

POPULATION-BASED SURVEY OF URINARY INCONTINENCE, OVERACTIVE BLADDER AND OTHER LOWER URINARY TRACT SYMPTOMS (LUTS) IN KOREA: RESULTS OF THE EPIC STUDY

Hypothesis / aims of study

To produce information about the prevalence of urinary incontinence (UI), overactive bladder (OAB) and other lower urinary tract symptoms (LUTS) in the general populations aged ≥ 18 years in Korea using the 2002 International Continence Society (ICS) definitions.

Study design, materials and methods

This study was conducted between May and September 2006. This was a population-based, cross-sectional survey of adults ≥18 year of age in Korea (N=2,000). Representative sample of the general population was selected and telephone interviews were conducted using a computer-assisted telephone interview (CATI) system. Using the 2002 International Continence Society (ICS) definitions, the prevalence of storage, voiding, and postmicturition LUTS were estimated. The data were stratified into age cohort and gender. Age-specific prevalence rates were calculated by adjusting for the age distribution in the country at the time of the survey. Ethics committee approval was obtained according to national regulations.

Results

The overall prevalence of any LUTS was 53.7% in men and 68.9% in women. The prevalence of storage LUTS (men: 44.6%, women: 64.4%) was greater than that for voiding and postmicturition symptoms combined (figure). Nocturia was the most prevalent LUTS (men: 36.6%, women: 48.2%) (table 1). The prevalence of incontinence in the general population aged ≥18 years was 15.8% (2.9% in men 28.4% in women). UI was more prevalent among women (28.4%) than men (2.9%). Among women mixed UI was the most prevalent types of UI, among men urgency UI were most prevalent. The overall prevalence of OAB was 12.2 % (men: 10.0%, women: 14.3%). Overall prevalence of OAB with UI was 5.1% (Men: 1.0%, Women: 9.2%) and the prevalence of OAB without UI was 7.1% (Men: 9.0%, Women: 5.1%). The prevalence of different types of incontinence in subjects with OAB was shown in table 2.

Interpretation of results

The results confirm that LUTS is a common condition in men and women across all adult age groups in Korea. And the prevalence increased with age in both men and women

Concluding message

To date, this is the first study to evaluate these symptoms simultaneously using the 2002 ICS definitions in Korea. Further analyses of EPIC data will be available and should yield information about LUTS regarding risk factors and comorbidities; coping and health care-seeking behaviours; and impact on sexuality, mental health, and work productivity.

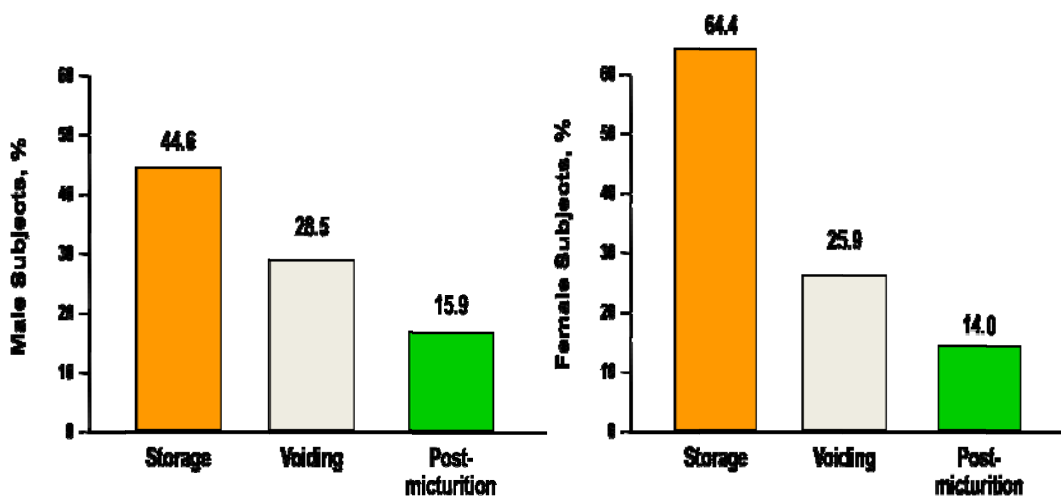


Figure Prevalence of Lower Urinary Tract Symptoms in Men & Women

Table 1 Prevalence (%) of LUTS according to Sex

	Men	Women
Storage		

Urination again (<2hrs)	23.3 (19.5-27.1)	28.3 (25.0-31.6)
Nocturia	36.6 (32.3-40.8)	48.2 (44.4-52.0)
Difficulty in postponing urination	7.8 (5.6- 9.9)	8.2 (6.2-10.2)
Voiding		
Intermittency	7.8 (5.7- 9.9)	7.7 (5.7- 9.8)
Weak stream	17.7 (14.3-21.0)	16.0 (13.3-18.7)
Straining	9.9 (7.5-12.3)	7.1 (5.2- 9.0)
Postmicturition		
Incomplete emptying	12.5 (9.8-15.2)	12.5 (10.3-14.8)

Weighted % and 95 % CIs

Table 2 Prevalence (%) of Incontinence in OAB Population

	Men	Women	Total
OAB with any incontinence	9.8	64.0	42.1
OAB with UUI only	4.5	7.9	6.5
OAB with SUI only	1.6	24.2	15.0
OAB with MUI	2.6	28.7	18.1
OAB with other incontinence only	1.1	3.3	2.4

Weighted %

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HUMAN SUBJECTS: This study was approved by the Institutional Review Board (IRB) and followed the Declaration of Helsinki Informed consent was obtained from the patients.