Patient safety in nursing homes in Sweden: nurses'views on safety and their role

Frieda Andersson and Katarina Hjelm

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ABSTRACT

Objective: Knowledge about patient safety in nursing homes is limited. The aim of this study was to describe what patient safety means to nurses working in nursing homes for elderly and how these nurses address patient safety.

Method: Qualitative study of semi-structured interviews with 15 nurses aged 27–62 years. Qualitative content analysis was applied.

Results: Nurses describe the meaning of patient safety in terms of proper care and treatment, and a sense of security. Based on nurses' description of patient safety, several factors were identified as prerequisites to achieve safe health care: competence; clear information transfer between health care organisations; continuity of care and appropriate environment. Barriers to patient safety was described as lack of sufficient resources; lack of communication and negative attitudes to incident reporting. To a great extent, nurses' work for patient safety consists of efforts to compensate for defects and ensure good health care in their daily work, since work with patient safety is not a management priority.

Conclusion: Patient safety needs to be clarified and prioritized in nursing homes and there is a need to understand nurses' role among other care givers and the need for shared routines among care givers.

Introduction

Safety and risks can be found at all levels of a health care system. Patient safety has been defined in different ways but according to Swedish law (SFS 2010:659) it is the "protection against adverse events" meaning "suffering, bodily or mental harm or illness and death that could have been prevented if adequate actions had been taken at the patient contact with health care" There is a growing knowledge about patient safety in hospital care, as efforts to improve patient safety have been made in many countries during the last decade. To date, however, there is limited knowledge about patient safety in other settings

and how work for patient safety is addressed at the micro level in direct contact with patients.³⁻⁴ Research on patient safety in nursing homes highlights a poorly developed patient safety culture,⁵⁻⁷ which may indicate that these patients may be at risk of harm, especially as preventable patient injuries are more common among patients over 65 years of age.⁸

In Sweden responsibility for health care is divided between the state, county councils and local municipalities. Health care in nursing homes for elderly patients is provided by the municipalities. National reports have indicated possible risks of medication errors, falls, delayed diagnosis and communication in nursing homes, but there are no quantitative date on the incidence of preventable adverse events.⁹⁻¹⁰ The aim of this study was to describe what patient safety means to municipal nurses working in nursing homes for the elderly and how these nurses address patient safety.

Methods

Study design and sample

A qualitative descriptive study design using semi-structured interviews was used.¹¹ A purposeful sample of 15 registered nurses (three specialized in primary health care) working in nursing homes were included.

Data collection

Written information about the aim and procedure of the study was sent to nurses' managers in three municipalities in southern Sweden for approval. Nurses who were interested in participating contacted FA by e-mail and a time and place was set for the interview after telephone contact. A semi-structured interview guide was developed based on literature in the area. The main questions were "Can you describe what patient safety means?" "Can you describe how you work for patient safety?" "What do you do when something goes wrong/when an error occurs?" "What do you perceive as affecting patient safety in nursing homes today and in the future?" There were also follow-up questions to cover the field. The interview guide was then pilot tested. First, an interview was conducted which resulted in minor rewording and merging of some questions for clarification; second, another pilot interview was held but no further changes were necessary.

Data were collected between August 2013 and March 2014 by FA, who has a background as a nurse in hospital and nursing homes with both private and municipal providers. All interviews were carried out in the nurses' workplace, lasted about an hour, and were audio-recorded and transcribed verbatim by FA. The study conforms to the Declaration of Helsinki and written informed consent was obtained. ¹² According to Swedish regulations, the approval of a research ethics committee was not required. ¹³

Data analysis

Data collection and analysis was done concurrently as sample size was determined by the purpose of maximizing information and therefore sampling was terminated when no new information emerged during data analysis. Qualitative content analysis was applied as the study is of a descriptive nature. The analysis has been done inductively. The transcribed interviews were first read through repeatedly to obtain a comprehensive view of the content as a whole. Comments and notes were made from the first impression which was used as the initial coding (example of coding procedure see Table 1). Parts of the text that seemed to intercept key thoughts or concepts based on the aim of the study were highlighted in different colours. The coloured parts of the text were read several times. Then the texts were read to systematically start coding the data. Quotations from coloured parts of the text were inserted in a separate table. To reduce the text, codes were derived from the quotations to describe the data. Depending on how the codes were linked to each other, how patterns and recurring regularities emerged, the codes were sorted into subcategories. Subcategories with similar meaning were then brought together into main categories.

Table 1. Examples of the different steps in the qualitative analysis of data

Quotation	Code	Subcategory	Category
"well, it is important to be thorough and that I control and ensure that everyone follows guidelines"	Control adherence to guidelines	Being visible as a leader	Everyday routine
"I work a lot together with the occupational therapist and physiotherapist after patient falls"	Help each other	Multiprofessional teamwork	Everyday routine

Analyst triangulation was used to validate the findings.¹¹ Subcategories and categories were constantly discussed during the process of analysis with the co-author. To ensure confirmability, quotations were used to illuminate the findings and verify categorizations. In order to further illustrate and describe the pattern of the results, the number of statements in the data analysis was also counted and presented as part of the results (Table 2)

Results

The study included fifteen registered nurses all except one of them female. Their median age was 44 years and they had varying length of work as nurses (2.5–42 years), with a median of 14 years. The nurses were working in nursing homes with both private and municipal providers as well as through staffing agencies.

Nurses described the meaning of patient safety as that patients should receive proper care and treatment and that both patients and nurses should have a sense of security (Table 2). Nurses went on to identify several factors that were seen as prerequisites to achieve patient safety.

Table 2. Overview of categories with accompanying subcategories.

What patient safety means		Nurses' work for patient safety	
Category	No. of	Category	No. of
	statements		statements
1. Proper care and treatment	59	4. Barriers to safe healthcare 209	
-		with impact for nurses' work	
		with patient safety	
Subcategories		Subcategories	
Adherence to guidelines	36	Lack of resources 101	
Working towards the same		Lack of communication 67	
goal	13	Attitudes and barriers to	
Receive the care needed	10	incident reporting	41
Category	No. of	Category	No. of
	statements		statements
2. Sense of security	33	5. Everyday routines	152
Subcategories		Subcategories	
Patients' sense of security	26	Being visible as a leader	65
Nurses' and assistant nurses'		Forum for quality work 63	
sense of security	7	Multiprofessional teamwork 24	
Category	No. of		
	statements		
3. Prerequisites to achieve	144		
patient safety			
Subcategories			
Competence and higher status	68		
Clear information transfer	45		
Continuity of care	24		
Physical environmental			
factors	7		

Proper care and treatment

Nurses described the meaning of patient safety as proper care and treatment where knowledge of and adherence to guidelines and routines is fundamental. Nurses emphasized that all professionals involved in patient care should possess adequate knowledge and should work towards the same goal. Local guidelines involving hygiene and medication routines were seen as central to patient safety. Nurses perceived patients' right to receive safe health care as well as the right care when needed.

"Patient safety means that everyone works in the same direction... that you stick to certain laws and rules for not doing wrong" (R12)

Sense of security

A sense of security was described as being related to both the patient and the nurse. The patients' sense of security was described as feeling safe in the home and trusting the care received. Both the patient and relatives should feel that the health care is reliable and will not result in harm. Patient safety was further described as patients' participation and right to be involved in their own care. Nurses' sense of security was expressed as being confident in their role in the organization. If nurses do not feel confident it might inhibit the possibility to provide safe health care.

"Patient safety is not just about serious events, it is about what the patient feels... if the patient doesn't feel safe then I don't feel safe as a nurse..." (R11)

Prerequisites to achieve patient safety

Competence

Competence was mainly addressed towards assistant nurses' need of adequate knowledge and their need for higher occupational status. Competence was nurses' ability to coordinate information and activities around the patient and their ability to develop an open climate for staff. The role and competence of a nurse was described as important since health care has become more complex. Competence also refers to organizational leadership and, in particular, responsibility for patient safety.

"The right competence for assistant nurses... there is a need for an overall perspective and responsibility to work for patient safety" (R4)

Clear information transfer

Nurses emphasized that clear communication, both as verbal communication and in medical records, between care givers is essential for patient safety. Communication was mainly described in relation to patient handovers and the accuracy in medical prescriptions. Consistency between guidelines and routines between care givers and, in particular, understanding each other's professional role and responsibility, were seen as crucial for clear information transfer.

"Clear communication and documentation... that we have the same guidelines (between municipalities and counties)... that they (professionals in hospitals) can understand how it works at a nursing home" (R14)

Continuity of care

Continuity of care was described as a major factor with continuity of assistant nurses emphasized as being essential for the patients' sense of security and for the ability to protect patients' integrity. In addition, nurses stressed the importance of physicians being easy to contact if needed and nurses being available in the nursing home both from the patients' and the relatives' perspective.

"Continuity among assistant nurses creates security because they can keep an eye on the patient..." (R9)

Environmental factors

Nurses said that if the nursing home environment met patients' needs, staff would be able to promote individualized and safe health care. Nurses emphasized that increased home care may pose a greater risk for the ability to ensure safe health care as the home environment may not meet patient's needs. A good physical work environment in the nursing home was described as a prerequisite for safety. In nursing homes there are factors nurses cannot change, for example furniture as well as the patient being present when nurses dispense drugs. Such factors were described as obstacles to safe health care.

"... if I can sit or stand in the kitchen and not be disrupted by the patient, that's important..." (R15)

Barriers to safe health care

Lack of resources

Lack of resources was viewed as a major contributing factor to unsafe health care, including insufficient competence, staff shortages, and vague and ambiguous patient safety work. Nurses mainly brought up insufficient competence in assistant nurses, which results in carelessness due to a lack of understanding of the consequences of not taking work duties seriously. Nurses described how assistant nurses' insufficient knowledge also makes delegation difficult and insufficient knowledge had consequences for incident reporting, as not everyone understands what an incident is or when and how to report it.

"... still there are so many errors with drugs...I know there is a lot of laziness among assistant nurses when it comes to reading medication lists... I can say that there are not many who know what an incident is or when to report..." (R11)

Patient safety emerges as an implicit concept and nurses describe how they perceive work related to improving patient safety as not being prioritized. They said there was no one with overall responsibility for patient safety work in nursing homes and that nurse's struggle to involve the responsible manager. However, nurses in one municipality said that their manager was interested in patient safety and that some nurses had attended short training courses focusing on risk and root cause analysis and that they had a structured procedure for reporting incidents. Furthermore, nurses in all three municipalities stated that an obstacle to patient safety was that they had little or no contact with their senior nurses. They stated a need for support regarding patient safety, mainly in terms of the physical presence of senior nurses in the organization.

"... Patient safety is not prioritized... I have not even seen the medical head nurse out in the organizations. It's all about teamwork... the willingness to work with patient safety has been there among us nurses..." (R12)

Lack of communication

The category of communication was related to lack of collaboration within and between carers as well as verbal communication and documentation. There is often a lack of important details in patients' medical records, mainly that documented by assistant nurses. Nurses also described how they mostly receive a report from nurses in hospital during patient transfer, but when the patient arrives at the nursing home this report is often not in accordance with the patient's present status. Gaps in information transfer during patient transfer were described as common errors due to different reporting systems. Also physicians' lack of knowledge and low priority in how to prescribe correctly in electronic medication systems was viewed as a contributing factor to errors. Nurses also described frustration about different electronic medical records which are supposed to facilitate information transfer but which created more barriers due to operational disruptions, inconsistent use and duplication. A further barrier to communication between professionals was described as a lack of understanding of nurses' responsibilities and operations in municipal health care.

"Patients' medical records are a major factor in failures. Here in the municipality we don't get important information and in hospital they don't know how we work... we don't understand each other's roles" (R5)

Attitudes and barriers to incident reporting

Attitudes were mainly related to a culture of blame where both nurses and assistant nurses often took the incident personally. Incident reporting was also seen as extra work, though nurses said that the attitude has improved. Nurses also described how those incidents where nurses have been involved are seldom brought up for discussion or reported. Barriers were related to lack of feedback from reported incidents. Nurses, except those from one municipality, said that they did not know what happens after the incident has been reported. These nurses said that they reported and documented the incident in the patient medical record or in a separate reporting system but that this did not result in any changes. Nurses described how lack of feedback results in a lack of motivation to report incidents.

"I think there is a feeling of blaming a single person..." (R7)

Everyday routines

In response to the present lack of safety, nurses adjust their way of everyday working by taking different actions in an attempt to ensure patient safety in nursing homes. Everyday routines are divided into three subcategories: being visible as a leader, forum for quality work and multi-professional teamwork.

Being visible as a leader

Nurses described themselves as the ones who coordinate information about the patient. Being visible was described as a way to ensure that information is shared and that daily work is conducted. Their presence can compensate for assistant nurses' lack of competence. Nurses also described efforts to encourage incident reporting which were described as attempts to minimize a culture of blame. In order to ensure that information will be received and delegated tasks will be performed by assistant nurses, nurses said that they have to control and secure both documentation and actions taken by other professionals. These solutions were described in terms of duplication.

"... you document in patient medical records to inform them (assistant nurses) about what they should do and you inform them verbally and then you also have to inform their manager and if it's drug-related then you have to go home to the patient and write a special note for them, well, it takes both belts, straps and parachutes" (R6)

Forum for quality work

All nurses described regular meetings intended for work with quality improvements, though the frequency and forms varied between nursing homes. In one municipality clear and structured work with adverse events was described, where patient safety was considered an important issue by nurses' managers. In this municipality risk analyses were also performed before the summer months. In the other two municipalities nurses also described how they work with reported incidents although these were not the main focus in these meetings. However, all nurses described incident reporting as a way of pursuing patient safety.

"We have quality meetings where we work for good quality in care" (R2)

Overall, the nurses spoke of individual learning from reported incidents. Discussions of reported incidents were described as opportunities for learning. Nurses said that learning is often related to personal involvement in an adverse event. In those cases when the incident is reported it results in individual learning, described by nurses as an awareness on the part of the individual not to repeat the same mistake.

"I learn to clarify" (R14)

Multi-professional teamwork

Working in multi-professional teams was described as an important strategy for patient safety in everyday work. Nurses worked in teams including assistant nurses, physiotherapists, and occupational therapists in the nursing home. Safety was described as enhanced by using the different perspectives and knowledge of all team members. Using patient risk assessment tools was also mentioned in relation to teamwork but was not described as the main strategy to work for patient safety.

"I work a lot together with the physiotherapist and occupational therapist regarding patient falls" (R3)

Discussion

Main findings

Nurses described patient safety as a sense of security including patient participation and trust in the care received. Hospital nurses have expressed similar views regarding patient engagement but was described in terms of being an important factor for patient safety.¹⁴ Patient participation is today ensured by law and

government policies aim for patients to be more involved in their health care, ¹⁵ but there is limited research showing that this results in improved patient safety. ¹⁶⁻¹⁷

The importance of communication and teamwork for patient safety has been documented several times before in hospital care ¹⁸⁻²⁰ and is confirmed by nurses in this study. To enhance communication between care givers during patient transfer, nurses in this study also emphasized that there is a need for consistency between guidelines and understanding of their professional role in municipal health care. Due to their overarching role with medical and nursing responsibility and the function of coordinating patient care, they have an understanding of factors with direct impact on patient care. Difficulties in understanding professional roles have a negative impact on communication and collaboration in hospitals. ²¹⁻²² These difficulties with professional roles probably impair information transfer even more between care givers from county councils to municipalities. The main reason for the gap in information exchange during patient transfers is described as a result of different patient medical records. Nurses also stated that electronic systems, supposed to facilitate information transfer, increase the risk of unsafe care and create more work, as nurses need to duplicate many tasks in several systems. More research is needed as health information technology is prioritized and often seen as a solution to many issues in health care, although it has been argued that policy-makers tend to overlook the limited success of these systems. ²³

Further, assistant nurses' lack of knowledge regarding medications has previously been shown to result in difficulties ensuring safe health care.²⁴ Something similar is described by nurses in this study, where lack of competence among many assistant nurses result in carelessness, such as when it comes to incident reporting. In comparison to a previous study in the field of patient safety in hospital care, ¹⁴ nurses said that patient safety work in a nursing home is vague and ambiguous. Nurses, except those from one municipality, highlighted that patient safety is not prioritized by their manager, and the lack of a person with overall responsibility for patient safety was considered to have a detrimental impact. Several nurses stated that feedback from reported incidents is seldom given and they mentioned difficulties in justifying incident reporting due to the fact that no actions or improvements in safety are seen, and reporting is a time-consuming activity. This result is not surprising as lack of feedback from management and time pressure are known to inhibit the willingness to report.^{6, 25-26} Abandonment of professional status and

autonomy is important for a good patient safety culture but is also proven to be a difficult barrier to overcome.²⁷ In the present study this is shown by the fact that some nurses stated that incidents where nurses were involved were not reported to the same extent as other incidents. Similar results have previously been related to physicians' failure to report incidents,²⁸ though there was a difference in one municipality where a few nurses and managers had received some training in patient safety. This may imply that training increases awareness of risk prevention and patient safety. However, nurses in all municipalities said that individual learning occurs when an individual becomes aware of an error and learns to not repeat a mistake. The absence of organizational learning is evident from the fact that many threats to patient safety are already well documented but nurses felt that no actions or improvements were seen.

Limitations

Several limitations must be considered when interpreting the results. First, the sample size was limited to 15 nurses. However, the analysis showed a homogeneous picture of the results early on, and no new information was added although data collection continued further to ensure that no new information emerged. Thus, further interviewing of nurses would probably not change the outcome of the findings. Second, FA who conducted the interviews, worked as a nurse in municipal health care, which might imply that she is not neutral or impartial, but on the other hand a researcher familiar with the field of study may also increase the tendency to capture important aspects of the studied problem and knowledge about when and where to ask for further answers and clarifications. Third, the results are limited to descriptions of respondent nurses in three municipalities and may not be generalizable. Data analysis in this study is strengthened by the fact that statements were counted to further illustrate and describe the pattern of the results.

Implications

There is a need for a common understanding of patient safety in nursing homes. Work with patient safety needs to be prioritized at all levels in municipal health care. For patient safety to be prioritized there is a need at the macro level to focus on patient safety in clinical skill development, and also to direct resources for patient safety work. There is a need for training and education in patient safety at both meso and micro level. As nurses play a vital role in municipal health care, as well as in patient safety, there is a

need for understanding of nurses' roles and cooperation with other care givers. Furthermore, improvements are needed in training, communication, routines between care givers, and communication within the nursing home.

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