

**Urinary incontinence and overactive bladder  
in the non-institutionalized Portuguese population:  
national survey and methodological issues**

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**Master in Epidemiology**

Summary

## Summary

## **Introduction**

Urinary incontinence and overactive bladder are common conditions in adults, with impact on physical, psychological and social well-being, and represent an important burden to the economy of health services. The assessment of the frequency of urinary incontinence and overactive bladder symptoms in specific settings and the extent to which they are diagnosed and treated is important to define priorities and sustain public health strategies oriented to the reduction of the human and economic burden of urinary dysfunctions. The wide regional variation in the frequency of these conditions reflects the methodological heterogeneity across studies, as well as cultural differences and heterogeneity in the distribution of their determinants. In addition to subject-specific methodological issues the potential effect of the sampling strategy on the representativeness of the samples obtained is an important issue in population-based surveys.

## **Objectives**

This study aimed to:

- Quantify the prevalence of self-reported and clinically diagnosed urinary incontinence and overactive bladder symptoms;
- Characterize the treatments received by urinary incontinency patients;
- Assess the determinants of both urinary incontinence and overactive bladder symptoms (*manuscript 1*)
- Quantify the time spent with interviews and unsuccessful contacts, and to compare the yielding of the contact attempts across regions, days of the week and day periods;
- Compare the demographic and health characteristics of the participants with those of the Portuguese population (*manuscript 2*).

## **Methods e Results**

The Portuguese mainland telephone number lists (Portugal Telecom “white pages”) were used for a stratified sampling by region (NUT II) of subjects aged  $\geq 40$  years. Socio-demographic data, smoking habits, obstetric history (women) and past medical history were evaluated in a telephone survey, conducted in early 2008

### Manuscript 1

The prevalence of different types of UI [stress (SUI), urge (UUI), mixed (MUI)] were computed according to the International Continence Society definitions (2002). OAB

symptoms were assessed through the Overactive Bladder Assessment Tool, 8 item version. Proportions and respective 95% confidence intervals (95%CI) were weighted according sex and age group distribution to reflect the prevalence in the Portuguese population.

The prevalence of at least one episode of urinary leakage in the previous month was 21.4% (95%CI: 19.0-23.9) in women (SUI: 42.2%), and the highest prevalence was observed among those aged 60-79 (27.1%; 95%CI: 21.8-32.5). In males, the overall prevalence was 7.6% (95%CI: 4.8-10.4), UUI: 60.2%, higher in those aged  $\geq 80$  (21.6%; 95%CI: 6.9-36.3). A clinical diagnosis of UI was reported by 4.5% (95%CI: 3.3-5.7) of individuals, from which 73% (95%CI: 61.9-84.5) had received pharmacological (76.5%), surgical (24.4%) or other (13.1%) treatment. The prevalence of OAB symptoms was 29.4% (95%CI: 26.6-32.2) in women and 35.1% (95%CI: 29.6-40.6) in men. In men it increased with increasing age and among women it remained constant.

### Manuscript 2

Time spent with interviews and unsuccessful contacts was quantified. Demographic and health characteristics of the participants were compared with those of the Portuguese population with data from Census 2001 and from the fourth National Health Survey.

The minimum response rate of the survey was 27.6 % and the cooperation rate 59.6 %. The proportion of refusals was higher on Saturdays (45.2 % vs. 30.7 %) and evenings (45.2% vs. 36.7%), as well as the selection of men (26.2 % vs. 21.0 %) and active workers (31.8 % vs. 21.8 %). Our sample included a higher proportion of women, elderly and more educated participants than the Portuguese population. Sex- and age- specific estimates of smoking and obesity obtained from our sample were similar to those in the Portuguese population.

### **Conclusions**

The prevalence of UI was similar to the described in other European countries. The gap between the proportion of UI episodes and clinical diagnosis emphasizes the need for awareness among both health professionals and general population. Despite the difficulties in reaching participants, the sampling strategy may produce representative samples for assessment of important health indicators.