



ELSEVIER

ORIGINAL ARTICLE

# Obesity in Australia

Oliver Huse<sup>a,1</sup>, Janitha Hettiarachchi<sup>b,1</sup>, Emma Gearon<sup>a,b</sup>,  
Melanie Nichols<sup>a</sup>, Steven Allender<sup>a</sup>, Anna Peeters<sup>a,\*</sup>

<sup>a</sup> Global Obesity Centre, Deakin University, Geelong, Australia

<sup>b</sup> School of Public Health and Preventive Medicine, Monash University, Melbourne, Australia

Received 20 February 2017; received in revised form 2 October 2017; accepted 7 October 2017

## KEYWORDS

Obesity;  
Population health;  
Epidemiology;  
Prevalence;  
Trends

## Summary

**Objectives:** To describe prevalence and trends for overweight and obesity in Australia and to critique the quality of available data on this public health priority.

**Design:** Comparison of aggregate prevalence data on adult and childhood overweight and obesity in publicly available national or state-based cross sectional surveys and survey series.

**Participants:** All representative population surveys, conducted since 1995, with measured height and weight at a national or state level.

**Results:** The most recent measured data found that 63.4% of Australian adults and 27.6% of children were overweight or obese in 2014/15. Tasmania had the highest observed adult prevalence of obesity (32.3%) and of overweight and obesity combined (67.5%). The Australian Capital Territory had the lowest observed prevalence of obesity (23.9%) and of overweight and obesity combined (63.0%).

Between 2007/08 and 2014/15, the age-standardised prevalence of adulthood overweight and obesity combined increased from 64.4% to 66.4%. Across states/territories the observed change varied from –5.3% (Western Australia) to 6.0% (Queensland). Amongst children the observed prevalence of overweight and obesity combined increased from 24.7% to 27.6%. Across states/territories the observed change varied from –1.4% (South Australia) to 11.1% (Tasmania).

**Conclusions:** In Australia, 1 in 10 more adults are obese today compared to 1995. Limitations in the available data mean it is difficult to conclude on trends over

\* Corresponding author at: Deakin University, BC Building, 221 Burwood Highway, Burwood, Victoria 3125, Australia.

E-mail address: [Anna.peeters@deakin.edu.au](mailto:Anna.peeters@deakin.edu.au) (A. Peeters).

<sup>1</sup> These authors contributed equally.

<https://doi.org/10.1016/j.orcp.2017.10.002>

1871-403X/© 2017 Asia Oceania Association for the Study of Obesity. Published by Elsevier Ltd. All rights reserved.

Please cite this article in press as: Huse O, et al. Obesity in Australia. *Obes Res Clin Pract* (2017), <https://doi.org/10.1016/j.orcp.2017.10.002>

time in children, Indigenous Australians, or by state/territory. We need to ensure the continuation and expansion of our National Health Survey and/or explore novel monitoring options from other countries.

© 2017 Asia Oceania Association for the Study of Obesity. Published by Elsevier Ltd. All rights reserved.

## Introduction

Obesity in Australian adults, defined as a body mass index (BMI) of 30 kg/m<sup>2</sup> or more, has increased rapidly since 1980, when nationally representative data first became available [1]. There has been international discussion of a potential plateau in trends in the prevalence of overweight and obesity since the year 2000, particularly in children [2]. However, a lack of comparability amongst survey methodology and populations has made it difficult to conclude on the trends in the prevalence of overweight and obesity in Australia.

In Australia, the lack of regular, systematic population health monitoring, including all ages and localities, has impeded our understanding of the development of this major health challenge, beyond the aforementioned basic understanding of overall shifts in prevalence. There is a strong consensus that regular, comprehensive, comparable and accurate monitoring is critical in order to prioritise and allocate obesity prevention and management strategies and to confidently identify changes over time [3].

Here we synthesise the data on the prevalence of overweight and obesity reported from national and state and territory surveys for adults and children. We aim to describe Australia's obesity landscape as far as possible from these data, including amongst adults, children and the Indigenous population, cross-sectionally and longitudinally. We also aim to identify opportunities for future reporting, and to highlight limitations in the available data.

## Methods

### Inclusion criteria

This study primarily synthesised the publicly reported aggregate data from nationally representative and state-specific Australian surveys with

measured height and weight, conducted since 1995. Due to this goal to identify nationally representative and state-specific Australian surveys, we visited all of the key national and state government health and statistics websites to identify potentially relevant surveys. Public websites published before December 2016 were included. Surveys were relevant for inclusion in the study if they reported prevalence of bodyweight categories according to BMI in publicly available reports. For children, only surveys that reported age-specific BMI cut-offs were included, to facilitate comparability with the most recent National Health Survey (NHS) 2014/15. We also refer to some, state-specific, measured (children only) surveys in applicable analyses. We have reported on nationally representative and state-specific Australian surveys with self-reported height and weight in Appendix B.

Details of all surveys included in the analyses are presented in Table 1.

### Data analysis

In our synthesis, data for adults and children are presented separately. We analysed the data both for Australia as a whole and by state and territory. For point-prevalence estimates taken from the 2014/15 NHS survey, we present unsynthesised unit record data from the source survey. All trends data for adults was age-standardised to the June 2001 Australian population, as recommended by the Australian Bureau of Statistics [4], using the direct standardisation method [5].

We did not extract individual level data for this report, and so we do not present any statistical analyses here. However, The Australian Bureau of Statistics (ABS) has published a report that includes some statistical analysis of trends, with significance tested at the 5% level [1]. Where these reported statistical tests are referred to in the results, differences in prevalence will be referred to as significant or not. Where no statistical analysis was performed by the ABS, differences in prevalence will be referred to as apparent or observed.

Download English Version:

<https://daneshyari.com/en/article/8674722>

Download Persian Version:

<https://daneshyari.com/article/8674722>

[Daneshyari.com](https://daneshyari.com)