Nurses’ decision-making process in cases of physical restraint in acute elderly care: A qualitative study

S. Goethals a,⁎, B. Dierckx de Casterlé b, C. Gastmans c

a Department of Nursing, Catholic University College Ghent, Belgium
b Centre for Health Services and Nursing Research, Catholic University of Leuven, Belgium
c Centre for Biomedical Ethics and Law, Catholic University of Leuven, Belgium

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ABSTRACT

Background: The increasing vulnerability of patients in acute elderly care requires constant critical reflection in ethically charged situations such as when employing physical restraint. Qualitative evidence concerning nurses’ decision making in cases of physical restraint is limited and fragmented. A thorough understanding of nurses’ decision-making process could be useful to understand how nurses reason and make decisions in ethically laden situations.

Objectives: The aims of this study were to explore and describe nurses’ decision-making process in cases of physical restraint.

Design: We used a qualitative interview design inspired by the Grounded Theory approach. Data analysis was guided by the Qualitative Analysis Guide of Leuven.

Setting: Twelve hospitals geographically spread throughout the five provinces of Flanders, Belgium.

Participants: Twenty-one acute geriatric nurses interviewed between October 2009 and April 2011 were purposively and theoretically selected, with the aim of including nurses having a variety of characteristics and experiences concerning decisions on using physical restraint.

Results: In cases of physical restraint in acute elderly care, nurses’ decision making was never experienced as a fixed decision but rather as a series of decisions. Decision making was mostly reasoned upon and based on rational arguments; however, decisions were also made routinely and intuitively. Some nurses felt very certain about their decisions, while others experienced feelings of uncertainty regarding their decisions.

Conclusions: Nurses’ decision making is an independent process that requires nurses to obtain a good picture of the patient, to be constantly observant, and to reassess the patient’s situation. Coming to thoughtful and individualized decisions requires major commitment and constant critical reflection.

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What is already known about the topic

• Decision making in acute elderly care and, in particular, in ethically charged situations requires critical reflection.

• Decision making in cases of physical restraint is focused on safety and guided by ethical considerations.

• Qualitative evidence concerning nurses’ decision making in cases of physical restraint is limited and fragmented.

What this paper adds

• This paper provides a nuanced understanding of the complexity of nurses’ decision making in cases of physical restraint.
Decisions are mostly made on the basis of rational arguments, in addition to being made routinely and intuitively.

Decisions are never experienced as a single, fixed decision but rather as a series of decisions that can change very quickly. Patients, nurses, and context-related factors contribute to the ever-changing character of the decisions made.

1. Introduction

The ethical dimension of care is an essential part of good nursing practice, and ethical reflection is necessary for nurses to come to thoughtful and balanced decisions (Bishop and Scudder, 1990). The review of Goethals et al. (2010) shows that nurses’ ethical practice is a complex process of reasoning and decision making that involves observing, analyzing, and judging patient-related issues. This decision making is influenced by nurses’ personal qualities. Limited staff and time are context-related elements that impede and complicate nurses’ ethical practice. As a result, more and more nurses prioritize medical technical care and experience the realization of the ethical dimension as a difficult and subordinated task (Milisen et al., 2006a).

Particularly in acute elderly care, where most of the patients have impaired physical and mental abilities and limited capacities to express their personal needs and wishes, the vulnerability of the patients increases. To deal appropriately with this vulnerability, nurses need to be able to critically observe and interpret patients’ signals in order to provide ethical care (Kihlgren and Thorsen, 1996; Randers and Mattiasson, 2000). Critical reflection on what constitutes good care is required in everyday care, but even more so in ethically charged situations such as those requiring physical restraint (Gastmans and Milisen, 2006).

Physical restraint is defined as “any device, material, or equipment attached to or near a person’s body that cannot be controlled or easily removed by the person and which deliberately prevents or is deliberately intended to prevent a person’s free body movement to a position of choice and/or a person’s normal access to their body” (Retsas, 1998).

During the last 20 years, awareness has increased about the frequent and unlimited use of restraint in the US, Australia, the UK, and other European countries (Hughes, 2010; Köpke et al., 2010). Based on research and motivated by a philosophy of individualized care, many measures are taken to change this standard of practice (Hughes, 2010). The use of physical restraints, however, is still a common practice (with a prevalence of 33–68%) in acute care settings (Hamers and Huizing, 2005) and remains an international topic of discussion. This discussion relates to several dimensions, including the violation of human rights (Hughes, 2010); the balance of clinical and ethical issues (Gastmans and Milisen, 2006; Gastmans, 2010); and to the question of whether physical restraint can ever be avoided (Flaherty, 2004).

Nurses’ key role in making decisions about the use of physical restraint must be understood in terms of their initiation of restraint use and/or by their intimate involvement in the care of restrained patients (Hamers and Huizing, 2005). A synthesis of qualitative evidence regarding nurses’ decision making in cases of physical restraint characterizes decision making as a complex trajectory that focuses on safety and is guided by ethical principles (Goethals et al., 2012). The different phases—e.g., before, during, and after restraint use—describe the trajectory character of the decision making (Kontio et al., 2010). The “complexity” of this trajectory is attributed to and depends on patient characteristics, such as degree of disruptive behavior (Janelli et al., 1995; Janelli and Kanski, 1996; Chien, 1999; Lee et al., 1999; Hantikainen, 2001; Ludwick et al., 2008); nurse-related factors, such as nurses’ willingness to take risks (Karlsson et al., 2000) and context-related factors, such as the family’s viewpoint (Hantikainen and Käppeli, 2000).

While most of the included studies focused on one or more substantive elements of this complexity, only two studies described decision making as a “trajectory” (Ludwick et al., 2008; Kontio et al., 2010). A refined understanding of this trajectory would be helpful in understanding the complexity of nurses’ reasoning process in ethically laden situations. Thus, the aim of this study was to explore nurses’ decision making process in cases of physical restraint in acute elderly care.

2. Methods

2.1. Design

We used a qualitative interview design inspired by the Grounded Theory approach (Corbin and Strauss, 2008). The Grounded Theory approach is well suited for discovering complex phenomena such as understanding the underlying social processes of decision-making.

2.2. Procedure and sampling

All hospitals in Flanders, Belgium with an acute geriatric ward (n = 63) were contacted by email. Thirty-four hospitals participated in our study. The hospitals completed a questionnaire on hospital characteristics and selected a contact person who served as a link between the researcher and the nurses. We purposefully selected hospitals from the initial sample of 34 hospitals, with the aim of sampling a wide variety of hospital characteristics (religious affiliation, size, geographical location) (Table 1). This sample heterogeneity enabled us to look up differences in settings, persons, and situations, resulting in a broad, diverse data base for identifying variations in the concepts. Initially we collected data using purposive sampling, which was then superseded by theoretical sampling. The sampling process resulted in 10 general hospitals and two university hospitals spread over the five provinces of Flanders. Six hospitals had a Catholic affiliation, and six had no religious affiliation. The questionnaire for nurses contained general closed-ended questions about the nurses’ characteristics (age, diploma, religion, education, work experience) and open-ended questions about their practice and ethical views regarding the use of physical restraint. Nurses were included when they met the following inclusion criteria: (1) actively and...
recently involved in decision making concerning physical restraint, (2) Dutch speaking, and (3) willing to participate in an interview. The sample of 21 nurses included 18 woman and three men, with an age range of 24–53 years. All nurses worked in geriatric wards, with an experience range of 1–28 years. Almost half of the sample had a Registered Nurse degree (n = 8), three had a Master’s degree in Nursing Science, and 10 had an undergraduate degree. Most were Catholic (n = 17), and slightly more than half of the sample used physical restraints daily (n = 12) (Table 2).

2.3. Data collection

We conducted 21 semi-structured, in-depth interviews between October 2009 and April 2011. Interviewees were asked to recall a recent case in which they participated in the decision making regarding the application of physical restraint. An interview format with open-ended questions was developed and guided by two literature reviews (Goethals et al., 2010, 2012), three pilot interviews, and discussions in the research group. As the study evolved, the interview format was adjusted several times. All interviews were audiotaped and verbatim transcribed by one researcher (SG). The interviews took place in the hospital wards (17) or at a participant’s home (4), and lasted on average 1 h.

2.4. Ethical considerations

The research protocol was approved by the Ethics Committee of the Faculty of Medicine of the Catholic University of Leuven. The participation was entirely voluntary, and a written study protocol that included detailed information about the study and the expectations of the participants was presented to the contact person and the nurses. The study participants had the right to withdraw their consent at any time and at any stage of the study. The process of informed consent was carried out with care. All data were treated confidentially and processed in an anonymous way.

2.5. Data analysis

Data analysis was performed using the Qualitative Analysis Guide of Leuven (QUAGOL) (Dierckx de Casterlé et al., 2012) which offered a comprehensive and systematic guide that supports and facilitates the process of analysis. The core characteristics and strengths of this guide lie in the case oriented approach characterized as a continual balancing between within-case and cross-case analysis, the use of different analytical approaches, the constant comparative method and of an interdisciplinary team approach. This method consists of two parts: (1) preparation of the coding work, using only paper and pencil and (2) the actual coding process, using a qualitative software program. The preparation of the coding work involves a focused (re)reading of the interviews phrasing to understand the storyline in a narrative report and in a conceptual scheme with concepts. Narrative reports and conceptual schemes were continuously discussed in the research team (SG, CG, BD), refined and if needed adapted by comparing schemes from other interviews. This first part of the analysis process aimed at producing an empirically based framework essential for the actual coding process. In the actual coding process, concepts are empirically tested by (re)reading all interviews again. Than significant fragments of the interviews are linked to the concepts using the QSR NVivo 8 software program. When all linked fragments share a common message the
essence of the concepts can be described as well as their dimensions and characteristics. Finally concepts are integrated in a storyline to come to a conceptual and theoretical description of the results. This systematic method of working consisted of a cyclic process of simultaneous data collection and analysis which allowed us to check and verify continuously the hypotheses developed in light of newly collected data in order to come to a deeper and more nuanced understanding of the data.

2.6. Trustworthiness

We ensured the trustworthiness of the findings by using various techniques such as developing an audit trail comprising memos, reports of research group meetings, schemes, and code trees. The different steps in the analysis process were considered with the research group, who constantly discussed the results in order to establish uniformity in wording, concepts, categories, and relationships. Researcher assumptions were bracketed by discussing them and were noted in a reflexive journal. Data triangulation was obtained by collecting data at different points in time and in different sites. This resulted in heterogeneity in the settings (hospital characteristics) and participants (personal characteristics). To validate the findings, we carried out an independent interpretation of transcripts and codes that was performed by a multidisciplinary team of peers.

3. Results

3.1. Introduction

The interviews showed that in elderly care almost all nurses independently made decisions related to the use of physical restraint. From nurses’ primary objective to guarantee patient’s safety and maintain peace in the ward, an intensive and dynamic decision-making process starts.

In most of the cases, the decision-making process consisted of two phases: forming a picture of the patient, and the actual decision making itself. In ideal circumstances decisions were based on a good assessment of the situation. This allowed nurses to determine who the patient is and what might be good for this person. The actual decision was made by the nurse alone, in consultation with a colleague, or after meeting with the team. While some decisions were discussed during pre-arranged meetings, other decisions were made ad hoc at the patient’s bedside. Most of the decisions were based on rational arguments, while some were made more routinely and intuitively. Facing the question of employing physical restraints often resulted in different sequential decisions that took place quickly. Hence, the decision to use restraints was never based on a single or fixed decision. The rapid succession of decisions implies that decisions are temporary and reversible. While some nurses felt very confident about their decision, others were uncertain of their decisions.

3.2. Description of the decision-making process

Regarding physical restraint, the nurses’ decision-making process started with forming a picture of the patient, followed by the actual decision making. Usually, the actual decision-making process consisted of three subphases. First, the nurses assessed the patient’s condition, considering how it would evolve (first subphase). Most of the respondents indicated that physical restraint was applied when the patient’s behavior was unsafe, both for himself and other patients. We called this determination the defining moment (second subphase). By continuing to observe and evaluate the situation, nurses could re-assess the patient’s situation, adjusting their initial decision, if needed (third subphase).

Not all decisions followed the above-described process. In some situations, immediately after forming an overall picture of the situation, nurses used a form of physical restraint like side rails and cross tables. In those cases, nurses were often influenced by the ward’s practice. They connected a certain patient profile (e.g. limited mobility or confused behavior) to the application of non-invasive restraint measures, e.g. side rails. Often, these decisions were made from a preventive perspective (e.g. avoiding falls) and seemed obvious in order to guarantee safety.

The following quote from one of the respondents addresses this issue:

“Yes, it’s like I said. She has no support any more. On her right leg she’s wearing a brace; her leg is totally crooked. And her left leg, she also has no support there. So the lady is falling when you put her in a seat. She falls forward, so it is logical reasoning that we take the cross table and put it next to her. That is a… that is an automatic decision.” (nurse 11)

In some cases, immediately after forming a picture, nurses might decide to loosen the restraint or stop its use. Being touched by the situation and experiencing that a human boundary has been reached, nurses by reflex removed the restraints or reduced them considerably, as shown in the following statement:

“Because, yes he lay there open and naked and he put everything away, and then we said, ‘we’ll release him.’ My immediate reflex was ‘give him freedom,’ so that he will not be that agitated. Because his son was with him and his son was there, he recognized him [his son] and that man, that man . . . started to scream.” (nurse 3)

3.2.1. Phase 1: forming the picture

Every decision was preceded by an assessment of the situation in order to form a picture of the patient. How nurses formed their picture as well as the details of this picture could vary widely. Nurses formed this picture by gathering information from home care and residential care colleagues and from family:

“And, because I first thought he came from a nursing home, . . . because we have to form a picture that includes details [of the patient’s] history, and the daughter told me that he
received something for his pain in the nursing home. And I looked for that product and it was Durogesic. And I was thinking when I, yes, I thought he will have side effects from that anesthetic. And I heard also on the telephone that the evening before, because he had so much pain, the doctor came to give him an injection of morphine.” (nurse 7)

Although some interviewed nurses considered only the medical and functional status and actual behavior of the patient, other nurses actively searched for additional information. This information included aspects about the patient’s social situation, e.g. the patient’s personality and his background. Especially in patients with longer hospital stays, some nurses searched for personal details that could support them in their decision-making process.

The following quote is an example of extended information seeking:

“I think that this man expected more in life than simply sitting between those four walls, because he had all his photos here from the trips he made. He looked like he had been very active, making trips with his friends to the Ardens, and you could discuss this with him. And he cheered up when you talked about his girlfriend. I had the impression that this man was more, he expected more than sitting between those four walls.”” (nurse 12)

3.2.2. Phase 2: the actual decision making

As mentioned above, the actual decision-making process can be divided mainly into three subphases: (1) waiting, giving chances, using alternatives; (2) the defining moment; and (3) reassessment of the decision making.

3.2.2.1. Subphase 1: waiting, giving chances, using alternatives. Because physical restraint is used only when no other option exists, many nurses initially adopted a waiting stance in order to give their patients one or more chances to avoid interventions such as restraint. In this subphase, the interviewed nurses stated that they were actively involved in observing and evaluating the patient’s every action. In addition to watchful waiting and giving chances, nurses also tried out various alternatives, like talking to patients, touching and orienting them to solve, for instance, disruptive behavior. In some cases, these alternatives could avoid or delay the decision to use physical restraint. Whether nurses gave one or more chances and to what extent they tried out alternatives, depended on several factors.

Among the interviewed nurses, those who were willing to take more risks, who had previous positive experiences with watchful waiting, and who had tried out alternatives tended to give patients more room. Although a nurse’s personality played a crucial role in this subphase, the patient’s behavior and the extent to which his safety or the safety of the environment was at risk was most important. The time available was also mentioned as an important factor for how often nurses gave the patient chances and/or tried out alternatives. Some of the nurses limited the patients’ chances usually during evening shifts and night duties when staffing was limited.

An example of a waiting stance was expressed by one of the respondents:

“No. Yes, after a time, yes, I try to hold him in the room. I think . . . [it’s better that] he is making a mess here in his room than [elsewhere]. After a time, perhaps he wants to go to bed; he feels it is night. But when it really doesn’t get better and he is annoying, seriously annoying, other people, then you have to intervene. Then I had to intervene. . . . (. . .). Yes, at a certain moment you are already stressed out and the other patients are confused. There is a lot of noise in the night. Other people start to cry and scream, [because] they are afraid that he will come into their rooms. They are angry because a foreigner enters their rooms and starts rummaging in their closets. And I can’t stop him. Yes, then I have to intervene and, I myself, yes, yes I think then ‘yes, this cannot go on further like this.’” (nurse 15)

3.2.2.2. Subphase 2: the defining moment. The defining moment in the decision making is the moment when nurses decide to use physical restraints. Endangering the patient’s safety and the comfort of other patients in the ward as well as other nurses, who already feel stressed by the difficult situation, were examples of the “defining moment.” When exactly this moment was reached depended on the above-described patient, nurse, and context-related factors. In most of the cases, the nurses described this decision as a last option because no other solution was available for solving, for example, the patient’s disruptive behavior. All of the nurses experienced the decision as a necessary evil, and in many cases, felt that the decision to use physical restraints was difficult to make:

“Some of us said: ‘No, let’s try it again.’ But others said: ‘Yes, but ( . . .) we’re not going to run constantly after him to direct him to his room. We lose too much time with that ( . . .). Yes, . . . it is noon: let’s try it once more. Give him one more chance to see what he will do.’ And some people agreed and said, ‘OK, let’s try it.’” (nurse 1)

3.2.2.3. Subphase 3: reassessment of the decision making. The act of constantly evaluating and reassessing the situation was the common thread in all of the nurses’ stories. The reassessment process could cause nurses to stick with their decision or adjust it. There were various options when adjusting the decision, such as reducing, temporarily interrupting, increasing, or stopping restraint use. How often the interviewed nurses reassessed and adjusted a specific decision varied greatly and depended on the patient’s situation, the nurse, and the context. Some decisions were adjusted once, while others were adjusted several times. Although some decisions were reassessed during specific times nurses exchange information, others were reassessed ad hoc at the patient’s bedside based on the nurses’ interpretation of the situation.

3.3. Characteristics of the decisions

Our study revealed that nurses’ decision making in situations of physical restraint is a dynamic and variable
process in which several decisions are made. Because the process entailed trying different approaches, judging, adjusting, and increasing or decreasing restraint use, all decisions were temporary and reversible in character.

3.3.1. Temporality of the decisions

The interviewed nurses emphasized the temporality of their decisions. This meant that physical restraints were used only when deemed necessary. Although the duration of restraint use depended on the patient’s behavior, it was influenced also by the context and the nurse’s personality. Restraints could be used when patients are confused (i.e., to avoid withdrawal of IV lines) or only during nighttime when needed supervision cannot be guaranteed:

“… I restrained her hands (…) And I knew that that was only for that period, because after that period, the other day, she wasn’t [acting up]. They [restraints] were still in her bed for when it would be necessary, but we did not need to use them anymore. That was only for that night. That was very peculiar.” (nurse 6)

On the basis of our interviews, we concluded that nurses who were willing to take more risks would reduce or stop restraints more readily than nurses who feared incidents or complaints. The latter were more willing to restrict patients for a longer period.

3.3.2. Reversibility of the decisions

The fact that temporality is a core characteristic of the decision means that the decisions are also reversible. In most of the cases, reversibility must be understood as undoing the restraints used earlier. The nurses indicated that physiotherapy and occupational therapy were valuable alternatives for interrupting restraint use for a period. The nurses also stated that they systematically detached the restraints (e.g., three-point restraint or wristbands) when the patient’s family was present:

“Yes, e.g., also when the family is with him. [In] patients that are restrained, often when the family is there, we say ‘we will loosen you.’ That is [done] often for patients that have hand restraints to protect infusion drains, nasogastric tubes, or dwelling catheters (…). We explain to the family why he is restrained and ask, ‘when you leave give us a signal.’” (nurse 19)

Next to undoing the restraint, the nurses stressed the importance of continuously evaluating their decisions. By meticulously following and evaluating the patient’s behavior and its associated risks, the nurses frequently reassessed and adjusted their decisions. A few hours after the application of physical restraint, the patient’s situation may change and a nurse may conclude that the restraint is no longer required and thus detaches the restraint:

“We always view it, it is not because I had to use restraints once, that you will use them always, no it does not work like that. No, continuously you say ‘yes, it is necessary or not because it [using restraints] is a little bit of a punishment. You don’t want to let [the patient] see it [as a punishment], but you impede them partly. So you have to evaluate that always.” (nurse 15)

3.3.3. Variety of decisions

Our analysis of the interviewees’ cases indicates that the decision making was rarely experienced as a fixed decision. The decisions made were the result of an intensive and continuous process of observing, trying out alternatives, and evaluating the whole situation. As a result, decisions were characterized as temporal and reversible, which implies that, in any given case, a variety of decisions can follow each other. In each patient, the restraint measure can change and vary from moment to moment such that the patient can be subjected to a variety of restraint measures.

The following citation illustrates the dynamic changes in decision making:

“Yes, I think in that case, it [restraint use] has been evaluated every shift. In the emergency unit, he was walking around. I put him behind the special door, and during the night, they applied a 5-point restraint. The next day I reduced the restraint gradually. But it was very clear that untimely stopping of restraint use was not enough, because we all predicted that when the family would be away, the situation would escalate again.” (nurse 3)

3.4. How decisions are made

Decisions concerning the use of physical restraint were made alone, in consultation with a colleague, or after discussion within the nursing team. Although some decisions were systematically discussed during specific times nurses exchanged information, other decisions were made ad hoc at the patient’s bedside. While most of the decisions were made in a reasoned way, others were made in a more intuitive and routine fashion.

3.4.1. The persons involved in the decision making

Which people are involved and how they are involved in the decision-making process can vary widely. Although the decisive role of nurses in the decision making was clear, the role of the physician depended on the habits and rules of the ward. In most of the cases, the physician’s role and involvement was of secondary importance and was experienced as less meaningful. In a few rather exceptional cases, the role of the physician in decision making was decisive. In addition, the voice and the role of the family in most of the cases were limited. However, the nurses reported that they respect the explicit wishes of the family concerning the use of physical restraint. Whether nurses decided on their own or after consultation with a colleague or with the team depended on the individual nurse and context. During evening shifts and during night duty when time was limited and staff was scarce, nurses decided more on their own. During the day, most of the nurses emphasized the importance of consulting their colleagues and exchanging views.

3.4.2. Reasoned, routine, and intuitive decision making

In most of the situations, the nurses came to a reasoned decision based on one or more patient- and/or
context-related arguments. Escalating aggression was a typical patient-related argument that prompted the application of physical restraint. Applying physical restraint for the comfort of night nurses was an explicit context-related argument. Often, reasoned decisions resulted from consultations with the team or with a colleague, during which different arguments were weighed against each other. Especially decisions concerning more invasive restraint measures, like the three-point restraint, were argument based.

“(…) the patient would like to go into his bed, because he was tired. So the table, of course, disappeared. And [while] in bed, he was not being restrained, because he was so calm. Yes, afterwards he wasn’t being restrained anymore. I communicate that with the night colleague: ‘I didn’t restrain the patient.’ And then I give my reason: ‘the patient was calm, the patient is mentally OK, don’t pull his oxygen.’ I tell all of this to the night colleague (…).” (nurse 4)

Routine decisions were mostly connected with the use of non-invasive restraint measures like side rails and cross tables. These preventive measures were often used for new patients with impaired mobility. In many cases, the nurses did not even view these measures as restrictive, but rather as useful tools in the care. Also, engrained ward practices promoted routine-driven decisions, as exemplified by the following comment:

“No, that is from the first day that we, the side rails are up and that they [the patients] say ‘yes, I’m not gonna walk away.’ But then I say, ‘No, but when you turn yourself you can hold this [the side rail] (…) On our ward almost all the sides rails are up; it is rather exceptional that they are down.” (nurse 6)

The nurses’ stories revealed that some came to their decisions in an intuitive way. Instead of basing their decisions on logical reasons, they based them on their personal feelings. Intuitive decisions tended to dominate especially in situations in which nurses were touched by the patient’s situation:

“No, … yes,… you come over there, you take the meal away and you see him sitting in his chair, then I would feel something like ‘yes come on,’ yes, it was a little bit sad… yes, that is one moment versus another moment. When he, he was sitting and looking there calmly, yes, then you think, ‘yes, come on,’ I, you try to feel this a bit but is not, it is not that you use a method for it (…) No, that was how I felt. So, yes, he seems calm now. He is, [so] we shall detach him. We’ll just let him do [it on his own]. That was only based on my feelings.” (nurse 14)

Also, in some situations, nurses could sense when the patient’s situation worsens. They could not explain exactly what they experienced, but they felt that they had to be alert in that situation and often decided to intervene in order to avoid harm:

“Yes, actually, yes, you can. It is best possible that I say, ‘let’s wait, we’ll put her in bed again.’ Yes, then I know that when I am on the other side of the corridor, and she will ring again. Yes, you feel [that is, sense] that. I felt that it would not be better. I felt it didn’t feel right.” (nurse 6)

3.5. The decision making is accompanied by certainty or uncertainty

The interviews indicated that nurses’ decisions to use physical restraint were accompanied by varying degrees of certainty. While some nurses felt very certain about their decision, others hesitated throughout the decision-making process.

3.5.1. Obvious and necessary decisions

The most typical decisions were ones that were made when nurses felt confident. These were routine-based decisions or decisions associated with situations when the patient’s behavior is clear and predictable. In these situations, nurses easily determined that boundaries were reached or exceeded. Verbal aggression progressing into physical aggression or any other behavior that causes other patients to become excited and scared were commonly mentioned examples of behavior that exceeds normal boundaries. Situations that nurses knew were likely to escalate and worsen if no measures were taken also made the decision making clearer and more certain, as shown in the following excerpt:

“Yes, the story is told on the ward. She was gone and we put in a cross table, because it was the first night for that lady. And from the information received from the other nurses [during the information-exchange meeting], we heard [that] certainly a waist belt should be used for the night. So she didn’t get any chances, because at 5 p.m., there was a problem. So then it is undoubtedly a waist belt.” (nurse 8)

3.5.2. Decisions accompanied by doubts

The most pronounced situations in which nurses hesitated on their decisions were those that lacked clarity. For example, nurses might be unfamiliar with a patient and they might not know exactly how the patient would behave and how this behavior would evolve. Additionally, doubts were strengthened when nurses felt attracted to the patient as a person. Verbal signals as well as non-verbal signals, like a glance and a patient’s facial expression, could cause nurses to be indecisive about whether to use restraints. This could delay the use of the restraint measure. Other typical circumstances that might provoke doubts included balancing between freedom and guaranteeing safety. In many cases, nurses chose to guarantee safety, even though they remained hesitant about their actual choice. Nurses had doubts not only during decision making but also later on after finishing their shifts or at home:

“Sometimes it is between two fires. Yes, I also would like her, I also would like to detach the restraint when she would say, ‘yes, I’ll ring the bell and I won’t walk around.’ For me, no problem, but she is not too… but at that moment she’s not too confident, because she doesn’t ring
and she walks around alone (...). Yes, physical restraint is not easy (...). When and when not...” (nurse 13)

4. Discussion

4.1. Discussion of the methods

As far as we know, this is the first qualitative study to examine nurses’ decision-making process during cases of physical restraint in acute elderly care in Flanders, Belgium. This qualitative study provided rich and in-depth insight into nurses’ reasoning and decision making during situations of physical restraint. The strengths of this study are (1) the systematic and cyclic process of data collection and analysis, (2) the heterogeneity of the sample regarding both hospital and nurses characteristics, (3) the principle of theoretical sampling until saturation, and (4) the various techniques used to maintain the trustworthiness of the findings. Although the data were collected by only one researcher (SG), the interviews and analysis were constantly discussed with other members of the research team (BD, CG). It would have been enriching if the interviews could have been validated by participant observation. Examining the decision-making process from another perspective also could have given new insights or clarifications about what was said.

4.2. Discussion of the findings

The results of our analysis showed that deciding on whether to use physical restraint in acute elderly care is a dynamic process having different phases. This core finding, which is in agreement with the main findings of Ludwick et al. (2008) and Kontio et al. (2010), indicates that nurses are meticulously involved in the assessment, follow-up, and evaluation of the patient situation as it evolves. Most of the various decisions made by the nurses resulted from a reasoned and reflective process with the main goal of guaranteeing safety. The findings clearly demonstrated that decisions in situations of physical restraint are characterized as reversible and temporal. Nurses confirmed this observation in practice by giving patients chances, by trying out different actions, and by constantly evaluating their decisions in order to delay, apply, or remove physical restraints. This intensive process of observing, deciding, and adjusting also shows that nurses want to apply restraints only when it is absolutely necessary and want to stop the application as soon as possible. Are decisions constantly evaluated, adjusted, and limited temporally because growing evidence shows that the use of physical restraint brings with it the risk of adverse events (Gallinagh et al., 2002; De Vries et al., 2004)? Or is it because of the documented negative experiences of older people (Gallinagh et al., 2001) who have undergone physical restraint? Despite of all the efforts the nurses made to make sound decisions regarding restraint use, they still found it difficult and, at times, hesitated to apply physical restraints. Indeed, restraint use still seems inevitable, and in some cases, remains a routine measure in acute elderly care in Flanders.

There are different reasons that might explain why nurses use physical restraint. Firstly, the interviews revealed that the nurses tried to get a grip of the whole situation by observing the patient and gaining information. We describe this process as the “forming the picture” phase. In our interviews, we observed that some nurses also searched for additional information concerning the patient’s personal situation to guide their decision. These nurses went further than only interpreting and judging the patient’s behavior. When patient behavior is only interpreted as ‘disturbing’ without a clear understanding of what constitutes this behavior, there is a serious risk that nurses come to an inappropriate response (Clarke, 2010). Doing this doing often results in the use of physical restraint. By taking a personal interest in the patient—knowing their background, likes, and dislikes—the nurses in our study tried to understand the experienced problems from a broader perspective. This important phase in the decision-making process can be equated to the concept of “knowing the patient” (Wittemore, 2000; Schmidt, 2010; Morrison and Symes, 2011). This concept means understanding and knowing the patient in a broader context, in all its aspects, rather than focusing specifically on the physical part of their existence. Being able to focus on the different dimensions of a patient as a person in a given situation is an important cue that guides nurses’ decision making toward individualized care and can be achieved through an interactive relationship (Wittemore, 2000; Schmidt, 2010; Morrison and Symes, 2011).

Secondly, nurses may not always be aware that some types of restraint measures overly restrict older people. The routine use of innocent-looking restraint measures like side rails, for example, could indicate that nurses using these measures may lack knowledge about these measures. The idea that nurses are unaware that side rails are also restrictive measures was confirmed by De Vries et al. (2004). How restraint is defined and what measures are used can differ widely across countries due to cultural or ethnic differences in care (Hughes, 2010). More challenging than trying to determine what can and cannot be considered as a restraint is the discussion concerning the use of physical restraint as a safety device, a treatment device, and a restraint device. A more appropriate framework for clinical practice would be to focus more on the purpose of a given restraint rather than on the particular types of restraint (Evans, 2010).

Thirdly, nurses’ independent way of making decisions can be linked to the central element of professional nursing care: observing and watching patients in order to protect patients from harm and negative events (Schmidt, 2010). Especially when patients’ safety and environmental peace might be compromised, we observed that the nurses quickly made decisions. This finding fits in with the idea that nurses always want to have control over a situation, and thus they always need to be “doing” something (Testad and Aarsland, 2010). Often, changes in patient conditions may require that a decision be adjusted very quickly. So nurses’ decisions concerning the use of physical restraint can be diminished, interrupted, or stopped, illustrating the temporary and reversible nature of restraint use. Perhaps this explains why these decisions are often made alone and not always discussed within the multi-disciplinary team. Very rarely do nurses discuss
their decisions with physicians or do physicians make the final decision. This finding contrasts with decisions related to care processes associated with euthanasia and artificial nutrition and hydration (ANH). These latter decisions, and especially those concerning the application of euthanasia, are irreversible. Because such decisions cannot be undone, decisions involving euthanasia and ANH require several, multi-disciplinary and in-depth consultations within a team context. Decisions concerning euthanasia and ANH are medical decisions. Although nurses have a significant and guiding role in the different phases of these processes, the final decision is attributed to and remains in the hands of the physician (Bryon et al., 2010; Dierckx de Casterlé et al., 2010).

Also the fact that the application of physical restraints is, in the Belgian context, an independent technical nursing act not requiring a physician's prescription might explain nurses' independent mode of decision making. However, the Belgian law on patients' rights (Belgian Law gazette, 26/9/2002) creates the opportunity for healthcare professionals to consider whether to apply physical restraints as a multi-disciplinary shared decision (Milsen et al., 2006b). This finding is also a point of discussion in the Netherlands, where Dielis-van Houts et al. (2003) supported the idea that decision making should be a multi-disciplinary responsibility, with the doctor carrying the final responsibility. Contrary to this opinion, Hamers and van Wijmen (2003) argued that decisions in cases of physical restraint must be a nursing decision. Yet we cannot state that reversible decisions, like the application of physical restraint, are not important enough to discuss in a team. On the contrary, systematic reflection by the multi-disciplinary team about the use of physical restraint could be useful in order to discuss the broader impact of these easy and innocent-looking nursing acts.

Fourthly, from our results and in accord with the literature (Goethals et al., 2010, 2012), it is evident that the difficult context, the nurses' personality, and the nurses' experiences undeniably influence the decision-making process in concrete situations. Context-related factors like traditions of the ward, and limited time and staff during evening and night shifts are circumstances that often lead to the use of physical restraint. Surprisingly, staff numbers do not appear to be significantly associated with restraint use (Castle and Fogel, 1998; Woo et al., 2004). Nurses' negative experiences with fall incidents often result in a limited willingness to take risks. Also, the convincing belief that guaranteeing patient safety is a priority in nursing practice could explain why nurses frequently use physical restraint. Especially, non-invasive measures routinely applied to vulnerable people with cognitive and physical limitations strikingly supports this premise. Based on our findings, supporting the philosophy of individualized care (Madan and Row, 2010), health care and nurses in particular are challenged in the way they will deal decisions on restraint use specifically for the frail elderly.

4.3. Challenges for education and nursing practice

Our study revealed the complexity and intensity of nurses' decision making in cases of physical restraint in acute elderly care. As the aging population continues to grow, nurses will be more and more confronted with vulnerable people and complex care, which will affect how they make future decisions. Understanding and managing, for example, dementia and its associated behaviors, as well as understanding the real meaning of individualized care, create challenges for education and training in practice (Agency for Healthcare Research and Quality, National Guideline Clearings house, NGC: 005974; Madan and Row, 2010; Testad and Aarsland, 2010). Evidence-based guidelines can lead nurses helping them to consider their decisions instead of automatically seeking "to do something" about a situation (Köpke et al., 2010). These guidelines can be a starting point for discussing cases systematically in team as well as for making a critical evaluation of the decision-making process in order to increase reflection on what is decided as well as how decisions are made, with the aim of reducing physical restraint (Köpke et al., 2012). Being able to discuss decision-making with all involved is an excellent opportunity for nurses to share their concerns and doubts, to learn and to optimize their knowledge. Such stimulating environment empowers nurses as persons and as professionals in complex ethical decision-making processes. Steps can be taken in the direction of a restraint poor environment, perhaps even to a restraint free environment, only through evidence-based insights, education and training, reflection, empowerment and a stimulating environment.

4.4. Implications for further research

Although our research provided a rich and in-depth view of the decision-making process of nurses in cases of physical restraint, many other interesting studies would be informative for nursing practice. We limited our setting to the acute geriatric ward. Hence, it would be interesting to replicate this research in other acute settings like intensive care, where vulnerable patients also can be found. Research involving residential care and home care also would be fascinating, because in these settings, nurse contact with patients and position toward patients differ greatly in nature. On the basis of our interviews, we can conclude that the involvement of patients and their families in the decision-making process is of secondary importance. It would be interesting, therefore, to interview them in order to explore how they view their role in the decision-making process. The Belgian law on patients' rights supports the idea that decision making in situations of physical restraint results from systematic multi-disciplinary consultations. Our results clearly show that this is not realized in practice. It would be interesting to explore the reasons for this discrepancy.

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