Central European Journal of Nursing and Midwifery

Cent Eur J Nurs Midw 2025;16(2):2196–2216
doi: 10.15452/CEJNM.2025.16.0010

REVIEW

Empowering educational actions of nurses for patients with long-term health problems: an integrative review

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Received December 3, 2024; May 6, 2025.

Abstract

Aim: The aim of this integrative literature review was to identify and synthetize empowering educational actions (EEA) that can be taken by nurses to support the empowerment of patients with long-term health problems. *Design:* An integrative literature review. *Methods:* The review followed methodology by Whittemore and Knafl. Four databases (PubMed, Web of Science, CINAHL, Scopus) were searched between January 2000 and October 2023 for relevant studies published in English. After complimentary manual searches, the quality of the included studies (n = 9) was assessed independently by two researchers using a tool by Hawker et al. Data were analyzed using inductive content analysis. *Results:* Three main categories of nurses' actions were synthetized: supporting patients' knowledge and skills, supporting patients' well-being, and supporting trust-based relationships and collaboration. *Conclusion:* Empowering patient education (EPE) is essential in supporting patients with long-term health problems to manage their own health. Nurses use varied empowering educational actions as part of EPE. The review's results can be used to increase awareness and understanding of actions nurses can take to support empowerment of patients with long-term health problems as part of patient education both in clinical practice and nursing education.

Keywords: actions / competence, empowerment, long-term health problem / chronic disease, nurse, patient education.

Introduction

Developing patient education that is empowering and comprised of clearly defined actions based on nurses' competence is an essential response to the current and upcoming challenges in healthcare. These challenges include global changes in the health and socio-demographic structure of populations and increasing prevalence of long-term health problems in all age groups (Organisation for Economic Co-operation and Development [OECD], 2023; World Health Organization [WHO], 2023), rapid progress in health technologies and treatment times (OECD, 2023; WHO, 2023), and lack of healthcare resources (OECD, 2022). To meet these challenges, patient education requires further investigation and development. From the perspective of patients, the key issue in the development of patient education is the increasing responsibility required of patients (OECD, 2022), which further emphasizes the importance of empowering patient education (EPE) (Leino-Kilpi et al. 1998, 1999; Virtanen et al., 2007, 2015).

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EPE has many positive outcomes for both patients and organizations (e.g., Gröndahl et al., 2019; Stenberg et al., 2016; Tuominen et al., 2023; Zhao et al., 2017). The role of nurses in EPE is to use their knowledge and skills to perform educational actions that support the process of patient empowerment (Castro et al., 2016). This review provides insights into these actions in the context of the education of patients with long-term health problems. The review also adds to previous research in which the need to further investigate patient education has been recognized (Leino-Kilpi et al., 2020).

Actions can be defined as the fact or process of doing something, typically to achieve an aim (Oxford University Press, 2022). Nursing actions are professional actions necessary to provide care for patients, and they are part of the theoretical basis of nursing (Kim, 2010, Meleis, 2018). For example, in the context of patient education, actions can be seen as a service that facilitates patients' individual health goals (Kim, 2010), as well as a means of supporting patients' self-management and use of knowledge in their own care (Leino-Kilpi et al., 1998; 1999). Action-oriented outcomes in EPE can be defined as the observable result of nursing actions,

i.e., engaging and supporting patients in understanding and managing their health (Meleis, 2018; WHO, 2012). Meleis (2018) stresses that nurse-directed actions must be appropriate and based on patient expectations.

Empowerment as a concept is difficult to define unequivocally (Halvorsen et al., 2020). In this study it was defined as a process and an outcome (Gibson, 1991). As a process, it is seen as active learning by patients which supports growth and control over their own health (Anderson et al., 2000; Funnell & Anderson, 2004; Kuokkanen & Leino-Kilpi, 2000). As an outcome, it includes patients' increased understanding, control, and actions concerning their own health (Anderson, 1996; Leino-Kilpi et al., 1998; 1999). Thus, in EPE it is essential to recognize patients' existing resources, their own preferences, expectations, and objectives (Klemetti et al., 2014; Virtanen et al., 2007, 2015), and by what means their empowerment can be supported by education (Leino-Kilpi et al. 2020).

It is relevant to identify what is done in patient education practice since previous research has shown that challenges exist in the realization of EPE; this can include expectations and knowledge associated with patient education not being fully met (Klemetti et al., 2014); for example, although empowering knowledge can be divided into six categories of biophysical, functional, financial, ethical, social, and experiential (Leino-Kilpi et al., 1998, 1999), education tends to focus mainly on biophysical and functional knowledge (Klemetti et al., 2014). This can be seen in a recent study of patients with diabetic foot ulcers, which found that healthcare professionals' focus in education was mainly on increasing patients' knowledge while patients' lived experience was often unacknowledged. At the same time, patients themselves considered their lived experience to be more important. (Hill et al., 2022). Additionally, despite being widely accepted as an important part of care and education in long-term health problems such as diabetes, the psychosocial aspects of living with the condition, i.e., experiential knowledge, are still inconsistently addressed in practice (Hermanns et al., 2020).

Patients' engagement with their own education supports health management and improves care outcomes (Shubrook et al., 2022). Thus, this review focused on the empowering educational actions (EEA) that can be taken by nurses to support the empowerment of patients with long-term health problems.

Aim

The aim of this integrative literature review was to identify and synthetize empowering educational actions (EEA) that can be taken by nurses to support the empowerment of patients with long-term health problems. The research question was: What EEA do nurses perform in practice as part of EPE with this patient group?

Methods

Design

This integrated review (Hopia et al., 2016; Whittemore & Knafl, 2005) consisted of five stages: problem identification, systematic search of databases and selection of studies, data extraction, quality assessment of the selected studies and data analysis using inductive content analysis, and presentation of the results.

Eligibility criteria

The inclusion criteria were:

- A description of the EEA of nurses used to support adult patients with long-term health problems.
- Empowerment as the theoretical basis of patient education in the study.
- An empirical scientific study.
- Published in English.

Any differences were discussed among the research group until consensus was achieved. Then researchers individually read the full text of the chosen studies. One article was added based on the complimentary manual search, finalizing the number of included articles at nine.

Search strategy

The search was started from the year 2000 since the theory of empowerment was brought into the context of patient education of those with long-term health problems during the 1990s (Funnel et al., 1991; Leino-Kilpi et al., 1998). A systematic literature search was conducted in four databases from January 2000 to October 2023: PubMed, CINAHL, Web of Science, and Scopus. Search terms based on key words were used, which included: actions / competence, empowerment, long-term health problem / chronic disease, nurse, patient education, and empowerment. The search strategy was finalized with the help of the university's information specialist (Table 1). Additionally, a complimentary manual search of references and databases was made to confirm the inclusion of all relevant studies.

Originally the review was aimed at investigating what was known of the competence of nurses in EPE,

but because of the limited number of studies on this topic, the search was adjusted to focus on the educational actions of nurses as an area of competence. However, the search terms of competence and empowerment were retained in the search strategy to ensure a broader perspective on educational actions.

Two researchers (TH and SEE) individually performed the search according to the final search strategy and selected studies for full-text assessment based on the title and abstract.

Study selection inc. PRISMA flow diagram

The selection process is illustrated by a PRISMA flow diagram (Figure 1).

Table 1 Search phrases by databases

PubMed	(‘Nurses’[MeSH] OR ‘Nursing’[MeSH] OR ‘Nursing staff’[MeSH] OR nurs*) AND (‘Patient education as TOPIC’[MeSH] OR ‘patient educ*’ OR ‘health advice*’ OR ‘patient teach*’ OR ‘patient learn*’ OR ‘patient counsel*’ OR ‘patient guid*’ OR ‘patient inform*’ OR ‘Patients’[MeSH] OR patient* AND educ* OR advic* OR teach* OR guid*) AND (competence OR ‘professional competence’ OR ‘clinical competence’ OR ‘nurse competence’ OR ‘mentor competence’ OR skill* OR ability* OR capability* OR capacity* OR knowledge* OR attitude* OR value* OR performance*) AND (‘Chronic disease’[MeSH] OR ‘chronic disease’ OR ‘long term disease’ OR ‘long term health problem’ OR ‘long term condition’ OR ‘long term illness’) AND (empower* OR ‘self-management’ OR activation* OR engagement* OR control* OR enable* OR ‘Power, Psychological’[MeSH]) AND (adult*)
CINAHL	(MH ‘Nurses+’ OR MH ‘Nursing’ OR MH ‘Nursing staff’ OR nurs*) AND (MH ‘Patient education’ OR ‘patient educ*’ OR ‘health advice*’ OR ‘patient teach*’ OR ‘patient learn*’ OR ‘patient counsel*’ OR ‘patient guid*’ OR ‘patient inform*’ OR MH ‘Patients+’ OR patient* AND educ* OR advic* OR teach* OR guid*) AND (competence OR ‘professional competence’ OR ‘clinical competence’ OR ‘nurse competence’ OR ‘mentor competence’ OR skill OR ability OR capability OR capacity OR knowledge OR attitude* OR value* OR performance*) AND (MH ‘chronic disease’ OR ‘long term disease’ OR ‘long term health problem’ OR ‘long term condition’ OR ‘long term illness’) AND (empower* OR ‘self-management’ OR activation* OR engagement* OR control* OR enable* OR ‘Psychological power’)
Web of Science	(Nurses OR Nursing OR ‘Nursing staff’ OR nurs*) AND (‘Patient education’ OR ‘patient educ*’ OR ‘health advice*’ OR ‘patient teach*’ OR ‘patient learn*’ OR ‘patient counsel*’ OR ‘patient guid*’ OR ‘patient inform*’ OR patient* AND educ* OR advic* OR teach* OR guid*) AND (competence OR ‘professional competence’ OR ‘clinical competence’ OR ‘nurse competence’ OR ‘mentor competence’ OR skill OR ability OR capability OR capacity OR knowledge OR attitude* OR value* OR performance*) AND (‘chronic disease’ OR ‘long term disease’ OR ‘long term health problem’ OR ‘long term condition’ OR ‘long term illness’) AND (empower* OR ‘self-management’ OR activation* OR engagement* OR control* OR enable* OR ‘Psychological power’) AND (adult*)
Scopus	(Nursing OR ‘Nursing staff’ OR nurs*) AND (‘patient educ*’ OR ‘health advice*’ OR ‘patient teach*’ OR ‘patient learn*’ OR ‘patient counsel*’ OR ‘patient guid*’ OR ‘patient inform*’ OR patient* AND educ* OR advic* OR teach* OR guid*) AND (competence OR ‘professional competence’ OR ‘clinical competence’ OR ‘nurse competence’ OR ‘mentor competence’ OR skill OR ability OR capability OR capacity OR knowledge OR attitude* OR value* OR performance*) AND (‘chronic disease’ OR ‘long term disease’ OR ‘long term health problem’ OR ‘long term condition’ OR ‘long term illness’) AND (empower* OR ‘self-management’ OR activation* OR engagement* OR control* OR enable* OR ‘Psychological power’) AND (adult*)

Evaluation of quality of articles

The quality of the included studies was assessed using a tool by Hawker et al. (2002), with items rated from very poor (1), poor (2), fair (3), through good (4) with a maximum of 36 points. Two researchers (TH and SEE) assessed quality individually, after which a consensus was achieved via discussion (Table 2). The total average score of the studies was 29.6 out of 36, indicating the overall quality to be relatively good, and all nine studies were accepted for analysis.

Data extraction

Data extraction was conducted by the principal researcher (TH) and another researcher (SEE) reviewed and confirmed the data extraction with a few modifications (Table 3). The data collected were the author(s), year of publication, country, the purpose of the study, participants, data collection methods, methods of data analysis, and the main results. The nine studies included were analyzed using content analysis with an inductive approach

(Graneheim et al., 2017; Lindgren et al., 2020). In this review, content analysis had the following phases: 1) identification of nurses' EEA, 2) condensing and coding of the EEA used by nurses using abstraction, 3) formation of subcategories from codes with the same themes, 4) formation of categories from subcategories with the same themes, and 5) formation of the main categories from categories with the same themes. Three main categories were formed from the final synthesis of the EEA of the nurses (Table 4).

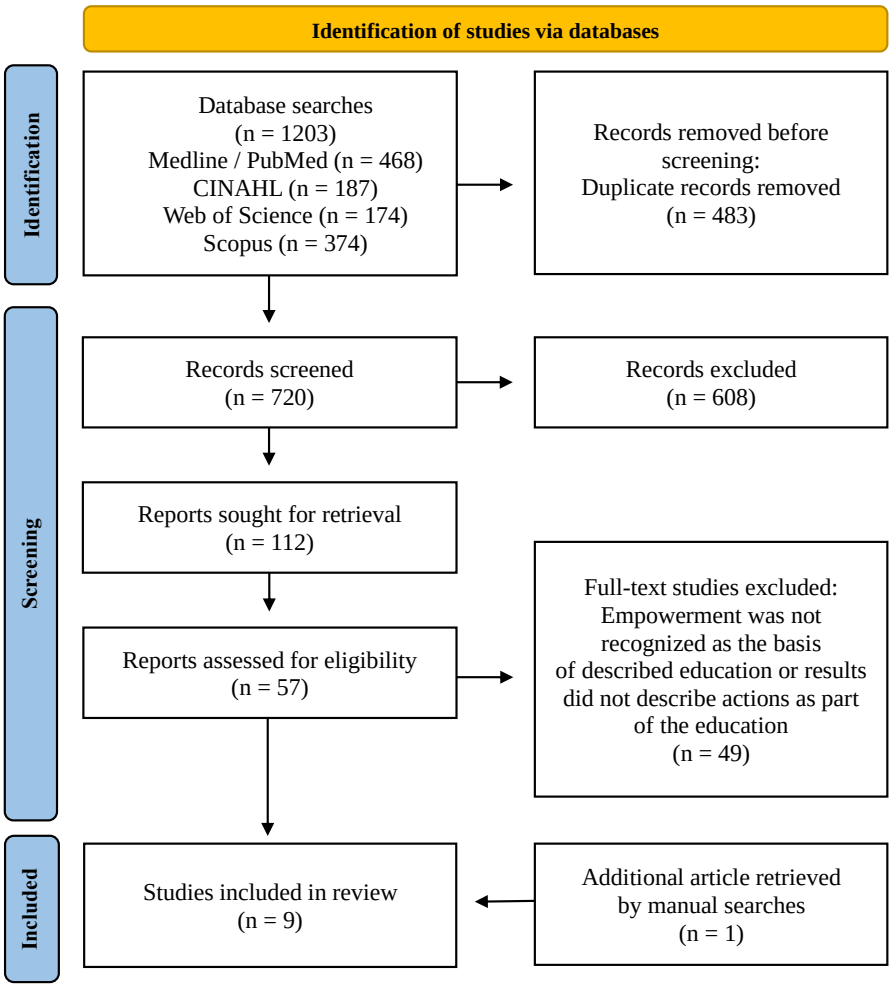

Figure 1 Modified PRISMA flow diagram (Page et al., 2021)

Results

Description of the studies

A total of nine studies (published between 2000 and October 2023) were included in the review. The studies were mostly published in the last decade with the number of studies increasing towards the beginning of the 2020s. They were published in the Netherlands (n = 2), UK (n = 2), US (n = 2), New Zealand (n = 1), Norway (n = 1), and Sweden (n = 1). Studies used the following data collection methods: individual interviews (Bos-Touwen et al., 2015; Macdonald et al., 2008; Sørensen et al., 2020), focus groups and interviews (Been-Dahmen et al., 2018), and surveys (Horsburgh et al., 2010). Additionally, four of the studies used mixed methods of data collection (Davisson & Swanson, 2018; DeJesus et al., 2014; Eldh et al., 2006; Wilson et al., 2006). Data were collected from patients (Been-Dahmen et al., 2018; Davisson & Swanson, 2018; DeJesus et al., 2014; Horsburgh et al., 2010) or nurses (Bos-Touwen et al., 2015; Eldh et al., 2006; Macdonald et al., 2008; Sørensen et al., 2020; Wilson et al., 2006). The patients in the studies had different long-term health problems: kidney transplants (Been-Dahmen et al., 2018), depression (DeJesus et al., 2014), chronic heart failure (CHF) (Eldh et al., 2006), cardiovascular (CV) disease or high risk of CV disease (Wilson et al., 2006), type 1 diabetes mellitus (DM) (Sørensen et al., 2020; Wilson et al., 2006), or Parkinson's disease (Wilson et al., 2006).

Table 2 Quality appraisal: total score of the original studies (based on Hawker et al., 2002)

Study	1. Abstract and title	2. Introduction and aims	3. Method and data	4. Sampling	5. Data analysis	6. Ethics and bias	7. Results	8. Transferability and generalizability	9. Implications and usefulness	Total (36)
Been-Dahmen et al. 2018	4	4	4	4	4	3	4	3	4	34
Bos-Touwen et al. 2015	4	4	3	3	4	3	3	3	4	31
Davisson & Swanson 2018	2	3	4	3	4	1	3	3	3	26
DeJesus et al. 2014	4	3	4	4	2	1	4	3	4	29
Eldh et al. 2006	4	3	4	4	4	4	4	4	3	34
Horsburgh et al. 2010	4	3	4	2	3	2	4	3	2	27
Macdonald et al. 2008	4	3	3	2	4	3	4	2	4	29
Sørensen et al. 2020	4	4	3	2	4	3	4	2	4	30
Wilson et al. 2006	4	4	3	2	2	2	3	2	4	26
Average scores	34.0	31.0	32.0	26.0	31.0	22.0	33.0	25.0	32.0	29.6

Table 3 Original studies (n = 9), data extraction (Part 1)

Author(s), Country, Year	The purpose of the study	Participants	Data collection methods	Data analysis	Results
Been-Dahmen et al. Netherlands 2018	To gain insight on how recipients perceived self-management challenges after kidney transplantation and what kind of support is needed.	kidney transplant recipients (n = 41)	qualitative study using focus groups (n = 32) and individual interviews (n = 9)	directed content analysis (DCA)	Education often lacked tailoring for individual needs and some participants felt that they received conflicting or vague advice. Nurses supported self-management, for example by giving instructions about recognizing bodily signs and possible problems, as well as giving positive feedback. Participants perceived some of the nurses to be empathetic, reliable, and good listeners and continuity of care contributed to a relationship of trust. However, nurses mostly overlooked recipients' emotional and social support needs.

DCA – directed content analysis

Table 3 Original studies (n = 9), data extraction (Part 2)

Author(s), Country, Year	The purpose of the study	Participants	Data collection methods	Data analysis	Results
Bos-Touwen et al. Netherlands 2015	To explore nurses' assessment of self-management potential of patients with long term health problems and clinical reasoning in tailoring individual self-management support.	nurses working with adults with long term health problems, (n = 15)	qualitative grounded theory study using semistructured interviews	Qualitative Analysis Guide of Leuven (QUAGOL)	Nurses possessed different perceptions on the definitions and associations of self-management. Responsibility shift from provider to patient was frequently mentioned. The aim of support varied from increasing quality of life to enhancing patients' responsibility in caring for their disease. Some nurses could not come up with a clear aim for self-management support. Substantial differences in patient assessments and how care was individualized. Most nurses assessed patients to have become either 'good' or 'bad' self-managers.
Davisson & Swanson US 2018	To evaluate the nurse led 'Living Well' by obtaining patient perspectives and researcher observations from the diabetes, heart failure, and COPD classes.	english-speaking elderly adults (over 65 years) with at least one long term health problem condition (n = 6)	qualitative descriptive study using observations and interviews with the Chronic Care Model (CCM) as the guiding framework	thematic analysis; both within- and across-coding was used	All participants saw CCM nurse coordinators as knowledgeable and forming supportive relationships with them as essential for self-management support. Participants used language that related to strong appreciation for the nurse coordinators. Nurses were seen to provide advocacy, knowledge, expertise and with their caring behaviors, persistence and continuous encouragement help participants through tough times. Nurse coordinators knew provider-centered methods of education delivery would not work. The coordinators worked to individualize the plans for care with each patient and shared material to help those participants with limited resources and organized group meetings to support patients.

QUAGOL – Qualitative Analysis Guide of Leuven; COPD – Chronic Obstructive Pulmonary Disease; CCM – Chronic Care Model

Table 3 Original studies (n = 9), data extraction (Part 3)

Author(s), Country, Year	The purpose of the study	Participants	Data collection methods	Data analysis	Results
DeJesus et al. US 2014	To evaluate patient-perceived satisfaction with care management and patient opinions on the effectiveness of care management in promoting self-management.	adults (18 or older) with depression (n = 125)	qualitative and quantitative survey, CCM for depression	qualitative responses coded with methods of content analysis by two independent analysts and descriptive statistics	Satisfied with depression care management, and felt that care management improved their treatment above and beyond other aspects of their depression treatment, increased their understanding of depression self-management, and increased the frequency of self-management goal setting. Patients valued emotional, motivational, and relational aspects of the care manager relationship, viewed care managers as caring and supportive, helpful in creating accountability for patients, and knowledgeable in depression care. Care managers empowered patients to take on an active role in depression self-management. Met expectations: to motivate patients, engage them in depression self-management, facilitate collaborative goal setting (extremely important), provide accountability and support, provide access to resources, and prevent patients from 'falling through the cracks'.
Eldh et al. Sweden 2006	To explore the phenomena of patient participation and non-participation as shown in patient visits to a nurse-led clinic for chronic heart failure (CHF) and experienced by the patients and nurses.	adults (53 to 79 years) with CHF (n = 3) and nurse specialists (n = 2) in nurse-led outpatient clinic	qualitative study with data triangulation of field notes from participatory observations and texts from narrative interviews	analysis according to the phenomenological hermeneutic tradition and interpreting structure by naive reading, structural analysis and creating and understanding of the interpreted whole	Nurses dominated the patient visits giving information on disease, treatment, and plans for patients. Patient questions were encouraged, and additional information was based on the questions. The information that was extent was standardized, as were the physical check-ups. Mainly followed the initiatives of the nurses.

CCM – Chronic Care Model; CHF – chronic heart failure

Table 3 Original studies (n = 9), data extraction (Part 4)

Author(s), Country, Year	The purpose of the study	Participants	Data collection methods	Data analysis	Results
Horsburgh et al. New Zealand 2010	To assess the feasibility of undertaking a substantive long-term trial to gauge the effectiveness of primary care nurses using the Flinders Program™ to improve health outcomes for New Zealand populations.	adults (25 to 90 years) with long-term health conditions (n = 57), of which 27 in intervention and 30 in control group	quantitative study using Partners in Health (PIH) scale, Patient Assessment of Chronic Illness Care (PACIC) scale and assessment of self-efficacy on baseline and at six months	statistical analysis	PACIC score was low at baseline and improved significantly at six months. At baseline shared goal setting (mean 1.30 out of 5, SD = 1.34) and follow-up (mean 0.93 out of 5, SD = 1.18) were low and there was significant improvement to mean levels of 2.40 and 2.29 respectively, at six months. Support in problem solving was slightly higher at baseline (mean 2.16 of 5, SD = 1.25), but also improved significantly to mean level of 3.13 (SD = 1.32). The Flinders program was efficient; however, none of the nurses used it in their usual work due to lack of confidence, high workloads, and time restraints.
Macdonald et al. UK 2008	To explore practice nurse involvement in facilitation of self-management for long-term conditions.	general practice nurses (n = 25)	qualitative study using semi-structured face-to-face interviews that were audio-taped, and transcribed verbatim	Analysis using grounded theory approach alongside discursive analysis. Analysis was informed by trajectory model and personal construct theories.	Nurses categorized patients usually in the first consultation on how they thought patient was going to cope with their health problem and used these assumptions to make encounters more predictable. These judgements about patients' activity and 'good' or 'bad' self-manager status affected how nurses worked. Nurses demonstrated appreciation for the importance of understanding patient's own perspective. Nurses were more confident about relinquishing control if they considered patients well-informed and concordant. There were examples of nurses persisting in giving information even when patients made it clear that this would not have any effect on the targeted behavior. Nurses tried to enable patients to self-manage based on a combination of their personal constructs of patients, their understanding of the stage of the patients' illness career, and the impact of the biographical and social dimensions of chronic illness. Nurses appeared more confident in dealing with patients in the early stages of the illness trajectory, particularly around the time of diagnosis.

PIH – Partners in Health; PACIC – Patient Assessment of Chronic Illness Care; SD – standard deviation

Table 3 Original studies (n = 9), data extraction (Part 5)

Author(s), Country, Year	The purpose of the study	Participants	Data collection methods	Data analysis	Results
					Nurses seemed to lack means to encourage effective self-care beyond strategies developed on the basis of personal experience and reliance on intuitive ways of working, although they demonstrated understanding of the challenges their patients faced, they found it difficult to articulate strategies to use beyond these 'common-sense' methods and relied on repeated information giving, improvised role modelling and patient education. Patient education was supported by giving information and using visual modes of delivery.
Sørensen et al. Norway 2020	To explore how patients with diabetes and multimorbidity experience self-management support by general practitioners (GPs), nurses and medical secretaries (cHCP = collaborating health care professionals) in Norwegian general practice.	adults with type 1 diabetes mellitus (T1DM) or type 2 diabetes mellitus (T2DM) with one or more additional long-term condition (n = 11)	Qualitative study using semi-structured interviews. Interviews were audiotaped, transcribed verbatim.	thematic analysis using Braun and Clarke's methodology	Identified four themes: - cHCPs provide diabetes-specific competence and personalized care: questions were answered, extended consultation time led to the establishment of personal relationships, diabetes care was more structured and comprehensive. - A desire to be heard: cHCPs were attentive, listened, and understood patients. cHCPs provided relaxed and open opportunity for two-way dialogue in which questions and concerns were resolved. - Perceived inadequate shared decision-making in T2DM when patients wished for more information about how their diabetes or cardiovascular disease could have been prevented at an earlier stage. cHCPs also failed to support patients in improving their self-management of diabetes to avoid complications. cHCPs kept the main responsibility for patients' treatment. Some attributed low sense of autonomy to a lack of knowledge.

T1DM – type 1 diabetes mellitus; T2DM – type 2 diabetes mellitus; GP – general practitioner; cHCP – collaborating health care professionals

Table 3 Original studies (n = 9), data extraction (Part 6)

Author(s), Country, Year	The purpose of the study	Participants	Data collection methods	Data analysis	Results
					- Patient autonomy in T1DM: expected cHCPs to be up to date acting as professionals (medical advances to support autonomy). Extended consultation time with cHCPs gave space to learn about the uniqueness of their diabetes and their inherent capabilities to manage their disease. In T1DM patients' opinion, they received better diabetes care in general practice, due to it being more holistic, long-term, and personal. cHCPs' had a complementary role in supporting patients' emotional and psychological well-being. Most T2DM patients expressed little or no involvement in decision making in treatment or setting lifestyle goals.
Wilson et al. UK 2006	To explore patient expertise by both patients and health professionals and analyze how patient expertise is promoted and enabled through the self-management process to uncover the mechanisms that enhance or impede the development of patient expertise.	Focus groups: Patient groups (n = 30, 7 with cardiac disease, 6 diabetes, 9 Parkinson's and 8 no long-term condition specified in the study). Nurses (n = 73), physiotherapists (n = 39). In addition: 1 consultant physician, 1 GP, 1 Expert patient Program lay tutor. Semi-structured interviews (n = 36, 22 adults with a long-term physical condition, 3 GPs, 2 physiotherapists, 3 general practice nurses, 2 nurse specialists and 2 medical consultants specializing in a long-term condition and 2 Expert Patient Program lay tutor).	qualitative study using focus group and individual interviews and observation	Analysis using grounded theory approach was utilized with two concurrent data strands. Data from professionals and patients were analyzed separately in order to facilitate the constant comparative method.	Nurses were found to be most anxious about expert patients when compared to other professionals, linked with a lack of professional confidence and unfounded fears regarding litigation – nurse specialists provided an exception to this. Nurses were most able to meet the emotional needs of patients, (unlike nurse specialists, they did not regard this as a skill). With the exception of nurse specialists, the majority of nurses appeared limited in appropriately facilitating self-management – suggesting an ongoing nursing culture of patient as passive, an over-emphasis on empirical knowledge, and a feeling of vulnerability on the nurses' part towards expert patients. Rhetoric rather than reality of autonomous nursing roles within the chronic disease management agenda; nurses' independence remains limited in practice.

T1DM – type 1 diabetes mellitus; T2DM – type 2 diabetes mellitus; cHCP – collaborating health care professionals

Empowering educational actions

The EEA used by nurses were classified into the following three main categories:

1) Actions supporting patients' knowledge and skills.
2) Actions supporting patients' well-being.
3) Actions supporting patients' trust-based relationship and collaboration with nurses.

These three main categories were synthetized from eight categories (Table 5).

Actions supporting patients' knowledge and skills

Categories consisted of supporting patients with up-to-date expertise and varied resources for patient education.

Supporting patients with up-to-date expertise meant that nurses themselves must have up-to-date knowledge (DeJesus et al., 2014; Sørensen et al., 2020), allowing them to be both knowledgeable (DeJesus et al., 2014) and competent in supporting the patient in the specific areas important to them (Sørensen et al., 2020).

Supporting patients with varied resources in patient education meant nurses used various support resources – providing materials (Davisson & Swanson, 2018), access to resources (DeJesus et al., 2014) and utilizing visual modes (Macdonald et al., 2008). Providing access to resources included utilizing multiprofessional collaboration by recruiting specialist providers to support self-management (Davisson & Swanson, 2018) and referring patients to other professionals (Macdonald et al., 2008) or specialized services, e.g., to mental health services, when necessary (Been-Dahmen et al., 2018). Actions enabling varied support resources also considered the patients' individuality by providing time for patients (Sørensen et al., 2020; Wilson et al., 2006), tailoring information individually (Macdonald et al. 2008), basing self-management approaches on patient's needs and preferences (Bos-Touwen et al., 2015), and helping them to find new routines in their daily life (Been-Dahmen et al., 2018).

Actions supporting patients' well-being

This category consisted of supporting the psychological, social, and emotional well-being of the patients.

Supporting psychological well-being meant recognizing the psychological impact of the health problem (Been-Dahmen et al., 2018) and being ready to meet the psychological needs of patients (Wilson et al., 2006). It also included being skilled in psychological support (Wilson et al., 2006), showing sincere interest in psychological well-being (Sørensen et al., 2020), supporting positive thinking (DeJesus et al., 2014) and positive cognitive restructuring (DeJesus et al., 2014; Macdonald et al., 2008), and providing continuous positive feedback (Davisson & Swanson, 2018; Macdonald et al., 2008; Sørensen et al., 2020).

Supporting social well-being meant enabling patients to rely on their own social network (DeJesus et al., 2014) and supporting the role of family and friends in the care of patients by providing educational material also to family and friends (Davisson & Swanson, 2018) and supporting the valuable role of family members, friends, or carers in patients' self-management (Been-Dahmen et al., 2018; Davisson & Swanson, 2018; Macdonald et al., 2008).

Supporting emotional well-being meant enabling discussions of emotional issues by forming proactive questions about emotions (Been-Dahmen et al., 2018) and offering opportunities to discuss emotional issues (Been-Dahmen et al., 2018). In addition, these actions included the encouragement of patients to express their feelings by sharing information related to frequently occurring emotions (Been-Dahmen et al., 2018) and teaching patients to express their feelings (DeJesus et al., 2014).

Actions supporting trust-based relationships and collaboration with nurses

Actions in this main category supported trust-based relationships and collaboration between patients and nurses and consisted of engaging in collaboration with patient-centered goal-setting, facilitating trustworthy relationships, and respecting patients as individuals.

Engaging in collaboration with patient-centered goal setting meant enabling collaborative goal setting (Horsburgh et al., 2010) and supporting realistic goals for patients (DeJesus et al., 2014; Macdonald et al., 2008). In addition, nurses engaged patients' in self-management (DeJesus et al., 2014), relinquished control to the patient (Bos-Touwen et al., 2015), supported patient's awareness of their own mastery (Bos-Touwen et al., 2015; Sørensen et al., 2020; Wilson et al., 2006), gave feedback on patient expertise (Been-Dahmen et al., 2018), and supported patient attendance in care-management (DeJesus et al., 2014) and the active role of patients in their own care (DeJesus et al., 2014). Engaging in collaboration also included supporting continuity of care by providing follow-up support (Horsburgh et al., 2010), supporting care planning (Horsburgh et al., 2010) and continuity in relationships with patients to ensure more comprehensive care (Been-Dahmen et al., 2018; Sørensen et al., 2020), and providing problem solving (Horsburgh et al., 2010).

Table 4 Example of synthesis of nurses' EEA

Code	Sub-category	Category	Main category
Being knowledgeable	Having up-to-date knowledge	Supporting patient with up-to-date expertise	Actions to support patients' knowledge and skills
Being up-to-date			
Having specific competences	Having relevant expertise		
Having relevant expertise			
Providing materials	Enabling varied support resources	Supporting patient with varied resources	
Providing access to resources			
Utilizing visual modes			
Recruiting specialist providers to support self-management	Utilizing multi-professionalism in supporting self-management		
Referring patients to other professionals			
Referral to mental health services when needed			
Providing time for patients	Providing varied resources individually		
Tailoring information individually			
Basing self-management approach on patient's needs and preferences			
Helping to find new routines to daily life			

Table 5 Analysis framework: EEA of nurses for patients with long-term health problems (Part 1)

Code	Sub-category	Category	Main category
Being knowledgeable	Having up-to-date knowledge	Supporting patient with up-to-date expertise	Actions to support patients' knowledge and skills
Being up-to-date			
Having specific competences	Having relevant expertise		
Being up-to-date			
Having relevant expertise			
Providing materials	Enabling varied support resources	Supporting patient with varied resources	
Providing access to resources			
Utilizing visual modes			
Recruiting specialist providers to support self-management	Utilizing multi-professionalism in supporting self-management		
Referring patients to other professionals			
Referral to mental health services when needed			
Providing time for patients	Providing varied resources individually		
Tailoring information individually			
Basing self-management approach on patient's needs and preferences			
Helping to find new routines to daily life			
Recognizing psychological impact	Recognizing the psychological impact of the health-problem	Supporting patients' psychological well-being	Actions to support patients' well-being
Readiness to meet the psychological needs of patients			

Table 5 Analysis framework: EEA of nurses for patients with long-term health problems (Part 2)

Code	Sub-category	Category	Main category
Being skilled in psychological support	Showing skill and interest in psychological support.		
Showing sincere interest in psychological well-being			
Supporting patients to think positively	Supporting positive thinking		
Supporting positive cognitive restructuring			
Giving continuous positive feedback			
Enabling patients to rely on their own social network	Supporting patient's social network	Supporting patient's social well-being	
Providing educational material for family and friends	Supporting role of family and friends in patient's care		
Supporting family members', friends' or carers' valuable role in patients' self-management			
Making proactive questions about emotions	Enabling discussions of emotional issues	Supporting patient's emotional well-being	
Offering opportunities to discuss emotional issues			
Sharing information related of frequently occurring emotions	Encouraging expression of feelings		
Teaching patient to express feelings			
Enabling collaborative goal setting	Supporting realistic goal setting in co-operation	Engaging in collaboration, enabled patient-centered goal setting	Actions to support patients' trust-based relationship and collaboration
Supporting realistic goals for patients			
Engaging in self-management	Supporting patient engagement		
Relinquishing control to the patient			

Table 5 Analysis framework: EEA of nurses for patients with long-term health problems (Part 3)

Code	Sub-category	Category	Main category
Supporting patients' awareness of their own mastery			
Giving feedback on patient expertise			
Supporting patient's attendance in care-management			
Supporting active role			
Providing follow-up support	Supporting continuity of care		
Supporting care planning			
Supporting continuity in relationship to create more comprehensive care			
Providing problem solving			
Enabling patient-centered care	Facilitating patient-centeredness		
Seeing patients as central and responsible			
Being friendly	Being approachable and trustworthy	Facilitating relationship of trust	
Being empathetic			
Being reliable			
Facilitating asking of questions			
Supportive through tough times			
Being involved and compassionate			

Table 5 Analysis framework: EEA of nurses for patients with long-term health problems (Part 4)

Code	Sub-category	Category	Main category
Maintaining relationships in care management			
Creating a relaxed and open atmosphere for discussion	Creating open atmosphere based on mutual trust		
Building a strong relationship and mutual trust. Patient was more comfortable in sharing personal information			
Listening to patients			
Being attentive			
Seeing patient as an individual person with DM	Seeing and respecting patient as a unique individual	Respecting patients as individuals	
Respecting patient's unique wishes, needs and decisions			
Understanding patient's own perspective			
Enabling discussion of personal circumstances	Supporting the sharing of personal experiences		
Asking proactively about personal experiences			
Listening to patient's personal story	Acknowledging patient's personal experiences		
Acknowledging patient's lived experience			

Finally, nurses' actions included facilitating patient-centeredness by enabling patient-centered care (Horsburgh et al., 2010) and regarding the patient as central and responsible for their own care (Bos-Touwen et al., 2015).

Facilitating relationships of trust consisted of several approaches, including: being approachable, being trustworthy and friendly (Sørensen et al., 2020), being empathetic (Been-Dahmen et al., 2018) and reliable with patients (Been-Dahmen et al., 2018; DeJesus et al., 2014), facilitating the asking of questions (Been-Dahmen et al., 2018; Eldh et al., 2006), giving support through difficult times (Davisson & Swanson, 2018), being involved and compassionate (Bos-Touwen et al., 2015), and maintaining relationships with care management (DeJesus et al., 2014). Additionally, it included creating an open atmosphere based on mutual trust by engendering a relaxed atmosphere for discussion (Sørensen et al., 2020), building a strong relationship and mutual trust (which allowed patients to be more comfortable with sharing personal information) (Bos-Touwen et al., 2015), listening to patients (Been-Dahmen et al., 2018; Macdonald et al., 2008; Sørensen et al., 2020), and being attentive (Sørensen et al., 2020).

Respecting patient as individuals meant seeing and respecting patients as unique individuals (Sørensen et al., 2020), respecting their unique wishes, needs and decisions (Bos-Touwen et al., 2015; Eldh et al., 2006), and understanding the patient's own perspective (Macdonald et al., 2008). Additionally, it included support when sharing personal experiences by enabling discussions on personal circumstances, asking proactively about personal experiences and listening to patients' personal stories (Been-Dahmen et al., 2018), and also acknowledging the lived experience of patients (Bos-Touwen et al., 2015).

Discussion

The aim of this integrative literature review was to identify and synthetize the empowering educational actions (EEA) that nurses can take to support patients with long-term health problems. Patients with long-term health problems were selected for this review since there is a gap in knowledge regarding the educational actions nurses are employing in practice as part of empowering patient education of this target group. Results from this review provide an understanding of what nurses are currently doing in practice and what kinds of EEA are used as part of EPE. This knowledge can be used to further develop EPE, to enhance nurses' competence to support patients' empowerment, and to recognize the implications for further research.

Results show that nurses take various actions to support patient empowerment as part of EPE. These actions are related to supporting patient knowledge and skills, their overall wellbeing, and respecting patients as unique individuals. Three main categories identified in this review were actions supporting patient knowledge and skills, actions supporting patient well-being, and actions supporting trust-based relationships and collaboration.

Supporting patient knowledge and skills means that nurses must first of all be knowledgeable and possess expertise themselves (DeJesus et al., 2014). The review indicated that to support patient knowledge and skills, nurses are required beforehand to take actions to ensure that their own knowledge and skills are up to date. In addition, it is important that nurses possess competence specifically in the areas important to the patients in their care, e.g., when working with people with diabetes, nurses should possess up-to-date competences specifically in the areas of diabetes care (Sørensen et al., 2020). Possessing specific and up-to-date competence is also important in long-term health problems, where technological advances and changes in care are rapid (Sørensen et al., 2020). Additionally, it is important that nurses take actions to maintain, develop and extend their competence, since they are then better able to identify and respond to the unmet knowledge needs of patients (Klemetti et al., 2014; Leino-Kilpi et al., 2020; Sigurdardottir et al., 2015).

Our review indicated that supporting patients with a varied number of resources (Davisson & Swanson, 2018), including multiprofessional collaboration (Davisson & Swanson, 2018), is an important part of supporting the empowerment of patients with long-term health problems. Additionally, it is important to note that actions related to these varied resources go beyond the educational materials and their various formats themselves. They also encompass the time allocated for interactions with patients (Sørensen et al., 2020; Wilson et al., 2006), as well as support for patients in managing their own time – for example, by helping them establish new daily routines that promote wellbeing (Been-Dahmen et al., 2018).

As this review highlights, nursing actions in support of patients' psychological and emotional well-being are important in long-term health problems. This is shown for example in the connection between positive thinking and positive outcomes of patients with diabetes (Alexandre et al., 2021; Luo et al., 2021), and in the value to patients of focusing

on the psychosocial aspects of living with the condition in everyday life (Hermanns et al., 2020).

Although emotions are a component of overall psychological wellbeing, this review considered them separately to highlight the importance of emotions (and discussing emotions) in the context of nurses' educational actions that support patient empowerment.

Emotions are closely linked to patients' lived experiences (Bos-Touwen et al., 2015) and should be more effectively acknowledged in educational practices (Hill et al., 2022). Emotions have also been shown to be connected to improved perception by patients of their own health after discharge from care (Zabalegui et al., 2020).

As this review shows, it is also important that nurses take action to support patients' social networks (DeJesus et al., 2014) and the participation of family and friends (Davisson & Swanson, 2018) since this is an important part of the support for patient empowerment. In future research, it is also important to consider how culture may influence a patient's social and emotional well-being (Hines-Martin et al., 2019; WHO, 2019) through emphasizing cultural sensitivity when tailoring support (Been-Dahmen et al., 2018).

Trust-based relationships between patients and healthcare professionals and a respectful atmosphere are recognized as a requirement for patient empowerment throughout the patient education process (Castro et al., 2016; Halvorsen et al., 2020; Virtanen et al., 2007). Respect between patients and nurses has also been recognized as fundamental in care relationships (Carlström et al., 2021). This study further underlines the results of previous studies (Koskenniemi et al., 2019) indicating that nurses should aim towards strengthening mutual respect and trust through their own actions. The results highlight the development of patient-nurse relationships based on respect. Respect for a patient is strengthened when nurses are interested in the patient's views, encourage positive thinking, and support the patient's individual capacities; these aspects emerged as key components of educational empowering actions (DeJesus et al.,2014; Sørensen et al., 2020) and were also reported by Koskenniemi et al. (2018). The importance of nurses' EEA is in underlining the patient's unique individuality, which also strengthens respect in the relationship. These aspects have been recognized in recent research showing that patients are often defined by their illness, which can lead to feelings of diminished self-worth (Jerpseth et al., 2021).

The review findings confirm earlier research on what patients expect in terms of support for becoming empowered – particularly being supported by nurses in developing knowledge and skills (Klemetti et al., 2014). In addition, the literature emphasizes the importance of nurses promoting patients' overall well-being (Been-Dahmen et al., 2018; DeJesus et al., 2014), building trust-based relationships and enabling cooperation (Been-Dahmen et al., 2018; Eldh et al., 2006), and of taking actions in support of education to empower patients (Klemetti et al., 2018; Virtanen et al., 2007, 2015).

While these actions were preliminarily identified in this review, more research is needed to improve our understanding of the nature of these actions – for example, what is required to develop and realize these actions as part of patient education in practice, what the outcomes of these actions might be, and if and how they relate to each other. Thus, more research is required on nurse EEA in the future.

Limitation of study

The literature review has several strengths, particularly in its search strategy and content analysis, although some limitations should be acknowledged. The search strategy, developed with the support of a library information specialist, helped to maximize coverage and strengthen the credibility of the search process. As a result, key studies were successfully identified. The nine studies selected, originating from six different countries, provide a broad perspective on the educational actions nurses use to support patient empowerment. The findings offer insight into specific actions taken by nurses as part of empowering education and align with earlier research (Atay et al., 2020; Klemetti et al., 2014, 2018; Virtanen et al., 2007, 2015). A thoroughly documented content analysis enhanced the reliability of the review (Graneheim & Lundman, 2004; Graneheim et al., 2017; Lindgren et al., 2020), and the final consensus on the findings was reached through discussions within the research group.

The limitations of the review are primarily related to the limited number of studies available on nurses' competence in educational practices of empowerment, which made it necessary to adjust the focus of the review to the educational empowering actions (EEA) of nurses instead. In addition, the nine studies included varied considerably in their data collection and analysis methods, as well as in sample sizes, which may have weakened the overall comparability of the findings.

The study recommends further analysis and evaluation of actions that support patient empowerment, using varied perspectives to enhance both patient empowerment and the development of educational practices of empowerment. The following areas are suggested for future research:

1) A broader investigation of the educational actions nurses can take to support patient empowerment, with the aim of making EPE more patient-centered – for example, by evaluating the effectiveness of individualized approaches.
2) An in-depth examination of the outcomes of nurses' educational empowering actions (EEA) to better understand their impact and inform the ongoing development of nursing practice and EPE.
3) An examination of nurses' competence in relation to educational empowering actions (EEA) as a basis for developing more effective nursing support for patient empowerment.

Conclusion

This literature review provided insight into the varied educational actions nurses can use to support empowerment of patients with long-term health problems. In the context of EPE these results add an understanding of what actions nurses are taking and can take to support patients' knowledge and skills, overall well-being, and trust-based relationships and collaboration.

The results can be used in clinical practice to increase awareness and understanding of organizations and nurses regarding actions that can be used to support patient empowerment. They can also be used to develop nursing education to include actions that empower patients and thus strengthen nurses' competence in this area. More research is needed to expand these findings and increase our knowledge of EPE.

Ethical aspects and conflict of interest

Ethical approval was not necessary for this literature review. The authors have declared no conflict of interest.

Funding

This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

Author contributions

Conception and design (TH, HV, HLK), data analysis and interpretation (TH, HV, SE), manuscript draft (TH), critical revision of the manuscript (TH, SE, HLK, HV), final approval of the manuscript (TH).

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