

DO PSYCHOSOCIAL FACTORS AFFECT THE WAY PEOPLE WITH SIMILAR SEVERITY OF LOWER URINARY TRACT SYMPTOMS (LUTS) PERCEIVE BOTHER AND SEEK MEDICAL ADVICE?

Hypothesis / aims of study

A great variability in health-seeking rates for LUTS exists in the literature, with ongoing research aiming to identify why people respond differently to the presence of symptoms. Age, gender, race/ethnicity and severity of mainly storage LUTS have been acknowledged as key biomedical factors affecting healthcare seeking. Additionally, bother from LUTS has been consistently identified as a determinant of treatment seeking. However, the psychosocial factors that affect health perception and help-seeking behaviour in association with the presence of LUTS have been ill-defined.

In a study sample recruited from a general Hospital's inpatients and outpatients and designed to be representative for age and gender, we aimed to identify determinants of bother and treatment seeking for various degrees of LUTS. We also aimed to study the moderating effects of psychosocial variables on bother and treatment seeking after controlling for severity of LUTS.

Study design, materials and methods

The study sample included patients with an IPSS of at least 1 who were identified from an initial sample of hospitalised patients, which represented a cross section of each of 13 clinics of a general hospital, and of Urology inpatients and Outpatients. Equal numbers of subjects were recruited in each of 6 design cells that were defined by age (18-40, 41-60, 61-80 years) and gender. All had been interviewed by trained psychologists, following approval by the Institutional Review Board and informed consent. Information on psychosocial characteristics, lifestyles, patient preferences for care, health status, and demographics was obtained using the survey instrument. The presence of LUTS was evaluated using the IPSS. Storage and voiding symptom scores were based off subsets of the IPSS questions ranging from 0-15 and 0-20 accordingly. Treatment seeking was measured by a single item: 'have you ever sought treatment for your urinary symptoms?' A bother question was modified in order to assess overall bother: 'how bothersome have the urinary symptoms been during the last month'. Patients responded on a scale of 0-3 with 3 denoting "a lot" of bother. The scales of psychosocial factors used as independent variables when examining the associations with bother and treatment seeking were those assessing emotional stability (TIPI subscale), sense of coherence, optimism, self-esteem, mastery, health efficacy, need for support, global satisfaction with life scale (SWLS), domain life satisfaction (LSI), positive and negative affect, perceived stress, satisfaction with relationship and depression. Logistic regressions and LOESS (LOcally Estimated Smoothing Splines) plots were used to examine the relationships between variables in this analysis.

Results

A total 681 questionnaires were eligible for analysis. Results are reported on 563 patients who had IPSS \geq 1. As expected, non-urology inpatients and urology outpatients were less likely than urology inpatients to have sought treatment. As interactions between patient type and key covariates were non-significant, further analysis was performed on the combined patient sample.

Basic determinants: Bother, IPSS, age, and gender were significantly associated with treatment seeking for LUTS and were comprised in the base multivariate regression model, which could predict up to 31.6% of the variance in treatment seeking. Treatment seeking increased with higher levels of bother. Subjects with 'some' and 'a lot' of bother were 5.30 and 8.13 times respectively more likely to seek treatment than those with no bother. Men were almost twice as likely to seek medical advice for LUTS as women (OR 1.93, p=0.009). As IPSS and age increased, so did the probability of treatment seeking (OR 1.09 and 1.29, respectively, p<0.001). In this regression model only two psychosocial factors remained in the model. SWLS scores less than 15 and stress showed a significant association with treatment seeking: as SWLS increased to 15, the likelihood of treatment seeking decreased (OR: 0.64, p=0.02). At SWLS >15, there was no association with treatment seeking. As stress scores increased, treatment seeking decreased (OR: 0.92, p=0.04). These 2 variables could explain 2.6% of the variance in treatment seeking when added in the final regression model.

Psychosocial determinants: The LOESS plots demonstrated the effect of psychosocial factors on treatment seeking for different LUTS severity and bother levels. Several variables, namely coherence, self-esteem, LSI, positive or negative affect, and perceived stress influence treatment seeking when LUTS severity and bother levels are mild or moderate. Conversely, in higher IPSS scores and bother levels the influence of psychosocial factors on treatment seeking was not significant.

Storage versus voiding symptoms: when examined individually, both voiding and storage symptoms were found to significantly increase the odds for seeking treatment (p<0.001 and p=0.03, respectively). However, in the multiple regression model only the voiding score remained significant (p<0.001).

Interpretation of results

Results compliment findings of earlier studies where bother was also found to have a more robust effect on healthcare seeking behaviour than symptoms themselves. According to the results of this study, treatment seeking is strongly influenced by severity levels, bother, age and gender. However, when looking at treatment seeking by IPSS and bother level, patients' psychosocial characteristics influence treatment seeking in the moderate/low severity levels.

Concluding message

In our study population, bother from LUTS was the strongest determinant of healthcare seeking. Age, gender, and IPSS completed a regression model which could explain up to 34% of the variance in treatment seeking. Severity of voiding symptoms could explain a greater proportion of variance in treatment seeking for LUTS than severity of storage symptoms in affected individuals. Several psychosocial factors influence treatment seeking when severity and bother levels are moderate or mild.

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<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Scientific Committee, Papageorgiou General Hospital, Thessaloniki
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes