# Primary care management of lower urinary tract symptoms in male patients

**Manejo en atención primaria de síntomas del tracto urinario inferior en pacientes masculinos**

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## Abstract

Introduction: It is estimated that 44.1% of men ≥ 20 years worldwide are affected by lower urinary tract symptoms.Only a minority of males consult their family physician.
Objective: To determine physicians' and patients' experiences of LUTS in primary care.
Method; A qualitative study was conducted through telephone interviews with general practitioners and male patients attending primary care with LUTS.
Results: Patients felt that attending the hospital for diagnosis and treatment of their LUTS would have no benefit.
Conclusions: Patients in this study indicated a strong preference for managing their symptoms in primary care.

**Keywords**: urinary symptoms, men, primary care, general practitioners source: DeCS
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**Resumen**

Introducción : Se estima que el 44,1% de los hombres ≥ 20 años en todo el mundo se ven afectados por síntomas del tracto urinario inferior .Solo una minoría de varones consultan a su médico de cabecera .
Objetivo: Determinarlas experiencias de los médicos y pacientes acerca de los STUI en atención primaria.
Método; Se realizó un estudio cualitativo a través de entrevistas telefónicas con médicos de cabecera y pacientes masculinos que acudieron a atención primaria con STUI.
Resultados: los pacientes sintieron que asistir al hospital para el diagnóstico y tratamiento de sus STUI no tendría ningún beneficio.
Conclusiones: Los pacientes en este estudio indicaron una fuerte preferencia por el manejo de sus síntomas en la atención primaria.

**Palabras Clave**:síntomas urinarios, hombres, atención primaria, médicos generalesfuente: DeCS

**Introduction**

It is estimated that 44.1% of men ≥ 20 years worldwide are affected by ≥ 1 lower urinary tract symptom (LUTS), a proportion that is

expected to increase as the population ages[1]. LUTS are associated with higher rates of anxiety and depression and impact work productivity, enjoyment of sexual activity, and overall health. Despite this, only a minority of men with LUTS consult their primary care physician about their symptoms and even fewer receive treatment[2].

Diagnosis and management can be complex due to the frequent comorbidity of male LUTS with prostatic disease, coupled with a commonly multifactorial etiology. In addition, physicians encounter new presentations of LUTS relatively infrequently, limiting their opportunity to develop expertise in this area. Therefore, although most men with LUTS could be effectively treated in primary care, primary care physicians may be unsure of their diagnosis and treatment, resulting in potentially avoidable referrals to urologic specialists[3].

NIH guidance indicates that men with uncomplicated LUTS should be referred to a specialist only when LUTS are bothersome and after conservative management and pharmacological treatment have proven ineffective[4].

Research on LUTS patient outcomes has focused on comparing specific interventions rather than patient satisfaction with their care, which has been little explored[5]. However, limited evidence indicates that treatment is often ineffective from the patient's perspective. For example, in an observational study of men treated for LUTS in primary care, about half of the participants reported unsatisfactory outcomes, such as persistent or worsening symptoms. A qualitative study also found that most participants experienced partial or no relief from their LUTS after seeing a physician, although they generally reported satisfaction with the care they received[6].

Despite the challenges of LUTS management in primary care, little research has explored the perspectives of general practitioners or investigated patients' experiences in depth. This qualitative interview study aimed to explore GPs' experiences of diagnosing and managing LUTS and patients' experiences and preferences for LUTS management in primary care.

**Method**

A qualitative study was conducted through telephone interviews with primary care physicians and male patients presenting to primary care with bothersome LUTS. Eleven primary care physicians and 25 male patients were purposively sampled from 20 primary care practices. A purposive sampling strategy was used to ensure patient and physician representation in the study. This study was approved by the Universidad Regional Autónoma de Los Andes (UNIANDES).

Patients were invited to participate by telephone or email, whereas those who chose not to were given brief information about the interview study by the recruiting physician. If they expressed interest in the interview study, patients were given an information sheet and a consent form that they were asked to return to the first author if they wished to participate. If they agreed to participate after reading the study information sheet, an interview was arranged at a mutually convenient time. Informed consent was obtained verbally at the beginning of each interview and was audio-recorded.

The patient interview topic guides aimed to explore patients' experiences with LUTS, their decision to visit the primary care physician about their symptoms, satisfaction with treatment, preferences for treatment in primary versus secondary care, and preferences for participation in treatment decisions. Interviews with family physicians were designed to be relatively brief to encourage participation.

Interviews were conducted from May 2019 to January 2020. The interviewers were previously unknown to the participants and had no clinical expertise in LUTS. Interviews were audio-recorded with participants' permission and transcribed verbatim.

The database and statistical processing of the data were performed and analyzed in the statistical program SPSS 26 (SPSS Inc., Chicago, IL, USA). Descriptive statistics were used for the results collection, presentation and interpretation.

**Results**

In total, 25 male patients and 11 physicians from 20 primary care practices participated in the study (Table 1). Patients ranged in age from 48 to 85 years (mean age of 67 years). Interviews with the primary care physician lasted between 10 and 22 min (mean 17 min); interviews with the patients lasted between 8 and 44 min (mean 23 min).

Table 1. Characteristicsoftheparticipants

| Feature | Number |
|---|---|
| Patients (n = 25) | |
| Participants in the main study<br>Yes<br>NO | <br>22<br>3 |
| Age group (years)<br>46-55<br>56-65<br>66-75<br>76-85 | <br>3<br>6<br>8<br>5 |
| IPSS<br>1-7 (Mild)<br>8-19 ( Moderate)<br>20-35 (Severe) | <br>3<br>12<br>7 |
| General practitioners (n= 11) | |
| Sex<br>Male<br>Female | <br>7<br>4 |
| Years in the general practitioner registry<br>0-5<br>6-10<br>≥11 | <br>3<br>4<br>4 |

Source: statisticalanalysis, p≤ 0,05

The interview data were organized into four main themes: unresolved symptoms, preference for primary care, satisfaction with participation in decision-making, and challenges of LUTS management in primary care.

None of the patients interviewed reported that their symptoms had resolved entirely after visiting the primary care physician. Most had not received treatment for their LUTS. Although in some cases, this was because testing was still ongoing, testing had been completed for other patients and no course of treatment had been prescribed. Patients believed this was because nothing could be done or the symptoms were normal for their age. Despite continuing symptoms, some expressed satisfaction with the GP consultations, as they had been assured that there was no serious underlying cause, such as prostate cancer:

Patients preferred their LUTS to be treated in primary rather than secondary care. This tended to be because visiting the primary care physician was more convenient, either because of the locality of the primary care physician's practice or shorter waiting times.

Patients also commented that they felt more comfortable at their primary care physician's office because the staff were familiar and knew their history. This meant that they were more reassured about having potentially invasive tests. Some emphasized that they felt completely confident in their primary care physician providing care.

In general, patients felt that attending the hospital for diagnosis and treatment of their LUTS would have no benefit. They believed that secondary care would only be useful in certain circumstances, for example, if specialist advice or equipment were needed for invasive and complex procedures or in an emergency.

Patients stated that they would be more likely to follow the recommended treatment for their LUTS if they felt involved in decision-making. Levels of involvement varied, with some patients following physician recommendations, others being informed of the rationale for their

treatment, and others participating fully in decision-making. Despite this variation, all were satisfied with their level of involvement.

Physicians highlighted the difficulty of differentiating between prostate and bladder symptoms to eliminate the possibility of prostate cancer. Increased awareness among patients due to public health campaigns meant that this was a particular concern and often why patients in this study decided to visit their GP. Given that LUTS are common among men aged ≥ 40 years, it was felt that increased awareness of prostate cancer symptoms could result in undue concern.

GPs identified that available treatments for LUTS were often ineffective and expressed concern about the possibility of side effects, particularly for older patients. As reported by patients, this resulted in medication discontinuation in some cases and LUTS going untreated. Therefore, GPs suggested that the least harmful alternative of nonpharmacologic approaches was not always considered.

**Discussion**

The mixed symptomatology and multifactorial causes of LUTS made differentiating symptoms (including ruling out the possibility of cancer) and deciding on an appropriate course of treatment challenging for primary care physicians. Therefore, treating LUTS was a trial-and-error process, and some patients received multiple treatments. None of the patients interviewed felt that their symptoms had entirely resolved. This appeared to be due to several factors, including the difficulty in establishing the causes of LUTS. GPs were particularly concerned about the relative ineffectiveness of drug treatments for LUTS and the possibility of side effects, especially in older patients.

Patients reported that they would prefer to have their symptoms managed in primary care when possible, citing the convenience of greater accessibility and shorter wait times and trust in physicians familiar with their history.

Although the GP interviews were brief, the research objective was narrowly focused and the participants had very specific expertise concerning the topic being explored; these factors allow the power of the information to be achieved with a smaller sample[7]. According to the thematic saturation evidence, most key themes were present in the first three GP interviews.

To the authors' knowledge, no study has previously explored the primary care physicians' perspectives regarding the management of LUTS. This study has enabled the identification of key challenges in the diagnosis and treatment of LUTS in primary care. Consistent with research highlighting the complexity of diagnosing LUTS in men,[8] physicians reported that differentiating symptoms and considering multifactorial causes made it difficult to decide on appropriate treatment.

The findings are based on limited research on patient satisfaction with LUTS management in primary care. In line with previous studies,[9] patients reported that their symptoms had not completely resolved. Contrary to research demonstrating the overall efficacy of medication in LUTS[10], physicians and patients in this study suggested that the treatments were not completely effective. However, as previously found, patients were generally satisfied with their care. Further exploration of this apparent contradiction revealed that patients were generally concerned that their symptoms might indicate prostate cancer and were therefore satisfied with the reassurance their primary care physician provided, even though their LUTS were not effectively treated. The public health campaigns not only raised awareness of prostate cancer but also had the effect of increasing potentially undue concern among patients[11].

Consistent with existing findings, more than half of the patients in this study had not received prior treatment for their LUTS. As previously reported, patients perceived this to be because their symptoms were age-related. In addition, concerns expressed by physicians regarding the efficacy of treatments for LUTS and the high incidence of side effects in older men may also partially explain the lack of prescribed treatment in some cases[12,13].

To the authors' knowledge, this is the first reported study examining patient preferences for LUTS management. Studies related to other health conditions have reported mixed results regarding primary or secondary care preferences. For example, cancer survivors prefer specialist follow-up[14], while limited research indicates that patients with mental

illness may prefer to access their primary care physician practice[15]. A survey related to epilepsy services found that, while younger patients and those with severe epilepsy preferred secondary care, older patients preferred to receive care from their primary care physician. Patients in this study, who tended to be older (mean age 67 years), expressed a strong preference for their LUTS to be treated in primary care[15]. Their reasoning aligned with the three types of continuity of care proposed by Reid et al.[16] informational continuity (GPs had access to a holistic clinical record system); relational continuity (patients had confidence in their GP and felt more comfortable with the staff and family environment); and management continuity (patients could access timely and convenient care through their GP).

The findings of the present study emphasized the importance of LUTS being managed in primary care whenever possible, as in addition to cost savings and reduced waiting times, this is a more accessible option for patients, who tend to feel more comfortable and confident being treated by family physicians[17,18].

Considering the lack of reported efficacy and intolerable side effects of some LUTS medications, further exploring non-pharmacological treatment would be beneficial. A study of urology outpatients[19,20] has shown promising results regarding the effectiveness of sessions promoting self-management of LUTS; however, the authors suggest that a large randomized controlled trial is needed to confirm the findings.

**Conclusions**

Patients in this study indicated a strong preference for managing their symptoms in primary care. However, given that the preference for primary versus secondary care appears to vary among different patient groups, it would be interesting to explore the effect of patient characteristics on treatment preferences.

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