

Changes in self-care maintenance during quarantine in patients with heart failure

L. Klompstra¹, L. Almenar², P. Deka³, E. Munoz-Gomez⁴, R. Lopez-Vilella², D. Pathak⁵, M. Westas¹, E. Marques-Sule⁴

¹Linköping University, Department of Social and Welfare studies, Linköping, Sweden; ²Hospital Universitario y Politecnico La Fe, Servicio de Cardiología, Valencia, Spain; ³Michigan State University, College of Nursing, East Lansing, United States of America; ⁴University of Valencia, Department of Physiotherapy, Valencia, Spain; ⁵Michigan State University, Department of Statistics and Probability, East Lansing, United States of America

Funding Acknowledgement: Type of funding sources: None.

Background: Patients with heart failure (HF) experience challenges in self-care that contribute to poor quality of life and high health care utilization. The COVID-19 pandemic required HF patients, especially living in countries with strict lockdowns and quarantines, to change their lifestyle including health promoting behaviors.

Purpose: To assess changes in self-care maintenance in patients with HF changed during quarantine compared to before quarantine. We hypothesized that the self-care maintenance behavior physical activity was most effected during quarantine.

Method: This is a cross-sectional survey study. From the medical chart, patients' disease severity (NYHA-class), ejection fraction and comorbidities were collected. Self-care maintenance was assessed using subscale Self-Care of Heart Failure Index 6.2. The total score ranges from 0–100, where 70 or higher is seen as having good self-care maintenance. With all the questions in the self-care maintenance scale a question was added: Did this change due to the COVID-19 pandemic? Patients could answer yes or no. When patients answered yes, they were asked the elaborate. Patients self-reported physical activity, before and during the pandemic, using the International Physical Activity Questionnaire (short form). Descriptive analyses were used for self-care maintenance, content analysis was applied for the qualitative data. Paired sample t-test were performed to assess the change in the total physical activity.

Results: In total, 120 patients with HF were included in this study (mean age was 79±13, 39% female, 78% NYHA-class I/II). Patients had a mean self-care maintenance of 32 (±6). No participant had good self-care maintenance (score of 70 or higher). Patients were non-adherent to regular physical activity (77%, n=92), keeping weight down (74%, n=89) and weighing themselves (66%, n=79) during quarantine (Figure). Behaviors which changed the most included keeping medical appointments (81%) and regular exercise (82%). Significantly higher levels of physically active was noticed before quarantine (776 Mets-minutes) compared to during quarantine (106 Mets-minutes) (p<0.01). The change in self-care maintenance was explained by change in motivation and self-confidence. Because of the pandemic and the quarantine, patients reported not being able to rely on health care and their usual social support system. Patients tried to create new habits when trying to maintain their self-care.

Conclusion: Patients with HF reported experiencing low self-care maintenance during quarantine due to not being able to go to medical appointments and decrease in physical activity. Public health policies during crisis events such as a pandemic should strive to provide support in coping with these changes and offer alternative ways of maintaining their self-care maintenance, especially with physical activity.

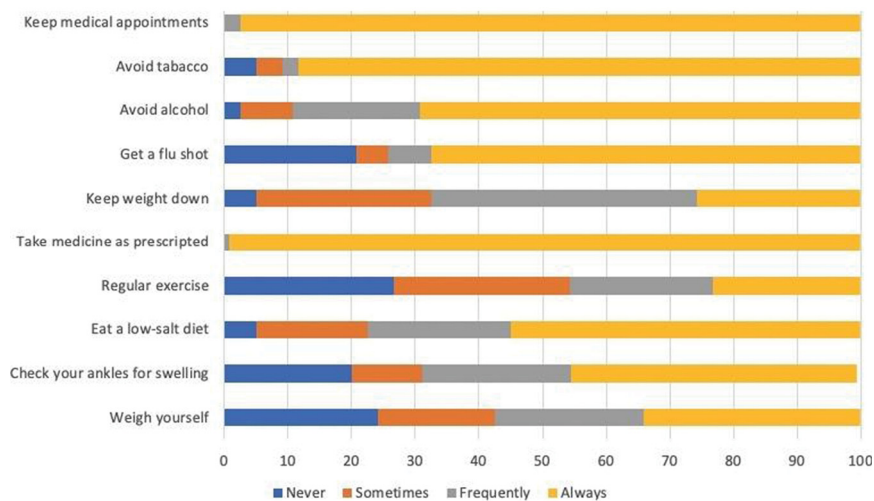


Figure 1. Self-care maintenance during quarantine