

BOTHER AND IMPACT OF URINARY URGENCY AND URGENCY INCONTINENCE ON HEALTH-RELATED QUALITY OF LIFE: RESULTS OF A POPULATION-BASED STUDY

Hypothesis / aims of study

Despite substantial recent research interest in overactive bladder syndrome (1), there is paucity of population-based studies evaluating its bothersomeness and effect on quality of life. We explored the relation of urinary urgency and urinary urgency incontinence (UUI) severity to bother, and impact of urgency and UUI on health-related quality of life (HRQoL).

Study design, materials and methods

Questionnaires were mailed to 6,000 Finns aged 18-79 years, randomly drawn from the Population Register. Symptom frequency based on the Danish Prostatic Symptom Score (2) urgency and UUI questions (scale: never-rarely-often-always) was examined in relation to bother (from urgency and UUI) and HRQoL. Bother from urgency and UUI was on a scale none-small-moderate-major. The age-standardised prevalence was calculated using the population structure of Finland.

HRQoL was measured by the validated, generic 15D instrument (3). The 15D consists of 15 dimensions. Each dimension has a single question with 5 response options. The 15D can be used as a profile measure or to give a single index score (15D Score) by means of population-based preference weights. The index score is between 0 (being dead) and 1 (being totally healthy); 0.03 is regarded as the minimum clinically important difference in the 15D Score (3).

Results

Of the subjects, 3,727 (62.4%) took part, and of them 130 were excluded due to pregnancy, puerperium, or urinary tract infection. The degree of bother increased with frequency of urinary urgency and UUI among both sexes ($p < 0.001$). More than 96% of subjects reported "no" or "small" bother from rarely urgency whereas 65% of subjects with often urgency and more than 70% with always urgency reported "moderate" or "major" bother from urgency (**Figure 1A**). Among subjects with rarely, often, and always UUI, "moderate" or "major" bother was reported by 20%, 92%, and 100%, respectively (**Figure 1B**). Any urgency was reported by 56% of subjects, but only one in seven (8%) reported "moderate" or "major" bother from urgency. Corresponding figures were 18% and 5.4% for UUI. Hence, three out of ten with any UUI reported "moderate" or "major" bother from UUI.

The mean age-adjusted 15D Score for men (women) with never urgency was 0.957 (0.955), 0.932 (0.933) with rarely urgency, and 0.876 (0.870) with often urgency (number of subjects with always urgency/UUI was insufficient for reliable analyses). Corresponding figures for UUI were 0.943 (0.946), 0.897 (0.909), 0.813 (0.824) with never, rarely, and often UUI, respectively. The differences between the groups (within sex) were statistically significant. Urgency and UUI were associated with statistically significant decrease in most dimensions of 15D among both sexes (**Figure 2**).

Interpretation of results

We conducted a questionnaire survey in a representative sample of Finnish people and achieved a high response rate. Moderate or major bother is commonly related to more severe symptoms, frequent (often or always) urgency and UUI, while only a minority of the subjects with less frequent symptoms report substantial interference (4% of those with rarely urgency and 20% with rarely UUI). Reduced quality of life scores were reported by subjects with frequent urgency but impairment occurred also with less severe forms of UUI. Finally, our results confirm that prevalence of overactive bladder is overestimated due to vague criteria (lack of bother assessment) and selected study populations regarding age distribution and low participation.

Concluding message

Having often urgency or rarely UUI is associated with decreased HRQoL. Prevalence of clinically important urinary urgency is approximately 8%.

Figure 1. Age-standardised prevalence of bother by frequency (scale: never-rarely-often-always) of A) urinary urgency, and B) urinary urgency incontinence (UUI).

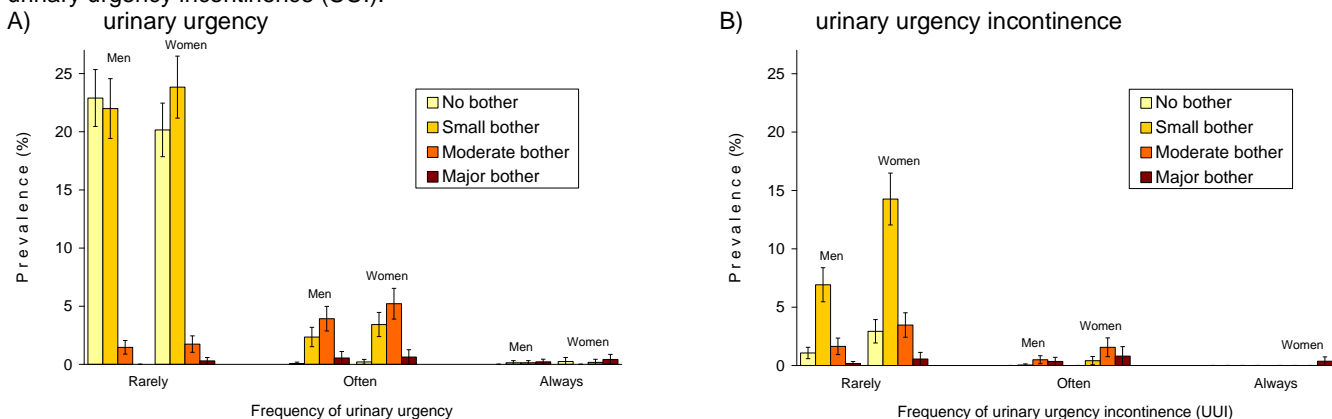
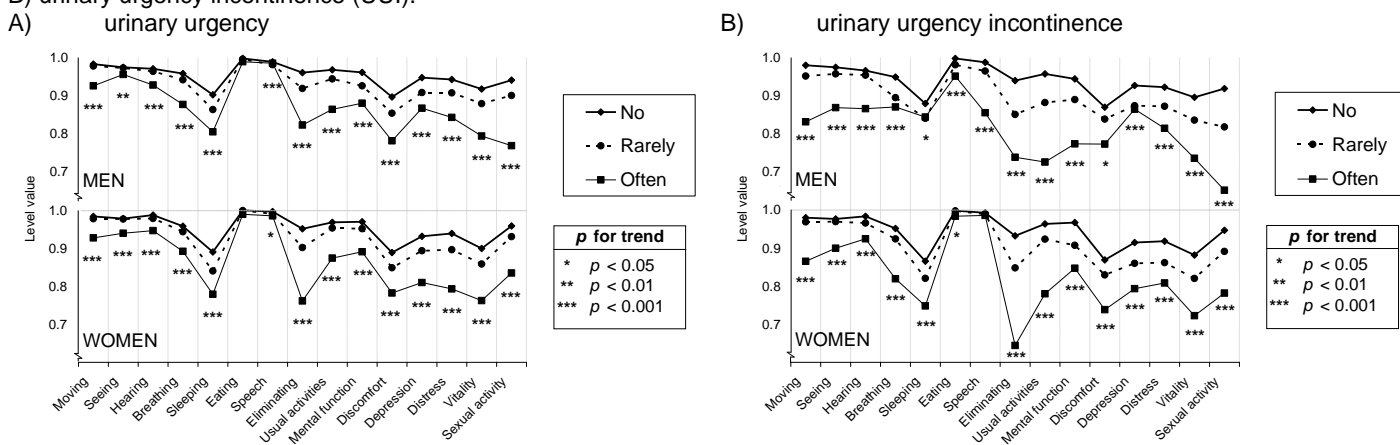


Figure 2. The age-adjusted means for dimension level values (profiles) of 15D instrument by frequency of A) urinary urgency and B) urinary urgency incontinence (UII).



References

1. Neurourol Urodyn (2002) 21 ; 167-78.
2. Scand J Urol Nephrol (1993) 27; 489-92.
3. Ann Med (2001) 33; 328-36.

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Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require eithics committee approval because	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).
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes