



# Contextual influences on nurses' decision-making in cases of physical restraint

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## Abstract

**Background:** In order to fully understand nurses' ethical decision-making in cases of physical restraint in acute older people care, contextual influences on the process of decision-making should be clarified.

**Research questions:** What is the influence of context on nurses' decision-making process in cases of physical restraint, and what is the impact of context on the prioritizing of ethical values when making a decision on physical restraint?

**Research design:** A qualitative descriptive study inspired by the Grounded Theory approach was carried out.

**Participants and research context:** In total, 21 in-depth interviews were carried out with nurses working on acute geriatric wards in Flanders, Belgium.

**Ethical considerations:** The research protocol was approved by the Ethics Committee of the Faculty of Medicine, Leuven.

**Findings:** Relationships with nursing colleagues and the patient's family form an inter-personal network. Nurses also point to the importance of the procedural–legal context as expressed in an institutional ethics policy and procedures, or through legal requirements concerning physical restraint. Furthermore, the architectural structure of a ward, the availability of materials and alternatives for restraint use can be decisive in nurses' decision-making. All interviewed nurses highlighted the unquestionable role of the practical context of care. Context can have a guiding, supportive, or decisive role in decision-making concerning the application of physical restraint.

**Discussion:** The discussion focuses on the role of the inter-personal network of nurses on the process of decision-making.

**Conclusion:** An institutional ethics policy and a value-supportive care environment can support nurses in their challenge to take ethically sound decisions.

## Keywords

Context, decision-making, nursing, physical restraint, qualitative study

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## Introduction

The well-being of patients depends to a large extent on professional ethical decisions made by well-educated and ethically sensitive caregivers.<sup>1</sup> However, in concrete care practices, it can be a real challenge for nurses to reach decisions that are morally grounded and that prioritize a patient's well-being. Ethical reasoning among nurses is therefore of paramount importance in the application of ethically sound nursing practices. The application of a physical restraint measure seems to be a good example of an ethically laden practice that requires a careful balancing of the values at stake.<sup>2</sup> Notwithstanding this knowledge in mind, the use of physical restraint is a widespread and common practice in acute and residential healthcare.<sup>3–13</sup> As a consequence, it is a challenge to discover how nurses reason and make decisions in cases of physical restraint. The review carried out by Goethals et al.<sup>14</sup> shows that nurses' decision-making in cases of physical restraint is a complex trajectory that is guided by ethical principles. In that process, nurses focus on patient's safety whereby patient, nurse, and context-related factors are taken into account.

In the study we undertook, we were specifically interested in nurses' ethical reasoning in cases of physical restraint in acute older people care. In the first part, we explored nurses' way of reasoning. We concluded that nurses' decision-making in cases of physical restraint in acute older people care is a complex process.<sup>15</sup> In the second part, we were able to discover the values that are weighed in nurses' decision-making.<sup>16</sup> To understand the nurses' ethical reasoning as a whole, it is essential to gain insight into the contextual factors influencing nurses' reasoning process. A limited number of empirical studies support the hypothesis that nurses are easily influenced by context in their decision-making in cases of physical restraint.<sup>17–21</sup> More detailed, time pressure and shortages of staff can increase the use of physical restraint.<sup>17–19,22–24</sup> A lack of support from managers and insufficient time allowed to discuss various options with physicians may impede nurses' decision-making processes.<sup>20,21</sup> An outspoken opinion of the patient's family or a medical order often results in nurses changing and adapting their decision-making to incorporate the wishes of others.<sup>19</sup> However, how exactly and in which way these factors play a role in the decision-making process and influence the prioritizing of values remains unclear. Hence, the objective of this study is thoroughly to examine the role of context in nurses' decision-making in cases of physical restraint in acute older people care. The following research questions were formulated: what is the influence of context on nurses' decision-making processes in cases of physical restraint, and what is the impact of context on the prioritizing of ethical values when making a decision on physical restraint?

## Methodology

To present a rich and in-depth review of the influencing role of context on nurses' decision-making, we chose a qualitative interview design, inspired by the Grounded Theory approach.<sup>25</sup>

Flemish hospitals in Flanders (Belgium) with an acute geriatric ward ( $n = 63$ ) were asked to participate in our study. We purposefully selected hospitals in order to sample a wide variety of hospital characteristics (religious affiliation, size, geographical location) (Table 1). As a result, 10 general hospitals and 2 university hospitals spread over the five provinces of Flanders were included in the study; 6 hospitals had a Catholic affiliation, and 6 had no religious affiliation. Nurses were selected based on certain characteristics (age, religion, education, possession of a diploma, work experience), on their practical experience, and on their ethical views regarding the use of physical restraint. The following inclusion criteria were applied: (1) actively and recently involved in decision-making concerning physical restraint, (2) Dutch speaking, and (3) willing to participate in an interview. The sample heterogeneity enabled us to examine differences in persons and situations, resulting in a broad and diverse database for identifying variation. Initially, we collected data using purposive sampling, which was then superseded by theoretical sampling. Our stepwise and rigorous sampling process resulted in 21 individual interviews with nurses—18 women and 3 men—

**Table 1.** Hospital characteristics (N = 12).

Province		Type	Religious affiliation		Number of beds	
Antwerp	3	General hospital	10	Catholic	6	<200
Limburg	1	University hospital	2	Neutral	6	201–400
East Flanders	4					401–600
West Flanders	2					601–800
Brabant	2					>800

**Table 2.** Nurses' personal characteristics (N = 21).

Sex		Age (years)		Conviction		Level of education	
Male	3	20–29	3	Catholic	17	Undergraduate nursing degree	10
Female	18	30–39	7	Buddhist	1	RN	8
		40–49	7	None	1	MSc nursing	3
		50–59	4	Liberal	2		
		60+	0				
		Working experience (years)		Employment status		Frequency of applying restraint	
		1–5	3	Full-time	15	Daily	12
		6–10	3	Part-time	6	Weekly	3
		11–15	6			Two/month	2
		16–20	3			Monthly	1
		21–25	3			Not known	3
		>25	3				

RN: registered nurse.

with an age range of 24–53 years and an experience range of 1–28 years. Almost half of the sample had a Registered Nurse qualification ( $n = 8$ ), 3 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).

### Data collection

Between October 2009 and April 2011, 21 individual in-depth interviews were carried out. We asked the nurses to recall a recent case wherein they were actively involved in decision-making regarding the application of physical restraint. After the case was told, we systematically questioned the nurses in order to get answers on the developed research questions. The interview guide was based on two literature reviews,<sup>14,26</sup> three pilot interviews, and discussions within the research team (S.G., B.D., C.G.). The processes of interviewing and analysis took place in a simultaneous way. After seven interviews were carried out, we took an interview break of 2 months in order to get a first general impression of the results. The gained insights supported us to interview in a focused way. All interviews were conducted, audio-taped, and transcribed verbatim by the same researcher (S.G.). The interviews took place in the hospital wards (17) or at a participant's home (4) and lasted on average for 1 h.

### **Ethical considerations**

The research protocol was approved by the Ethics Committee of the Faculty of Medicine, Leuven. A written study protocol that included detailed information about the study and the expectations of the participants was presented to the hospital contact person and to the nurses. Participation was entirely voluntary, and informed consent was obtained prior to every participant interview. Any participant could withdraw his or her participation at any point during the study. Data of participants and hospitals were anonymized and treated confidentially.

### **Data analysis**

Data analysis was performed using the Qualitative Analysis Guide of Leuven<sup>27</sup> (QUAGOL). This guide presents a comprehensive and systematic method that supports and facilitates the process of analysis. The core characteristics and strengths of this method lie in the case-oriented approach, characterized by a continual balancing between within-case and cross-case analyses, the use of different analytical approaches, the constant comparative method, and an interdisciplinary team approach. The analysis consists of two parts: (1) data coding using only paper and pencil and (2) the analysis process using a qualitative software program. The data coding involved a focused (re)reading of the interviews in order to develop a clearly understandable storyline as a narrative report and to place concepts within a defined scheme. In the actual coding process, concepts were empirically tested by (re)reading all interviews again. The systematic method of working involved a cyclic process of simultaneous data collection and analysis which allowed us continuously to check and verify the hypotheses developed in the light of newly collected data, enabling us to come to a deeper and more subtle understanding of the data.

### **Rigor**

We ensured that the findings were trustworthy by applying various means of verification, such as developing an audit trail of memos, reports of research group meetings, schemes, and coding trees. The process of analysis was reviewed within the research group (S.G., B.D., C.G.), who constantly discussed the results in order to establish uniformity in wording of concepts, categories, and relationships. To validate the findings, we carried out an independent interpretation of transcripts and codes, which was performed by a multidisciplinary team of experts.

## **Results**

### **Introduction**

According to the interviewees, decision-making in cases of physical restraint is a complex process. This complexity is largely due to the interplay of diverse contextual factors that have an impact on nurses' decision-making. The interplay between contextual and nurse-related factors makes it even more difficult to get a precise picture of the influencing role of context. However, the nurses' accounts showed some obvious trends concerning the influencing role of context.

The complexity of decision-making in cases of physical restraint is largely due to the interplay of different contextual factors. The network of relations among nursing colleagues, other care providers, and the family creates a forum for decision-making. The procedural-legal context is expressed through an institutional ethics policy, guidelines, or legal requirements that direct nurses' decision-making. The architectural structure of a ward, the time of day, and staff-related factors may also be decisive in nurses' decision-making.

*The inter-personal network as a forum for decision-making.* Analyses show that nurses almost never take decisions concerning physical restraint alone. Nursing colleagues, other care providers, physicians, and the patient's family form the network wherein a decision is taken. The extent to which different members of the inter-personal network affect nurses' decision-making can be illustrated in three scenarios: in a first scenario, nurses defer to and adapt to the opinion of another person, directly or indirectly involved, in their own decision-making; in a second scenario, the nurses verify or discuss their decision with a colleague; in a third scenario, nurses reach a consensus through a systematic and intense consultation with the other care providers involved. In the last scenario, the inter-personal network has an essential role in reaching a decision.

*The guiding role of the inter-personal network.* The interviews indicate that even when nurses make a sole decision, they tend to refer to the opinion, advice, or wishes of others involved. Often, the perspective of others has a decisive influence on nurses' decision-making. In particular, the opinion of a colleague or the expressed wish of family members may be followed or adopted without an explicit discussion. Nurses often try to meet the expectations of colleagues or family in order to avoid a need for discussion. The values expressed by others involved are simply adopted in the nurses' own decision-making:

No—at the request of the family, because the family was also concerned. Supposing that we hold off, and the patient gets out of bed. She is going to fall because her mobility is not good enough to walk on her own. At the request of the family we decided to put on the side rails. (Nurse 10)

*The role of the inter-personal network in verification.* The majority of the interviewed nurses reported situations in which they wanted to verify their own opinion with that of a colleague before making a final decision. In these situations, nurses used the inter-personal network as a means of verification. By verifying their own opinion against the opinion of a colleague, nurses look for confirmation and support in their own decision-making: they may also discuss with more than one colleague and strive for a consensus. Although decision-making then gains a more reflective character, the weighing of the diverse values in the decision-making process is rather implicit:

No—we just discussed this. For instance I might say “Look, I think I should not apply physical restraint for this reason” and then my colleague says “Yes, but I think that you have to apply physical restraint for this reason.” So we try to come to a consensus about what we will do. (Nurse 9)

*The inter-personal network as a constitutive medium.* For a limited number of the interviewees, the inter-personal network forms the medium to come to a consensus. This implies that the inter-personal network has a formative or constitutive character. By systematically discussing the patient's situation within the team, exchanging information between all the care providers involved, and weighing the pros and cons of the diverse options, a dynamic decision-making process is created that aims to reach the best decision on patient care. Postponing a decision until consultation has taken place is considered as positive by interviewees and as an opportunity to learn. This encourages nurses to be very careful in the application of physical restraint and to weigh the diverse factors, though sometimes in an implicit manner:

Yes—now he gets a fixed table because it is not safe anymore. But then automatically the physiotherapist says “Yes, but with us during his physiotherapy he still walks 5 meters” and the physician listens also, and then I explain for how long and how we apply restraint. I asked whether we could not look for alternatives, especially considering his behavior—he was very difficult . . . (Nurse 5)

### *The procedural–legal context in decision-making*

*The use of the procedural–legal context to direct decision-making.* Many nurses also report that their decision-making is influenced by the procedural–legal context concerning the use of physical restraint. The availability of guidelines, the presence or absence of an institutional ethics policy, and legal aspects concerning restraint use often set parameters wherein nurses take their decisions. For instance, the presence of an institutional ethics policy concerning restraint use in the hospital encourages nurses to apply restraint as little as possible or to follow the guidelines in order to apply the restraint measure in an appropriate way:

There are three points we always follow. I think this is a legal issue—you may not only use the belt—this they have told me. A very long time ago we used to do that [ . . . ], but it seems it is no longer allowed, so I don't dare to apply this anymore. (Nurse 6)

*Concerns over personal liability and financial claims against the hospital.* A proportion of the interviewed nurses report that they have to justify their decisions to their colleagues, the patient's family, and the managers of the hospital. Decision-making is considered as something that can have serious consequences for the nurse involved as well as for the hospital. Concerns over their personal liability or concerns to avoid financial claims against the hospital may result in nurses following the wishes of the family, for example, and avoiding perceived risks of litigation. In these cases, nurses, in a conscious and diligent manner, put their personal concerns aside and choose the safest solution from the procedural–legal perspective:

And then I choose the safest legal option, which may not be the most humane option, but these are two different things. But if my boss has to pay I don't know how many Euros, then I also get into trouble as the responsible nurse. It is not the most humane option, I know that. (Nurse 8)

### *Physical–material factors*

A lot of nurses describe the important influence of physical–material factors in their decision-making. Physical–material factors can, when not optimal, become decisive in nurses' decision-making. Multiple interviewees report that depending on the physical–material conditions, different values may be applied in their decision-making. The location of patients with runaway behavior in an open ward can be crucial in the application of physical restraint, as their physical safety becomes a priority. Location of the patient in a single room encourages nurses to remove the physical restraint, such that the patient's freedom of movement can be respected:

. . . Yes—because the ward is not secure. Because of the open ward and all the people we find it difficult to apply restraint, but when you have to make the choice between a patient for whom you are responsible running away and getting out on the street, and knowing that even worse things could happen, than you choose physical restraint. If the ward could be closed then we would not opt for physical restraint at the moment: the patient could only go into other rooms and we wouldn't need restraint. Yes, we are very concerned: we have already had some bad experience through not restraining and I'm more afraid of experiencing these problems again than of applying restraint. (Nurse 20)

### *Time- and staff-related factors*

From the interviews, we can deduce that there is an important interplay between time- and staff-related factors in nurses' decision-making. Time-related factors are associated with the time of day (morning, noon, evening, and night) at which nurses have to take decisions. Staff-related factors include the presence or absence of other staff and family and the availability of therapies at the various times. The supervision

guaranteed to be available, the level of work pressure at particular times, and the limited time available to discuss decisions with colleagues all influence nurses' decision-making. Particularly during the evening shift, when nurses are busy and supervision capacity is limited, nurses tend to apply physical restraint more often. Some nurses report that in such circumstances, they also anticipate the in-coming nightshift and apply physical restraint to prevent difficulties at the start of the shift of their colleagues. Numerous nurses report that fewer staff on duty or the absence of therapies during the weekend leads to reduced capacity to supervise the patients, which in turn leads to more frequent application of physical restraint. In these situations, physical safety is accorded highest priority. Nurses consider these kinds of decisions, taken in context, as a necessary action. They also report that in such cases no other practical solutions could be found:

It is difficult for me when I know that I could allow the patient to retain his mobility by not applying restraint. But you know that you have to apply restraint because of the circumstances. This is difficult for me, yes . . . but there is no other option. (Nurse 5)

The availability of more staff, family visits, and therapies such as physiotherapy and occupational therapy create circumstances whereby supervision can be guaranteed more easily. These contextual factors are often decisive for nurses in the evaluation or reconsidering of their decisions concerning physical restraint:

This is very important: when there is more supervision and when there is more staff then you can omit the restraint. When there is therapy and when the family is there then you don't need it so much. Even if a patient exhibits runaway behavior, when the family is there then the reason to apply restraint has gone. Where there is a risk of falling but the patient is doing his exercises under supervision, then the reason for applying restraint is not there [ . . . ] The presence of staff is very important as well as therapy and worthwhile daytime activities. (Nurse 1)

## Discussion

This qualitative study provides an insight into the influencing role of context on the decision-making process among nurses who are considering whether to apply physical restraint. As far as we know, this is the first published qualitative study focusing exclusively on the influencing role of context in nurses' decision-making in cases of physical restraint in acute older people care. We were able to increase the described insights of context in cases of physical restraint as reported in literature, and to some extent, the prioritizing of the different values that affect the nurses' decision-making could be mapped. The most important weakness of this study is the lack of purposive sampling with regard to contextual factors. The finding that diverse contextual factors are influencing nurses' decision-making suggests some heterogeneity among the identified factors.

The results of our analysis show that nurses' decision-making in cases of physical restraint is influenced by different contextual factors. Among these, the inter-personal network seems to play a predominant role. Most of the participants of the study relied in their decision-making process on their network of contacts and used this network whenever possible. The tendency to discuss the use of physical restraint in the workplace during exchange of information (typically at change of shift) or on-the-job is supported by Saarnio et al.<sup>28</sup> Given the complex nature of decision-making, the tendency for decision-making to be shared and a consensus reached between interdisciplinary teams can only be encouraged. Explicitly weighing the alternatives and discussing the different options with their colleagues or other team members is a supportive tool for nurses to come to ethically sound decisions. This finding was also an important conclusion of the study of Rodney et al.<sup>29</sup> This method of decision-making is considered as positive and supportive by the nurses themselves and confers advantages to the individual nurse as well as to the team. By deciding as a team, the information exchange is augmented, which supports an effective, patient-oriented decision-making process. Furthermore, the contributions of different practitioners with their unique professional

knowledge, practical skills, and expertise are fully realized.<sup>30</sup> This method of decision-making prevents hasty decisions, allows the nurse to feel empowered to minimize restraint use, and allows the nurse to experience real team work.<sup>31</sup>

Although applying physical restraint is, in the Belgian context, recognized as an independent nursing intervention, the clinical ethical considerations of Gastmans and Milisen<sup>32</sup> and the guidelines of the university hospitals of Leuven<sup>33</sup> support the idea that a decision to apply physical restraints should be a multi-disciplinary shared decision. However, results indicate that in many cases, decision-making by nurses is not a team process. On the contrary, in many cases, nurses either blindly follow an opinion or request of other persons involved<sup>34</sup> or adopt an earlier decision without questioning the different options and related values. Other reported cases where decision-making does not involve a team include examples where nurses explicitly verify their opinion with individual colleagues to come to a decision. These examples of decision-making demonstrate that nurses commonly adopt earlier decisions or follow the expectations of the others involved. Based on the moral development theory of Kohlberg, this is defined as the conventional way of reasoning.<sup>35</sup> The tendency of nurses to reason in a conventional way was also an important finding of a review of nurses' ethical reasoning<sup>26</sup> as well as being noted in the international research report of Dierckx de Casterlé et al.<sup>36</sup>

Another finding of our study is that the nurses' reasoning process regarding physical restraint is strongly influenced by the time of day, the availability of other staff, equipment and alternatives, and the work pressure experienced by the nurses. The results demonstrate that nurses adjust their decisions to specific working circumstances (e.g. the time of day). With the exception of Huizing et al.,<sup>37</sup> other researchers confirm the nurses' tendency to apply physical restraint more often when they experience staff shortages<sup>8,9,22,23,38</sup> or a lack of time.<sup>22</sup> It is a notable finding that when nurses are under pressure of time, their decision-making gives priority to the safety of the patient. This finding may be at least partly due to the specific Belgian healthcare policy that aims to ensure patient safety in the hospitals, which is an important priority in patient care and is part of an integrated care policy that focuses on the patient's rights<sup>40</sup> ([www.health.belgium.be](http://www.health.belgium.be)). More and more nurses feel that they are expected to justify their decision-making and consider themselves personally liable for their nursing practices.

It may be regarded as questionable whether it is ethically acceptable for nurses to adapt their decision-making to the context instead of deciding in favor of the patient's best interests. Regularly adapting their decisions to meet the expectations of others may involve a serious risk of falling into routines and thereby not meeting the ideal of good care because the individuality and individual needs of patients are not taken into account.<sup>39</sup>

## Conclusion

This study reported some important findings concerning the influencing role of context on decision-making in cases of physical restraint in acute older people care. Context can have a guiding, constitutive, or decisive role. In supporting nurses in their challenge to take ethically sound decisions that are debated and worn by the team, we have some suggestions for nurses and leaders in care. First, an institutional ethics policy concerning the use of physical restraint should be known and practiced by all nurses. Second, nurses should have the opportunity to share their opinions, experiences, and concerns with regard to the application of physical restraint within a multi-disciplinary team. Third, nurses should be encouraged to reflect on decision-making in terms of balancing ethical values. Therefore, a management environment wherein value-oriented work takes priority should be created. Such an environment can give nurses time and space to discuss their ethical concerns, necessary in becoming ethically sensitive care givers. By guiding and supporting nurses in their development as ethically sensitive care givers, nurses can be encouraged to identify and prioritize the patient's well-being above other considerations.

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## Conflict of interest

The authors declare that there is no conflict of interest.

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