

GENDER DIFFERENCES IN COPING STRATEGIES FOR TROUBLESOME LOWER URINARY TRACT SYMPTOMS PRIOR TO SEEKING TREATMENT

Hypothesis / aims of study

This study tried to explore gender differences in Lower Urinary Tract Symptoms (LUTS) of patients who sought medical treatment for their LUTS and to evaluate gender differences in impact on quality of life in different types of LUTS and their severities. Furthermore, we demonstrated disparities in adaptation strategies used to cope with LUTS in different genders.

Study design, materials and methods

From July 2013 to December 2013, 184 consecutive patients who came to a tertiary center seeking medical treatment for LUTS including stress urinary incontinence (SUI), overactive bladder (OAB), and mixed urinary incontinence (MUI) were recruited in this study. OABSS, IPSS and UDI-6 were used to evaluate severities of these symptoms and IIQ-7 was used to measure the impact of these three symptoms on the quality of life. Patients' coping strategies were also compared to evaluate gender differences.

Results

In total, 184 patients (81 men and 103 women) were recruited into this study. The LUTS between genders were significant in both sexes ($p < 0.05$). Women had significantly more SUI and MUI than that of men (68.0% and 43.7% vs. 11.1% and 9.9%; $p < 0.05$, respectively). Men had significantly more OAB than that of women (97.5% vs. 85.4%; $p < 0.05$).

Patients with OAB had significantly lower scores on the UDI-6 (less severe) for men compared to that of women (3.6 ± 2.4 vs. 6.6 ± 3.7 ; $p < 0.05$) and had significantly less impact on quality of life for men than that of women (3.1 ± 3.1 vs. 5.8 ± 5.3 ; $p < 0.05$). However, patients with SUI had significantly higher scores on the OABSS (more severity; 8.3 ± 2.4 vs. 6.2 ± 3.1 ; $p < 0.05$) but did not have a significant difference in the impact on quality of life in both genders. Taken together, we found that these three LUTS seemed to have less impact on quality of life in men even though they had similar grades of severity. After further stratification of the severity of OAB and SUI, we also found that OAB or SUI had less impact on quality of life in men than in women whatever the severity, moderate or severe, of OAB or SUI.

Both genders used the preventive toileting before going out (95.1% vs. 82.5%; $P < 0.05$), restricted fluid intake (66.7% vs. 57.3%; $P > 0.05$) or sought treatment at primary care clinic (58.0% vs. 36.9%; $P < 0.05$) as adaptive strategies. However, one-third of women used pads to protect from urine leakage or performed pelvic floor exercise to avoid urine leakage. Nearly one-fourth women avoided contact with cold water or performed urge strategies to control the urge to void. Further, we found that both genders frequently used preventive toileting before going out, restricted fluid intake, or sought treatment at primary care clinics to relieve their OAB symptoms. Nevertheless, men still used preventive toileting before going out, restricted fluid intake, or sought treatment at primary care clinics to deal with their SUI. Women wore pads to prevent urine leakage in addition to preventive toileting before going out and restricted fluid intake. Fewer women than men with SUI or OAB sought treatment from primary care clinics.

Educational attainment influenced healthcare seeking behaviours between genders. Women with junior or senior high school (45.3%) and college or higher (40%) were more likely to seek treatment at primary care clinics to deal with their LUTS than patients with elementary school or less (12%). Men with elementary school or less (60%) and with junior or senior high school (63%) were more likely to seek treatment at primary care clinics to deal with their LUTS than patients with college or higher educational attainment (45.8%).

Interpretation of results

Gender differences in LUTS are significant. The impact of similar LUTS on men and women might be different. Using preventive toileting before going out and restricting fluid intake are often used by both genders as self-management techniques for their bothersome LUTS. However, more coping strategies were used by women than men to handle their bothersome LUTS. Of the patients suffered from SUI or OAB, more men sought primary treatment, but women wore pads to prevent urine leakage rather than seeking primary treatment. Gender differences are evident with the effects of educational attainment on healthcare seeking behaviours and the use of coping strategies to handle LUTS.

Concluding message

Prevalence and impact on quality of life of LUTS as well as using self-management techniques for solving their problems have significant gender differences.

References

1. Bauer RM, Huebner W. Gender differences in bladder control: from babies to elderly. *World J Urol* 2013; 31: 1081-1085.
2. Minassian V, Steward W, Hirsch A, Kolodner K, Fitzgerald M, Burgio K, Cundiff G, Blaivas J, Newman D, Dilley A. The role of urgency, frequency, and nocturia in defining overactive bladder adaptive behavior. *Neurourol Urodyn* 2011; 30: 406-411.
3. Ricci JA, Baggish JS, Hunt TL, Stewart WF, Wein A, Herzog AR, Diokno AC. Coping strategies and health care-seeking behavior in a US national sample of adults with symptoms suggestive of overactive bladder. *Clin Ther.* 2001;23:1245-59.

Disclosures

Funding: none **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** IRB of Chung Shan Medical University Hospital **Helsinki:** Yes **Informed Consent:** Yes