2014

Changing accuracy of self-reported bmi over time in NSW, Australia

Margo Barr  
*University of Wollongong, mlb593@uowmail.edu.au*

David G. Steel  
*University of Wollongong, dsteel@uow.edu.au*

Raymond A. Ferguson  
*RF Software Services, Neutral Bay*

---

**Publication Details**


Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au
Changing accuracy of self-reported bmi over time in NSW, Australia

Keywords
reported, self, accuracy, changing, australia, nsw, time, over, bmi

Disciplines
Engineering | Science and Technology Studies

Publication Details

This conference paper is available at Research Online: http://ro.uow.edu.au/eispapers/3465
CHANGING ACCURACY OF SELF-REPORTED BMI OVER TIME IN NSW, AUSTRALIA

Thursday, 21 August 2014: 11:45 AM
Ballroom C (Dena'ina Center)

Margo L Barr, MPH, University of Wollongong, Wollongong, Australia
David G Steel, PhD, University of Wollongong, Wollongong, Australia
Raymond A Ferguson, BS, RF Software Services, Neutral Bay, Australia

INTRODUCTION:
Overweight and obesity are important risk factors for cardiovascular disease, diabetes and certain types of cancer. Body mass index (BMI), defined as weight divided by height squared (kg/m²), is often used in large population-based studies to monitor population trends in overweight and obesity, with 25-29 being overweight and above 30 being obese. As height and weight are often collected by self-report using personal interview (PI) or Computer Assisted Telephone Interviewing (CATI) it is important to monitor the accuracy of BMI derived from self-reported height and weight and how the differences between self-reported and measured are changing over time.

METHODS:
Studies that included both self-reported and measured height and weight for NSW, Australia were identified. Results were accessed from the published reports. Differences in overweight and obesity estimates for the self-reported and measured data were calculated for each study. The association between differences and year was then examined.

RESULTS:
There were four studies that included both self-reported and measured height and weight for NSW. These were: 1995 National Health Survey (NHS) and National Nutrition Survey with self-reported data from PI; 1997 NSW Health Survey validation study with self-reported data from CATI; 2004-06 National Survey of Adult Oral Health with self-reported data from CATI; and 2007-08 NHS with self-reported data from PI. The differences in NSW between self-reported and measured overweight and obesity were 23.4% in 1995; 18.5% in 1997; 12.8% in 2005 and 5.2% in 2008. The line of best fit was linear (R²=0.9137) with slope -1.3.

CONCLUSIONS:
More studies that included both self-reported and measured height and weight are needed in NSW. Based on the available data it appears that self-reported overweight and obesity are becoming more accurate over time. Therefore if adjustments are being applied to self-reported data the changing differences should be taken into consideration.

See more of: Overweight and Obesity: Free Papers
See more of: Free Papers

<< Previous Abstract | Next Abstract
Abstract: CHANGING ACCURACY OF SELF-REPORTED BMI O...