Living with urinary incontinence: A Longitudinal study of older women

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Incontinence

- Incontinence is common
- Can be socially debilitating
  *It affects people socially, emotionally, physically, psychologically and economically.*
- Can be prevented
- Can be managed
1996 baseline surveys
Australian Longitudinal Study of Women's Health (ALSWH)

- Leaking Urine:
  - Mid-age women (45-50) N= 14070
    - 15% rarely
    - 15% sometimes
    - 5% often
  - Older women (70-75) N= 12800
    - 13% rarely
    - 15% sometimes
    - 7% often

- Cross-sectional associations between incontinence severity and
  - BMI,
  - other urinary symptoms,
  - smoking,
  - hormone replacement therapy,
  - hysterectomy.

- Many women who had incontinence were employing methods to prevent incontinence that may have other detrimental health outcomes: eg.
  - reduced fluid intake
  - avoid physical activity

Miller et al. Neurourology and Urodynamics, 2003
Brown & Miller. Journal of Science and Medicine in Sport, 2002

Follow-up Surveys

At each survey women were asked about:
- ✓ Leaking Urine in past 12 months
- ✓ Urine that burns or stings
- ✓ Constipation
- ✓ Prolapsed vagina, bladder or bowel
- ✓ Comorbid conditions
- ✓ Gynaecological procedures
- ✓ Height and Weight (Body Mass Index)
- ✓ Other health and social circumstances (eg. area, education, need for care)
- ✓ SF-36 Health Profile
Transitions in incontinence
Survey 1 – Survey 2
N= 12432 older women

Leaking Urine Sometimes/Often

<table>
<thead>
<tr>
<th>Status</th>
<th>Yes</th>
<th>No</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sometimes/Often</td>
<td>2578 (20.7%)</td>
<td>9397 (75.6%)</td>
<td>457 (3.7%)</td>
</tr>
<tr>
<td>Yes</td>
<td>877 (34.0%)</td>
<td>444 (4.7%)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1066 (41.3%)</td>
<td>6806 (72.4%)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>511 (19.8%)</td>
<td>1764 (18.8%)</td>
<td></td>
</tr>
<tr>
<td>Dead by S2</td>
<td>124 (4.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dead</td>
<td>383 (4.1%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dead by S2 | 124 (4.8%)  |
Missing     | 457 (3.7%)  |

Transition Status S2-S4
n= 12432 women at S1

<table>
<thead>
<tr>
<th>Incontinence Sometimes/often</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalent (Yes at S1)</td>
<td>738</td>
<td>11</td>
</tr>
<tr>
<td>Intermittent (Yes at S1; No at S2 or S3)</td>
<td>162</td>
<td>2</td>
</tr>
<tr>
<td>Incident (No at S1; Yes at S2 or S3)</td>
<td>1389</td>
<td>20</td>
</tr>
<tr>
<td>Never</td>
<td>4612</td>
<td>67</td>
</tr>
<tr>
<td>Missing/withdrew (S1-S4)</td>
<td>3667</td>
<td>30</td>
</tr>
<tr>
<td>Dead</td>
<td>1864</td>
<td>15</td>
</tr>
</tbody>
</table>
Prevalence of incontinence according to BMI at S1

Prevalence of incontinence according to Gynae history at S1
Longitudinal analysis

S2: 73-78, S3: 76-81, S4: 79-84 years


• Increase over time
  OR S4:S2 1.94 (1.79-2.09)

• No ass’n with:
  – Education
  – Smoking
  – Diabetes
  – Parity

• Adjusted for
  – Area

Associated with (P<0.005)

  Stroke OR 1.3 (1.1-1.6)
  (Dementia) OR 2.3 (1.6-3.3)
  Dissat. Phys. Ability OR 1.7 (1.5-1.9)
  Falls to ground OR 1.2 (1.1-1.3)
  5+ GP visits OR 1.2 (1.01-1.3)
  Prolapse OR 1.5 (1.4-1.7)
  Hysterectomy OR 1.1 (1.1-1.4)
  Prolapse repair OR 1.2 (1.1-1.4)
  Obese BMI OR 2.2 (1.7-2.8)
  Dysuria OR 2.1 (1.9-2.3)
  Constipation OR 1.5 (1.3-1.6)

SF-36 Physical Function scores

P<0.0001
Incontinence is associated with poorer levels of physical and social function, but these differences often preceded reports of "leaking urine".

Women with incontinence may have other conditions which also affect their physical and social functioning (e.g., stroke, dementia, other physical disability).

Women with incontinence were not less likely to provide care, to be married, or to undertake volunteer work. Social disability associated with incontinence may be overstated in those contexts where incontinence can be managed.

Parity not such an important risk factor at older ages, but other gynaecological factors are.

Dysuria and constipation may precede the onset of incontinence and may make incontinence worse – prevention of dysuria and constipation may provide opportunity to prevent or manage incontinence.

Obesity is associated with incontinence – prevention of obesity may be important in preventing incontinence.

Women with incontinence have high contact with the health care system providing many opportunities for prevention and management of this condition.