

## PREVALENCE, BOTHER AND TREATMENT SEEKING BEHAVIOUR RELATED TO URINARY INCONTINENCE, LUTS AND SEXUAL DYSFUNCTION IN A GENERAL HOSPITAL'S INPATIENT POPULATION: RESULTS FROM THE HOSPITALISED AND OUTPATIENTS' PROFILE AND EXPECTATIONS STUDY (HOPES)

### Hypothesis / aims of study

Several studies have examined the prevalence and bother of either LUTS, urinary incontinence or sexual dysfunction, usually in a gender specific manner and in community-based population. In addition, more recent research is investigating the notion of treatment seeking, mostly for incontinence and sexual dysfunction. However, studies comparing the prevalence, bother and treatment seeking of those 3 urological conditions are lacking, as well as comparisons by gender and age.

The Hospitalised and Outpatients' Profile and Expectations Study (HOPES) is a hospital-based, random sample survey, investigating patients' expectations and psychosocial profiles, as well as the prevalence and self-perceived severity of urinary incontinence, LUTS and sexual dysfunction, by gender and age. HOPES aimed to determine the level of bother and record treatment seeking tendencies, and compare the findings from these 3 conditions. We present a preliminary analysis of the collected data from a sample of inpatients.

### Study design, materials and methods

The study was designed to represent a cross section of each of 13 departments of a general hospital, and to include equal numbers of subjects in each of 6 design cells, defined by age (18-40, 41-60, 61-80 years) and gender. Following signed informed consent data were obtained during a 2-hour, in-person interview, conducted by a well-trained psychologist/interviewer. Wherever possible, the questions and scales employed were selected from published instruments with documented metric properties and approved by a Scientific Advisory Committee. To ensure acquisition of the highest quality data, all staff were trained, certified, monitored and regularly retrained in all procedures and protocols. A minimum of 10% double data entry ensured accurate data computerization.

Subjective perception of sexual functioning was measured by the SCSF (4-items), LUTS were assessed by the IPSS questionnaire (moderate or severe  $\geq 8$ ), incontinence by ICIQ-SF questionnaire. The IPSS bother question was adjusted to assess overall bother for each condition ('how bothersome have the sexual/urinary/incontinence problems been during the last month?'). Impact on quality of life was measured by the AUASI bother question 2 adjusted to each condition ('If you were to spend the rest of your life with your sexual/urinary/incontinence problems just as they are now, how would you feel?').

Results analysis included descriptive statistics. The SPSS version 13 statistical software package was used.

### Results

A total of 454 subjects (232 women or 51.1% and 222 men or 48.9%) with a mean age of 50 years (no age difference between men and women) were recruited in a 6-month period. Overall 317 inpatients 61.8% males and 38.2% females had complete data on all three questionnaires (SCSF, IPSS and ICIQ-SF).

#### *Prevalence*

Fifty six per cent of the total sample reported at least one sexual dysfunction (SD), 28.7% reported moderate or severe LUTS (IPSS score 8-19 and 20-35 respectively) and 10.1% reported some type of urinary incontinence at least once a week.

Within males, 7.1% reported incontinence, 27.6% reported LUTS and 49.5% reported a sexual problem. Within women, 14.9% reported incontinence, 30.6% reported LUTS and 66.1% reported at least one sexual problem. Within the 18-40 age group 5.5% reported incontinence, 12.7% reported LUTS and 37.3% reported a sexual problem. Within the 41-60 age group 8.3% reported incontinence, 29.4% reported LUTS and 58.7% reported a sexual problem. Within the 61-80 age group 17.3% reported incontinence, 45.9% reported LUTS and 73.5% reported a sexual problem.

#### *Bother*

The median score on the IPSS bother question was higher for those reporting incontinence (2 = some bother), followed by those reporting a sexual problem (1 = little bother) and LUTS (0 = not at all bothersome). The median score on the AUASI question 2 for impact on QOL was again higher in patients reporting incontinence (5 = unhappy), than in patients with a sexual problem (median score 4 = mostly dissatisfied), and those with LUTS (median score 3 = mixed feelings).

#### *Treatment seeking*

Of those reporting an SD only 26.3% had sought treatment, of those reporting LUTS only 32.1% and of those reporting incontinence 46.9%.

Within men reporting incontinence, 14.3% of those who sought treatment were in the 18-40 age group, 14.3% were 41-60y, and 71.4% were 61-80y. Within men reporting LUTS, 15.7% of those who sought treatment were 18-40y, 25.5% were 41-60y, and 58.8% were 61-80y. Within men reporting an SD, 22.2% of those who sought treatment were in the 18-40 age group, 33.3% were 41-60y, and 44.4% were 61-80y.

Within females reporting incontinence, 14.3% of those who sought treatment were 18-40y, 33.3% were 41-60y and 52.4% were 61-80y. Within women reporting LUTS, 25% of those who sought treatment were in the 18-40 age group, 31.3% were 41-60, and 43.8% were in the 61-80 age group. Within females reporting an SD 21.4% of those who sought treatment were 18-40, 53.6% were 41-60, and 25% were in the 61-80 age group.

### Interpretation of results

Although urinary incontinence was the least prevalent of the 3 urological conditions investigated, it appeared to be the most bothersome and associated with more frequent treatment seeking than either LUTS or SD, suggesting also an association between bother and treatment seeking behaviour. In contrast, although SD was the most prevalent condition, it was the one that least frequently drove patients to their physicians, suggesting involvement of different psychosocial factors, personality traits and disease-specific perceptions.

Age was associated with a higher prevalence of all 3 conditions and also with higher treatment seeking in men more than in women, possibly due to increased duration and severity of the problem. However, perceptions and psychosocial factors affecting bother and treatment seeking in different age groups also need to be determined.

### Concluding message

Urological conditions were found to be highly prevalent in this random sample of hospitalised patients. Urinary incontinence was less prevalent, but more bothersome than either LUTS or sexual dysfunctions. Prevalence of all three conditions increased with age.

A minority of those reporting incontinence, LUTS or sexual dysfunction had sought treatment. Treatment seeking was positively associated with age, this trend being more significant in men than in women. Psychosocial factors determining bother and treatment seeking behaviors in males and females of different age groups need to be investigated in all 3 conditions. Such findings could be of interest in presentation and management strategies development.

**FUNDING: None**

**HUMAN SUBJECTS: This study was approved by the Aristotle University of Thessaloniki Ethics Committee and Papageorgiou Hospital of Thessaloniki Ethics Committee and followed the Declaration of Helsinki Informed consent was obtained from the patients.**