FINDINGS IN BRIEF

- Females classified as overweight and obese are more likely to have urinary incontinence than those classified with a normal BMI.
- In general, people classified as overweight and obese have a higher prevalence of urinary incontinence, than those classified with a normal BMI.
- People classified as obese also have a higher prevalence of severe urinary incontinence.

INTRODUCTION

Incontinence has been associated with gender, age, pregnancy and diabetes, as well as obesity, measured by Body Mass Index (BMI). Monetary costs per annum of urinary incontinence are estimated at A$710.44 million, and incontinence is often the main reason for admission to nursing homes. Both obesity and incontinence are important public health issues. The prevalence of urinary incontinence in South Australian adults has been reported at 4.4% for males and 35.3% for females, with an overall prevalence of 20.3%. This brief report summarises South Australian population data relating to BMI and urinary incontinence.

METHODS

The data in this report were obtained from the Spring 2001 Health Omnibus Survey conducted in South Australia. The number of interviews conducted was 3037 (response rate 71.3%).

Respondents were asked two questions in this survey to determine urinary incontinence, "Do you ever lose any urine when you don't mean to, for example, when you cough, sneeze or laugh?" and "Do you ever suddenly feel the urge to go to the toilet but accidentally wet yourself before reaching the toilet?" Respondents were considered to have urinary incontinence if they answered yes to one or both of these questions. Respondents were also asked if they ever wore incontinence protection aids, and if this was so, they were considered to have severe urinary incontinence.

The World Health Organisation has classified weight according to BMI in kg/m². Table 1 describes the adult BMI associated with different weight categories:

<table>
<thead>
<tr>
<th>BMI</th>
<th>Underweight</th>
<th>Normal 18.5 - 24.9</th>
<th>Overweight 25.0 - 29.9</th>
<th>Obese ≥ 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg/m²</td>
<td>&lt;18.5</td>
<td>18.5 - 24.9</td>
<td>25.0 - 29.9</td>
<td>≥ 30</td>
</tr>
</tbody>
</table>

RESULTS

Table 2 shows the proportion of people with and without different types of incontinence, for each category of BMI. Respondents who reported all types of urinary incontinence, or severe types of urinary incontinence, are statistically significantly more likely to be classified as obese. Severe incontinence is a sub category of all type of urinary incontinence.

<table>
<thead>
<tr>
<th>BMI</th>
<th>NO INCONTINENCE n=2394</th>
<th>INCONTINENCE ALL TYPES n=643</th>
<th>SEVERE n=156</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>80.2</td>
<td>19.8</td>
<td>5.2</td>
</tr>
<tr>
<td>Normal</td>
<td>80.7</td>
<td>19.3</td>
<td>20.1</td>
</tr>
<tr>
<td>Overweight</td>
<td>82.1</td>
<td>17.9</td>
<td>24.8</td>
</tr>
<tr>
<td>Obese</td>
<td>70.4</td>
<td>29.6*</td>
<td>31.6*</td>
</tr>
<tr>
<td>Not Stated</td>
<td>74.2</td>
<td>25.8</td>
<td>26.4</td>
</tr>
</tbody>
</table>

*Statistically significantly higher ($\chi^2$ test, $p < 0.05$) than those with a normal BMI.

Figure 1 illustrates that for females, the prevalence of all types of urinary incontinence is statistically significantly higher among those who are classified as overweight or obese, and the prevalence of severe urinary incontinence is statistically significantly higher among those who were classified as obese, when compared to normal BMI.

Figure 1: Prevalence of All types and Severe Urinary Incontinence for Males and Females by BMI category

*Statistically significantly higher ($\chi^2$ test, $p < 0.05$) than same sex with normal BMI.
ACKNOWLEDGEMENTS
The data used in this Brief Report was provided from HOS questions submitted by the Department of Obstetrics & Gynaecology, University of Adelaide.

REFERENCES

INFORMATION
For further results from the survey, please visit the Population Research and Outcome Studies web site at: http://www.dh.sa.gov.au/pehs/PROS/publications.html or contact Jodie Avery on 08 8226 6292 or email jodie.avery@health.sa.gov.au