## Cross-culture adaptation and clinical application of UFS-QoL in Chinese women with uterine fibroid

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## Abstract

Objective: To demonstrate the applicability and adaptability of UFS-QoL in evaluating treatment effectiveness in Chinese populations. Design: Secondary analysis of a prospective cohort study. Setting: 20 Chinese hospitals Population or sample: 2411 Chinese women with symptomatic fibroids. Methods: Patients completed UFS-QoL and short form-36 (SF-36) at presurgery, 6 months, and 12 months after surgery. Evaluating the extent to which items comprising UFS-QoL the same concept in Health-related Quality of Life (HRQL) is obtained by calculating the Cronbach's  $\alpha$  coefficient. Relationships between items and domains were established using principal axis factor analysis with orthogonal rotation. Correlation between UFS-QoL and SF-36 was estimated by Spearman's correlation. The ability to detect change was evaluated by comparing pre- and post-treatments and 6- and 12-month scores using mixed effect models. Main outcome measures: Internal reliability, convergent validity, criterion validity, and responsiveness. Results: Exploratory factor analysis yielded six factors with eigenvalues >1. A 63.61% total variance was explained by the test items. Ceiling effects of self-consciousness and sexual functioning were >15%. UFS-QoL showed a positive and moderate correlation with SF-36, with good consistency reliability (Cronbach  $\alpha$ >0.7 in all subscales) and ability to detect change after treatment, except for self-consciousness (Cronbach  $\alpha$ =0.56), which showed both lowest effect size (0.38) and SRM (0.38) in 6 and 12 months after treatment Conclusions: Symptom severity, activity, and mood domains were valid and reliable in the Chinese UFS-QoL. However, self-consciousness domain needs further investigation on cultural adjustment, for example, cognitive debriefing for how Chinese interpret those questions.

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