Nurses' views on patient self-management: a qualitative study

Janet M.J. Been-Dahmen, Jolanda Dwarswaard,
Johanna M.W. Hazes, AnneLoes van Staa & Erwin Ista

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ABSTRACT

Aims

To unravel outpatient nurses' views on the role of people with chronic conditions in self-management, nurses' own support role, and to establish how these views relate to nurse-led self-management interventions.

Background

Providing self-management support is a core task of nurses in outpatient chronic care. However, the concept of self-management is interpreted in different ways and little is known about nurses' views on patients' role in self-management and nurses' own support role.

Design

Qualitative design.

Methods

Individual semi-structured interviews were held in 2012-2013 with outpatient nurses at a university medical hospital in the Netherlands. After transcription, data-driven codes were assigned and key elements of views and experiences were discussed within the research team. Finally, insights were merged to construct and characterise types.

Results

Twenty-seven nurses were interviewed. The analysis identified three divergent views on self-management support: adhering to a medical regimen; monitoring symptoms; and integrating illness into daily life. These views differ with respect to the patient's role in self-management, the support role of the nurse and the focus of activities, ranging from biomedical to biopsychosocial. The first two were mainly medically oriented. Nurses applied interventions consistent with their individual views on self-management.

Conclusion

Nurses had distinct perceptions about self-management and their own role in self-management support. Social and emotional tasks of living with a chronic condition were, however, overlooked. Nurses seem to lack sufficient training and practical interventions to provide self-management support that meets the integral needs of patients with a chronic condition.

Why is this research needed?

- Self-management support is a core element of outpatient nursing care for patients with a chronic condition.
- Although dissimilar concepts of self-management are provided in literature, views of outpatient nurses on patients' core tasks in self-management have not been extensively studied yet.

What are the key findings?

- Nurses' focus in providing self-management support is usually medically oriented and tends to overlook psychosocial challenges patients face in chronic illness.
- Nurses apply interventions that are consistent with their ideas about patients' self-management tasks and the patient and nurse's role in self-management and self-management support.
- Nurses tend to apply interventions that do not activate patients.

How should the findings be used to influence policy/ practice/ research/ education?

- Outpatient nurses' should be encouraged to employ a holistic view on patients' needs in providing self-management support.
- Research should focus on testing nurse-led self-management interventions to determine which approaches are feasible and effective.
- Training and co-creation could give nurses insight into their personal views on self-management. Clinical nursing leaders and expert patients could play an important role in challenging nurses' attitudes.

INTRODUCTION

Hospital care was historically designed to address acute health problems according to the biomedical model. This model does not correspond, however, with the needs of the growing population of patients struggling with the physical, psychological and social demands of living with a chronic condition (Wagner et al. 2001). A shift from an acute care model to a chronic care model is needed to close the gap between supply and demand of these health services (Alt & Schatell 2008, Holman & Lorig 2000, WHO 2002). Through its biopsychosocial focus, the chronic care model recognises the importance of the social context and the complementary system devised by society (Engel 1977). Self-management is seen as a critical component to achieve the shift to a chronic care model (Barlow et al. 2002). However, little is known about nurses' views on providing self-management support (SMS) to people with chronic conditions.

Background

Although the term self-management is commonly used in the literature, no generally accepted definition exists (Jones et al. 2011, Udlis 2011). It is often reduced to compliance with a medical regimen (Udlis 2011). However, broader perspectives that focus on more than just the medical aspects of living with a chronic condition are in circulation (Coleman & Newton 2005, Lorig & Holman 2003, Singh 2005, Udlis 2011). In this study, the broad definition of Barlow et al. was adopted: *'the ability to manage one or more chronic conditions (e.g. symptoms, treatment, physical and psychosocial consequences, and lifestyle changes) and to integrate them in day-to-day life with the aim of achieving optimal quality of life'* (Barlow 2001, p. 547, Barlow et al. 2002, p. 178). This definition was inspired by the theory of Corbin and Strauss (1988), which proposes there are three patient-related types of 'work' involved in living with a chronic condition: illness-related work, everyday life work and biographical work. Work in this context is defined as *'a set of tasks performed by an individual or a couple, alone or in conjunction with others, to carry out a plan of action designed to manage one or more aspects of the illness and the lives of patients and their partners'*(Corbin & Strauss 1988, p. 9).

Given the demands self-management places on people with chronic conditions, they will need support from healthcare professionals (Lorig & Holman, 2003). A qualitative study among healthcare professionals in 13 European countries and a review report including 172 studies showed that this is often provided by nurses (Elissen et al. 2013, Singh 2005). Many practical self-management interventions have been developed to guide nurses in the shift to chronic care, such as motivational interviewing techniques (Efraimsson et al. 2012), action plans (Turnock et al. 2005), educational programs (Otsu & Moriyama 2011, Coster & Norman, 2009), telemonitoring (Trappenburg et al. 2008), and coping interventions (Akyil & Ergüney 2013). Several systematic reviews aimed to gain

insight in the effectiveness of self-management tools and interventions (Monninkhof et al. 2003, Warsi et al. 2004, Taylor et al. 2005). However, these systematic reviews often fail to provide solid evidence to draw conclusions and guide intervention development in daily practice (Coster & Norman 2009). Despite the availability of self-management tools, nurses and other healthcare professionals have difficulty in operationalizing SMS in daily work routines (Elissen et al. 2013). The chronic care model expects nurses to form a partnership with their patients (Bodenheimer et al. 2002, Holman & Lorig 2000). However, it is not unusual for nurses to be troubled by expert patients, as nurses themselves are accustomed to play the expert role (Thorne et al. 2000, Wilson et al. 2006). Attitudes such as these could affect successful implementation of interventions and other changes in daily healthcare practices (Grol & Grimshaw 2003). The views of outpatient nurses on roles in self-management have not been extensively studied. Understanding of these views can provide input for improvement of the current nurse-led self-management support in outpatient clinics of hospitals.

THE STUDY

Aim

This study aims to unravel outpatient nurses' views on the role of people with chronic conditions in self-management, nurses' own support role, and to establish how their views relate to self-management interventions applied by nurses.

Design

To gather in-depth information, we applied a qualitative design using semi-structured interviews with nurses working with outpatients. This study was designed as the first step of an intervention mapping process (Bartholomew et al. 1998) that should lead to a tailored SMS program for outpatients with various chronic conditions.

Sample and participants

Because staff composition and working methods of the different study settings – outpatient clinics of the Erasmus MC University Medical Center Rotterdam in the Netherlands – varied considerably, purposeful sampling was used to achieve maximum variation. The main criteria for sampling were gender, age, work experience, type of chronic condition, occupational level and educational level. Nurses were invited if they (1) held consultations with outpatients with a chronic condition and (2) were a registered nurse (RN) (Bachelor of nursing) or a nurse practitioner (NP) (Master degree). Nurses with less than one year experience in the outpatient setting were excluded. Thirty-three nurses were invited to participate.

Data collection

Individual semi-structured interviews were conducted between October 2012 and January 2013. All data was collected by trained healthcare researchers (JB, JD, or other members of the research group) who did not work at an outpatient clinic and held expertise in self-management. An interview between a nurse and a researcher lasted about one hour and was held in a private location at nurse's work site. Sometimes also a student was present. The interview questions had been formulated on the basis of the findings from an extensive literature review (Table 1). All interviews started with the same question: "Could you tell us something about your experience in working with outpatients with a chronic condition?". The order in which the questions were introduced depended on the nurse's responses. They were encouraged to give examples, details and circumstances about their work. Demographic data were collected as well during the interview. The interviews were audio-recorded and transcribed ad verbatim.

Table 1. Interview Questions.

Start question
Could you tell us something about your experience in working with outpatients with a chronic condition?
Open questions
In your opinion, what is self-management?
How do you help outpatients to manage their chronic condition in everyday life?
What type of activities (interventions) do you use for self-management support?
What kind of activities (interventions) work well? And which do not?
Which tasks do your outpatients have in managing their chronic condition?
When does supporting outpatients in managing their chronic condition in everyday life wok well?
What are difficulties in supporting outpatients in managing their chronic condition in everyday life (what type of patient)?
What competencies, attitudes, and skills does a nurse need to support the self-management of outpatients with a chronic condition?

Ethical considerations

A standardised invitation was sent by email to thirty-three nurses. If they did not respond within two weeks, they were contacted by telephone by the first author (JB). All respondents were informed about the study both orally and in writing, and were assured of complete confidentiality. The respondents gave oral consent. Under Dutch law, no ethical approval is needed for research among professionals. The study protocol was reviewed and approved by a committee of the University's Doctoral Research Board, in compliance with the Dutch ethical research regulations.

Data analysis

Data collection and analysis was an iterative and reflexive process (Polit & Beck 2008). Transcripts were read in order to capture an overall impression. Codes were data-driven

and assigned to meaningful lines or fragments (inductive analysis) (Creswell 2007). Subsequently, overlapping codes were merged. Themes considered included: 'definition of self-management', 'self-management support interventions', 'conditions for self-management (support)'. Some subthemes were: 'self-management equals adherence' and 'self-management equals monitoring physical changes'. Subthemes under 'self-management support interventions' listed: 'providing motivational interviewing' and 'initializing group consultations'. Afterwards, a typology construction was carried out. A typology is the result of a grouping process in which each type can be defined as a combination of attributes (Kluge 2000). First, key points of each interview were summarised to an A4 sheet and discussed by the members of the research group. During this process relevant attributes were elaborated for the analysis: the definition of self-management; the perception about the patient's role in self-management; the perception about the support role of the nurse; and applied interventions. Cases were subsequently grouped by means of these attributes and types were constructed. Lastly, all of the analysis' insights were merged to characterise the constructed views. Quotes presented in the results section serve to clarify these views. In coding quotes, education level of the nurse in question (RN or NP) was combined with a random number. The qualitative analysis package Atlas.ti 6.2 was used for analysis.

Strategies to establish rigor

Credibility was established by researcher triangulation and member checks. Participants received a summary of the main themes discussed during the interview to enable them to affirm the interpretation of the researchers (Lincoln & Guba 1985). After ten interviews the member check stopped, because no additional information was obtained. Researcher triangulation was achieved because the data were collected and analyzed in a team-based fashion. The first author (JB) analyzed all data in detail. The second author (JD) analyzed the first fourteen interviews also. JB and JD discussed the results of their coding to reach agreement. The first author coded the remaining interviews in the same way. To increase the dependability, the design, methods, summaries, analyses and results were all discussed within the research team. Details of the participants and settings are described below, allowing readers to conclude on the degree of transferability. The description of the methods also contributes to the conformability of the study.

FINDINGS

Twenty-seven out of 33 invited outpatient nurses participated (response rate 81.8%). Two nurses did not respond to repeated email or telephone messages and four others declined participation because of an excessive workload or provided no explanation.

Twenty-four out of these 27 nurses (88.9%) were female, which proportion reflects the gender distribution in Dutch hospital care. Their median age was 42 years (ranging from 29 to 56); eight participants (29.6%) were over 50 years old. Seventeen participants (63.0%) held a Master's degree in advanced nursing. The frequency and duration of their consultations differed. NPs had more responsibilities than RNs: NPs also diagnosed health problems, ordered treatments and prescribed medications by protocol and under supervision of a physician.

Sample demographic and clinical characteristics are shown in Table 2. The desired maximum variation was achieved with this sample.

Divergent nursing views on self-management

The analysis showed that nurses had divergent perceptions about self-management. Even if they initially used the same keywords, they could attach different meanings. For example, although they all considered 'patient choice' as an important element of self-management, they aimed for different choices. Some nurses referred to:

Making choices about the treatment process. (NP7)

The options they provided were limited to biomedical decisions, such as a choice between oral and liquid medication. Others argued from a broader perspective. For them it was important that patients:

Determine what fits with their personal life. (RN4)

They need to:

Make a choice about the life they want. (NP13)

This could also imply that a patient's choice did not contribute to health status improvement. For example, a patient might decide to quit treatment because of perceived side effects that hinder daily life and outweigh treatment benefits. The nurses evaluated such choices in different ways.

Nurse perceptions of self-management ranged from a biomedical focus to a wider biopsychosocial perspective. Differences in perceptions also concerned the contributions of the patient and the nurse's role. Some nurses mentioned a major support role for themselves, while others stressed the importance of an active role for patients. Based on these two issues, three views on the patient's role in self-management, and subsequently nurses' own goals in supporting patients, were identified: 1) Adhering to a medical regimen; 2) Monitoring symptoms; and 3) Integrating illness into daily life. Each view represents a dominant definition of self-management and attributes other roles to patient and nurse. Consequently, nurses also applied different interventions. Table 3 provides an overview of the specific characteristics of these views, and Figure 1 provides

Table 2. Demographic and clinical characteristics

	Total N (%)
Gender	
Male	3 (11.1)
Female	24 (88.9)
Education level	
Registered Nurse	10 (37.0)
Nurse Practitioner	17 (63.0)
Age	
20 – 29 years	1 (3.7)
30 – 39 years	11 (40.8)
40 – 49 years	7 (25.9)
> 50 years	8 (29.6)
Years working in current job	
< 5 years	12 (44.4)
5-10 years	10 (37.1)
> 10 years	5 (18.5)
Chronic conditions	
Internal medicine	
- Cardiac diseases (e.g. heart failure, familial hypercholesterolemia)	3
- Endocrine diseases (e.g. diabetes, pituitary disease)	2
- Hematologic diseases (e.g. sickle cell disease and haemophilia)	3
- Infectious diseases (e.g. human immunodeficiency virus (HIV))	1
- Pulmonology (cystic fibrosis)	1
- Rheumatic diseases (e.g. rheumatoid arthritis and ankylosing spondylitis)	2
- Transplantation medicine (Kidney and liver transplantation)	2
Neurology	
- Amyotrophic lateral sclerosis and progressive muscular atrophy	1
- Cerebrovascular accident	1
Oncology	
- Head and neck cancer	1
- Colorectal carcinoma	1
- Radiotherapy	1
- Experimental cancer treatments	1
- Testicular cancer	1
Paediatrics	
- Birth defects (cleft and lip palate)	1
- Infectious diseases (e.g. human immunodeficiency virus (HIV))	1
- Neurological disorders (e.g. behavioural problems and epilepsy)	2
- Pulmonology (e.g. asthma and home ventilation)	2

Table 3. Specific characteristics of the views of what self-management entails

	1) Adhering to a medical regimen (n=12)	2) Monitoring symptoms (n=10)	3) Integrating illness into daily life (n=5)
Definition self-management support	• The ability of the patient to live as healthy as possible • Biomedical model	• Monitoring medical symptoms and being able to take action if things are not going well • Biomedical model	• Coping with a chronic condition in daily life • Biopsychosocial model
Nurses perception of the patient's and nurse's role	• Patients should adhere to prescribed health regimens • Nurses should provide information about the health regimen which is expected to cause behaviour change	• Patients should have an active role so as to be better able to manage their condition • Nurses should provide education to equip patients to be able to monitor their symptoms	• Patients are the prime agent in determining how life can be adjusted to a chronic condition • Nurses should provide holistic support and help patients' to adapt to their chronic condition
Interventions applied by nurses to support self-management	• Objectifying current health status through screening instruments • Providing protocolled information and instruction about the medical regimens • Convincing patients to adhere by using motivational interviewing • Training medical and technical skills • Distributing tools for medication adherence • Supervising the medication administration • Organizing educational meetings for family members	• Objectifying current health status by asking questions • Providing protocolled information about identifying health problems and performing correct actions • Teaching early signal and act skills • Distributing (digital or paper-based) diaries to help patients get insight in their health status	• Observation through listening and informing about any kind of problems in daily life • Supporting by discussing problems individually • Discussing problems in group consultations • Providing tailored information about experienced problems/ gaps of knowledge

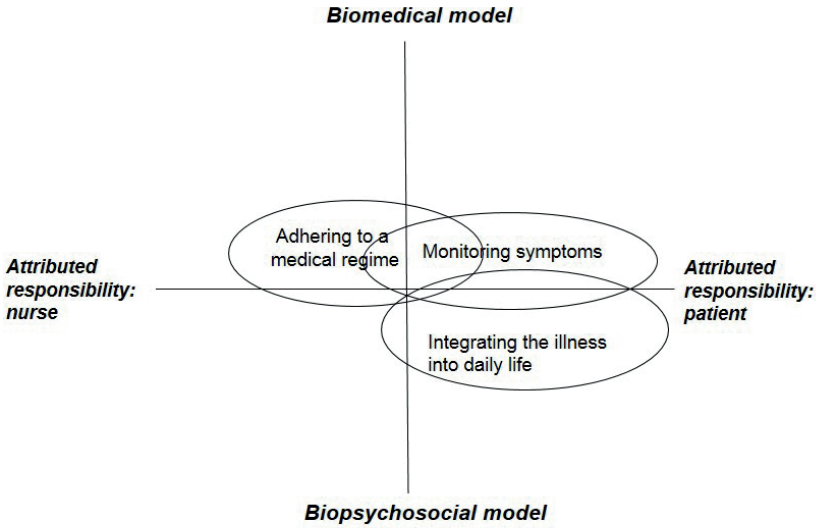

Figure 1. Focusses of the three dominant views

a graphical representation. The vertical axis ranges from a focus on the disease to a focus on daily life. The horizontal axis ranges from a leading role of the nurse to a leading role of the patient.

1. Adhering to a medical regimen

Definition of self-management

Nurses holding this view interpreted self-management as the ability of the patient to live as healthily as possible. These nurses mainly argued from a biomedical perspective. Patients were seen as good self-managers if they adhered to the treatment and lifestyle rules. Self-management was defined as:

> *Self-management means for example that patients are well able to nebulise the prescribed liquid medication and to accurately clean the equipment. (RN1)*

As a patient, you should be able:

> *To cope well and integrate prescribed health regimens into daily life. (NP10)*

Noteworthily, many oncology nurses held this view.

Perceptions about the patient's and the nurse's role

Nurses holding this view had different opinions about the division of tasks. A common opinion was that nurses needed to provide information about health regimens, in the expectation of triggering behavioural change, and that patients should adhere to these prescribed regimens:

I have made treatment schedules that show what patients have to do every day[…]. These schedules, in combination with my explanation, create self-management. (NP7)

However, some nurses considered being adherent as the prime responsibility of the patient. Their task was to only facilitate information and skills needed for good adherence:

We explain the regimen to our patients, but finally they must decide if they want to follow it. (RN3)

It was mentioned that patients:

Only succeed if they are intrinsically motivated. (RN2)

Other nurses emphasised a bigger responsibility for nurses with regard to patient adherence:

As a nurse, I have a guiding role. The easier I make it, the more willing they are to adhere. (RN1)

For most nurses, it was difficult and sometimes frustrating when patients did not perform these tasks well and made unhealthy choices:

Every now and then I think: 'Why am I doing this?' Sometimes it is just not possible to activate patients. (RN2)

<u>*Nursing interventions to support patients*</u>

Nurses who held this view considered it very important to start their consultation with an objectification of the patient's current health situation:

I always start with taking a history, so it will be clear what's going on and if there are any problems. (NP12)

To detect these disease-related problems, they often used screening methods such as measuring pain with a Visual Analogue Scale. These results objectified the patient's medical situation, indicated whether changes in the medical regimen would be necessary, and ultimately guided the choice of subsequent interventions. If they detected emotional problems with standard screening instruments (such as the Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith 1983), the patient was referred to a specialist, for example a psychologist.

Nurses often focused on providing information and instruction about the medical regimen in order to:

Encourage and motivate [patients] to take their medication. (RN5)

Motivational interviewing techniques were used to convince patients to adhere to and to continue treatment. Nonetheless, education was considered the most important prerequisite of adequate self-management. Hence, the main role of the nurse is:

To provide education to patients. (NP4)

Information provision was usually protocolled, e.g. by using a PowerPoint presentation outlining all information considered to be important:

We have a number of fixed items that are addressed in the PowerPoint presentation. (RN3)

Besides, nurses taught medical and technical skills:

When patients have a stoma, I teach them how to deal with this in specific situations. (NP12)

Mostly this was taught in an incremental way:

The first time I will explain the subcutaneous puncture step by step. […] The second time, we will do it together. The third time, I try to let them do some steps by themselves. And the fourth time they take a sort of exam. (NP2)

To support medication adherence, nurses used tools, such as pre-packaged medicaments or text messages as reminders, which make medical and health-related tasks easier for the patient:

I think that's one of the prerequisites of SMS. When tasks are difficult, patients' self-management will be poorer. Patients will do their tasks when they're easy to perform. (RN1)

Some nurses supervised the medication administration more directly:

I let them come more often. [..] If we do it [medication administration] together I can see where problems arise. (NP2)

Some nurses also directed their support towards family members by organizing family meetings. These meetings were solely focused on providing information about the medical regimen. These nurses reasoned that self-management is more difficult when a patients' network is not well informed about the chronic condition and its consequences:

The people around the patient create so many challenges for them, [by saying things like] *'some cake every now and then doesn't do any harm. (RN2)*
Knowledge is an important prerequisite to family members: *'To be able to support their partner or child in managing the chronic disease'. (NP4)*

2. Monitoring symptoms

Definition of self-management

In this view, nurses specified self-management as monitoring medical symptoms. Self-management is:

> *Patients' ability to monitor that things aren't going well today, or to notice weight gain or shortage of breath. (NP1)*

As a patient you must be able to take action in these kinds of situations, e.g. by calling the hospital for assistance:

> *[..] that patients are aware of the symptoms. [..] If they think it is not okay, they call me. That is self-management. (NP6)*

These nurses placed their symptom monitoring in a biomedical perspective. This view was held by nurses from a diverse range of hospital departments and patient populations.

Perceptions about the patient's and the nurse's role

Opinions on this issue differ from that expressed by nurses holding the 'adhering to a medical regimen' view in the acknowledgement of an active patient role:

> *I expect them to think for themselves and to not be reckless. (NP5)*

The nurses believed that taking the lead will help patients manage their condition well:

> *It's easier for patients to live with their disease when they are less dependent on us. (RN6)*

Despite the importance of the patient's personal responsibility, nurses emphasised there is a limit to this agency. Nurses needed:

> *To be aware of the danger that patients do not receive enough care. (RN6)*

They described that patients can be good self-managers, but nurses need to:

> *Help them if necessary. (NP5)*

Nursing interventions to support patients

Being well informed was seen as a conditional component of self-monitoring the medical aspects of a chronic condition:

> *I got back to information. Be careful with infections. If people know the ins and outs of their condition it is easier for them to self-manage. (RN6)*

Nurses taught patients how to identify health problems and to act if necessary, e.g. by contacting the nurse, taking additional medication or taking rest. Nurses usually transferred knowledge in a protocolled way:

We trained him by means of this information book. (NP6)

Serious problems and consequences needed to be prevented with training in early signaling:

Gradually, I just see patients deteriorate. Their ankles are increasingly swollen or they are getting short of breath. When this happens, I wonder why they did not call me earlier. [..] If they had reported this earlier, all I had to do was adjusting medication for three days. (NP1)

In order to create awareness of predictive signs several nurses asked the patient to keep a diary (digital or paper-based). To check how a patient managed the disease, nurses often asked about this:

I will always tell them what they can do [when the disease is deteriorating]. Later on, I ask how things are going. (NP7)

If it turned out that patients were not properly monitoring symptoms, nurses tended to use motivational interviewing techniques to convince patients of its necessity. These nurses rarely asked about emotional problems. If patients wished to discuss emotional issues, they were usually referred to a specialised professional.

In addition to protocolled knowledge transfer, nurses held group meetings or information sessions to educate relatives as well, so they would be able to help the patient monitor the disease:

One also would like to explain the disease to [patients'] relatives. (NP1)

3. Integrating the illness into daily life

Definition of self-management

Nurses holding this view defined self-management as:

Coping with a chronic condition in daily life. (NP17)

These nurses did not argue from a biomedical perspective but rather endorsed to the biopsychosocial model. Adapting life to a chronic condition was seen as a crucial part of self-management. For example:

People saying they are going to work less. They adapt their daily activities to the disease. (RN3)

Acceptance was seen as the most important prerequisite to adaptation. Similar to the nurses holding the previous view, this group of nurses also worked in a diverse range of hospital departments and supported patients with different chronic conditions.

Perceptions about the patient's and the nurse's role

Nurses holding this view highly valued patients' agency in daily life. Only patients themselves know how to adjust to the chronic condition:

Ultimately they [patients] need to adapt their daily activities to the disease. (NP3)

These nurses were of the opinion that a supportive role was needed to encourage adaptation:

Through coaching a nurse can help. (RN4)

However, patients still need to take the lead.

Nursing interventions to support patients

Support was, in addition to managing medical aspects, more focussed on aspects of daily living with a chronic condition. According to these nurses, support could be provided by observing and exploring in an open way:

Whether there are other kinds of problems. (RN3)

These problems might be related to social life, relations or work. In the other views, nurses paid very little attention to these kinds of problems. These nurses listened to and talked with their patients about such problems. For example, how to achieve that treatment is as bearable as possible in daily life taking into account work, school and other activities. One of the nurses used the theory of presence (Baart, 2012):

[My task is] mainly to be present. By remaining dedicated to your patients and taking walks with them. (RN4)

Some talked individually with their patients and others used group consultations in which:

Patients can become aware that they are not the only ones with this disease. Many of the patients feel alone'. (NP8)

If serious emotional problems (e.g. depression or anxiety) were apparent, the patient was referred to a psychologist or other specialist. Besides, these nurses also educated their patients about the chronic condition; not strictly protocolled but more tailored to

patients' needs. For example, one nurse tried to anticipate patients' needs by administering a questionnaire aimed to identify knowledge gaps:

> *This questionnaire has simple questions, such as 'how much do you know about your disease, and the treatment', and 'do you use the prescribed treatment'? When a patient scores poorly I customise my education to the knowledge gaps. (NP17)*

DISCUSSION

This study pointed out three divergent views of outpatient nurses on what self-management for a chronic patient entails: 'adhering to a medical regimen'; 'monitoring symptoms'; and 'integrating illness into daily life'. Nurses' perceptions about the definition of self-management ranged from a biomedical focus to a biopsychosocial focus. The views 'adhering to a medical regimen' and 'monitoring symptoms' were mainly focused on the biomedical aspects of self-management. Patients' agency was limited according to the nurses adhering to the biomedical model, while these nurses themselves assumed a higher level of responsibility. Those stressing that 'integrating illness into daily life' is a core adaptive task for patients also take into account the social and emotional elements of self-management. Nurses who held this view attached more importance to the agency of patients, in the line with the definition of self-management adopted in this study (Barlow 2001, Barlow et al. 2002). Nurses with a distinct view on self-management applied different self-management interventions.

The finding that nurses' views on SMS are divergent is consistent with the current debate in literature (Jones et al. 2011, Udlis 2011, van Hooft et al. 2015). It is encouraging to see that we did not find a view fitting the lower left quadrant of Figure 1. While some nurses gave support to patients who difficulty managing daily life, they did not fully take over a patient's own responsibility for this.

Supporting psychosocial health problems is an indispensable part of nurses' competency framework (ter Maten-Speksnijder et al. 2015). Still, many nurses in the present study considered medical management as the core element of SMS. Their interventions aimed to support patients' medical tasks, such as teaching them how to inject medication subcutaneously. These nurses offered little support to patients' challenges in daily life, or to emotional problems. This lack of psychosocial support was also shown by Kennedy et al. (2014). From a patient perspective, it would be desirable that nurses expand their (conceptions of) SMS. People with chronic conditions have not only to deal with illness-related adaptive tasks, but also with so-called everyday life work and biographical work (Corbin & Strauss 1988) for which they must achieve a new equilibrium (Moos & Holahan 2007). This argues for a more holistic view on supporting patients' core tasks in self-management.

Partnership between nurses and patients is an important prerequisite to successful SMS (Bodenheimer et al. 2002, Holman & Lorig 2000). Nurses in our study held different opinions about the role division between the partners. Some nurses acknowledged patients as the experts in their own lives and aimed to support patients by using their professional expertise. However, most nurses played the traditional role of the expert who will tell the patient what to do. Patients are passive in this situation (Bodenheimer et al. 2002, Holman & Lorig, 2000). It seems difficult to achieve a collaborative partnership (Thorne et al. 2000, Wilson et al. 2006, ter Maten-Speksnijder et al., 2015).

The lack of a holistic view on self-management and the difficulties in achieving partnership also became apparent in the limited repertoire of nursing interventions. Nurses mostly used some way of traditional (standardised) patient education. It is known that educational programmes have benefits for patients. However, merely conveying information will not lead to behavioural change and is insufficient to improve patients' self-management skills (Coster & Norman 2009). SMS should include interventions that improve patients' problem-solving skills, increase self-efficacy, and support application of knowledge in real-life situations (Coleman & Newton 2005). Nurses' repertoire now mainly consists of interventions with a passive role for patients (Novak et al. 2013). It would seem better to apply interventions such as action plans and programs designed to activate patients by improving problem-solving skills (Zoffmann & Kirkevold 2012, Zoffmann & Lauritzen, 2006, Handley et al. 2006).

A possible explanation for the nurses' limited repertoire is the idea that there is nothing new to self-management and that there is no reason to change current healthcare provision (Kennedy et al. 2014, de Veer & Francke 2013). Adequate training of nurses in principles of behavioural change and in developing interventions, in co-creation with patients, could give nurses the resources to effectively support patients' self-management (Macdonald et al. 2008, The Health Foundation 2011). Without sufficient tools and training it will be difficult to operationalise SMS in working routines (Elissen et al. 2013). On the other hand, nurses should keep in mind that not everyone with a chronic illness desires or is able to be engaged in self-management (Novak et al. 2013). Preferences, personal context, and self-management abilities can vary according to patients' illness and life course (Dwarswaard et al. 2015, Paterson et al. 2001). SMS should therefore be tailored to the appropriate context, patients' needs and preferences (Trappenburg et al. 2013).

We had expected to find a relationship between nurses' views on self-management and their educational level. NPs are expected to operate at higher levels, both in the nursing domain and in the physician domain (ter Maten-Speksnijder et al. 2014). Their tasks and responsibilities go beyond direct patient care, as these include nurse management, nursing research, and nursing education (Bryant-Lukosius et al. 2004). However, we could not detect such a relationship. We also expected to find a relationship between

nurses' views and the specific characteristics of a chronic condition. For if daily medical management is needed, such as in diabetes or end stage renal disease, the main focus is likely to be on the medical aspects, whereas for patients with rheumatic disorders coping with pain and disabilities in daily life can be expected to be more important. However, we could only detect a link between oncological diseases and the 'adhering to a medical regimen' view. All oncology nurses argued from this view. This might be explained by the fact that cancer is often still considered an acute healthcare problem. However, survivorship and new technologies increase the importance of long-term cancer care (IKNL 2014, VIKC 2010). This new recovery perspective is likely to influence oncology nurses' view on self-management in the future. The fact that we were not able to detect further connections between views and disease characteristics could suggest that nurses' personal characteristics have more impact on the view on self-management. Attributing responsibility to the patient and establishing partnership might be more difficult for nurses who are inclined to keep everything under control. However, a qualitative design is not suited to detect such correlations. Further quantitative research is needed to determine what kind of factors affect nurses' views on self-management.

Limitations of the study

A limitation of the study is that all data was collected in one country and a university hospital setting only. Therefore, data may not be representative of nurses working in non-academic hospitals, the community, or in other settings. Also, similar studies need to be conducted in other cultures in order to unravel nurses' views on patients' core tasks in self-management. In addition, due to the qualitative nature of the study, we cannot say anything about the influence of nurses' views on patient outcomes. For this purpose, further quantitative research is needed.

The results of this study are based on nurses' self-reported ideas and activities. The relationship between nurses' views and the SMS interventions they apply has not been studied before. Observations of nurse-led consultations could increase the validity of the results (Creswell 2007), as this could reveal interventions and activities that nurses unconsciously apply.

CONCLUSION

Nurses had distinct perceptions about self-management and their role in self-management support. Three different views were identified: 'adhering to a medical regimen'; 'monitoring symptoms'; and 'integrating illness into daily life'. Each view differs with respect to the definition of self-management and the role division between the patient and the nurse. The first two views attach great importance to the management of the

medical aspects. This is a characteristic of the traditional acute care model with its focus on compliance with the medical regimen. This model does not fit with the psychological and social support needs of patients with a chronic condition. Nurses are recommended to provide self-management support in conformity with the biopsychosocial model. Furthermore, the nurses in this study seemed to mostly use traditional interventions, and were not inclined to use interventions that activate patients. Sufficient tools and additional training can help nurses operationalise self-management support in their daily working routines.

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