

UNDERSTANDING SYMPTOM BOTHER CAUSED BY OVERACTIVE BLADDER AND OTHER LOWER URINARY TRACT SYMPTOMS FROM A POPULATION PERSPECTIVE

Hypothesis / aims of study

A multinational study evaluated the prevalence and burden of overactive bladder (OAB) symptoms among men and women ≥ 18 years of age. This analysis seeks to further elucidate symptom bother caused by lower urinary tract symptoms (LUTS) in men and women with OAB symptoms.

Study design, materials and methods

The EPIC study¹ was a cross-sectional, population-based survey in Canada, Germany, Italy, Sweden, and the United Kingdom (N=19,165). Computer-assisted telephone interviews were conducted with a geographically stratified random sample of the population. The 2002 International Continence Society definitions² of OAB and other LUTS were used to classify participants with LUTS. The following LUTS were assessed: urgency, frequency, nocturia, urinary incontinence (UI; including stress UI, urgency UI, mixed UI), intermittency, slow stream, straining, terminal dribble, incomplete emptying and postmicturition dribble. All participants were asked about specific urinary symptoms and comorbid conditions. A longer questionnaire was administered to respondents reporting OAB symptoms (ie, cases). Two validated measures were used to define symptom bother in OAB cases: the Patient Perception of Bladder Condition (PPBC) and the Symptom Bother Scale of the Overactive Bladder Questionnaire (OAB-q). Individuals who met either of the following criteria were classified as bothered by their urinary symptoms: PPBC responses indicating their bladder condition caused them minor, moderate, severe, or many severe problems; OAB-q Symptom Bother Scale score >15 for men and >20 for women.

Results

More than 90% of OAB cases reported ≥ 2 LUTS. The proportion of men (46%) and women (45%) with OAB experiencing ≥ 4 LUTS was approximately the same. However, the proportion of OAB cases reporting ≥ 4 LUTS significantly increased with age (<40 y, 32%; 40–59 y, 44%; ≥ 60 y, 54%). As the number of LUTS reported increased among cases, so did the proportion of respondents who were bothered. This was true for both men and women and all age groups (**Table 1**).

Male (71%) and female (59%) cases predominantly reported experiencing a mix of storage, voiding, and postmicturition symptoms. The most common voiding symptom was terminal dribble (men, 37%; women, 25%), and the most frequently reported postmicturition symptom was incomplete emptying (men, 37%; women, 33%) (**Table 2**).

Interpretation of results

Many OAB cases experience ≥ 3 LUTS in addition to urgency. Individuals with OAB reported higher numbers of LUTS as age increased, while gender differences were less dramatic. The number of LUTS experienced by OAB cases impacts symptom bother. Voiding and postmicturition symptoms are common among men and women with OAB symptoms.

Concluding message

From a general population perspective, OAB symptoms usually coexist with other voiding and postmicturition symptoms. Overall, urinary symptom bother in men and women with OAB is related to the total number of LUTS, including storage, postmicturition, and voiding symptoms.

References

1. Eur Urol (2006) 50;1306–1315.
2. Neurourol Urodyn (2002) 21;167–178.

Table 1: Number of LUTS in OAB Cases by Gender, Age, and Symptom Bother

Gender, n(%)	# of LUTS					
	1	2	3	4	5	6+
Men n=502*	50 (10.0)	104 (20.7)	116 (23.1)	92 (18.3)	59 (11.8)	81 (16.1)
Bothered n=271†	7 (14.0)	29 (27.9)	61 (52.6)	57 (62.0)	43 (72.9)	74 (91.4)
Women n=932*	84 (9.0)	226 (24.2)	203 (21.8)	166 (17.8)	122 (13.1)	131 (14.1)
Bothered n=497†	7 (8.3)	74 (32.7)	99 (48.8)	107 (64.5)	95 (77.9)	115 (87.8)
Age group						
Age 18-39 y n=302*	62 (20.5)	91 (30.2)	53 (17.5)	35 (11.6)	23 (7.6)	38 (12.6)
Bothered n=122†	6 (9.7)	21 (23.1)	24 (45.3)	23 (65.7)	18 (78.3)	30 (78.9)
Age 40-59 y n=543*	53 (9.8)	119 (21.9)	133 (24.5)	96 (17.7)	76 (14.0)	66 (12.1)
Bothered n=289†	5 (9.4)	45 (37.8)	61 (45.9)	59 (61.5)	58 (76.3)	61 (92.4)
Age 60+ y n=589*	19 (3.2)	120 (20.4)	133 (22.6)	127 (21.6)	82 (13.9)	108 (18.3)
Bothered n=357†	3 (15.8)	37 (30.8)	75 (56.4)	82 (4.6)	62 (75.6)	98 (90.7)

*Number of individuals with specific number of LUTS divided by total individuals in that group.

†Number of bothered individuals with specific number of LUTS divided by total number of individuals with that specific number of LUTS.

Table 2: LUTS in OAB Cases

Symptom, n (%)	Men (n=502)	Women (n=932)
Urgency	502 (100)	932 (100)
Nocturia	378 (75.3)	685 (73.5)
Frequency	151 (30.1)	230 (24.7)
Urinary incontinence	155 (30.9)	516 (55.4)
Intermittency	111 (22.1)	189 (20.3)
Slow stream	136 (27.1)	174 (18.7)
Straining	84 (16.7)	94 (10.1)
Terminal dribble	185 (36.9)	235 (25.2)
Incomplete emptying	185 (36.9)	304 (32.6)
Postmicturition dribble	119 (23.7)	121 (13.0)
Storage only symptoms	147 (29.3)	378 (40.6)
Storage and voiding symptoms	107 (21.3)	186 (20.0)
Storage and postmicturition symptoms	61 (12.2)	118 (12.7)
Storage, voiding, and postmicturition symptoms	187 (37.3)	250 (26.8)

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HUMAN SUBJECTS: This study was approved by the Ethics Committee at Goteborg University, DNR 305-05 and followed the Declaration of Helsinki Informed consent was obtained from the patients.