) and weight (kg) were measured by a trained data collection worker and carers

self-reported their height and weight. Body mass index (BMI) was calculated and categorised according to the World Health Organization (WHO) growth reference for school-aged children and adolescents.⁵ Staff BMI were categorised using the WHO values for overweight (>25 kg/m²) and obese (>30 kg/m²).⁶ In total, 243 residential care staff and 95 young people consented to participate in the study. However, complete anthropometric data were only collected from 78 young people; this is not surprising given the vulnerability of this population. Supplementary Tables 1–3 describe the demographics of the sample and the breakdown of weight status by group and gender. Nearly one-third of children were classified overweight (28.2%) and one-third were obese (34.6%). Neither gender nor time spent in care were significantly associated with weight status. Rates of overweight/obesity among carers were 35.4% and 37.4%, respectively. There was no significant sex difference among carers; however, a small but significant negative association was found between carers BMI and level of education.

This is one of a few studies to report rates of overweight/obesity among a hard-to-reach group of young people in Australian OOHC, one of two studies to use objective measures of young people's height and weight, and the first to include the weight status of their carers. Almost two-in-three young people were overweight/obese, which is considerably higher than the figures reported five or more years ago.² This rate is also higher than current prevalence of overweight/obese in children aged 2–17 years, who have the lowest index of disadvantage, which is 28.9%.⁷ The prevalence among carers was also high, with 72.8% categorised as overweight/obese, compared to 60% in other Australian adults.⁷

Interestingly, time in care was not associated significantly with the young persons' BMI. This suggests their socioeconomic background may predispose them to being overweight/obese prior to entering OOHC. One limitation of the current study was that data pertaining to weight status on entry to care was not collected; hence, it is difficult to determine whether they are entering OOHC already overweight/obese. Nevertheless, given the high rates of overweight/obesity in this sample and that the average time spent in care was 21.5 months, it is clear that – while the OOHC environment may not be contributing to weight gain – it is

not improving the young people's physical health outcomes, highlighting the need for intervention.

In Australia, there is a paucity of health strategies or interventions that specifically target weight status in young people in OOHC, as part of an overall health assessment, and there are no standard recommendations about the food or physical activity environments provided to young people in residential care. In contrast, the Scottish government has developed and implemented a 'Health Promotion Guidance: Nutritional Guidance for Young People in Residential Care Settings'.⁸ This guide includes nutritional information and practical guidance around improving young people's dietary intakes. Promoting physical activity and staff role modelling are also covered. 'Eating well' is also written into the Scottish National Care Standards.⁹ Australia would benefit from adopting similar guidelines.

The high rate of excessive weight observed among carers suggests that interventions should not be limited to young people. In accordance with other studies,¹⁰ we found an inverse relationship between the carer's education level and overweight/obesity. Given the low levels of education among carers in this study (only 14.9% had tertiary education), it is likely that greater focus on the provision of support, training and resources (specific to healthy eating and being physically active) for children's care teams is necessary. That is, staff should be offered ongoing professional development to improve their health literacy.

There is little doubt that future research needs to have a stronger focus on understanding the factors that contribute to higher rates of overweight/obesity in young people living in OOHC and to evaluate obesity prevention interventions designed specifically for this group. Further investigation of the role of SES as a contributing factor to weight gain in this population is necessary, and health promotion guidelines that focus on nutritional intake and physical activity for young people in OOHC are required.

Acknowledgements

This project was funded by the Australian Research Council and approved by the Department of Human Services Research Coordinating Committee, Victoria, Australia. The project was supported by three major community service organisations in Victoria,

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Australia: Berry Street, Salvation Army Westcare and Wesley Mission Victoria; and a single therapeutic unit from the Department of Human Services. Rachael Cox has a PhD scholarship funded by the National Health and Medical Research Council.

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Correspondence to: Professor Helen Skouteris,
School of Psychology, Faculty of Health,
Deakin University, 221 Burwood Highway,
Burwood, Victoria 3125;
e-mail: helen.skouteris@deakin.edu.au