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

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CHANGING ACCURACY OF SELF-REPORTED BMI OVER TIME IN NSW, AUSTRALIA

Thursday, 21 August 2014: 11:45 AM

Ballroom C (Dena'ina Center)

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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/m^2), 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 ($R^2=0.9137$) 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.

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August 16 - 21, 2014

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Anchorage, AK

