Self-care behaviors of Italian patients with heart failure

A Cocchieri, E Vellone, B Riegel, G Rocco and R Alvaro

University Tor Vergata, School of Nursing, Rome, Italy

University of Pennsylvania School of Nursing, Philadelphia, United States of America

Center of Excellence for Nursing Culture and Research, Rome, Italy

Purpose: Self-care is considered essential in the effective treatment of heart failure (HF). Patients who are adequate in HF self-care have a better quality of life (QOL), fewer hospitalizations and emergency department visits than those who are not adequate in HF self-care. In Italy, self-care is still understudied. The aim of the study was to describe self-care behaviors in Italian HF patients.

Methods: A descriptive design was used to study a convenience sample of 1192 adults with HF recruited from cardiovascular centers located across Italy. Patients had a diagnosis of HF confirmed by echocardiogram and clinical symptoms, were more than 18 years old, and had not had an acute coronary event in the last three months. A survey was used to collect patients' socio-demographic and family characteristics, smoking and alcohol habits, medical treatment and the use of health care services and hospitalization for HF in the last year. Clinical characteristics (NYHA functional class, ejection fraction) were obtained from the medical record. The Charlson Comorbidity Index was used to assess comorbidity and the Self-care Heart Failure Index v.6.2 was used to investigate self-care behaviors.

Results: The mean age of the sample was 72 years (SD, 11) and most participants were male (59%). Almost 80% of participants had less than a high school education and most (78%) were retired. Most of the sample (75%) was in NYHA class II or III and the mean ejection fraction was 44.6% (SD 10.9). Most participants had never smoked or had given up smoking in the last year (80%) while 15% still smoked. About one third (36%) drank alcohol regularly. The most frequent comorbid conditions were hypertension (68%), atrial fibrillation (40%) and diabetes (28%). More than a half (54%) had been hospitalized because of HF decompensation at least one time in the last year. The mean self-care maintenance, management and confidence scale scores were 55.30 (SD, 15.3), 53.18 (SD, 20) and 54.57 (SD, 20.9) respectively. Self-care behaviors engaged in never or rarely were physical exercise (37.6%), daily weighing (22.2%), taking an extra diuretic for symptoms (38.2%), and reducing fluid intake for symptoms (23.3%). Patients felt little confidence in their abilities to keep themselves free of HF symptoms (27%) and to evaluate the importance of their symptoms (13.5%).

Conclusions: The results of this study illustrate that HF self-care is poor in Italians. Culturally appropriate interventions designed to improve HF self-care are clearly needed if nurses are to help Italians improve their self-care behaviors.

Heart failure and survival: a case for self-rated health

S Inkmor, M Lainscek, E Tahirovic, TD Trippel, V Tscholl, G Loncar, N Sekularac, AN Neskovic, W Haverkamp, T Dassen, G Gebrich and HD Duengen

Charité - Campus Virchow-Klinikum, Department of Internal Medicine, Berlin, Germany

University Clinic of Respiratory and Allergic Diseases Golnik, Division of Cardiology, Golnik, Slovenia

Clinical Hospital Center Zvezdna, Department of Cardiology, Belgrade, Serbia

Clinical Hospital Center Zemun, School of Medicine, University of Belgrade, Belgrade, Serbia

Charité - Campus Virchow-Klinikum, Department of Nursing Science, Berlin, Germany

University of Würzburg, Institute for Clinical Epidemiology and Biometry, Würzburg, Germany

Purpose: Patients' self-rated health (SRH) is predictive for adverse events during beta-blocker uptitration in patients with heart failure, as was revealed in the recently published Cardiac Insufficiency Bisoprolol Study in Elderly (CIBIS-ELD) trial. This pre-defined secondary analysis examined the predictive value of SRH for survival before and after the end of uptitration.

Methods: 720 patients (261 women, 36%) aged 73+/-5 years (mean+/-SD) provided information on SRH before and after beta-blocker uptitration in CIBIS-ELD. They were followed up after 4 years. SRH was measured by asking «How do you rate your health in general?», using a five-point Likert-scale with lower numbers indicating better health: 1 = excellent, 2 = very good, 3 = good, 4 = fair, 5 = poor. Mortality was analysed by Cox regression.

Results: 144 patients died during the 4-yr observation period. In bivariate analysis, worse SRH is associated with worse prognosis, independent of whether SRH assessment is made before or after titration. The last observed value and the best of two SRH observations became non-significant after adjustment for age (P = 0.125 and P = 0.128, respectively). The mean of two SRH observations was still significant when adjusting for all covariables except NTproBNP (HR = 1.26 per full level, P = 0.037) but significance was lost when NTproBNP was included (HR = 1.17, P = 0.157). The worst of two consecutive observations was most predictive for mortality in patients with systolic as well as diastolic heart failure. It remained independently significant in multiple Cox regression analysis including age, sex, NYHA class, hospitalisation in the past year, six-minute walk distance, heart rate, haemoglobin, uric acid, eGFR and NTproBNP.