Abstract: P1038

The European Heart Failure self-care behaviour scale: psychometric testing of the Hebrew version

Authors: T Ben Gal1, V Yaari1, B Avraham1, NP Kato2, L Klompstra2, A Stromberg3, T Jaarsma2, 1Tel Aviv University, Heart Failure Unit, Cardiology Department, Rabin Medical Center - Tel Aviv - Israel, 2Linkoping University, Department of Social and Welfare Studies - Linkoping - Sweden, 3Linkoping University, Department of Medical and Health Sciences and Department of Cardiology - Linkoping - Sweden,

Topic(s): Chronic Heart Failure: Lifestyle Modification

Citation: Background: Regular assessment of self-care behaviour is important to tailor patient's care and to evaluate effectiveness of interventions such as educational programs or heart failure (HF) disease management programs. The European Heart Failure Self-care Behaviour Scale (EHFScBS) is a validated instrument used worldwide.

Aim: To develop and evaluate validity and reliability of the Hebrew version of the 9 item EHFScBS in Israel HF patients.

Methods: In order to develop the Hebrew version of the EHFScBS, forward and back translation was performed according the standard translation process of the scale. Content validity of the scale was assessed by Israeli HF experts including HF nurses and HF cardiologists and usability was assessed by HF patients. For the psychometric evaluation, 102 HF patients (mean age 61±12 years, male 75%, NYHA II and III 42% and 51% respectively) from 2 studies performed in 2007 and 2015-2017 in a tertiary teaching hospital in Israel, were analysed. As for validity, content validity, construct validity and known-groups validity were assessed. Reliability was evaluated with internal consistency. This 9-item scale ranges from 0-100, with higher scores indicating better self-care behaviour.

Results: Experts reported that items concerning general self-care to reduce weight and smoking cessation were missing. Patients found the scale easy to complete after a short explanation and took no more than 10-15 minutes to complete it. An explore factor analysis using a principal component analysis with varimax rotation extracted two factors. Factor 1 consisted of 5 items regarding health maintenance behaviour such as "take a low-salt diet" (items 1, 5, 7, 8 and 9) and factor 2 included 4 items about consulting behaviour such as "if short of breath increases I contact my doctor or nurse" (items 2, 3, 4 and 6). Known-groups validity testing revealed a significant difference before and after an educational intervention in the total score (n=40, 41.6 ± 23.8 vs. 67.6 ± 21.8, p < .01). Values of Cronbach’s alpha in total score, factor 1 and 2 were 0.78, 0.68 and 0.76, suggesting that internal consistency of this scale was acceptable.

Conclusions: Our study provides support for usability, validity and reliability of the 9-item Hebrew version of the EHFScBS. The scale in the current format is ready to use for assessing self-care behavior in Israeli HF patients.