

## Abstract

**Background:** Psychiatric morbidity has been shown to be highly prevalent among patients with urinary incontinence (UI) and can adversely affect their clinical outcome. Stress incontinence (SI) was the most prevalent subtype, and an increasing number of Hong Kong women were seeking help for the condition. Yet little is known about the psychiatric morbidity in local SI patients.

**Objectives:** To determine the prevalence of psychiatric morbidity, identify the correlates and to evaluate the effectiveness of the Hospital Anxiety and Depression Scale (HADS) and the 12-item General Health Questionnaire (GHQ-12) as screening tools for psychiatric morbidity in Chinese women with urodynamic SI.

**Methods:** This was a cross-sectional study that examined consecutive patients with newly diagnosed SI attending a local urodynamic study clinic from July 2014 to May 2015. Socio-demographic and clinical factors were recorded. Incontinence-specific symptom severity and quality of life impairment were quantified by Urogenital Distress Inventory (UDI-6) and Incontinence Impact Questionnaire (IIQ-7). The HADS and GHQ-12 were administered as screening tests for psychiatric morbidity. Psychiatric diagnoses were evaluated by the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID). The results of HADS and GHQ-12 were compared against the psychiatric diagnoses generated from SCID.

**Result:** Among the 127 subjects recruited, 41.7% had current psychiatric disorders. The point prevalence of depressive and anxiety disorders were 31.5% and 19.7% respectively. The lifetime prevalence of overall psychiatric disorders, depressive disorders and anxiety disorders were

54.3%, 43.3% and 22.0%, respectively. Major depressive disorder was the commonest mood disorder, while generalized anxiety disorder was the commonest anxiety disorder. Only 20.8% of subjects with psychiatric morbidity were receiving mental health service. High UDI-6 scoring, nocturia frequency and reported history of psychiatric disorders were independent factors associated with overall psychiatric disorders. High UDI-6 scoring and embarrassment from smell were associated with current depressive disorders. Current anxiety disorders were correlated with high IIQ-7 scoring and employment status (working). Both HADS and GHQ-12 were effective as screening tools for current overall psychiatric and depressive disorders, but HADS performed better than GHQ-12 in screening for overall psychiatric disorders, depressive disorders and anxiety disorders. The optimal cut-off score for screening any psychiatric morbidity by HADS-Total score was 10 (sensitivity 88.7%, specificity 75.7%).

**Conclusion:** Psychiatric disorders were common in Chinese women with urodynamic SI. Factors that were associated with psychiatric morbidity were identified. HADS was the recommended tool for screening psychiatric disorders in these patients.