Development and Validation of a Cross-Cultural Heart Failure-Specific Quality of Life Questionnaire

*Nor F. Mohamed,1 Siti R. Ghazali,2 Nor A. Yaacob,3 Aizai A. Rahim,4 Oteh Maskon5

ABSTRACT: Objectives: Heart failure (HF) is a common clinical syndrome with an enormous impact on prognosis and lifestyle. Accordingly, rehabilitation measures need to be patient-specific and consider various sociocultural factors so as to improve the patient's quality of life (QOL). This study aimed to develop and validate a HF-specific QOL (HFQOL) questionnaire within a multicultural setting. Methods: This study took place at the National Heart Institute and Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia, between March 2013 and March 2014. A self-administered 75-item HFQOL questionnaire was designed and administered to 164 multi-ethnic Malaysian HF patients. Exploratory factor analysis was performed to assess the instrument's construct validity. Cronbach's alpha coefficients were used to determine internal consistency. Results: A total of 33 out of 75 items were retained in the final tool. The HFQOL questionnaire had three common factors—psychological, physical-social and spiritual wellbeing—resulting in a cumulative percentage of total variance of 44.3%. The factor loading ranges were 0.450–0.718 for psychological wellbeing (12 items), 0.394–0.740 for physical-social wellbeing (14 items) and 0.449–0.727 for spiritual wellbeing (seven items). The overall Cronbach's alpha coefficient of the questionnaire was 0.82, with coefficients of 0.86, 0.88 and 0.79 for the psychological, physical-social and spiritual wellbeing subdomains, respectively. Conclusion: The HFQOL questionnaire was found to be a valid and reliable measure of QOL among Malaysian HF patients from various ethnic groups. Such tools may facilitate cardiac care management planning among multi-ethnic patients with HF.

Keywords: Heart Failure; Quality of Life; Culturally Competent Care; Ethnic Groups; Questionnaire Design; Reliability and Validity; Malaysia.

ADDITIONAL MATERIAL: This study provides a validated and reliable heart failure (HF)-specific questionnaire to measure quality of life (QOL) in a multi-ethnic population. The HF-specific QOL questionnaire can be used to assess the QOL of Malaysian HF patients, regardless of ethnic, cultural or religious background. Such instruments facilitate patient-specific management by prioritising items with a lower QOL domain, enhancing the effectiveness of care as well as patient satisfaction.

1Department of Psychology & Counselling, Faculty of Human Development, Sultan Idris Education University, Tanjung Malim, Malaysia; 2Department of Psychological Medicine, University Malaysia Sarawak, Sarawak, Malaysia; 3Department of Community Medicine, Universiti Sains Malaysia, Kelantan, Malaysia; 4Department of Cardiology, Institut Jantung Negara, Kuala Lumpur, Malaysia; 5Department of Cardiology, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia

*Corresponding Author’s e-mail: norfirdous@fpm.upsi.edu.my and norfirdous.m@gmail.com