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QUALITY OF LIFE IN SOUTHEAST ASIAN PATIENTS WITH CHRONIC HEART FAILURE IN SINGAPORE

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Background Patients with chronic heart failure have an adverse prognosis and often experience debilitating physical and psychological symptoms such as fatigue, dyspnoea and depression which limit their daily activities and affect their quality of life. There are currently no reports on the quality of life experienced by Southeast Asian patients with chronic heart failure in Singapore. This study aims to explore the relationships and factors influencing the quality of life in patients with chronic heart failure in Southeast Asian population.

Methods The authors conducted a retrospective study of chronic heart failure patients seen at the heart failure clinic of a secondary hospital in Singapore from 2005 to 2010. The Minnesota Living with Heart Failure (MLWHF) questionnaire consisting of 21 questions was self-administered to patients on first clinic visit and after 6 months. A general linear model analysis was performed to explore the differences in the change between 6 months and baseline of total MLWHF score. A sub analysis in the physical and emotional domains was also performed. Lower MLWHF scores denote better quality of life.

Variables that may impact quality of life include socio-demographics such as age, gender, marital status and education level; risk factors such as smoking and alcohol consumption; co-morbidities such as hypertension, diabetes mellitus, cerebrovascular diseases; and clinical parameters such as left ventricular ejection fraction. Analysis was adjusted for clinical factors such as New York Heart Association Functional Class status, medications prescribed (ACE inhibitors, β -blockers and spironolactone) and baseline MLWHF scores.

Results A total of 1282 patients (61% males, mean age 67.2 years) completed questionnaires at baseline and after 6 months. Males showed a mean score improvement of -3.464 in MLWHF score compared to females (95% CI -6.856 to -0.072 , $p=0.045$). Patients without cerebrovascular disease or atrial fibrillation also had improvement in mean scores of -5.725 (95% CI -9.581 to -1.870 , $p=0.004$) and -3.762 (95% CI -7.595 to 0.070 , $p=0.054$). Sub analysis of the emotional domain showed that males had a better MLWHF score compared to females (mean score -1.059 ; 95% CI -2.019 to -0.100 , $p=0.03$). Patients without cerebrovascular disease or atrial fibrillation also had better mean scores compared to those with either of these two conditions (absence of cerebrovascular disease: mean score is -1.455 , 95% CI -2.544 to -0.365 , $p=0.009$; absence of atrial fibrillation: mean score is -1.13 , 95% CI -2.214 to -0.046). In the sub analysis of the physical domain, males had a -1.607 score difference (95% CI 0.199 to 3.015 , $p=0.025$) compared to females; patients without cerebrovascular disease had a mean score difference of -2.55 (95% CI -4.151 to -0.949 , $p=0.002$) while patients without atrial fibrillation had a mean score difference of -1.647 (95% CI -3.237 to -0.058 , $p=0.042$).

Conclusion In conclusion, males reported better quality of life compared to females. In addition, patients, regardless of gender, who do not have cerebrovascular disease or atrial fibrillation showed improved MLWHF scores compared to baseline. This research contributes to our understanding of chronic heart failure patients in Singapore, and suggests areas which may be targeted in seeking to optimise quality of life in these patients.