

WHAT IS THE MOST BOTHERSOME LOWER URINARY TRACT SYMPTOM? INDIVIDUAL AND POPULATION LEVEL PERSPECTIVES

Hypothesis / aims of study

We compared the bothersomeness of various lower urinary tract symptoms (LUTS) in men and women aged 18-79 years.

Study design, materials and methods

Questionnaires were mailed to 6,000 subjects (3,000 men and 3,000 women) aged 18-79 years, randomly drawn from the national population register. We used the validated DAN-PSS questionnaire for assessment of frequency and bother of 12 different LUTS [1]: hesitancy, weak stream, incomplete emptying, straining, increased daytime frequency, nocturia, urinary urgency, urgency urinary incontinence (UUI), dysuria, post-micturition dribble, stress urinary incontinence (SUI), overflow/weeping incontinence. Among symptomatic subjects, the proportion of individuals with at least moderate bother was calculated for each symptom (individual level) (Figure 1). The age-standardised prevalence of subjects with at least moderate bother was also calculated for each symptom (population level) (Figure 2). To assess statistical significance, 95% confidence intervals were calculated.

Results

Out of 6,000 subjects, 3,727 (62.4%) took part. The LUTS with the greatest bother burden at the population level were: urgency (7.9% prevalence, with at least moderately bothersome), stress urinary incontinence (SUI) (6.5%), nocturia (6.0%), post-micturition dribble (5.8%), urgency urinary incontinence (UUI) (5.0%) and daytime frequency (4.3%). Among symptomatic subjects, UUI was the most bothersome LUTS. No differences between sexes in the perceived bother were found from an individual perspective, whereas the population bother burden from urinary incontinence was higher in women than men, and vice versa for voiding and post-micturition symptoms. (Figures 1-2).

Interpretation of results

Individuals of both sexes who experience UUI are more likely to rate it as causing moderate or major bother, compared with sufferers of any other LUTS. At the population level there are significant differences in the prevalence of bothersome LUTS between sexes. Among men, post-micturition dribble, urgency and nocturia are the most prevalent bothersome symptoms. Among women, SUI, urgency and UUI are the most prevalent bothersome symptoms. Although only a minority of individuals with urinary urgency rate it as causing moderate or major bother, at a population level, considering both sexes together, urgency is the LUTS with the greatest bother burden.

Concluding message

Individuals of both sexes who experience UUI are more likely to rate it as moderately or very bothersome, compared with other LUTS. At the population level, the most prevalent bothersome symptoms are post-micturition dribble, urgency and nocturia among men, and SUI, urgency and UUI among women. Overall, UUI is the most bothersome LUTS from the individual perspective and urgency from the population perspective.

Figure 1. Individual perspective: Age-standardized proportion (%) of subjects reporting at least moderate bother among symptomatic men and women. Error bars represent 95% confidence intervals.

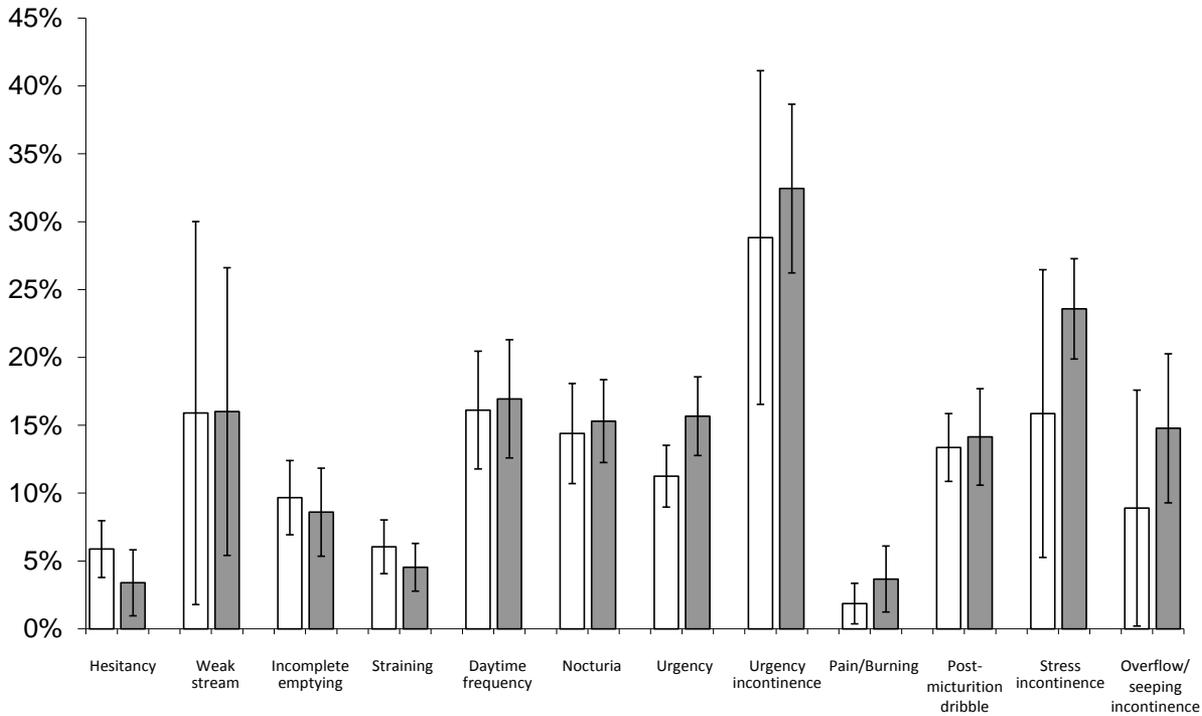
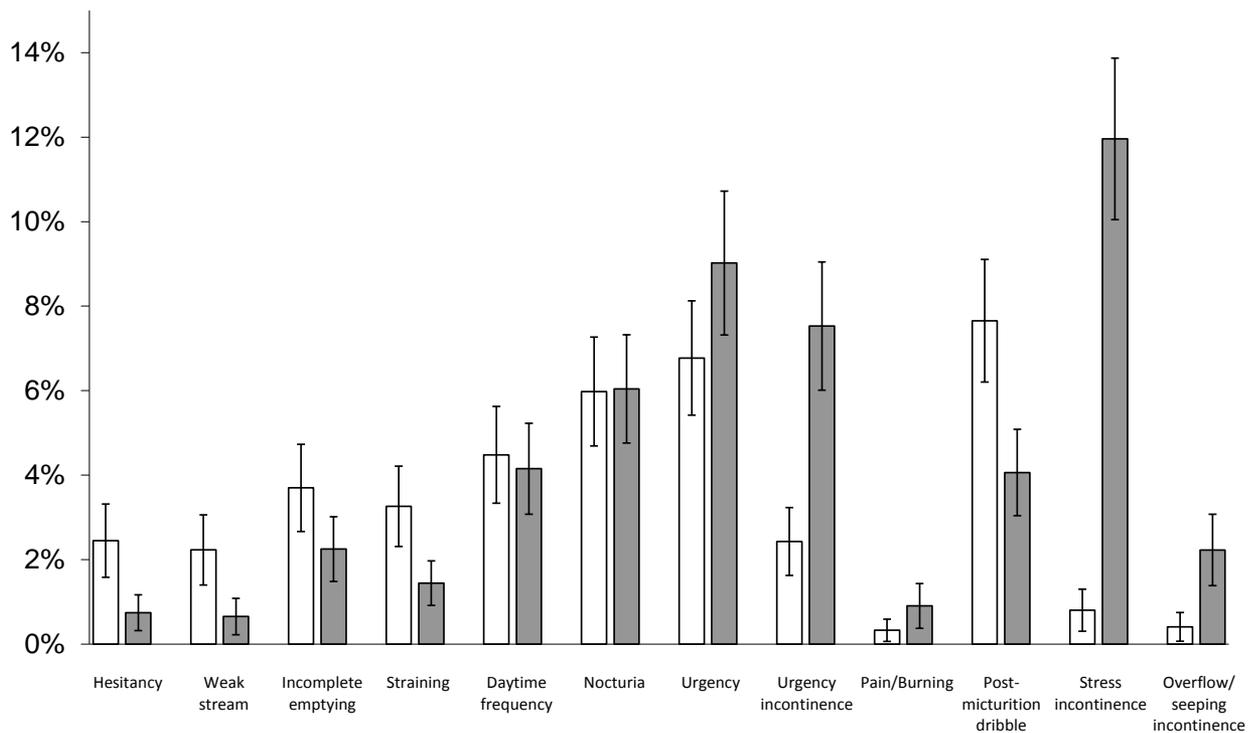


Figure 2. Population perspective: Age-standardized prevalence (%) of at least moderate bother from LUTS among men and women. Error bars represent 95% confidence intervals.



Specify source of funding or grant

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Is this a clinical trial?

No

What were the subjects in the study?

HUMAN

<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	in accordance with the Finnish regulations on questionnaire surveys, an exemption from ethical review was granted by the ethics committee of the Pirkanmaa Hospital District (Tampere, Finland).
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No
