

Cross Validation of the Moorehead-Ardelt Quality of Life Questionnaire II with WHOQOL and SF36 and Clinical Application

¹ Bariatric & Metabolic International Surgery Center, E-Da hospital, Taiwan ²Department of Internal Medicine, E-Da hospital, Taiwan

Huai-Ching Kuo¹, Chi-Hsien Lo¹, Chih-Kun Huang¹, Chi-Yang Chang²

Background: Obesity has become a major worldwide public health issue. There is a need for tools to measure patient reported bariatric outcomes. The Moorehead-Ardelt Quality of Life Questionnaire II (MA-II) contains six items. The objective of this study was to translate the MA II into Chinese and validate it in patients with morbid obesity.

Methods: The MA-II was translated into Chinese and backtranslated into English by two language specialists to create the Taiwan version, which was validated by correlations with two other generic questionnaires of health-related quality of life (HRQOL), Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36), and World Health Organization Quality of Life (WHOQOL)-BREF Taiwan version. The convergent validity was accomplished by a series of Spearman rank correlations. Reliability of the MA-II Taiwan version was determined by internal consistency obtained by Cronbach alpha coefficient and test-retest reliability obtained by intraclass correlation coefficient.

Results: One hundred subjects with morbid obesity were enrolled to test the MA II Taiwan version convergent validity and internal consistency. Test-retest studies (2 weeks apart) were applied to 30 morbidly obese patients. Satisfactory internal consistency was demonstrated by a Cronbach alpha coefficient of 0.79. Good test-retest reliability was shown by intraclass correlations ranging from 0.73 to 0.91. The total sum of MA-II scores was significantly correlated with all four domains of the WHOQOL-BREF and two major components of SF-36. All six MA-II items showed significant correlations with each other, and total sum of MA-II scores was negatively correlated with body mass index, indicating a one-dimensional questionnaire of HRQOL.

Conclusions: The MA-II Taiwan version is an obesity-specific questionnaire for QOL evaluation with satisfactory reliability and validity. It has the advantages of extensive evaluation for HRQOL, cross-cultural application, rapid completion, high response rates, and an advanced scoring system.