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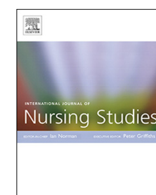
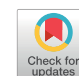


Understanding the complexity of working under time pressure in oncology nursing: A grounded theory study



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ABSTRACT

Background: The international nursing shortage has implications for the quality and safety of patient care. Various studies report that nurses do not have time to complete all necessary nursing care tasks, potentially resulting in nurse-perceived time pressure. Providing good care in the current nursing environment often poses a real ethical challenge for nurses. How nurses experience caring for cancer patients under time pressure and how they deal with the limited time available in achieving an ethical nursing practice remains unclear.
Objectives: To report qualitative research grounded in oncology nurses' experiences with time pressure, its perceived impact on nursing care and the ways in which they deal with it.
Design: A qualitative study design with a grounded theory approach was conducted to explore and explain oncology nurses' experiences with time pressure and its underlying dynamics.
Setting and participants: Purposive and theoretical sampling led to the inclusion of 14 nurses with diverse characteristics from five inpatient oncology nursing wards in one academic hospital.
Methods: Individual, semi-structured, in-depth interviews were conducted over a six-month period in 2015 and 2016. Data collection and analysis occurred simultaneously. The interview data was analysed using the Qualitative Analysis Guide of Leuven and NVivo software.
Results: The conceptualised phenomenon of time pressure, grounded in empirical data, illuminated its complexity and helped us to explicate and describe what nurses felt when working under time pressure. The interviewed nurses described time pressure as a shared yet nuanced reality. We uncovered that nurses dealt with time pressure in varied ways, with a broad range of proactive and 'ad hoc' strategies. According to our interviewees, time pressure was a significant barrier in providing good nursing care. They illustrated how time pressure particularly affected the interactional aspects of care, which most nurses considered as essential in an oncology setting. Underlying personal, cultural and context-related factors seemed to play a key role in nurses' individual experiences with time pressure.
Conclusion: Time pressure is a widely recognised and experienced phenomenon among nurses which has substantial negative implications for the quality and safety of patient care. Our findings reinforce the need to establish better support for nurses and to reduce the circumstances in which nurses are ethically challenged to provide good care due to time pressure. Based on our findings, we recommend investing more in the nursing culture and nurses' personal development, in addition to optimising nurse staffing levels.

What is already known about the topic?

- The nursing shortage has substantial implications for the quality and safety of patient care.
- Time pressure is a possible explanatory factor for missed nursing care, which seems common in the clinical setting and is associated with decreased patient satisfaction and variation in quality of care.
- Existing research on what time pressure means to nurses and how they cope with it, especially how they perceive the consequences of time pressure in oncology care, is scarce.

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What this paper adds

- The experience of time pressure in oncology nursing is a shared yet nuanced reality with individual differences among nurses, underlining the complexity of this phenomenon.
- How nurses cope with realising good nursing care in a vulnerable patient population under difficult circumstances can potentially be explained by individual and organisational factors.
- Time pressure is perceived as a barrier in providing high-quality care for patients with cancer, more specifically through adverse verbal and nonverbal behaviour towards patients.

1. Background

The international healthcare system is challenged by a nursing workforce shortage, as demand for nurses continues to increase due to growing aging populations and increasing burdens of complex and chronic conditions. This workforce crisis reflects not only present but also future shortages in registered nurses in most European countries and worldwide (Eurohealth, 2016; OECD, 2016; WHO, 2013, 2016).

The nursing shortage has substantial implications for the quality and safety of patient care (e.g. Aiken et al., 2017). A growing number of studies have found that high workloads and low nurse staffing levels may adversely affect patient outcomes and experiences (e.g. Aiken et al., 2002, 2011, 2014, 2017; Cho et al., 2016, 2017; Kane et al., 2007; Needleman et al., 2011). A key hypothesised factor in the association between nurse staffing and patient experiences is 'missed care' or 'care left undone', defined as necessary care that nurses failed to deliver due to a lack of time. Many studies have found that the activities that are most frequently reported as missed by nurses involve addressing the psychosocial and emotional needs of patients (e.g. Ausserhofer et al., 2014; Ball et al., 2014, 2016, 2018; Cho et al., 2017; DeCola and Riggins, 2010; Jones et al., 2015; Kalisch et al., 2009, 2011; West et al., 2005). Besides workload and adequate nurse staffing (Teng et al., 2010b), these findings suggest that under what conditions nurses work, especially time constraints, might affect how they provide nursing care.

Previous quantitative studies contribute to the evidence of nurses' perception of a lack of sufficient time to complete required tasks and its potential effects on patient care (e.g. Teng et al., 2010a,b; Thompson et al., 2008; Yang et al., 2014). Time pressure is more than a lack of measurable time and in-depth qualitative studies that have explored nurses' subjective experiences of time pressure are scarce (Jones, 2010). In 2001, Bowers et al. uncovered the importance of time for nursing care in long-term care facilities. They described how nurses developed strategies to compensate when they experienced insufficient time, however, with possible adverse consequences for nurses and patients. For example, nurses would give the highest priority to required tasks with immediate and visible effects, whereas emotional care was often given the lowest priority (Bowers et al., 2001). Other qualitative studies also explored how nurses would get things done if they did not have sufficient time. These studies (Chan et al., 2013; Waterworth, 2003) showed that routinisation of nursing work could reduce nurse-perceived time pressure, but that this could also lead to temporarily overlooking individual needs of patients. As a result, nurses' desires to practice according to their personal values often meet challenges, especially when these values are restrained by time pressure (Bentzen et al., 2013).

The initial aim of the above-mentioned qualitative studies was to explore nurses' experiences with time and strategies to manage time. No previous studies have explored what it really means for nurses to work under time pressure in the context of oncology. Providing good nursing care under time pressure may be even more challenging when it concerns a vulnerable patient population (Izumi et al., 2010; Udo et al., 2013). Cancer is a major cause of death worldwide that can evoke emotional distress and makes patients more vulnerable because of its diagnosis, treatment and prognosis. The vulnerability of this patient population underlines the importance of a holistic, individualised and human-oriented kind of nursing approach, which may be perceived as particularly challenging for oncology nurses working under time pressure. This study is the first that aims to uncover oncology nurses' experiences of time pressure, its potential consequences for nursing care and how nurses cope with it.

2. Methods

2.1. Study design

A qualitative design with a grounded theory approach (Corbin and Strauss, 2015) was followed to explore and theoretically explain nurses' experiences with the phenomenon of time pressure and its underlying dynamics in oncology care (Polit and Beck, 2012).

2.2. Sample

The study was carried out in an academic hospital in Flanders, Belgium. We initially used purposive sampling to recruit the first participants. This was followed by theoretical sampling (Corbin and Strauss, 2015) to select participants with a variety of characteristics and experiences in response to emerging findings. Inclusion criteria were (1) an associate's or bachelor's degree in nursing, (2) engagement in direct patient care at the selected wards, (3) an employment status of at least 50% and (4) at least six months experience in the current ward to minimise the risk of bias because of a first job experience.

The participants were recruited with the cooperation of the hospital's nursing director and nurse manager of oncology. A total of five nursing wards specialising in different branches of oncology care were included. We first recruited participants in three nursing wards. After initial recruitment, our data indicated that we needed to enrol nurses from two additional wards with other types of cancer patients to broaden our sample. This contributed to an adequate diversity of participants (Table 1), allowing us to provide a comprehensive understanding of the phenomenon and underlying factors (Corbin and Strauss, 2015; Polit and Beck, 2012). Head nurses were contacted by email to explain the purpose of the study and its expectations and to obtain permission. Information about the study was provided to the participants by the first author with face-to-face presentations, study posters placed in the nursing wards and an information sheet. To facilitate the sampling process and to identify potential participants, we developed a short, standardised questionnaire that was handed out to interested nurses. This questionnaire inquired about demographic details and contained statements on workload and time pressure, and the choice whether or not to participate in an interview. Each questionnaire was returned in a sealed envelope in a provided box in the nursing ward. The responses to the questionnaire are provided in Table 1.

The final sample consisted of 14 nurses from five inpatient nursing wards that provide oncology care for adult patients with various types of cancer (i.e. two general medical oncology wards, one of which is specialised in radiation therapy, a haematology ward, a gynaecological oncology and surgery ward and a ward for oncological lung diseases). The large majority of participants were female nurses with an age range between 20 and 39 years old. Nurses with less than three years of experience, with many years of experience (11+) and in the middle range were included. Eleven participants held bachelors' degrees in nursing and professional titles in oncology nursing, of whom ten participants had advanced bachelors' in oncology. The latter requires a one-year training course to specialise in oncology nursing (FPS Health, 2016). Two participants had obtained masters' degrees, of which one was in nursing. Half of the included nurses worked full-time; others worked part-time because they combined it with another job position or wanted to spend more time with their family or pursue further studies.

Nurses' responses to the questionnaire indicated that they often perceived a high workload on their nursing ward. Many nurses

Table 1
Demographic details and characteristics of participants (n = 14).

Item	Response	n
Gender	Male	2
	Female	12
Age	20–29	5
	30–39	5
	40–49	2
	50 +	2
Education	Associate's degree	3
	Bachelor's degree	11
	Professional title in oncology	11
	Master's degree	2
Nursing ward	General medical oncology A	3
	General medical oncology B	3
	Haematology	3
	Gynaecological oncology/ surgery	3
	Respiratory oncology	2
Nursing experience (years)	1–2	5
	3–5	3
	6–10	3
	11–20	1
	20 +	2
Employment status	Full-time	7
	Part-time (≥50%)	7
I experience a high workload on my nursing ward.	Never	0
	Sometimes	5
	Often	9
	Always	0
I experience time pressure in my own nursing care.	Never	0
	Sometimes	7
	Often	7
	Always	0
Time pressure has an impact on nursing care.	Never	0
	Sometimes	5
	Often	7
	Always	2

experienced time pressure more or less frequently whilst providing nursing care. According to the questionnaire, nurses also reported that the impact of time pressure on nursing care was often to always tangible. In the interviews, we further explored what these experiences meant for nurses.

2.3. Data collection

Single, semi-structured, in-depth interviews were conducted with 14 nurses between December 2015 and May 2016, taking place in a private, quiet room in the nursing ward or hospital, according to the participants' choice. Each face-to-face, individual interview lasted approximately one hour and was planned during, right before or after the nurse's shift, except for two interviews that took place outside working days for participants. A scoping review and two pilot interviews guided the development of a topic and interview guide, which were further refined during the research process in response to emerging data. Interviews started by going into detail about the answers given on the questionnaire, and probing techniques were used to obtain more depth (Polit and Beck, 2012). An open first question for participants was to tell more about a recent situation where they experienced time pressure and to illustrate how they dealt with time pressure in that situation. All interviews were carried out, audio-recorded and transcribed verbatim by the first author. One participant requested the opportunity to read the transcript but made no alterations.

2.4. Data analysis

The process of data analysis was based on the comprehensive theory- and practice-based Qualitative Analysis Guide of Leuven (QUAGOL) which is inspired by the grounded theory approach (Dierckx de Casterlé et al., 2012). The method consists of two parts, each with five stages, to guide us through a cyclic and simultaneous process of data collection and analysis. The first part requires a thorough preparation of the coding work, or to 'first look at your data to see what you should look for in your data' (Sandelowski, 1995, p. 371). Each interview was transcribed verbatim by the interviewer and transcripts were (re)read by the research team in order to develop an understanding of each individual interview. This was followed by drafting conceptual schemes of the individual interviews for comparison. The process of constant comparison led to the identification of common themes within and across interviews. A resulting list of concepts was drafted which was used for the actual coding process in the second part of the QUAGOL. It is only in this part of the method that we used qualitative data analysis software, QSR NVivo 11, to code interview data and link significant passages. The in-depth analysis of relevant concepts resulted in a meaningful conceptualisation of the phenomenon of time pressure in response to the research question.

The strengths of the QUAGOL lie in its underlying principles: it is characterised by a case-oriented approach with a continual balancing between within-case and cross-case analysis, forward-backward dynamics using the constant comparative method and the use of different analytical approaches (i.e. combining a holistic and creative approach with a classic empirical one as thematic analysis). The guide also strongly encourages a team approach. A thorough, extensive preparation of the coding process, instead of line-by-line coding, produces analytically and contextually meaningful ideas and concepts, helping researchers to grasp the essence of the research phenomenon (Dierckx de Casterlé et al., 2012).

2.5. Trustworthiness

Several strategies were used to ensure the trustworthiness of our findings (Polit and Beck, 2012). We ensured credibility by creating an audit trail (e.g. interview transcripts, memos and meeting reports); by documenting the research context (e.g. field notes) and process of data analysis using thick description (e.g. added relevant citations to illustrate the generated concepts); by triangulating data collection to obtain a maximum variety of participants at different points in time; by member checking during the interviews through summarising the participant's major responses in answer to the research question at the end of the interview. The latter allowed us to check interviewee's immediate reactions and encourage them to provide critical feedback on the interviewer's interpretation of their story. Data collection and analysis continued in a cyclic process until saturation for the core findings was reached. The research team frequently discussed the findings to establish uniformity in interpretation and explored the interviewer's reflexivity during these meetings. Three years prior to the study, the first author was a nursing intern in an oncology nursing ward; to avoid bias, her ward was not included in the sample.

We organised two formal peer debriefings in April and July of 2016 with a panel of experts in oncology care, nursing management and ethics, psychology and qualitative research to discuss the preliminary findings. A total of 10 experts participated in the peer debriefing process, seven and five in each session respectively. These meetings contributed to a more nuanced understanding and uniform interpretation of the studied phenomenon. In November 2016, we discussed the results during a meeting with the head nurses of the oncology nursing wards from the academic hospital where the study was conducted. This generated important feedback considering that our findings were generally recognised.

2.6. Ethical considerations

The Ethics Committee of the University Hospitals Leuven (reference mp08239) approved the study in December 2015. All participants gave written informed consent and measures were undertaken to guarantee

data confidentiality. The interviewer had sole access to the identity of the participants. Participation was voluntary.

3. Results

Time pressure was experienced by the interviewed oncology nurses as a shared yet nuanced reality in their daily nursing practice. Nurses' perceptions of time pressure, its effects on nursing care and their approaches to cope with it varied which was expressed through different words and emotions to describe their experiences. We uncovered a broad range of strategies that nurses employed to work under time pressure. The main strategies nurses used, differed from how they initially perceived time pressure. Some nurses described that they would find creative and proactive solutions to plan and organise their nursing care in the best possible way despite time constraints. Others described feeling so overwhelmed at times that they used ad hoc and less organized approaches to get through their work under time pressure. An impact of time pressure on nursing care was described by the interviewees as a barrier in caring for vulnerable patients. Most nurses said that time pressure subsequently resulted in a sense of failure to provide good nursing care. These nurses also emphasised that they considered interacting with patients and responding to their psychosocial and emotional needs as essential in oncology nursing. Yet, working under time pressure strained these interactions with patients. This was explicated by nurses as avoiding or postponing communication and avoiding making eye contact with patients. We identified three underlying factors that caused variation in nurses' perceptions of time pressure. At an individual level, nurses' individual characteristics (e.g. beliefs and values) could influence their priorities under time pressure. At an organisational level, we found that the nursing culture, such as the team culture and leadership style of the head nurse, and contextual factors (e.g. inadequate nurse staffing, accumulation of acute events) also influenced nurses' experiences.

These findings illustrate and underline the complexity of what it means for nurses to work under time pressure in a clinical oncology setting. A schematic description of the results can be found below (Fig. 1). This figure illustrates how underlying factors influence nurses' experiences and thus also their perceptions of an impact of time pressure on nursing care and their strategies to cope with it.

3.1. A shared yet nuanced reality

Throughout the exploration of nurses' experiences, time pressure emerged as a shared reality when providing care for patients with cancer. However, nurses expressed their experiences in different ways, pointing to the nuances of this complex reality. For example, some nurses described time pressure as a lack of measurable clock time while others described it as feeling overwhelmed and rushed to get all the work done in time.

> "If it's busy, then it's like you haven't done anything or that you have done one hundred and one things and then suddenly time is up." (participant 2)

Time pressure was not always perceived by nurses as present. However, calm periods were rather scarce, and most nurses experienced time pressure at some point in time during shifts or series of shifts. Perceiving a prolonged presence of time pressure also reinforced a sense of persistent and dominant time pressure experienced by nurses.

Variation was also found in the intensity of time pressure described. Pressure that was perceived as acceptable by nurses, was described as a positive pressure to carry out care more productively. When time pressure was perceived as more intense, nurses associated it with negative feelings and frustration. These feelings were related to situations where they experienced that there was insufficient time to give the care that they considered important. For some nurses, the effects of severe time constraints were not only limited to working hours but also extended to their personal lives.

> "I have more and more problems with time pressure. I begin to notice that I'm going home really miserably. I used to go home satisfied but not anymore now. That has been so for months. And soon I'll start dreaming about it too." (participant 8)

3.2. A broad range of individual strategies

Nurses' ways of reacting to situations under time pressure varied widely and how nurses responded to inadequate time originated in the perceived intensity of the time pressure and their personal coping strategies to manage time pressure.

3.2.1. Proactive strategies

Nurses who coped with time pressure in a more proactive way, sought creative solutions to work as efficiently and adequately as possible. These nurses seemed more aware of how they wanted to provide good care under time pressure. The following example shows how this nurse combined giving a bed bath and having a conversation with at patient.

> "If I have to give someone a bed bath or even in the bathroom, then I will chat with the patient and you feel immediately, you feel if people want to talk further or that they block [the conversation]. You can always feel that, and I consider it to be an ideal moment that when you are washing someone, to take a moment… that's a moment that you have time to talk with your patient because you're busy there anyway." (participant 11)

Setting priorities, planning and organising care, asking support within the team, referring situations and delegating to other team professionals are various examples of active strategies reported by nurses.

> "[on setting priorities] on a feeling and assessing which patient has the most need at what moment but I think that this usually goes automatically. I don't consciously think about 'today I will talk with that person' but then I'll strictly do my care, though I'll try to assess the situation and care planning is really important. And in terms of

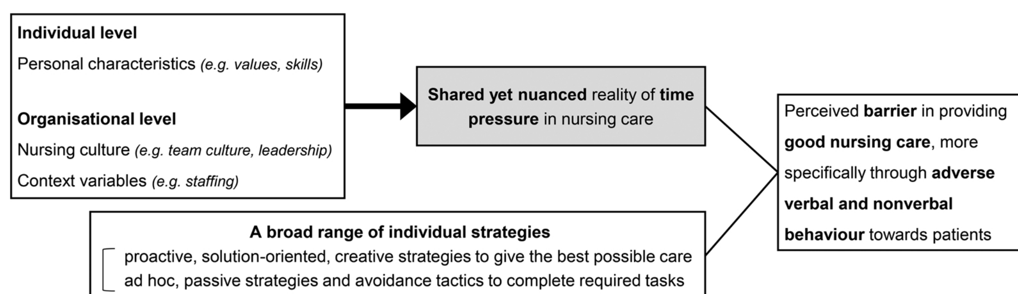

Fig. 1. Empirically based conceptualisation of working under time pressure in oncology nursing.

> conversations, I think that you have to take that into account: that person has a hard time and I'll stay there for a bit longer." (participant 6)

In general, nurses mostly expressed the highest priority for visible physical care, as the following quote shows:

> "I think my priorities are different [under time pressure], I make sure that I first do all functional care, not that I want to say that psychosocial [care] isn't functional, but just the technical things first, like blood samples, hygienic care…" (participant 1)

This was unless they perceived addressing the psychosocial and emotional needs of patients as more acute or essential. Another example of an active strategy was planning and organising care in advance, which enabled nurses to take control of their care planning and to provide all care in a timely manner. Efficient organisation of care was considered as an important nursing skill, even when there were no time constraints. However, when acute situations and unexpected events (e.g. rapid deterioration of a patient) occurred, nurses' care planning was delayed. As a result, the interviewees had to re-organise their care to get their work done, described by a nurse as 'trying to fit the puzzle pieces'.

> "[on talking with a patient] It is possible but sometimes it's hard… it's not like we don't have any time for our patient, but sometimes it is really trying to fit the puzzle pieces to get the rest of your work done too." (participant 6)

Another approach was referring cases to other team professionals (e.g. contacting a psychologist), which was considered useful when nurses experienced time constraints and could not fully address the psychosocial needs of patients, or if the patient needed a more professional framework. This strategy was perceived as allowing more time for other nursing activities.

Openly and actively communicating with patients and team members about time constraints was described by nurses as helpful when there was insufficient time to have more in-depth conversations or to answer questions and provide timely care. Explicitly identifying the issue of time constraints in nurses' work and how to address patients' needs was described as a working strategy in the longer term. Delegating tasks to colleagues and nursing students was considered useful if the individual oncology nurse could still maintain a broad view over his or her patients while supervising the students.

A way to manage and reduce time pressure was described by some nurses as trying to find a balance with time. With this strategy, the nurses approached the process of care over a prolonged period instead of considering it as an all-or-nothing situation. In this way, they felt less pressed for time and sought ways to create time and space for care. To illustrate: if nurses did not have enough time during their shift to participate in more in-depth conversations with patients, they would address patients' needs in another, less busy shift in the near future.

3.2.2. Ad hoc strategies

Nurses would cope with challenges due to time pressure more passively by using ad hoc approaches or by avoiding certain situations when they felt they had to endure time pressure in difficult times. This meant that in response to time pressure, they would approach tasks more ad hoc to finish them instead of organising the best possible care or thinking in the longer term. Nurses also described how they avoided to create openings for in-depth talks with patients or limited care to only the required physical aspects such as wound care, taking blood samples and administering medication.

Other strategies were significantly delaying care or trying to complete all nursing care activities by increasing the work pace and working overtime. Nurses considered it acceptable to work faster and stay longer to complete necessary nursing care, however, it was also undesirable, and nurses did not consider this as a strategy to deliver good care. It also frequently occurred that nurses skipped their lunch breaks.

Nurses also followed a more fixed and routine way of working to get their tasks done which would help them under time pressure, but they said it resulted in less individualised, patient-centred care.

> "Just keep going on is the only thing and don't think about it and go from the one thing to the other. Yesterday, I was busy too at my side, and there was an admission, and it was just entering the room: everything okay, pain, and I return later but first I make sure that all the rest was done before I had time to take a moment to organise everything there [in that room] (…)" (participant 3)

When it was still not possible to finish everything, passing on tasks to a colleague of the next shift was accepted, though regarded negatively because it increased another nurse's workload.

3.3. Perceived impact of time pressure on nursing care

The interviewed nurses perceived time pressure as a barrier in providing good care to a vulnerable patient population. In general, nurses recounted they wanted to care for patients in a holistic manner, and they explained how time pressure hindered them in accomplishing this. As a result, nurses often felt they were falling short to achieve, not only their personal standard of care, but also the care expectations of patients and other nurses as they perceived them. Delayed responses to patients' needs or unfinished nursing tasks were illustrations of how tangible the impact of time pressure was for nurses. Leaving care undone implied for most nurses that they provided physical-related care activities but lacked time to give holistic care.

One of the most striking results regarding nurses' perceived impact was that time pressure adversely affected their verbal as well as their nonverbal communication towards patients. All interviewees said that there was often insufficient time to have more in-depth talks with patients and they often avoided to actively explore patients' feelings. Some nurses described how they would explicitly tell patients that they had to postpone conversations to a less busy moment in their shift. However, they emphasised that it was important to pick up the conversations or else they would harm the patients' trust. Nurses also illustrated with many examples how time pressure led them to give nonverbal signals that they did not have enough time. They said that care was provided to patients in a rushed manner, already moving away from patients while they were still talking and that they made less eye contact with patients. These tactics were used to avoid creating opportunities for having a conversation that would take time and which would be more difficult to block once they started talking. These experiences contrasted with what nurses perceived as important when caring for this kind of patient population and the interviewees associated this with difficulties in achieving a bond of trust with patients. Nurses talked about their concerns that patients would not always address their needs because they saw nurses appearing to act in haste.

> "Then you do the evening round or the next round, they [patients] need to have medication on the hour they should get it, and then they say, 'I've been having pain for a couple of hours actually', and then I think, 'why didn't you call?', I find it awful when they say, 'I saw you were busy and I thought: she will come by eventually', and I don't think that's okay. If you have pain, you should take or get something." (participant 8)
>
> "We enter [the room], and then we scan [the medication] with our computer and give the medication, while we know that patient is trying to make eye contact because he has to ask something, and we avoid it. While… that's not us, we came to work here because we are that kind of people [who make time for patients' needs], one by one." (participant 8)

Nurses described time pressure therefore as an obstacle for quality care because it hindered them to detect psychosocial, educational and

medical needs, leading to unmet and possibly unidentified needs of patients. They reported during the interviews that it was more difficult to estimate the time that was needed to address the psychosocial and emotional needs of patients, which in turn led to making less time available for this. Tasks with a more immediate or visible impact were often given priority over psychosocial needs when nurses were pressed for time.

> "It gives me the feeling that you are purely doing the practical things and that you have finished your checklist because you have done all your strict [care], the things you really had to do, you have done them but… the 'extra', what makes it 'humane', sometimes I feel that I forget that and that I don't have the time or pay attention to it, and when you notice that people really do need that. I find… that gives an unpleasant feeling. Then you have the feeling, or then I have the feeling that I have fallen short in my care." (participant 7)

Impact on physical care was also described with regards to patient safety. Some nurses said that they lacked time to check if they administered the right medication but also to educate patients about their treatment sufficiently (e.g. chemotherapy and its side effects). Some nurses described how they felt insecure about the safety of the provided care after a busy day.

3.4. Underlying factors

The following examples demonstrate the underlying dynamics of nurses' perceived time pressure.

3.4.1. Personality of the nurse

Nurses' individual characteristics such as their beliefs, values and skills are examples of factors that influenced their perceived time pressure. To illustrate, their personal qualities shaped their beliefs and expectations of good nursing care and subsequently their perceived discrepancies with their given care under time pressure. For some nurses, this meant that they could not provide care that was up to the level required by their own values. Others questioned if these care intentions were in accordance with patient's needs.

> "I find it such a shame, that you can't… do the 'extra', even if your patient doesn't know that there is 'more' but that you can do it for yourself too. So, you don't have to go home with a bad feeling every now and then. It's just too much sometimes." (participant 4)
> "Or it is based on a gut feeling: I want to give something extra to [patients], but that's you as a nurse: 'I think I have to give something', but if that's really true…" (participant 5)

Other examples were nurses' interpersonal and organisational skills, coping abilities and also their perception of control to complete their nursing care under time pressure. For instance, nurses who perceived factors beyond their control seemed more likely to experience time pressure. Some nurses explicitly attributed their coping strategies to their years or nursing experience.

3.4.2. Nursing culture

Variation in experiences could also be explained by differences in the nursing culture, specifically if the nursing culture was perceived by nurses as facilitating or hindering the achievement of good care. Team culture and the head nurse's leadership style were examples given by nurses to illustrate the influence of this culture. Nurses referred to administrative and social rules that shaped their work environment. In each ward, there were written and unwritten social rules that imposed a time schedule and organisational rules regarding care planning, such as when to administer medication or give hygienic care. This resulted in schedule-related work peaks throughout the shift, influencing nurses' perceived time pressure. Especially in the morning shift, nurses set deadlines to complete certain care activities.

> "The morning shift for me, I experience it as busier because I feel that my patients have to be washed before 11:30 (…) I find it terrible if there's still wound care left to do at 2 o'clock." (participant 4)

Nurses recounted how the team culture could help them cope with stress when working under time pressure. Working together and experiencing good communication within the team was perceived by nurses as crucial to get things done more efficiently and timely because they felt more supported to give good nursing care.

> "I'm not going to experience stress so quickly here but that's because there's a good team behind you and you know that you always have help if it really would not go so well." (participant 12)

The leadership style of head nurses was also an example of what influenced the nursing culture on the ward. Some nurses described that they felt supported by their head nurse in organising their nursing care in an ethical way, whereas others felt less supported. Nurses recounted that this was influenced by the way their head nurse supported teamwork, enhanced communication within the nursing team and with other health professionals and responded to shortages of personnel. The latter was often cited as a source of frustration for nurses.

> "When you have many bedridden patients, you can't do it alone, and usually this is anticipated by the head nurse: they constantly ask you how it is going with the team and what the workload is, so you can get support with hygienic care (…) because you can't get things done sometimes." (participant 1)

3.4.3. Context

Nurses' perceptions of time pressure were also influenced by contextual factors, referring to specific circumstances that intensified pressure. Nurses described how low staffing levels, whether the result of sickness-related absence by colleagues or organisational limitations, resulted in more time pressure. Staff shortages in combination with a complex patient case mix often hindered nurses from providing the care needed by patients, according to the interviewees.

> "I know colleagues who have worked here much longer say, you notice that patient safety actually does not improve despite so many efforts of the hospital because there is simply less staff and a heavier patient load." (participant 6)

Sudden acute conditions, especially when combined with multiple events during a short period of time, resulted in nurses' having to reorganise their care to get all their work finished. Nurses specifically spoke about time pressure in situations where they were confronted with severely ill or dying patients or a patient's death. Nurses recounted that they lacked time and space to support these patients and their relatives, which they experienced as conflicting with their ethical values. Still, they described how they would try to act according to these values and care intentions in this context instead of providing rushed care. This led to delayed or limited care for other patients.

4. Discussion

Our qualitative design with a grounded theory approach enabled us to explore the complexity of the researched phenomenon carefully and reflect on what it means for nurses to work under time pressure. This complexity is illustrated by the interviewed nurses' expressing, in different ways and tones, how they experienced working under time pressure in oncology nursing.

The range of strategies used by oncology nurses to deal with time pressure partly overlaps with those described in studies about nurses' time management strategies (Bowers et al., 2001; Waterworth, 2003). Waterworth (2003), for example, described a range of direct and indirect time management strategies, while Bowers et al. (2001) suggested that nurses compensated having too little time by developing

strategies to keep up or catch up. Our study reinforces previous insights on strategies to manage time and adds new insights by suggesting two main approaches to specifically deal with time pressure. We found that nurses developed a range of strategies, either to give the best possible care within the limited time available or to complete required tasks by using ad hoc strategies and avoidance tactics tasks when feeling overwhelmed due to time pressure. Some of these strategies, however, seemed to have significant adverse consequences for providing individualised and qualitative nursing care. This was also illustrated by Bowers et al. (2001), who reported nurses' efforts to increase their efficiency through routinisation and prioritisation when confronted with great time pressure in order to complete their tasks, instead of striving to provide high quality nursing care. Evidence is still lacking, however, regarding the effectiveness of these strategies and which conditions caused nurses to employ different strategies.

The current study also reveals factors that can explain the causes of variation in nurses' experiences of working under time pressure and coping with it. The individual differences and organisational factors further emphasise the complex nature of the phenomenon of time pressure. Particularly noteworthy is the role of the nursing culture, which has also been addressed in the literature. For instance, in terms of team culture, support from team members (i.e. teamwork), team expectations on priorities and not wanting to overburden colleagues are all examples of culture-related factors that may influence how nurses work during busy periods (Chan et al., 2013; Waterworth, 2003). Cummings et al. (2010) also underlined in their review the role of the nursing leader in understanding nurses' work concerns and supporting them in achieving high-quality patient care. Our results have shown that team culture and leadership style are examples of factors that can facilitate or hinder achievement of good nursing care under time pressure. Precisely how this works remains unclear in this study.

A common thread throughout the interviews was nurses' experience of time pressure as a significant barrier in achieving good care in oncology nursing, even though we observed differences among nurses. Nurses described in their own ways how they struggled to provide quality care, resulting in the feeling that they were failing to meet their standards or expectations. Our findings further elicited that not only the nature of care was affected, but also the ways in which nurses provided care. It emerged in our study that nurses were intuitively aware that they had given rushed care under time pressure. The presence of nursing time is, however, perceived to be fundamental to the nurse-patient relationship, resulting in delayed and hurried responses to patients' needs being perceived by patients as lacking concern for their needs (Jones, 2010). The importance of these interpersonal aspects of care increases when caring for vulnerable patients (Dierckx de Casterlé, 2015; Izumi et al., 2010; Scott et al., 2014). Being sensitive to patients' feelings of vulnerability seems crucial in achieving an ethical practice (Dierckx de Casterlé, 2015; Gjengedal et al., 2013). Subsequently, when nurses fail to provide the expected 'good care' in the broadest sense of the word, it threatens the nurse's sense of identity as a 'good nurse' (Angel and Vatne, 2016; Dierckx de Casterlé, 2015; Gastmans et al., 1998).

There is a substantial need for a nursing culture in which nurses can realise 'skilled companionship', i.e. a nurse's role that combines the 'scientific and moral basis of nursing practice' (Dierckx de Casterlé, 2015). Being a skilled companion requires not only medical and technical competence, but also a nurse's ability to genuinely care for patients (Dierckx de Casterlé, 2015; Gastmans et al., 1998). Our findings lead us to question whether it is possible for nurses to realise this in morally distressing situations such as working under time pressure (Dierckx de Casterlé, 2015; Goethals et al., 2010; Harvey et al., 2017; Varcoe et al., 2012). It remains unclear if nurses' care intentions or standards are induced by idealism or challenging realism, as some nurses reflected that their standards might be unrealistic. Taking into account the vulnerability of oncological patients, it is, however, important to keep in mind that interactional and interpersonal aspects of care are crucial when caring for this population.

4.1. Study limitations

The study has limitations that should be considered when interpreting its findings. The first limitation is the relatively small sample size of 14 participants compared to what is normally expected in grounded theory. Most interviewed nurses were female, younger than 39 years old and held a professional title in oncology nursing. We did achieve a variety of characteristics and experiences which increased the chance of including relevant perspectives in our study. Next, the cyclical process of data collection and analysis only continued until the point of theoretical saturation for key concepts was reached. The findings that illustrate our main concepts therefore cannot be further explained or nuanced. Although our results may suggest possible interesting relationships between concepts, our data do not allow us to make valid assumptions of associations. A third limitation is that bias could have occurred, considering that participation was voluntary and recruited participants were likely to have experienced time pressure, given that the study was advertised as seeking participants who could tell us more about this phenomenon. It is also plausible that some nurses declined to participate precisely because of time pressure. The study recruited participants from five wards located in a single academic hospital. This may limit the transferability of the results to other settings.

Despite some limitations, the study presents a description of nurses' experiences which we believe reflects the complex reality of working under time pressure in oncology settings. The QUAGOL guided our research team in the process of data collection and analysis. Interview transcripts and emergent findings were discussed until we reached coherence in the meaning and interpretation of core categories. The results were generally recognised in the peer debriefing sessions and in the meeting with the head nurses. This enriched the quality of our findings and it also opened up further discussions on how better to support nurses working under time pressure.

4.2. Implications for research and policy

Our study implicates a need to follow a more nuanced approach to support nurses in providing care in an ethical manner, especially in the context of time pressure. Our uncovered underlying causes that lead to different experiences of time pressure suggest that solutions should be aimed at the individual as well as the organisational level of nursing settings to address time pressure. For example, the individual characteristics of nurses suggest that solutions should be aimed at helping them to cope with stressors and to build resilience in order to enhance their personal development. At the organisational level, our results strongly emphasise the importance of developing interventions that are focused on creating a positive nursing culture, such as establishing an inspiring shared vision for a good nursing practice and investing in excellent and ethical nursing leadership (Storch et al., 2013) and teamwork. These various examples seem to be potentially interesting approaches based on this study and need further exploration. To illustrate, Cummings et al. (2010) described in their review how nursing leaders used their emotional skills to build trust with individuals and teams through listening, empathy and responding to their concerns. These types of leaders would help their staff complete their required tasks to achieve excellent patient care, showing that investing in leadership has positive effects on the nursing workforce and patient outcomes. Dierckx de Casterlé et al. (2008) have demonstrated this positive impact of clinical leadership development on the nursing team and the care-giving process. Evidence is limited, however, about which strategies (e.g. educational activities, creating opportunities to practice leadership competencies) are most effective in leadership development (Cummings et al., 2008, 2010). Interventions in nursing based on investing in leadership development towards transformational/relational leadership are therefore interesting to explore.

5. Conclusion

Time pressure is widely recognised and experienced in nursing practice. Our study points out the nuances of this complex phenomenon and elicits an urgent need to achieve better support for nurses and to reduce the circumstances under which time pressure negatively affects nursing care. It has been shown that time pressure has adverse implications for nurses' verbal and nonverbal behaviour towards patients and hinders them in providing care in an ethical manner. Especially in the context of the global nursing shortage, improving the work environment and better supporting an ethical care practice for nurses is one of today's biggest challenges in nursing.

Conflict of interest

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Contributors

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Appendix A. Supplementary data

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