Toileting behavior and urinary tract symptoms among younger women

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Background

• Previous studies have demonstrated that women’s toileting behaviours can contribute to bladder health problems.

• Premature, delayed or straining voiding as well as position and place preference for voiding can cause irritative symptoms, incontinence, overdistension and residual urine.

• Lack of standardized instruments to explore variations in women’s toileting behaviours has contributed to an incomplete understanding of behaviours and symptoms.

• The toilet behaviour scale (TB) was translated to Swedish and showed acceptable reliability and validity. However, further testing is needed in other samples and ages to strengthen its generalibility.

• A pilot survey of 100 students in Malmö 18-25 years showed that a dysfunctional way, neglecting the need to go to the toilet or psychological factors affected emptying pattern.
Aim

• The aim of this study was to investigate urinary symptoms and toileting behavior among younger women in the age of 18-25 years.

Method

• A postal questionnaire consisting of three forms was distributed to 550 women in the ages of 18-25 years randomly selected from the population register in Skåne with one reminder. 519 was reached due to address unknown.
• The questionnaires:
  – 6 background questions (age, height, weight, occupation, parity, smoking)
  – International Consultation on Incontinence Modular Questionnaire – Female Lower Urinary Tract Symptoms (ICIQ-FLUTS)- grade A
  – Toileting Behavior scale (TB)
• The study was approved by local ethical committee of southern Sweden.
TB scale

• 19 questions
  – Premature voiding (5)
  – Staining voiding (4)
  – Place preference for voiding (4)
  – Delayed voiding (3)
  – Position preference for voiding (3)

• 5 alternatives
  – Never (1)
  – Rarely (2)
  – Sometimes (3)
  – Often (4)
  – Always (5)

• The higher score, the more dysfunctional behavior
ICIQ-SF

• 12 questions
  – Frequency (1-4)
  – Voding (5-7)
  – Incontience (8-12)

• 5 alternatives + bother score (0-10)
  – Never (0)
  – Occasionally (1)
  – Sometimes (2)
  – Most of the time (3)
  – All of the time (4)

• The higher score the more impact of individual symptoms
Results

Background

- 173 (33.3%) women responded
- Mean age of 21.5 years
- BMI mean 22.9
- 26 (15.6%) women were smokers
- 127 were students in higher education, 46 were employed
- 153 (85%) nulliparous, 20 parous (14 uni; 6 multi)
TB scale
at least sometimes (sometimes, often, always)

• Place preference for voiding
  – 87% were worried about the cleanliness of public toilets
  – 72,8 % avoided to use them
  – 92.9 % empty the bladder at home just in case
  – 76% try to wait until I come home

• Premature voiding (void without desire)
  – 46,5% at home
  – 24% at work/school
  – 46% preventive
  – 19% in the home of someone,
  – 9% in a public place

• Delayed voiding
  – 70,4 % busy,
  – 48,6% restrain the desire as long as possible
  – 46,7% at work

• Straining voiding
  – 20,3% to initiate
  – 12,7% during the whole urinating process
  – 38,8% to empty the bladder completely
  – 42,2% to empty the bladder faster

• Position preference for voiding
  – 97,6% sit down on the seat
  – 24, 4% hover over the toilet
  – 4,2% squat on the toilet
ICIQ-SF

at least sometimes (sometimes, most of the time, all of the time)

• Frequency (4)
  – 19.3% nocturia
  – 34.2% urgency (Van breda 14.5%)
  – 21.1% pain
  – 50.9% daytime (s=9-10, o=11-12, a=>13)

• Voiding (3)
  – 23.6% hesitancy
  – 22% straining
  – 13.9% intermittency

• Incontinence (5)
  – 12.8% urge
  – 8.7% frequency leakage
  – 16.5% stress
  – 2.3% unexplained
  – 0 % nocturnal eunresis (1 rarely)
<table>
<thead>
<tr>
<th>ICIQ-FLUTS</th>
<th>Place preference for voiding</th>
<th>Premature voiding</th>
<th>Delayed voiding</th>
<th>Straining voiding</th>
<th>Position preference for voiding</th>
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</table>
Discussion

• Hover over the toilet – Moore et al; res > 149%
• Place preference (= avoiding toilets) and delayed voiding
• Lack of knowledge
• Dysfunctional emptying – coexisting symptoms emptying/storage phase
• Van Breda (159 students, 18-30 years),
• Pauwels et al (middle-aged women), large bladder capacity
• Bladder pain - ?
• Responders – those with problem?
• IPSS – TB/ICIQ-SF
• Drop out
Lower Urinary Tract Symptoms  
LUTS

• Lagringssymptom
  – Ökad miktionsfrekvens
  – Trängningar+/- inkontinens
  – Nykturi

• Tömningssymptom
  – Initiering
  – Svag/avbruten stråle/omgångstömning
  – Ofullständig tömning o/e efterdropp

Överaktiv blåsa
Overactive bladder
OAB

Vanor?
Beteende?
Conclusion

• Lower urinary tract symptoms were quite common in this group of young women.

• Toileting behaviours were also significant related to urinary tract symptoms.

• Thus, toilet behaviour scale (TB) was useful for assessing this population, and the translated version showed good validity and reliability.

• Further research about the impact of the toileting behaviour is needed to understand the origin and development of LUTS and its treatment.