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# NOCTURIA IS THE LOWER URINARY TRACT SYMPTOM WITH GREATEST IMPACT ON QUALITY OF LIFE OF MEN IN A COMMUNITY SETTING

# Hypothesis / aims of study

Lower urinary tract symptoms (LUTS) are a prevalent condition that are known to reduce quality of life (QOL). The association between symptom severity and impact on QOL has been shown in several study populations, revealing that as symptom severity increases, so does the impact on various parameters of QOL, such as bother, general health, and sexual satisfaction. The purpose of this study is to assess impact of each specific urinary symptom on QOL of community dwelling men.

# Study design, materials and methods

The study included 373 men over 50 years old who were recruited from the community. Clinical exclusion criteria included radical prostatectomy, use of urinary catheter, acute or uncompensated chronic diseases, alcoholism or drug addiction, neurological and psychiatric diseases, use of central nervous system active drugs and actual or previous treatment for benign prostatic hyperplasia (BPH). Individuals were approached in three public places of a large city in northeastern Brazil and were asked to fill out a health and sociodemographic questionnaire, the International Prostate Symptom Score (IPSS) including the IPSS isolated question addressing health-related QOL (HRQL). Each IPSS evaluates 7 specific symptoms including: incomplete emptying, frequency, intermittency, urgency, weak stream, straining and nocturia. Patients were considered to have a specific symptom when they scored ≥ 1, except for nocturia, which the cutoff score was 2. We used the Pearson Correlation Test to assess the correlation of each urinary symptom to the Analyses were performed using the Statistical Package for Social Sciences (SPSS), version 12.0 (SPSS, Chicago, III).

#### Results

The studied group had a mean age of  $61.1 \pm 8.8$  and a mean IPSS score of  $7.8 \pm 6.5$ . The prevalence of incomplete emptying was 25.7%, frequency 59.5%, intermittency 42.3%, urgency 42.0%, weak stream 45.5%, straining 25.7 and nocturia 58.9%. The mean score obtained for each LUTS is shown on Figure 1. The correlation between each LUTS and the HRQL question is shown on Figure 2.

### Interpretation of results

Nocturia (≥ 2 voids per night) was the second most common symptom in our sample with highest the average score of all questions. The Pearson Correlations Test revealed that nocturia has by far the strongest association with QOL, followed by frequency, which was the most prevalent symptom. Other symptoms demonstrated nonsignificant associations. Many studies have demonstrated an association of nocturia with a reduced health-related quality of life (HRQL) in univariate analysis of men with LUTS/BPH. However, few studies confirmed the association between nocturia and HRQL using multivariate analysis. [1], [2], [3]

# Concluding message

Nocturia is a prevalent condition and the symptom with the greatest impact on quality of life in comparison to other lower urinary tract symptoms in men older than 50 years of age. This finding is significant and may be important in the therapeutic strategy of patients with LUTS, for whom the improvement of nocturia may have the greatest impact on quality of life.

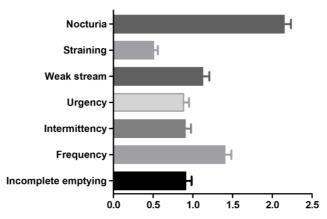


Figure 1. Scores obtained for each LUTS. Data are reported as mean values + standard errors of the mean.

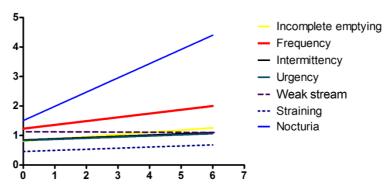


Figure 2 Correlation of each lower urinary symptom with HRQL using Pearson R.

#### References

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Specify source of funding or grant	Ethical disclosure
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	University of Sao Paulo Ethics Committee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes