

Validation of the Sinhala translations of the Bristol Lower Urinary Tract Symptom Questionnaire and The Kings Health Questionnaire on Quality of life in a group of Lankan women with Lower Urinary Tract symptoms

Abstract

Introduction: Validated questionnaires and urodynamic studies are used to evaluate female lower urinary tract symptoms (FLUTS) including urinary incontinence and or urgency .

Objectives: To validate and use Sinhala translations of the International Consultation on Incontinence Modular Questionnaire for FLUTS (ICIQ-FLUTS) and the Kings Health Questionnaire (KHQ).

Method: The ICIQ-FLUTS and the KHQ were translated in to Sinhala, using standard procedures. The internal consistency of the Sinhala translations were assessed in 59 women having urinary incontinence and or urgency (cases) and 118 women with symptoms other than FLUTS (controls). The reliability of the Sinhala translations was assessed in a sub group of 25 cases. The scores obtained by the use of the two Sinhala translations in the cases and controls were compared. The 59 cases underwent urodynamic assessments and the scores obtained from the Sinhala translations, before and after treatment, were compared. ICIQ-FLUTS was also validated as a diagnostic tool using the urodynamic assessments as the gold standard.

Results: The Sinhala translations had good internal consistency (Cronbach's Coefficient Alphas ranging from 0.74-0.84 in the three domains of the ICIQ –FLUTS and from 0.68-0.95 in the seven domains of the KHQ), and were reliable (Pierson's Correlation Coefficients on test - retest ranging from 0.61 - 0.67 in the three domains of the ICIQ – FLUTS and from 0.6-0.75 in the seven domains of the KHQ).

The mean scores obtained in the cases and the controls were markedly different. Urodynamic Stress Incontinence (UDSI), Detrusor Overactivity (DO) and mixed urinary incontinence were detected in 48 (81%), two (3%) and four (7%) respectively by urodynamic assessments. Five (8%) had no abnormality demonstrable on urodynamic assessments. Significant improvements in symptoms and quality of life ($p < 0.001$) were detected after treatment. In the Sinhala translation of ICIQ-FLUTS, all the women with DO reported leakage of urine during coughing and sneezing

Conclusion: The Sinhala translations of the ICIQ-FLUTS and KHQ are valid and reliable in assessing women with urinary incontinence and or urgency before and after treatment.