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VALIDATION OF THE JAPANESE VERSION OF ICIQ-SF (INTERNATIONAL CONSULTATION ON INCONTINENCE QUESTIONNAIRE-SHORT FORM) IN PATIENT WITH URINARY INCONTINENCE

Aims of Study

While several self-completion questionnaires have been designed, there is no brief and psychometrically robust instrument for the evaluation of the frequency, severity and impact on QoL of urinary incontinence in men and women in research and clinical practice across the world. A brief and robust measure to evaluate symptoms and impacts on QoL in patients with urinary incontinence was developed in 2nd International Consultation on Incontinence (ICI) on 2001; the International Consultation on Incontinence Questionnaire Short Form (ICIQ-SF). The ICIQ-SF comprised a self-diagnostic item (not scored) and 3 scored items of frequency of leakage, perceived quantity of leakage and impact on everyday life, and is evaluated by scoring system ranging from 0 to 21. The ICIQ-SF has been shown to be psychometrically sound in studies in the UK. The ICIQ-SF was translated to Japanese according to the procedure for linguistic validation. The Japanese ICIQ-SF underwent psychometric testing to assess its availability for clinical use.

Methods

The Japanese ICIQ-SF was administered to consecutive 173 male and female patients (mean age of 62 years) with incontinence attending Urology clinics and its psychometric properties were investigated in terms of validity (content, construct and criterion), reliability (test-retest analysis and internal consistency) and responsiveness. In evaluation of the test-retest reliability, the patients completed the questionnaires on two occasions two weeks apart.

Results

The ICIQ-SF was completed in full by 97.7%, missing data ranging from 0.6 to 1.7%. The relationship between the ICIQ-SF and King's Health Questionnaire (Japanese version) was investigated in a sample of 123 patients, and the ICIQ item concerned with impact on everyday life was significantly correlated with 10 items in the KHQ with Spearman's rho ranging from 0.45 to 0.60 ($p < 0.001$). In a sample of 75 patients, the ICIQ-SF scores significantly correlated with objective data on pad test (Spearman's rho 0.459, $p < 0.001$). In the test-retest analysis in 50 patients, crude agreement between test and retest responses ranged from 70 to 86%, with weighed Kappa values of 0.52 to 0.62. The correlation of the total score between test and retest responses was very high (Spearman's rho 0.91, $p < 0.0001$). Cronbach's alpha coefficient for the 3 items was calculated to be 0.72. In 41 patients undergoing treatment for incontinence, the score of the ICIQ-SF significantly changed from 15.8 to 5.8 (mean) following treatment ($p < 0.01$).

Conclusions

The Japanese version of the ICIQ-SF has been shown to be psychometrically sound, providing a brief and robust measure to assess the impact of urinary incontinence on patient's QoL. The Japanese ICIQ-SF is relevant for clinical use to evaluate urinary loss and the impact of treatments on patient outcome.