

THE PREVALENCE OF LOWER URINARY TRACT SYMPTOMS, OVERACTIVE BLADDER AND URINARY INCONTINENCE IN TURKEY: RESULTS OF A POPULATION BASED SURVEY

Hypothesis / aims of study

Since 2002 International Continence Society (ICS) definitions, several population based trials have been conducted to estimate the prevalence of lower urinary tract symptoms (LUTS) at different regions. The majority of these trials however were limited by gender, examining urinary incontinence (UI) in women and LUTS in men (1). In Turkey, the prevalence of LUTS, UI and overactive bladder (OAB) have not been investigated in the population. The objective of this study was to estimate and compare the prevalence of LUTS, UI and OAB in a population based survey.

Study design, materials and methods

This cross-sectional, population-based survey was conducted between May and October 2012 in Denizli, Turkey. A random sample of 2128 women and men aged ≥ 18 years was selected from the health registries of randomly assigned 40 primary care physicians (PCP). A questionnaire including sociodemographic data; comorbid conditions, dietary habits and risk factors; LUTS, OAB and UI symptoms (with linguistically validated ICS definitions and a validated ICIQ-SF form); body mass index; vital signs and dip-stick urinalysis was developed. PCPs and site staff were trained about the study. Questions were answered by the participants and remaining data were filled out by the site staff.

Results

A total of 1571 (74%) individuals agreed to participate and analysis were conducted on 1555 people (636 males [40.9%] and 919 women [59.1%]) after 16 individuals with a nitrite-positive dipstick test were excluded. At least one LUTS were reported by 71.0% (men, 65.5%; women, 74.7%) of the study population. The prevalence of storage, voiding and postmicturition symptoms were; 56.1% (men, 45%; women, 63.8%), 39.3% (men, 41.1%; women, 38%) and 30.7% (men, 34.6%; women, 28.1%), respectively. Urgency, as the dominating symptom of OAB was reported by 29.3% of the study population (men, 20%; women, 35.7%) and the frequency was more than "once a week" in 62.2% of those. The prevalence of urge, stress and mixed urinary incontinence were; 12% (men, 4.7%; women, 17.1%), 19.8% (men, 4.7%; women, 30.3%) and 5.6% (men, 0.8%; women, 8.9%), respectively. The prevalence of all storage symptoms and the majority of the voiding and postmicturition symptoms increased with age. The most prevalent voiding and postvoiding symptoms were terminal dribble and postmicturition dribble in both genders.

Interpretation of results

The results of our study and the prevalence of LUTS, OAB and UI in our country highly correlated with previously published large scaled population based trials (1-3). The prevalence of voiding and postmicturition symptoms are slightly higher in our population. The prevalence of OAB seemed significantly higher than the published reports however when frequency (more than "once a week") is included in the interpretation, the OAB prevalence decreases to world prevalence estimates. The prevalence of UI including all subtypes is similar to the results coming from the western countries which are significantly higher than the Asian.

Concluding message

Using the ICS definitions, this study is the first and largest population based survey evaluating the prevalence of LUTS, UI and OAB in Turkey. The results of our study showed that these symptoms are highly prevalent in our region.

References

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Disclosures

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