

RESEARCH ARTICLE

To support self-management for people with long-term conditions – The effect on shared decision-making, empowerment and coping after participating in group-learning sessions

Christina Petersson^{1,2}  | Annette Nygårdh³ | Berith Hedberg⁴

¹Jönköping Academy for Improvement of Health and Welfare, Jönköping University, Jönköping, Sweden

²Qulturum – Center for Learning and Innovation at Jönköping County, Jönköping, Sweden

³Department of Nursing Sciences, School of Health and Welfare, Jönköping University, Jönköping, Sweden

⁴Jönköping Academy for Improvement of Health and Welfare, Jönköping University, Jönköping, Sweden

Correspondence

Christina Petersson, Jönköping Academy for Improvement of Health and Welfare, Jönköping University, Jönköping, Sweden.
Email: christina.peterson@ju.se

Funding information

This research project has been funded by FUTURUM – academy for health and care, Region Jönköping, Sweden D-nr: FUTURUM-767341

Abstract

Introduction: Interventions that support patients to handle the emotional and medical aspects of a long-term health condition is important. One way is to use peer-support groups, to help patients solving problems, increasing their knowledge and making decisions.

Aim: was to investigate the impact on shared decision-making, empowerment and coping after participation in group-learning sessions for patients with long-term conditions ($N = 42$).

Design: An intervention following a health education programme based on group-learning sessions was established. Eight different programmes were held in five different departments at a regional county hospital in Sweden.

Methods: Questionnaires were analysed using paired-sample t-test.

Results: Results showed that patients might have better opportunities to be more active during their patient encounter after attending the group learning sessions. Interventions directed to patient activation may be one key in future healthcare management, especially concerning long-term conditions. Empowering patients is central in healthcare, and using different approaches is important.

KEYWORDS

chronic illness, patient activation, peer-support, self-management interventions

1 | INTRODUCTION

Long-term health conditions are one of the biggest challenges for future healthcare policy related to cost and effects on health and quality of life for people around the world (Hajat & Stein, 2018). In addition to healthcare services, people with long-term health conditions may need support in learning and maintaining their self-care

behaviour. Consequently, there is a need to focus on resources for long-term self-management and use of techniques that successfully manage this (de Silva, 2011). For instance, several general components can work to support people with long-term health conditions in their self-care behaviour. This can be exemplified by being involved in decision-making (Coulter et al., 2015), promoting healthy lifestyles and educating people about their condition and how to self-manage

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2022 The Authors. *Nursing Open* published by John Wiley & Sons Ltd.

(Hoffmann, McKenna, Worrall, & Read, 2007). Also, motivate the use of structured information (Weng, Dai, Huang, & Chiang, 2010), and support in self-monitoring of symptoms (Tucker et al., 2017). Nursing care for individuals affected by long-term health conditions are an overall goal of nursing care, which also includes supporting patients with information and strategies needed to manage the impact of a disease have on everyday life (Hellqvist, 2021).

1.1 | Empowerment, coping and shared decision-making

There are expectations that nurses should explore new ways of supporting patients with long-term health conditions, which is different from traditional one-to-one consultations. This takes its standpoint from a health promotion perspective, that individuals' take responsibility for their own well-being to improve or sustain health (Bossy, Knutsen, Rogers, & Foss, 2019). Zimmerman (1995) state that psychological empowerment consists of intrapersonal, interactional and behavioural components. The intrapersonal component refers to how people think about themselves and includes perceived control, competence and efficacy. The interactional component refers to how people think about and relate to their social environment and covers a person's understanding of options or choices to achieve their goals. The behavioural component refers to specific actions taken to change one's situation and how to influence outcomes. Behavioural component may also include behaviours to cope with stress or adapt to change (Zimmerman, 1995).

The concept of empowerment has become a popular goal for healthcare professionals in a number of fields (Agner & Braun, 2018). In more recent years, Bravo and colleagues (Bravo et al., 2015) have described a conceptual model of empowerment, which includes several levels. At the patient level, two points of focus occur; patient capacities/resources (including self-efficacy, knowledge, perceived control, and sense of meaning and coherence) and patient behaviours (participation in decision-making, taking an active role in consultations, self-management and participation in support groups). At the healthcare provider level, two examples of empowering interventions are also described. First, interventions that empower individuals such as motivational interviewing, shared decision-making, counselling and health coaching. Second, group-based empowering interventions, such as expert patient programmes, personalized care planning, patient education or disease self-management programmes (Bravo et al., 2015). One central aspect that is required to achieve patient empowerment is the change in the power relations that currently exist between patients and healthcare providers (Pulvirenti, McMillan, & Lawn, 2014). It is important that the patient is encouraged to actively participate in their consultation and be engaged in the decision-making process regarding his or her own health. To support the patient in making informed choices is central regarding person-centred care and this includes respecting the patient's preferences for involvement (Scholl, Zill, Härter, & Dirmaier, 2014). More specifically, shared decision-making is an approach where healthcare

What does this paper contribute to the wider global clinical community?

- Patients with long-term conditions should be encouraged to share their knowledge to others, which can give support in managing their disease
- Group-learning sessions can add a perspective of patients' lived knowledge which is one of the key aspects concerning treatment of patients with long-term conditions

professionals and patients can share the best available evidence when they are facing a task of making decisions, and the patients are supported to consider options or to achieve informed preferences (Friesen-Storms, Bours, van der Weijden, & Beurskens, 2015; Olling, Steffensen, Berry, & Stacey, 2021).

Being affected by a long-term condition can be seen as a stressful life event, where the person has different individual capacities to respond effectively to such an event, which could be defined as the process of coping. Coping is a dynamic process of involving continuous interactions between the individual and the environment and is regarded as a person's own cognitive and behavioural efforts to handle stressful situations. Therefore, coping is closely linked to the concepts of empowerment and shared decision-making when handling stressful life events. Two types of coping occur; problem-focused, which is about handling the source of stress and dealing with the situation. The second is emotion-focused, which is about handling emotions associated with the stressful situation (Lazarus & Folkman, 1984). Both empowerment and coping place an emphasis on the interaction of the person and the environment, which will contribute to social and emotional well-being. It is suggested that empowering interactions can be an important mediator of stressful life experiences by encouraging action-oriented responses and health to the social environment (Agner & Braun, 2018).

1.2 | How to strengthen patient empowerment

Based on the principles described by Zimmerman (1995) above, a person being active and taking own responsibility for the care process, demands person-environment-oriented attributes such as having access to information about treatment and disease. This can be exemplified by the ability to self-care and self-management (Van de Velde et al., 2019). Interventions aiming to support individuals to manage the emotional and medical aspects of a specific illness to maintain or create a new life role in their everyday life is important. Also, to strengthen patient empowerment, interventions can be delivered in different formats, for example one-to-one or in groups. An advantage of using group sessions is the ability to offer peer support, which can support problem solving, increased knowledge and decision-making (Clark, MacCrosain, Ward, & Jones, 2020).

Structured peer-support in self-management programmes for long-term health conditions can strengthen patient activation and provides the knowledge and skills for the patient to have confidence to take on that role (Judith H Hibbard & Mahoney, 2010). According to van Hoof et al. (2017), interventions that focus on self-efficacy and motivation are mostly successful and they conclude that education alone will not result in a sustainable behavioural change. In addition, the target group and use of peers and group homogeneity are important factors (van Hoof, Been-Dahmen, Ista, van Staa, & Boeije, 2017). Although improvements in self-management is expected to improve health services utilization and enable people to live better lives with a long-term health condition, studies about the effectiveness of group-based self-management programmes have shown mixed results (Allegrante, Wells, & Peterson, 2019). Only relatively modest short-term improvements in outcomes of utilization and cost reductions have been described (Franek, 2013). On the other hand, qualitative results point to other benefits, such as benefits due to lower incidence of symptom distress, greater awareness of the disease, improved self-management strategies, learning and peer support (Lindblad, Hedberg, Nygårdh, & Petersson, 2020; Stenberg, Haaland-Øverby, Fredriksen, Westermann, & Kvisvik, 2016). The results suggest that these kinds of programmes are an essential part of contemporary healthcare management but the effects and evaluation efforts in measuring outcomes in patient education programmes remain uncertain (Stenberg et al., 2016). Therefore, the purpose of this study was to investigate the impact on shared decision-making, empowerment and coping after participation in group-learning sessions for patients with long-term health conditions.

2 | METHOD

2.1 | Intervention – health education programme based on group-learning sessions

The management staff at the local hospital decided to implement a nursing intervention based on a patient-controlled health education programme developed by Vifladd and colleagues (Vifladd, Landtblom, & Hopen, 2010). This programme emphasized the patients' own questions and experiences and was performed on five group-learning sessions over a period of six months and was led by a facilitator (all of them registered nurses). All participants taking part in the group-learning sessions had experiences from similar diagnoses of long-term conditions, but the length of time following diagnosis differed. The purpose of attending the group-learning sessions was to meet other people sharing the same diagnosis and to share common knowledge and learn from each other's experiences and invited healthcare professionals. On the first occasion, participants in the group decided the content for the future sessions (the four upcoming sessions) by choosing, for example if an "expert" should be invited. An expert could be a dietician, physician or a librarian. Topics of interest were discussed and submitted to the experts in advance

and participants could ask questions during the session. The facilitator was responsible for taking notes and distributed the notes to all participants after each session.

2.2 | Data collection procedure

During 2015–2018, nine different health education programmes were set up in six different departments at a regional county hospital in southern part of Sweden. The hospital was serving about 94,000 inhabitants. The criterion of inclusion in the study was that participants could speak and understand Swedish language and had given their informed consent to participate. Selections of participants were a sample of convenience. The procedure was as follows: a registered nurse at each department asked if a patient was interested in joining the health education programme. The nurse then kept a list of potential interested patients. When the list had at least 10–12 potential participants, they were invited to the planned group sessions. Subsequently some patients changed their mind about participating or did not have the ability to join at the specific days for the planned group-sessions. According to this sample procedure, the total number of participants eligible for this study was unknown to the research group. Each group had about 4–10 participants. At the first occasion, a researcher visited the group, gave information about the study, and handed out the questionnaires. A facilitator who had led the group-learning sessions, distributed questionnaires the second time, which was around 6–9 months after the intervention. No reminders for follow-up answers to the questionnaires were sent out as a postal survey. Some departments ran the educational programme several times (but only one programme each semester) and some departments only set up one programme. To achieve a sufficient number of participants, the data collection lasted over several years. A power analysis was not calculated.

2.3 | Questionnaires

The participants answered background questions about their gender, age, marital status, education level, type of condition and employment status. EuroQol-5D visual analogue scale (EQ5D VAS) was used as a background variable to estimate participants' self-reported health (Devlin & Brooks, 2017), which is an overall valuation of the current state of health, and estimated using a scale of 1–100, where a higher score indicates better health (Burstrom, Johannesson, & Diderichsen, 2001). We used three different questionnaires to measure the outcome variables, described below.

2.3.1 | Shared decision-making

CollaboRATE, is a fast and frugal patient-reported three-item measurement, developed to assess the level of shared decision-making in a clinical encounter (Barr, Thompson, Walsh, Grande,

Ozanne, Elwyn, 2014). Patients are asked to indicate the level of effort made in response to the three items: "How much effort was made to help you understand your health issues," "How much effort was made to listen to things that matter most to you about your health issues," and "How much effort was made to include what matters most to you in choosing what to do next." (Barr et al., 2014). The items are answered using a five-point Likert scale with responses of 0 – no effort made to 4 – every effort was made. The Swedish version of CollaboRATE has shown satisfactory psychometric results (Broström, Pakpour, Nilsen, Hedberg, & Ulander, 2019).

2.3.2 | Empowerment

The Swedish version of the Diabetes Empowerment Scale (SWE-DES-23) is a version of Diabetes Empowerment Scale (DES) (Anderson, Funnell, Fitzgerald, & Marrero, 2000), which have been used in the context of patients with chronic kidney disease (Nygårdh, Malm, Wikby, & Ahlström, 2012; Tsay & Hung, 2004). SWE-DES-23 contains 23 statements divided into four subscales of empowerment. These are: identification of problems and problem-solving; to reach goals and overcome barriers (10 items), self-awareness; where to get support and make self-care choices (4 items), stress management; positive and negative ways of coping (4 items), and willingness to change; about reaching goals (5 items). The participants answered the items on a five-point Likert scale ranging from 1 (definitely do not agree) to 5 (agree entirely). Higher mean values indicate stronger empowerment. The reliability of the Swedish version has been tested before showing satisfactory psychometric results (Leksell et al., 2007).

2.3.3 | Coping

Ways of coping questionnaire (WCQ) is internationally well known and has been translated into several languages. The Ways of Coping Questionnaire-Swedish version (WCQ-S) was used to assess the stress management and problem-solving aspects related to coping (Lundqvist & Ahlström, 2006). This questionnaire has been used before in patients with chronic disease (Ahlström & Wenneberg, 2002; Nygårdh et al., 2012) and measures the thoughts and actions that an individual uses to manage stressful situations. The revised WCQ-S has 45 statements divided into the eight scales. 1. Confrontive coping – describing aggressive efforts to alter a situation and risk taking (6 items). 2. Distancing – efforts to detach oneself and create a positive outlook (6 items). 3. Self-controlling – effort to regulate feeling (7 items). 4. Seeking social support – seek informational and emotional support (6 items). 5. Accepting responsibility – acknowledge one's role in a problem and to attempt to put things right (4 items). 6. Escape/avoidance – describe wishful thinking and efforts to avoid problems (8 items). 7. Planful problem solving – problem-focused

efforts to alter a situation (6 items) and 8. Positive reappraisal – efforts to create positive meaning by focusing on personal growth (7 items). The participants answered the items on a 4-point Likert scale to indicate the extent to which they use each strategy. The options were from 0 (does not apply or not used) to 3 (used a great deal). The WCQ-S total score has good internal consistency (Lundqvist & Ahlström, 2006).

2.4 | Analysis

Data were analysed using paired-sample *t*-test, to determine whether the mean difference between the two observations. Each participant answered all questionnaires twice. The first observation followed attendance of the first group-learning session, and the second observation was about 6–9 months after ending the intervention. In the paired sample *t*-test, two competing hypotheses are formulated: the null hypothesis and the alternative hypothesis. The null hypothesis assumes that the true mean difference between the paired samples is zero. Conversely, the alternative hypothesis assumes that the true mean difference between the paired samples is not equal to zero. Cronbach's alpha was used in order to determine internal consistency of the questionnaires (Kirkwood & Sterne, 2003). All data were analysed using Statistical Package for the Social Sciences (SPSS) version 25.0. Statistical difference was set at $p = .05$.

2.5 | Ethical considerations

Considerations were made according to the ethical principles stated in the Declaration of Helsinki (Puri, Suresh, Gogtay, & Thatte, 2009). Verbal and written information about the study was given to each participant before they gave their informed consent to take part in this study. The Research Ethics Committee at the Faculty of Health Science at Linköping University, Sweden approved the study (D-nr: 2014/405–31).

3 | RESULTS

3.1 | Response rate and characteristics of participants

A total of 80 questionnaires were distributed and 42 were returned, which produced a response rate of 52.5% which was deemed satisfactory by the authors. Attrition analysis was not possible due to the study design. All characteristics of the patients are presented in Table 1. In total, the study sample comes from nine different group-learning sessions, which represents six different disease groups. According to the patients' estimated health described by EQ5D VAS, there was a high variation (mean 63; sd 22.6, range 20–95).

TABLE 1 Background information about the studied population

		N	%	Mean (sd)	Range
Gender	Male	22	52		
	Female	20	48		
Age	18–34	6	14		
	35–54	20	48		
	55–74	12	29		
Marital status	Single	8	19		
	Married/cohabitant	33	79		
Employment	Studying	2	5		
	Unemployed	1	2		
	Retired/sick-leave	26	62		
	Working	13	31		
Education	Comprehensive school	6	14		
	Upper secondary school	19	45		
	University	16	38		
Diagnosis	Inflammatory bowel disease (1 group)	4	9		
	Atrial fibrillation (3 groups)	20	48		
	Immunodeficiency (1 group)	1	2		
	Stroke (2 groups)	9	22		
	Chronic kidney disease (1 group)	4	10		
	Depression (1 group)	4	9		
EQ5D VAS	Before intervention	42	–	63 (22.6)	20–95

TABLE 2 Results of shared decision-making after attending group-learning sessions

CollaboRATE	Baseline		Follow-up			Difference	
	N	mean	N	mean	N reported change (%)	95% CI of diff.	t (p)
#1 How much effort was made to help you understand your health issues?	40	2.23	40	2.78	18 (45)	–0.86–0.24	–3.63 (.001)
#2 How much effort was made to listen to the things that matter most to you about your health issues?	40	2.25	40	2.63	16 (40)	–0.69–0.62	–2.42 (.020)
#3 How much effort was made to include what matters most to you in choosing what to do next?	39	2.31	39	2.54	16 (41)	–0.60–0.13	–1.30 (.202)

3.2 | Impact of group-learning sessions

3.2.1 | Shared decision-making (CollaboRATE)

Results are presented for each item from the questionnaire CollaboRATE (Table 2) that measures shared decision-making. Internal consistency with Cronbach's alpha was 0.95. A statistical difference occurred for the item about efforts that were made to help the patient understand their health issues before and after the intervention (m 2.23 vs. 2.78, $p = .001$). Of the 40 patients answering the question, 18 patients described a positive change

(45%) after the intervention. Also, a difference was found in the item about what efforts were made to listen to the patient about the things that mattered most to them (m 2.25 vs. 2.63, $p = .020$). In this item, 16 of 40 patients showed a positive change (40%). In the last item, about efforts made to include what matters most to the patient in choosing what to do in the next step, we did not detect any statistical difference, yet 16 out of 39 patients described a positive change (41%). These results indicate that after the intervention patients may have better opportunities to be able to be more active in a shared decision-making process during a patient encounter with a physician.

3.2.2 | Empowerment (SWE-DES-23)

Internal consistency according to Cronbach's alpha was 0.92. In three of the four subscales in SWE-DES, the subscale of measuring empowerment showed a positive change between baseline and follow-up. The subscales about self-awareness – how to get support and make self-care choices (m 3.25 vs. 3.65, $p = .037$) stress management – about positive and negative ways of coping (m 3.09 vs. 3.41, $p = .034$) and willingness to change – about reaching goals (m 3.42, vs. 3.72, $p = .011$). Nearly 60% of all patients had made improvements between baseline and follow-up after intervention for all three subscales and the results are presented in Table 3. In the dimension regarding problem identification and problem solving, we did not detect any statistical difference, yet 19 participants out of 38 described a positive change (50%). This indicate that patients after the intervention seems to strengthen their empowerment, but the results showed no statistical difference when it comes to identification of problems and problem solving.

3.2.3 | Coping (WCQ-S)

Internal consistency according to Cronbach's alpha was 0.91. According to the analysis, no influences were found on coping strategies except for the subscale about escape/avoidance ($m = 1.19$ and 0.95, respectively, $p = .043$). (Table 4), which is about wishful thinking and efforts to avoid problems. There is a decrease from baseline to follow-up, which indicates that this strategy may be used less often after the intervention. In the dimension of planful problem solving, which describes problem-focused efforts to alter a situation, there was also a decrease following the intervention ($m = 1.50$ and $m = 1.30$, respectively, $p = .050$).

4 | DISCUSSION

4.1 | Principal findings

This study aimed to investigate the impact on shared decision-making, empowerment and coping after participation in group-learning sessions. The principal findings demonstrate that patients may have better opportunities to be more active in a shared

decision-making process during a patient encounter, after attending group-learning sessions. Dealing with empowerment, the results indicate that patients seemed to strengthen their empowerment and more specifically, when it comes to self-awareness; stress management and willingness to change. However, the results are more uncertain when it comes to the identification of problems and problem solving. Coping strategies are not affected to any large extent after the intervention.

There was improvement between base line and follow-up in the two items about efforts made to help the patient understand their health issues and efforts made to listen to things that matter most to the patient. It could be argued that a majority of patients prefer an active and shared role in decision-making during a medical encounter, but there is a gap between a patient's expectation and a doctor's perception of the patient's role preference. According to Ambigapathy and colleagues (Ambigapathy, Chia, & Ng, 2016), more than half of the patients in their study preferred shared decision-making as described before consultation, but about 45% felt that the decision was shared during the consultation. When patients are sharing their experiences and knowledge in peer groups, it is possible for patients to take a stand for themselves in future encounters. This is also described in a systematic review by Clark and colleagues (Clark et al., 2020), which illustrates that knowledge, communication and decision-making may increase clinically significant outcomes. Being involved in one's own care relates to many factors, such as being able to prepare before decision-making, to receive information during consultations, and to experience continuity by being assured a possibility of returning to the healthcare provider after the consultations. Patient involvement in consultations needs to build on a communicative interaction during consultations with providers that leads to a feeling of clarity, confidence related to decision-making, trust towards providers, a feeling of being understood and confidence in receiving consistent care within an established relationship (Siouta et al., 2016). This highlights the importance of providing patients with the strength to speak out for themselves, which may be easier for patients after attending group-learning sessions.

Self-awareness, which is about self-knowledge and how to make necessary self-care choices and awareness of how to obtain support when needed, was improved after the intervention. There was also an improvement in the item, being ready to make changes. This is in line with other research, demonstrated in a realist review by

TABLE 3 Results of empowerment after attending group-learning sessions

	Baseline		Follow-up			Difference	
	N	Mean	N	Mean	N reported change (%)	95% CI of diff.	t (p)
SWE-DES 23							
Self-awareness	36	3.25	36	3.56	21 (58)	-0.61-0.20	-2.17 (.037)
Stress management	37	3.09	37	3.41	23 (62)	-0.61-0.02	-2.20 (.034)
Willingness to change	37	3.42	37	3.72	23 (62)	-0.35-0.74	-2.69 (.011)
Identification of problems and problem solving	38	3.43	38	3.44	19 (50)	-0.23-0.21	-0.14 (.886)

TABLE 4 Results of coping after attending group-learning sessions

WCQ-S	Baseline		Follow-up		N reported change (%)	Difference	
	N	Mean	N	Mean		95% CI of diff.	t (p)
Confrontative coping	36	1.04	36	1.08	17 (47)	-0.21-0.13	-0.51 (.610)
Distancing	35	1.13	35	1.12	16 (46)	-0.18-0.211	0.13 (.896)
Self-controlling	33	1.59	33	1.33	9 (27)	-0.06-0.58	1.68 (.103)
Seeking social support	35	1.45	35	1.34	13 (37)	-0.187-0.41	0.77 (.445)
Escape/avoidance	35	1.19	35	0.97	9 (26)	0.07-0.43	2.09 (.043)
Planful problem solving	34	1.50	34	1.30	9 (26)	0.00-0.40	2.04 (.050)
Positive reappraisal	35	1.40	35	1.24	14 (40)	-0.91-0.40	1.28 (.211)
Accepting responsibility	35	1.16	35	1.06	16 (46)	-1.94-0.38	0.67 (.508)

van Hooft and colleagues (van Hooft et al., 2017). Their results indicated that the mechanism of knowledge is a key to both behavioural changes, coping strategies and self-efficacy. When patients are able to connect to each other, it can give them opportunity to relieve stress; providing them with role models and helping them to learn strategies to be used to deal with day-to-day issues (Chen & Li, 2009), which also supports our results. The impact of empowerment and motivation on self-management behaviours has been studied before and shows that patients that feel more empowered and active are those most likely to self-manage effectively. Thus, specific self-management education programmes do not seem to make patients more engaged. It remains uncertain which intervention leads to the best support in self-management to increase empowerment and motivation (J. H. Hibbard, Mahoney, Stock, & Tusler, 2007; van Hooft et al., 2017). The influence on empowerment when implementing a health education programme with group-learning sessions as in this case, is dependent on several aspects that are difficult to control. First, the facilitators' personal characteristics and training. Second, patients' ability to undertake empowerment activities influenced by their own values, social support and circumstances for their condition (duration and severity) (Bravo et al., 2015). Within the context of self-management, empowerment approaches also assume that individuals wish to be empowered to self-manage in specific ways. It also assumes that they have the capacity and want to change, which may affect the intended outcomes (Pulvirenti et al., 2014). The evidence base suggests that the benefits of participating in such interventions that support self-management are less incidence of symptom distress and greater awareness of patients' condition, peer support, learning and improved self-management strategies (Stenberg et al., 2016). Therefore, we conclude that the focus on peer-support groups is to learn about how peers have taken control of their health and this empowered component may lead to an increased responsibility for self-management of their condition (Arney et al., 2020; Lindblad et al., 2020), which strengthens the results of increased empowerment after attending group-learning sessions.

The effect on outcomes concerning coping did not show any changes in this study. It has been described that when groups of

patients with their own experiences come together, it is shown that they have greater empathy and can be role models of successful coping strategies. Furthermore, this adds a credibility to such programme and when information is shared about similar experiences, an unspoken understanding occurs (Stenberg et al., 2016). One explanation of why we did not detect any changes in coping strategies may be that the coping perspective is primarily an individual focus and considers the social environment only to the extent that it affects the ability to achieve balance. Social support is also a significant mediator of life stress. One reliable form of social support takes place in the involvement with others who have experienced similar stressful events, which increases the possibility to give and receive accurate advice that can facilitate the coping process (Gutierrez, 1994). Life stress is associated with illness perceptions and coping strategies and the consequences of the illness mediates the relation of life stress to coping strategies (Karademas, Karamvakalis, & Zarogiannos, 2009). Our study sample consist of several conditions – with different manifestations and different influence on daily life – which may be one of several explanations of why we did not find any effect on coping.

4.2 | Strengths and limitations

The intervention was based on an initiative from the hospital (so clinical in nature) to test a health education programme instead of continuing with lessons given from clinicians to groups of patients (i.e. patient schools). One strength of this intervention is that the programme was tested and developed before, relying on a pedagogical structure (Vifladt et al., 2010). Also, that outcome measures were psychometrically tested and have been used in other research areas before. Still, several weaknesses must be highlighted. First, the small sample size comprised patients with several different conditions that affected daily life and self-care management processes in different ways, which we could not control for. The total number of eligible participants were not known to the research group, and an attrition analysis could not be calculated, which also is a limitation. Second, the sample procedure

made by the nurses may also be a limitation as it was based on a sample of convenience. The sample procedure after the intervention was carried out during several months that may have affected the results. It is questionable if the coping questionnaire was suitable as an outcome measure because coping is influenced by many other factors that we could not control for. It could be argued that a self-management questionnaire had been a better choice, but it was deemed difficult due to the heterogeneous group of patients. One factor that helps explain is the substantial variation in estimated general health described in EQ5D-VAS. This factor may also have influenced the results. The study results should be handled in respect to these limitations, but the results can work as an inspiration to future studies and outcome measures following self-management interventions.

4.3 | Conclusions and implications

Patient capacities exemplified by them feeling more prepared in a shared decision-making process and taking a more active role in consultations point to the direction that it may be improved after attending group-learning sessions. Moreover, there seems to be an effect on self-awareness and stress management. Interventions directed to patient activation, where they take an active role in supporting each other may be one of the keys in future healthcare management for nurses, especially concerning the care of people with long-term health conditions. Results in this study needs further research to explore these tendencies. Still, we believe that empowering patients is central and if a shared decision-making process is to become a reality, nurses need to learn to use different methods to explore different patient preferences and needs. This is in line with Swedish healthcare regulations, to move towards patient power and increased control and therefore, such interventions should be a part of regular care. The group of patients who want to be active and take their own responsibility for their own health puts an additional demand on the competence of nurses.

Future research should focus on testing the effect after group-learning session interventions, with a larger sample and a more homogenous group of patients. We would also recommend following the effects longitudinally, to understand the long-term effects of such interventions and to further explore the results detected in this study.

AUTHORS CONTRIBUTIONS

Christina Petersson contributed to data analysis, critical appraisal, writing the original draft and editing the final draft. Berith Hedberg contributed to funding acquisition, methodology, review and editing the final draft. Annette Nygårdh contributed to reviewing and editing the final draft.

All authors have agreed on the final version and meet at least one of the following criteria [recommended by the ICMJE (<http://www.icmje.org/recommendations/>)]:

- substantial contributions to conception and design, acquisition of data or analysis and interpretation of data;
- drafting the article or revising it critically for important intellectual content.

ACKNOWLEDGEMENTS

The authors acknowledge the facilitators leading the group-sessions for their support and that they have generously invited us to share the results of the study. The authors acknowledge Bo Rolander for his valuable contributions in discussing statistical analysis. They are also thankful for the financial support from Futurum – the Academy for Health and Care in Region Jönköping's County, Sweden.

CONFLICT OF INTEREST

The authors declare no conflict of interest

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Christina Petersson  <https://orcid.org/0000-0002-5123-032X>

REFERENCES

- Agner, J., & Braun, K. L. (2018). Patient empowerment: A critique of individualism and systematic review of patient perspectives. *Patient Education and Counseling*, 101(12), 2054–2064. <https://doi.org/10.1016/j.pec.2018.07.026>
- Ahlström, G., & Wenneberg, S. (2002). Coping with illness-related problems in persons with progressive muscular diseases: the Swedish version of the Ways of Coping Questionnaire. *Scandinavian Journal of Caring Sciences*, 16(4), 368–375. <https://doi.org/10.1046/j.1471-6712.2002.00099.x>
- Allegrante, J. P., Wells, M. T., & Peterson, J. C. (2019). Interventions to support behavioral self-management of chronic diseases. *Annual Review of Public Health*, 40, 127–146. <https://doi.org/10.1146/annurev-publhealth-040218-044008>
- Ambigapathy, R., Chia, Y. C., & Ng, C. J. (2016). Patient involvement in decision-making: A cross-sectional study in a Malaysian primary care clinic. *BMJ Open*, 6(1), e010063. <https://doi.org/10.1136/bmjopen-2015-010063>
- Anderson, R. M., Funnell, M. M., Fitzgerald, J. T., & Marrero, D. G. (2000). The diabetes empowerment scale: A measure of psychosocial self-efficacy. *Diabetes Care*, 23(6), 739–743. <https://doi.org/10.2337/diacare.23.6.739>
- Arney, J. B., Odom, E., Brown, C., Jones, L., Kamdar, N., Kiefer, L., Hundt, N., Gordon, H. S., Naik, A. D., & Woodard, L. D. (2020). The value of peer support for self-management of diabetes among veterans in the Empowering Patients In Chronic care intervention. *Diabetic Medicine*, 37(5), 805–813. <https://doi.org/10.1111/dme.14220>
- Barr, P. J., Thompson, R., Walsh, T., Grande, S. W., Ozanne, E. M., & Elwyn, G. (2014). The psychometric properties of CollaboRATE: A fast and frugal patient-reported measure of the shared decision-making process. *Journal of Medical Internet Research*, 16(1), e3085. <https://doi.org/10.2196/jmir.3085>
- Bossy, D., Knutsen, I. R., Rogers, A., & Foss, C. (2019). Moving between ideologies in self-management support-A qualitative study. *Health Expectations*, 22(1), 83–92. <https://doi.org/10.1111/hex.12833>

- Bravo, P., Edwards, A., Barr, P. J., Scholl, I., Elwyn, G., & McAllister, M. (2015). Conceptualising patient empowerment: a mixed methods study. *BMC Health Services Research*, 15, 252. <https://doi.org/10.1186/s12913-015-0907-z>
- Broström, A., Pakpour, A. H., Nilsen, P., Hedberg, B., & Ulander, M. (2019). Validation of CollaboRATE and SURE - two short questionnaires to measure shared decision making during CPAP initiation. *Journal of Sleep Research*, 28(5), e12808. <https://doi.org/10.1111/jsr.12808>
- Burström, K., Johannesson, M., & Diderichsen, F. (2001). Swedish population health-related quality of life results using the EQ-5D. *Quality of Life Research*, 10(7), 621–635.
- Chen, Y. C., & Li, I. C. (2009). Effectiveness of interventions using empowerment concept for patients with chronic disease: a systematic review. *JBI Library of Systematic Reviews*, 7(27), 1179–1233. <https://doi.org/10.11124/01938924-200907270-00001>
- Clark, E., MacCrosain, A., Ward, N. S., & Jones, F. (2020). The key features and role of peer support within group self-management interventions for stroke? A systematic review. *Disability and Rehabilitation*, 42(3), 307–316. <https://doi.org/10.1080/09638288.2018.1498544>
- Coulter, A., Entwistle, V. A., Eccles, A., Ryan, S., Shepperd, S., & Perera, R. (2015). Personalised care planning for adults with chronic or long-term health conditions. *Cochrane Database of Systematic Reviews*, 2015(3), Cd010523. <https://doi.org/10.1002/14651858.CD010523.pub2>
- de Silva, D. (2011). *Evidence: helping people help themselves*. The Health Foundation.
- Devlin, N. J., & Brooks, R. (2017). EQ-5D and the EuroQol group: Past, present and future. *Applied Health Economics and Health Policy*, 15(2), 127–137. <https://doi.org/10.1007/s40258-017-0310-5>
- Franek, J. (2013). Self-management support interventions for persons with chronic disease: An evidence-based analysis. *Ont Health Technol Assess Ser*, 13(9), 1–60.
- Friesen-Storms, J. H., Bours, G. J., van der Weijden, T., & Beurskens, A. J. (2015). Shared decision making in chronic care in the context of evidence based practice in nursing. *International Journal of Nursing Studies*, 52(1), 393–402. <https://doi.org/10.1016/j.ijnurstu.2014.06.012>
- Gutierrez, L. M. (1994). Beyond coping: An empowerment perspective on stressful life events. *Journal of Sociology & Social Welfare*, 21(3), 201–221.
- Hajat, C., & Stein, E. (2018). The global burden of multiple chronic conditions: A narrative review. *Preventive Medicine Reports*, 12, 284–293. <https://doi.org/10.1016/j.pmedr.2018.10.008>
- Hellqvist, C. (2021). Promoting self-care in nursing encounters with persons affected by long-term conditions—A proposed model to guide clinical care. *International Journal of Environmental Research and Public Health*, 18(5), 2223.
- Hibbard, J. H., & Mahoney, E. (2010). Toward a theory of patient and consumer activation. *Patient Education and Counseling*, 78(3), 377–381.
- Hibbard, J. H., Mahoney, E. R., Stock, R., & Tusler, M. (2007). Do increases in patient activation result in improved self-management behaviors? *Health Services Research*, 42(4), 1443–1463. <https://doi.org/10.1111/j.1475-6773.2006.00669.x>
- Hoffmann, T., McKenna, K., Worrall, L., & Read, S. J. (2007). Randomised trial of a computer-generated tailored written education package for patients following stroke. *Age and Ageing*, 36(3), 280–286. <https://doi.org/10.1093/ageing/afm003>
- Karademas, E. C., Karamvakalis, N., & Zargiannos, A. (2009). Life context and the experience of chronic illness: Is the stress of life associated with illness perceptions and coping? *Stress and Health: Journal of the International Society for the Investigation of Stress*, 25(5), 405–412.
- Kirkwood, B. R., & Sterne, J. A. (2003). *Medical statistics*. Blackwell Science Ltd.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer publishing company.
- Leksell, J., Funnell, M., Sandberg, G., Smide, B., Wiklund, G., & Wikblad, K. (2007). Psychometric properties of the Swedish diabetes empowerment scale. *Scandinavian Journal of Caring Sciences*, 21(2), 247–252. <https://doi.org/10.1111/j.1471-6712.2007.00463.x>
- Lindblad, A., Hedberg, B., Nygårdh, A., & Petersson, C. (2020). “An expanded window of understanding a changed everyday life”—experiences from patients with long-term conditions after attending group learning sessions. *Journal of Patient Experience*, 7, 1022–1028. <https://doi.org/10.1177/2374373520937167>
- Lundqvist, L. O., & Ahlström, G. (2006). Psychometric evaluation of the ways of coping questionnaire as applied to clinical and nonclinical groups. *Journal of Psychosomatic Research*, 60(5), 485–493. <https://doi.org/10.1016/j.jpsychores.2005.08.019>
- Nygårdh, A., Malm, D., Wikby, K., & Ahlström, G. (2012). Empowerment intervention in outpatient care of persons with chronic kidney disease pre-dialysis. *Nephrology Nursing Journal*, 39(4), 285–293.
- Olling, K., Steffensen, K. D., Berry, L., & Stacey, D. (2021). The Invisible Roles of Oncology Nurses in Shared Decision Making. *Cancer Care Research Online*, 1(2), e0007. <https://doi.org/10.1097/CR9.000000000000007>
- Pulvirenti, M., McMillan, J., & Lawn, S. (2014). Empowerment, patient centred care and self-management. *Health Expectations*, 17(3), 303–310. <https://doi.org/10.1111/j.1369-7625.2011.00757.x>
- Puri, K., Suresh, K., Gogtay, N., & Thattai, U. (2009). Declaration of Helsinki, 2008: Implications for stakeholders in research. *Journal of Postgraduate Medicine*, 55(2), 131.
- Scholl, I., Zill, J. M., Härter, M., & Dirmaier, J. (2014). An integrative model of patient-centeredness - a systematic review and concept analysis. *PLoS One*, 9(9), e107828. <https://doi.org/10.1371/journal.pone.0107828>
- Siouta, E., Hellström Muhli, U., Hedberg, B., Broström, A., Fossum, B., & Karlgren, K. (2016). Patients' experiences of communication and involvement in decision-making about atrial fibrillation treatment in consultations with nurses and physicians. *Scandinavian Journal of Caring Sciences*, 30(3), 535–546. <https://doi.org/10.1111/scs.12276>
- Stenberg, U., Haaland-Øverby, M., Fredriksen, K., Westermann, K. F., & Kvisvik, T. (2016). A scoping review of the literature on benefits and challenges of participating in patient education programs aimed at promoting self-management for people living with chronic illness. *Patient Education and Counseling*, 99(11), 1759–1771. <https://doi.org/10.1016/j.pec.2016.07.027>
- Tsay, S. L., & Hung, L. O. (2004). Empowerment of patients with end-stage renal disease—a randomized controlled trial. *International Journal of Nursing Studies*, 41(1), 59–65. [https://doi.org/10.1016/S0020-7489\(03\)00095-6](https://doi.org/10.1016/S0020-7489(03)00095-6)
- Tucker, K. L., Sheppard, J. P., Stevens, R., Bosworth, H. B., Bove, A., Bray, E. P., Earle, K., George, J., Godwin, M., Green, B. B., Hebert, P., Hobbs, F. D. R., Kantola, I., Kerry, S. M., Leiva, A., Magid, D. J., Mant, J., Margolis, K. L., McKin, B., ... McManus, R. J. (2017). Self-monitoring of blood pressure in hypertension: A systematic review and individual patient data meta-analysis. *PLoS Medicine*, 14(9), e1002389. <https://doi.org/10.1371/journal.pmed.1002389>
- Van de Velde, D., De Zutter, F., Satink, T., Costa, U., Janquart, S., Senn, D., & De Vriendt, P. (2019). Delineating the concept of self-management in chronic conditions: A concept analysis. *BMJ Open*, 9(7), e027775. <https://doi.org/10.1136/bmjopen-2018-027775>
- van Hooff, S. M., Been-Dahmen, J. M. J., Ista, E., van Staa, A., & Boeije, H. R. (2017). A realist review: What do nurse-led self-management interventions achieve for outpatients with a chronic condition? *Journal of Advanced Nursing*, 73(6), 1255–1271. <https://doi.org/10.1111/jan.13189>

- Vifladdt, E. H., Landtblom, A.-M., & Hopen, L. (2010). *Hälsopedagogik för vårdare och brukare i samarbete: en introduktion till bemästrande*. Bilda.
- Weng, L. C., Dai, Y. T., Huang, H. L., & Chiang, Y. J. (2010). Self-efficacy, self-care behaviours and quality of life of kidney transplant recipients. *Journal of Advanced Nursing*, 66(4), 828–838. <https://doi.org/10.1111/j.1365-2648.2009.05243.x>
- Zimmerman, M. A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology*, 23(5), 581–599.

How to cite this article: Petersson, C., Nygårdh, A., & Hedberg, B. (2022). To support self-management for people with long-term conditions – The effect on shared decision-making, empowerment and coping after participating in group-learning sessions. *Nursing Open*, 9, 2444–2453. <https://doi.org/10.1002/nop2.1261>