

FACTORS PREDICTING BOTHER AND TREATMENT SEEKING BEHAVIOUR RELATED TO LOWER URINARY TRACT SYMPTOMS (LUTS): RESULTS FROM THE HOSPITALIZED AND OUTPATIENTS' PROFILE AND EXPECTATIONS STUDY (HOPES)

Hypothesis / aims of study

Recent surveys in patients with LUTS showed that symptom bother is associated with treatment seeking, which in turn is positively associated with response to therapy. However, there is little published data on the psychosocial determinants of both the bother and treatment seeking behaviour associated with LUTS, while gender and age comparing studies are largely missing.

Hospitalized and Outpatients' Profile and Expectations Study (HOPES) was designed to investigate patients' expectations and psychosocial profiles, as well as the prevalence, severity, and factors predicting the bother and treatment seeking behaviour related to urological symptoms, including LUTS. We present preliminary results, by age and gender, from a general hospital's inpatient population.

Study design, materials and methods

The study was designed in order to represent a cross section of each of 13 departments of a general hospital, and to enroll 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.

Patients were asked to complete the IPSS questionnaire with categorisation of symptoms as mild, moderate and severe (score 0-7, 8-19 and 20-35 respectively). Bother from LUTS was assessed using the IPSS bother question ("Overall, how bothersome have the above symptoms been during the last month") and the AUASI bother question 2 ("If you were to spend the rest of your life with these symptoms as they are now, how would you feel about that"). A very broad range of psychosocial factors was measured using 33 instruments that could be categorized as: 1) personality characteristics 2) beliefs about self, 3) health beliefs, 4) social support, 5) life satisfaction, 6) affect, 7) lifestyle, and 8) demographics.

Results analysis included descriptive statistics, correlation coefficients and multiple linear regressions using SPSS version 13 statistical software package. P values less than 0.05 were considered statistically significant.

Results

A total of 454 subjects were recruited in a 6 month period. Overall 134 inpatients reported moderate or severe LUTS (n=107 or 23.6% and n=27 or 5.97% respectively). Reporting of moderate or severe LUTS was found to increase with age (r=0.5, p=0.000) in both male and female inpatients. The percentages of inpatients with moderate or severe LUTS were 12.7%, 28.1% and 47.7% in the 18-40, 41-60 and 61-80 age groups respectively. Frequency of moderate or severe LUTS was similar in both genders apart from the age group 18-40 where a higher frequency was recorded for women. Male inpatients had a higher median score for incomplete bladder emptying than female ones (2 vs 1), interrupted micturition (1 vs 0), weak micturition stream (3 vs 0), difficulty in urinating (1 vs 0) and nocturia (4 vs 2), whereas women had higher median scores in micturition frequency (4 vs 3) and urgency (2 vs 1).

No age or gender association was found between bother from LUTS assessed with either the IPSS bother question or the AUASI bother question 2. Moderate or severe bother from LUTS was reported by 41.4% of inpatients in the IPSS bother question, but the majority of patients (55.5%) reported they would feel terrible, unhappy or mostly dissatisfied with continuing symptoms.

Level of bother was significantly associated (r=0.6, p=0.000) with symptom severity in all age groups and in both male and female patients. Both the storage and the voiding symptoms were significantly associated with the bother from LUTS (beta = 0.319 and 0.385 respectively). However, bother was found to increase more with increasing severity of voiding rather than storage symptoms. Psychosocial factors that were able to predict increased bother from LUTS were identified and they were agreeableness (beta=1.477), life satisfaction (beta=-2.92), active coping (beta=1.061), health internal Loc (beta=0.667), and emotional stability (beta=0.562).

Overall, 52.5% of patients with moderate or severe LUTS had sought treatment. No age association was found with treatment seeking, but males were found to seek help more often than women (r=0.54, p=0.003).

Subjective well-being scores were no different between those who sought and those who did not seek treatment (25.7 vs 25.3). Three symptoms were able to predict treatment seeking in those patients: incomplete bladder emptying (r=0.49, p=0.000), interrupted voiding (r=0.38, p=0.011) and difficulty urinating (r=0.48, p=0.002). Finally, of the numerous psychosocial factors that were examined for predictive value only male gender and increased perceived stress was found to be able to predict treatment seeking for LUTS.

Interpretation of results

Despite the use of the IPSS questionnaire which has been validated in men – although used in women in several, epidemiological mainly, studies - no association was found between gender and bother from LUTS. However, this might be an explanation why voiding symptoms, known to be more prevalent in men, were found to associate better with the bother from LUTS. Interestingly, women had higher scores in urgency and frequency, both main symptoms of the overactive bladder syndrome.

Concluding message

Despite a higher prevalence of moderate or severe LUTS recorded in older age, the bother from LUTS did not appear to be gender or age specific. However, severity of symptoms was predictive of the bother from LUTS, as well as a number of psychosocial and personality factors, including agreeableness, low life satisfaction, active coping, health internal loc and emotional stability.

This study is one of the first to identify patient symptoms that can predict treatment seeking (Incomplete bladder emptying, interrupted voiding and difficulty urinating), as well as predictive psychosocial factors such as male gender and increased perceived stress.

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