

Enhancing self-care adherence in heart failure patients by developing a manual containing well-defined and theory-based behaviour change interventions through the application of the COM-B behaviour model (HE 7352/1-2)

Summary

Although international guidelines recommend on-going self-care as part of routine heart failure management, and despite evidence supporting the positive outcomes related to self-care, patients are frequently unable to adhere. Heart failure self-care can be modified and enhanced through behaviour change interventions (BCIs). However, previous self-management interventions have shown limited success in improving adherence to self-care because they were neither theory-based nor well defined, which precludes the identification of underlying causal mechanisms as well as transparency and reproducibility of the intervention. Thus, we propose to develop an intervention manual that contains theory-based BCIs that are well-defined using eight descriptors proposed to describe BCIs in a standardised way. The manual will serve as a blueprint, which then can be applied with confidence in a subsequent exploratory trial that seeks to enhance patients' adherence to self-care. To manage the process of developing BCIs in a systematic fashion, our work programme consists of four stages. Behaviour change interventions will be based on both selected statements of findings that were derived by our research team from the recently completed qualitative meta-summary project (HE 7352/1-1) and findings from a quantitative meta-analysis published by Kessing *et al.* (2016). These two up-to-date comprehensive reviews synthesising qualitative and quantitative studies will be used to extract factors (target behaviours) associated with self-care adherence / non-adherence (Stage 1). Patients' health behaviour associated with adherence to self-care will be reinforced; behaviour associated with non-adherence will be modified through instigating new desirable behaviour. Extracted behaviours associated with adherence/non-adherence will then be mapped onto the 'Capability, Opportunity, Motivation and Behaviour' (COM-B) model, thus capturing the underlying mechanisms that are involved (Stage 2). To develop approaches for change, the 'Taxonomy of Behaviour Change Techniques' will be used to allow effective mapping of the target behaviours onto established behaviour change techniques to either reinforce facilitating factors or to modify hindering ones (Stage 3). Suggested BCIs will then be translated into locally relevant interventions using the Normalisation Process Theory (NPT) in order to overcome the difficulties of implementing theoretically derived interventions into everyday practice. Applying NPT will assist in identifying factors that promote/inhibit the effective and sustained incorporation of interventions into routine clinical work. Finally, a consensus development method (Delphi technique) will be employed to fine-tune content and acceptability of the intervention manual (Stage 4) to increase the likelihood of successfully piloting and implementing future BCIs into the German health care system.

Objectives

Based on the 37 statements of findings from our qualitative meta-summary, we will develop theory-based BCIs suited to improve adherence to self-care behaviour in HF patients. Underlying factors that function as barriers to self-care will be identified and linked to a behaviour model to provide strategies for behaviour change techniques that are capable of modifying such undesirable behaviour associated with non-adherence to self-care. Likewise, factors that function as facilitators to self-care will be identified and linked to a behaviour model to provide strategies for behaviour change techniques that reinforce desirable

behaviour associated with self-care adherence. Thus, the objective of this study is to design a feasible intervention and compile a manual containing well-defined theory-based BCIs including the concept and outline of a future exploratory trial ready for pilot testing that aims to enhance self-care adherence in patients with HF. To manage the process of developing BCIs in a systematic fashion, our work programme consists of four stages (Stage 1-4).