Predictive factors for Health-related Quality of Life in Congestive Heart Failure: systematic review

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Background: Improvement in treatment of congestive heart failure (CHF) has resulted in a decrease in mortality and hospitalisations in patients with CHF. However, no cure is available which makes better management of CHF of paramount importance. Therefore, the H2020 HeartMan project was developed to provide accurate advice on disease management adapted to each patient through the use of a Decision Support System (DSS), telemonitoring and a mobile application. Recently, health-related Quality of Life (HRQoL) has gained increasing attention since it was shown to be related to mortality. The aim of this study was to identify key predictors of HRQoL in CHF patients. This information will be used to develop the DSS for HeartMan.

Methods and Preliminary results: Pubmed, Web of Science and Embase were searched in February 2016 for the following combination of terms: heart failure, quality of life, health perception and functional status. Systematic literature screening was done by two independent reviewers considering citations on stable ambulatory CHF patients and reporting on predictors of HRQoL. Fifty-four studies out of 7355 citations were included for further data extraction and quality appraisal. Sixteen distinct categories clustering different types of variables were found, with demographic characteristics, mental health, functional status, comorbidities and physical capacity as the most important categories. Within the abovementioned categories, age, depression, New York Heart Association (NYHA) class, gender, comorbidities and social support were the most frequently cited decisive variables explaining the variance of HRQoL.

Conclusion: A wide variance in predictors for HRQoL has been described in literature with demographic but also mental health characteristics being the most important categories. The underlying relation between these distinct categories should be further explored and taken into account in the development of the DSS for HeartMan.

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