

## THE BURDEN OF INCONTINENCE IN ASSOCIATION WITH LUTS AND SEXUAL FUNCTION: A QUESTIONNAIRE-BASED SURVEY ON TREATMENT SEEKING AND EXPECTATIONS

### Hypothesis / aims of study

In a sample of incontinent women visiting outpatient facilities we aimed to investigate parameters associated with healthcare seeking and treatment expectations, also in relation to the presence of LUTS and sexual dysfunction.

### Study design, materials and methods

Women suffering from incontinence who visited the Female Urology outpatient clinics of two University hospitals completed a common survey tool comprising basic demographics and the IPSS, ICIQ-SF and SCSF questionnaires for evaluation of the presence and severity of LUTS, incontinence and sexual dysfunction, respectively. Specific questions were employed to assess level of bother from LUTS, incontinence and sexual dysfunction, prior treatment seeking (duration and type), use of incontinence protection (pads, diapers), and treatment expectations (duration and degree of response).

Descriptive statistics were employed to summarize the sample's data. Logistic regression analysis was used to detect the factors associated with level of bother from incontinence, LUTS and sexual problems as well as with women's expectations from an oral treatment and their willingness for daily intake of a medication.

An Independent samples t-test was also used for between groups' comparisons.

### Results

A total 284 women (mean age 58.2 years, range 20-83) participated in the survey. The majority (n=232, 81.7%) were married and had 2-3 children. More than half (n=147, 51.8%) had received only primary education. An impressive 79.2% (n=226) were either overweight (37.3%) or obese (41.9%). However, an association between body-mass index and type or degree of incontinence was not found.

*Characteristics of incontinence:* Mixed incontinence was the predominantly reported type (n=147, 51.8%), followed by stress (n=77, 27.1%) and urgency incontinence (n=56, 19.7%). The majority (n=133, 46.8%) leaked small amounts but several times during the day (54.2%) and used incontinence protection (n=232, 81.7%). Most women (n=224, 78.9%) were bothered 'some' or 'a lot' by their incontinence, but only half (n=148, 52.1%) had sought and even less (n=118, 41.5%) had received treatment. Previous treatments included short courses (1-3 months) of medication in 74 women (26%) and/or pelvic floor muscle physiotherapy in 42 (14.8%) women, while 43 (15.1%) women had had prior surgery for incontinence.

Most women also reported concomitant moderate-to-severe LUTS (n=233, 82.0%), which were bothersome in 79.2% (n=226) of cases. Again, less than half (47%, n=135) had sought medical advice for their LUTS.

*Treatment expectations and treatment-associated parameters:* Seven out of ten women (69.7%, n=198) expected complete cure from a medical treatment for incontinence. In addition, 53.5% (n=152) of women were willing to take lifelong oral treatment if it were to keep them completely dry.

Frequency and degree of incontinence significantly increased bother from incontinence; women losing urine several times a day and those losing a moderate amount of urine were more likely to report high level of bother from incontinence (OR: 6.36, p=.009 and OR: 7.62, p=.004, respectively). Bother from concomitant LUTS and frequency of incontinence episodes significantly increased the likelihood of healthcare seeking for incontinence (OR: 3.19, p=.002 and OR: 8.18, p=.008, respectively). A low bother from incontinence decreased the odds for women seeking a complete cure from their treatment (OR: 0.210, p=.002).

In women with concomitant LUTS, analysis showed a significant association between severity of LUTS and level of LUTS bother. Specifically, women with moderate-severe LUTS were almost five times more likely (OR: 4.95, p<.001) to report high level of LUTS bother. Women with increased bother from LUTS were more likely to seek medical help for LUTS (OR: 2.99, p=.002).

*Sexual function:* Sixty-five percent of women (n=184) provided data on sexual function. Younger age (mean 56.3 vs 66.5 years, [t(238)]=6.11, p<.001) and higher education were associated with the presence of sexual activity. Forty-seven percent (87/184) of sexually active women were dissatisfied with their sexual function. Lack of sexual desire (n=51, 27.7%) was the commonest sexual dysfunction reported, followed by dyspareunia (n=34, 18.5%), inadequate vaginal lubrication (n=32, 17.4%), and leak during intercourse (n=28, 15.2%). Incontinence during sexual intercourse significantly increased the odds for reduced sexual desire (OR: 5.37, p=.001) but also for treatment seeking for incontinence (OR: 5.09, p=.004).

### Interpretation of results

As most women expect complete cure for their incontinence and at least half are willing to take lifelong oral medication to achieve this goal, it is possible that the efficacy of oral agents for incontinence should be examined on a different basis to the commonly reported reduction of incontinence episodes, especially considering that only half of the incontinent women seek medical advice, even less receive proposed treatment and a further smaller proportion use pharmacotherapy.

The finding of increased body-mass index in this sample of incontinent women should be associated with demographics from age-matched controls for significance.

### Concluding message

Most incontinent women use incontinence protection but only half of them have sought medical advice and even less have received a short treatment course, usually of pharmacotherapy, although the majority are bothered both by incontinence and from concomitant LUTS. Bother from concomitant LUTS and frequency of incontinence increase the likelihood for healthcare seeking for incontinence. Incontinence during intercourse is a strong prognostic factor for reduced libido and increases significantly the odds for incontinence treatment seeking.

Most women expect a complete cure for incontinence when visiting outpatient facilities. A more patient-centred definition of efficacy of pharmacotherapy for incontinence may be required.

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<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>No</b>
<b><i>This study did not require ethics committee approval because</i></b>	<b>anonymous standard questionnaires used in outpatients as part of routine patient assessment</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>No</b>