

## VALIDITY AND RELIABILITY OF THE KING'S HEALTH QUESTIONNAIRE IN A CHINESE POPULATION

### Aims of Study

To investigate the reliability, responsiveness and validity of the King's Health Questionnaire (KHQ) in Chinese women suffering from urinary incontinence

### Methods

The Chinese version of the KHQ were constructed by the standard translation / back-translation method. Consented Chinese women with urinary incontinence were recruited from a university teaching hospital. Subjects then filled in both the KHQ and Chinese version of Short Form-36 (SF-36). A urinary diary was kept for one week. The same questionnaires were administered again two weeks later followed by uroflowmetry and cystometry testing. Reliability is assessed by internal consistency, test-retest correlation. Validity is assessed by correlation with generic SF-36 and urinary diary parameters.

### Results

A total of 170 patients were recruited and 161 of them were able to complete the study. The Chinese version of KHQ was found to have a high internal consistency, reliability and responsiveness.

Domain of KHQ	Cronbach's alpha coefficient	Rho
Limitations		
Role	0.876	0.505
Physical	0.692	0.648
Social	0.891	0.486
Personal	0.933	0.731
Emotional problems	0.929	0.726
Sleep / Energy disturbance	0.813	0.625
Severity Measures	0.772	0.662

Criterion validity the KHQ scale was supported by significant correlation with corresponding SF-36 subscales and urinary diary parameters.

Common Domain between SF36 and KHQ	Spearman's correlation coefficient	P
General Health	-0.707	<0.001
Physical function	-0.523	<0.001
Role limitations	-0.360	<0.001
Social limitations	-0.527	<0.001
Mental Health	-0.501	<0.001
Energy / vitality	-0.401	<0.001

Correlation between KHQ and urinary diary findings	Urinary Frequency	Urinary Incontinence
General Health	0.270**	0.113
Incontinence Impact	0.309**	0.268**
Personal relationships	0.125	-0.060
Incontinence severity measures	0.121	0.086
Physical limitations	0.289**	0.250
Role limitations	0.174	0.250
Social limitations	0.237*	0.180
Emotions	0.211*	0.150
Sleep / Energy	0.367**	0.026

\* P < 0.05 (2-tailed) \*\* P < 0.01 (2-tailed)

### **Conclusions**

The Chinese version of KHQ is a reliable and valid instrument, which would be useful in both clinical and research setting.