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# MULTICENTER STUDY ON THE ASSESSMENT OF FEMALE LOWER URINARY TRACT SYMPTOMS: A COMPARISON OF IPSS AND ICIQ-LF QUESTIONNAIRES

## Aims of Study

Lower Urinary Tract Symptoms (LUTS) are common, age-related symptoms that affect both males and females worldwide; urinary problems may be strictly urologic in origin (e.g. BPH, urethral stricture, in men; urethral prolapse and hypermobility in women) or may arise from systemic disorders (e.g. diabetes, vascular or neurological disease, hypertension and drug intake).

Current practice includes assessment of both clinical symptoms (urinary, sexual, and other symptoms) as well as quality of life (QoL) to achieve the most complete evaluation of a given patient's LUTS. Whereas several self-administered questionnaires are commonly used to evaluate LUTS in males [1], there are fewer questionnaires available for females [2,3].

The aim of this study is to evaluate the efficacy of two self-administered questionnaires (W-IPSS and ICIQ-LF) in the assessment of symptoms and quality of life in females with LUTS with respect to age of menarche and menopause, type of menstruation, parity, lifestyle, alcohol and tobacco use, and body mass index.

## **Methods**

Sixty females with LUTS (mean age 61.2±12.3years) were recruited for the study: Twenty-six (43%) complained of urine leak, 13 complained of irritative symptoms, and 21 complained of both urine leak and irritative symptoms.

Inclusion criteria were age greater than 40 years, voiding symptoms for more than 3 months, and the ability to complete a self-administered questionnaire. Exclusion criteria were neurogenic bladder dysfunction, psychiatric syndromes, any kind of malignancy, and inflammatory pelvic pain disease.

Each patient was asked to indicate the age of menarche and menopause, the type of menstruation (intensity, duration, and regular or irregular frequency), parity, lifestyle (sedentary or dynamic), and alcohol and tobacco use. Weight and height were recorded to calculate the body mass index (BMI). All patients were asked to complete both ICIQ-LF and W-IPSS; the overall compliance was 83% and 65% respectively.

## <u>Results</u>

Patients with a regular menstruation (65% of patients) reported higher scores than those with irregular menstruation in "Emotional aspect" symptoms (8.5 vs 6.9), "Daily life" QoL (13.2 vs 11.1) and "Sexual life" QoL (5.7 vs 3.3). In addition, regular menstruation was associated with a lower symptom score in "Other urinary symptoms" (10.6 vs 12.7); this data was consistent with W-IPSS scores (12.8 vs 18.6).

Multiparous patients reported higher scores in "Daily life" symptoms (11.3 vs 8.9) and "Sexual life" QoL (6.0 vs 3.5) compared to primiparous patients.

Patients with sedentary lifestyles (53%) reported higher symptom scores than those with dynamic lifestyles in the following categories: "Daily life" (11.6 vs 8.6), "Emotional aspect" (8.8 vs 7.0), "Other urinary symptoms" items (12.5 vs 9.9), and in QoL of "Other urinary symptoms" (45.3 vs 34.3). W-IPSS scores confirmed this data (18.0 vs 11.9).

Smokers demonstrated higher scores than non-smokers in "Emotional aspect" (8.8 vs 7.3) and both in symptoms (17.8 vs 12.7) and QoL (13.5 vs 11.4 respectively) items of "Daily life". This data was consistent with W-IPSS scores (17.8 vs 8.8).

No differences between groups were noted for early versus late menarche, early versus late menopause, alcohol intake, or BMI.

## **Conclusions**

Both questionnaires are easy to compile and analyze. The ICIQ-LF is more detailed and allows for a more complete overview of female symptoms and QoL. The W-IPSS has the advantage of being derived from the worldwide questionnaire (AUA Symptom Index). Furthermore, IPSS allows a rapid identification of many significant alterations in urinary habits, in both sexes.

The age of menarche and menopause, alcohol intake, and BMI were not related to LUTS symptom or QoL scores. Women with regular menses report lower incidence of "other urinary symptoms", but also a worse emotional impact of urinary incontinence than women with irregular menses. As reported in literature, multiparous women have a higher incidence of urinary incontinence than primiparous women (consistent with previous reports in the literature), as well as an inferior quality of sexual life. Lifestyle also affects LUTS, with sedentary females complaining of worse symptoms. Finally, smokers demonstrated worse symptom scores in both "daily activity" and in "emotional aspects" than did non-smokers.

#### **References**

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