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DISEASE RELATED QUALITY OF LIFE IN PATIENTS WITH LOWER URINARY TRACT SYMPTOMS

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ABSTRACT

Introduction: Lower urinary tract symptoms (LUTS) are increasingly prevalent in middle-aged and old men. LUTS of the majorities of middle-aged men are usually attributed to benign prostatic enlargement. A measure that addresses patients' most bothersome symptoms and bothersome score may lead to improve outcomes and patient satisfaction to the treatment. The objectives of this study were to assess patient-reported most bothered symptom and bothersome score in men with LUTS. **Materials and Methods:** This was a descriptive study conducted among patients with lower urinary tract symptoms at surgery clinic, Teaching hospital, Peradeniya. Face-to-face interviews were conducted with 714 patients to assess their symptoms associated. The International Prostate Symptom Score (IPSS) was used for this. It is based on the answers to seven questions concerning urinary symptoms and one question concerning quality of life. Data was analysed by chi square test in SPSS version 20. **Results**: The mean age of the study sample was 62.37±13.15 years (16- 94 years). There was a significant association between bothersome score and IPSS groups (mild, moderate, severe) based on total IPSS score ($p< 0.05$). The most prevalent bothersome symptoms of these patients were urgency (42.5%), nocturia (21.7%), and sensation of incomplete voiding (19.8%). Furthermore, patients reported that they experienced these symptoms more than half of the time; incomplete emptying (35.8%), increased frequency (34%), intermittency (36.1%), urgency (37.5%), weak stream (54%), straining (28%), nocturia (17.2%)**. Conclusions**: Most bothersome symptoms were urgency and nocturia. Eventhough the frequency of occurrence of these symptoms were less; in particularly nocturia.

KEYWORDS: Lower urinary tract symptoms, International Prostate Symptom Score, Bothersome score, Bothersome symptom, Sri Lanka.

INTRODUCTION

Lower urinary tract symptoms (LUTS) are increasingly prevalent in middle-aged and old men, with a prevalence of 50% by age 60 years and 90% by the ninth decade of life. The development of benign prostatic hyperplasia is associated with proliferation of the prostatic stroma and epithelium. This leads to an increase in weight of prostate and a spectrum of clinical manifestations known as lower urinary tract symptoms. Lower urinary tract symptoms comprise voiding (obstructive) symptoms, such as reduced stream, hesitancy, and straining, as well as irritable symptoms, including frequency, urgency, nocturia.[1]

Scoring systems have been developed to quantify LUTS so as to assess the severity and degree of bother of LUTS and their influence on quality of life.[2] Medical professionals use the International Prostate Symptom Score (IPSS) to measure how bothersome a person's symptoms are. It's a seven-item questionnaire about typical benign prostatic hyperplasia symptoms that provides a score from 0 to 35. The International Prostate Symptom Score also includes a question to help the doctor assess the overall impact on quality of life.

A score of 0-7 indicates the condition is mildly bothersome.

A score of 8-19 indicates the condition is moderately bothersome.

A score of 20-35 indicates the condition is severely bothersome.[3, 4, 5]

The goals of our study were to assess patient-reported most bothered symptom and bothersome score in men with LUTS.

MATERIALS AND METHODS

Methodology

This was a descriptive study conducted among patients with lower urinary tract symptoms at surgery clinic,

Teaching hospital, Peradeniya. Face-to-face interviews were conducted with 714 patients to assess their symptoms associated. The International Prostate Symptom Score (IPSS) was used for this. It is based on the answers to seven questions concerning urinary symptoms and one question concerning quality of life.

Statistical analysis

Chi-square test was performed to discover whether there is a relationship between categorical variables. Statistical significance at $p< 0.05$ was accepted for all analysis. Data was analysed using Statistical Package for the Social Sciences (SPSS) version 20.

RESULTS AND DISCUSSION

The mean age of the study sample was 62.37±13.15 years (16- 94 years). There was a significant association between bothersome score and IPSS groups (mild, moderate, severe) based on total IPSS score ($p< 0.05$).

Table 1: Association between bothersome score and IPSS groups.

	Value	Asymp. Sig. (2-sided)
Pearson Chi-Square	55.249[a]	0.001
Likelihood Ratio	49.102	0.001
Linear-by-Linear Association	32.882	0.001

The most prevalent bothersome symptoms of these patients were urgency (42.5%), nocturia (21.7%), and sensation of incomplete voiding (19.8%).

Table 2: Frequencies of bothersome symptom.

Symptom	Frequency	Valid Percent
Incomplete emptying	41	19.8
Increased frequency	6	2.9
Intermittency	10	4.8
Urgency	88	42.5
Weak stream	6	2.9
Straining	11	5.3
Nocturia	45	21.7
Total	207	100.0

Several studies have shown the reliability of the IPSS bothersome question.[6] There was a strong positive association between LUTS severity and the IPSS bothersome score for men from different countries and different cultural backgrounds.[7] Therefore, it has been suggested that the IPSS bothersome question is a simple and reliable tool for assessing treatment outcomes in men with bothersome LUTS in benign prostatic hyperplasia.[8] Furthermore, patients reported that they experienced these symptoms more than half of the time; incomplete emptying (35.8%), increased frequency (34%), intermittency (36.1%), urgency (37.5%), weak stream (54%), straining (28%), nocturia (17.2%).

Table 3. Frequencies of IPSS symptoms.

Symptom	Not at all	Less than one time in five	Less than half the time	About half the time	More than half the time	Almost always
Incomplete emptying	24.9	8.8	13.4	17.2	14.2	21.6
Increased frequency	17.3	14.1	15.3	19.3	15.4	18.6
Intermittency	26.9	9.9	11.4	15.7	12.7	23.4
Urgency	22	11.6	11.4	17.5	10.9	26.6
Weak stream	16.3	7.3	6.4	16	14.2	39.8
Straining	42.4	6.3	9.6	13.8	13.5	14.5
Nocturia	11	14.9	21.5	20.7	14.6	17.2

When the above symptoms cause discomfort to patients, it requires treatment. For an example, nocturia can cause day-time sleepiness, reduce daily life activity, and increase the risk of falls.[9, 10] Therefore, nocturia-related symptoms need to be treated to improve the quality of life of patients.

Increased costs and morbidity level related to frequency of prostatectomies have led to find measuring tools for better evaluation, predictors of good outcome, as well as to alternative treatment methods. Symptoms lead the patient to seek treatment and symptom improvement is the main goal for the patient.

CONCLUSIONS

Most bothersome symptoms were urgency and nocturia. Eventhough the frequency of occurrence of these symptoms were less; in particularly nocturia. Further studies should be done over large sample in different cultural and different geographical areas.

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