

Author(s): C. Payne ¹ , W. Stewart ² , R. Herzog ³ , J. Liberman ² , A. Wein ⁴ , T. Hunt ⁵
Institution, city, country:
¹ Center for Neuro-urology and Female Urology, Stanford, USA; ² Innovative Medical Research, Hunt Valley, USA; ³ University of Michigan, Ann Arbor, USA; ⁴ University of Pennsylvania, Philadelphia, USA; ⁵ Pharmacia Corporation, Peapack, USA
Title (type in CAPITAL LETTERS. Leave one blank line before the text).
VARIATION IN PREVALENCE OF OVERACTIVE BLADDER SYMPTOMS IN A COMMUNITY SAMPLE: EARLY RESULTS FROM THE NOBLE PROGRAM
<u>Aims of study</u> The National Overactive BLadder Evaluation (NOBLE) Program encompasses a series of studies designed to provide information on the prevalence and impact of overactive bladder (OAB) symptoms in the USA. OAB is a symptomatic diagnosis used to describe the symptoms of urgency and/or frequency, with or without urge incontinence. Previous estimates of the prevalence of OAB have focused only on incontinence, overlooking the symptoms of urgency, frequency and nocturia in the absence of incontinence. Studies encompassing these latter symptoms vary considerably in estimates of prevalence, due to differences in symptom criteria and the lack of clinical validation. To provide preliminary data on the prevalence of OAB symptoms, we used data from the first interview of a community-based test-retest reliability study. We examined how variation in symptom definition influenced prevalence estimates.
<u>Methods</u> A total of 351 adults completed the first telephone interview, which began with questions about demographics and usual fluid intake and was followed by 15 screening questions (yes/no format) for symptoms of frequency, nocturia, urgency, urge incontinence and stress incontinence. Affirmative responses to screening questions were followed by more detailed questions about symptoms, coping strategies and psychological/physical impact of symptoms in the previous 4 weeks.
<u>Results</u> Of the 351 respondents, 65% were female; 35% male. The age distribution was: 18–39 years, 38%; 40–59 years, 36%; 60–79 years, 22%; and ≥80 years, 4%. The majority of respondents were white (83%). The median and mean numbers of servings of fluid/day were 8.3 and 7, respectively. Ten percent of respondents reported use of diuretics; 9% reported a ‘bladder problem’; and 5% reported a urinary tract infection in the previous 4 weeks that was treated with an antibiotic. The prevalence of specific OAB symptoms varied substantially depending on the criteria used (see Table).

Author(s)

C. Payne¹, W. Stewart², R. Herzog³, J. Liberman², A. Wein⁴, T. Hunt⁵

The prevalence of frequency, defined as greater than 8 micturitions/24 hours, was 13.1% and, as expected, was substantially influenced by fluid intake. Waking up at night or 'from sleep' to urinate was common. Urgency was also very common and the daily feeling of urgency was reported by 25.1%. The yes/no screening questions for incontinence were expected to be highly sensitive, but not specific. Accordingly, prevalence of incontinence was substantially lower when additional criteria for frequency/episodes and the amount of urine loss were included. At least one of the seven coping strategies was used by 28.2% of respondents. Individual coping strategies were used by 5–17%. There may be substantial unmet treatment need in the population based upon the high level of distress relating to the need to cope among 8.5% of respondents.

Symptom	Definition	%
Frequency	>8 micturitions/24 hrs	13.1
	>8 mic/24 hrs: those with fluid intake 7 servings/below 7 servings	15.5 / 7.3
	>10 mic/24 hrs / >12 mic/24 hrs	6.9 / 3.7
Nocturia	At least every other night (>4 nights/wk) 1+ micturition/night	19.4
	Every night with ≥ 2 micturitions/night	9.7
Urgency	'Yes' to at least 1 of 3 screening questions	41.2
	Feeling of urgency daily	25.1
Use of coping strategies	'Yes' to at least 1 of 7 coping strategies	28.2
	Usually concerned about fluid intake	6.9
Incontinence	Locate bathroom immediately in a new place	8.6
	'Yes' to at least 1 of 5 screening questions	19.7
	Greater than rarely in the last 4 weeks	8.5
	Greater than rarely in the last 4 weeks with volume loss >few drops	7.7

None of the statistics in this table represents mutually exclusive categories

Conclusions

Previous estimates of overactive bladder prevalence vary considerably, ranging from 1.2–10% in the USA and 12–22% in various European countries [1]. In part, the observed variation in prevalence estimates may be explained by how OAB is defined. We found that, when based on affirmative responses to screening questions, prevalence of OAB-specific symptoms was very high and likely to be overestimated. Prevalence estimates were considerably lower when strict criteria were used and when the estimates were based on questions with established test-retest reliability. Ongoing work to clinically validate the NOBLE questionnaire will provide the foundation for refinements of these prevalence estimates.

References

1. The European overactive bladder survey: Prevalence of symptoms and medical consultation. *Am J Man Care* (Suppl). In print.