



Between a rock and a hard place: Registered nurses' accounts of their work situation in cancer care in Swedish acute care hospitals

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ABSTRACT

Purpose: Hospital organizational features related to registered nurses' (RNs') practice environment are often studied using quantitative measures. These are however unable to capture nuances of experiences of the practice environment from the perspective of individual RNs. The aim of this study is therefore to investigate individual RNs' experiences of their work situation in cancer care in Swedish acute care hospitals.

Methods: This study is based on a qualitative framework analysis of data derived from an open-ended question by 200 RNs working in specialized or general cancer care hospital units, who responded to the Swedish RN4CAST survey on nurse work environment. Antonovsky's salutogenic concepts "meaningfulness", "comprehensibility", and "manageability" were applied post-analysis to support interpretation of results.

Results: RNs describe a tension between expectations to uphold safe, high quality care, and working in an environment where they are unable to influence conditions for care delivery. A lacking sense of agency, on individual and collective levels, points to organizational factors impeding RNs' use of their competence in clinical decision-making and in governing practice within their professional scope.

Conclusions: RNs in this study appear to experience work situations which, while often described as meaningful, generally appear neither comprehensible nor manageable. The lack of an individual and collective sense of agency found here could potentially erode RNs' sense of meaningfulness and readiness to invest in their work.

1. Introduction

In the seminal report *Keeping patients safe* (Page, 2004), the U.S. Institute of Medicine emphasized the importance of recognizing nurses' work environments as a means to improve patient safety. Registered nurses (RNs) make up the majority of the health care workforce (National Board of Health and Welfare, 2018) and have a central role in patient care, e.g. delivering care, monitoring patients, supervising other nursing staff, and coordinating care in multi-professional teams, allowing them a unique overview of a patient's hospital stay (Page, 2004). Research has identified several aspects of the work environment and the hospital organization conducive to positive patient and staff outcomes (Aiken et al., 2008; Braithwaite et al., 2017; Kirwan et al., 2013;

Kutney-Lee et al., 2013), including adequate staffing, good collegial communication and teamwork, visible nursing leadership, and positive workplace cultures. Much of this previous research has relied upon RNs as organizational proxy-informants in surveys about organizational features and how they shape the practice environment in which RNs work.

Viewing a healthy work environment in line with the World Health Organization's definition of health as more than "merely the absence of illness" (World Health Organization, 2014), and as not merely the absence of negative features, might prove useful in identifying new ways of improving RNs' work environments, and thus, of also making patient care safer. This is in line with what Antonovsky, a sociologist, called a "salutogenic" (Antonovsky, 1987) perspective in contrast to a more

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common, pathogenic problem-oriented focus. He raises the question “what predicts to a good outcome?” (Antonovsky, 1987)^(p7) even in the presence of stressors. Antonovsky begins to answer this, by defining key components of a Sense of Coherence (SoC): *meaningfulness* – the extent to which one feels that events are worthy of investing time and energy in; *comprehensibility* – the extent to which one feels that stimuli from internal and external environments makes cognitive sense; and *manageability* as the extent to which one perceives adequate resources to be available to meet demands from the environment (Antonovsky, 1987). While these three key components are described on an individual level as crucial for a SoC, he also has considered them in regard to “health-enhancing job characteristics” (Mittelmark et al., 2017)^(p197), describing work places in which individuals experience these components (Antonovsky, 1987). Several others have built upon these ideas (Mittelmark et al., 2017), however, as Tishelman (1990) pointed out nearly 30 years ago, it could be fruitful to examine how RNs perceive meaningfulness, comprehensibility and manageability in job situations related to providing patient care. The salutogenic approach is similar to the perspective used in research about organizational resilience, defined as “the intrinsic ability of a system to adjust its functioning prior to, during, or following changes and disturbances, so that it can sustain required operations under both expected and unexpected conditions” (Wears et al., 2015, p21). Antonovsky's three components could be considered inherent parts of RNs' capacity to contribute to organizational resilience and maintain safe, high quality patient care.

Our perspective in this article is in part informed by our previous research from Sweden, in which we found that RNs who reported having adequate staffing and resources, supportive nurse leadership and collegial relations with physicians were significantly more prone to assess patient safety on their ward as better (Smeds Alenius et al., 2014). We also found that excellent patient safety, as reported by RNs, was related to significant reductions in 30-day inpatient mortality in Swedish acute care hospitals (Smeds Alenius et al., 2016). However, these studies and others are generally based on aggregated quantitative measures and give little indication of contextual factors which RNs view as underlying these associations.

To complement existing studies by contributing in-depth knowledge and nuance about relationships between work environment factors and patient care from the vantage point of RNs, in this study we aim to investigate individual RNs' own accounts of their experiences of their work situation in cancer care in Swedish acute care hospitals. Based on responses to an open-ended final question in the Swedish RN4CAST survey about the RN work environment, we sought to examine what RNs themselves write in their own words, about their work situation – when provided with an opportunity to express their views in writing.

2. Methods

The data used in this study derive from a cross-sectional national survey of RNs, conducted within the Swedish component of the EU 7th framework RN4CAST project (Sermeus et al., 2011). In Sweden, RNs were recruited through the member register of the Swedish Association of Health Care Professionals, which, at the time, represented > 80% of clinically active RNs. The survey was distributed by a consulting government agency, Statistics Sweden, to RNs working with inpatient care in medical/surgical wards in all (N = 72) acute care hospitals in Sweden. The respondents could chose to complete the survey as a digital or printed version (for more information on procedure, see (Lindqvist et al., 2015)). The Ethical Review Board in Stockholm (Dnr, 2009/1587-31/5) approved the study prior to initiation.

The RN survey explored different aspects of RNs work, staffing, latest shift, and education levels, as well as work experience, using 118 items from instruments which have been extensively used and validated in many international settings (Fuentelsaz-Gallego et al., 2013; Lake, 2007; Maslach et al., 2009; Sorra and Dyer, 2010; Warshawsky and Havens, 2011). One of the instruments was the Practice Environment

Scale (PES) (Lake, 2002; Li et al., 2007) which was developed from the Nursing Work Index (NWI) (Aiken and Patrician, 2000). The PES-NWI is a widely used research instrument for investigating aspects of the work environment (Swiger et al., 2017; Warshawsky and Havens, 2011). It consists of 32 items grouped into five dimensions; *Staffing and resource adequacy*; *Nurse manager ability, leadership and support of nurses*; *Collegial nurse-physician relations*; *Nursing foundations for care*; and *Participation in hospital affairs*, to cover different aspects of the work environment and the hospital organization that have been shown to create a nursing care environment conducive to positive patient and staff outcomes (Aiken et al., 2008; Aiken, 2002; Desmedt et al., 2012; Kirwan et al., 2013; Kutney-Lee et al., 2013).

The final component of the RN4CAST survey included a Sweden-specific section with questions about cancer care as well as a last open-ended question where respondents were asked: “Do you have any thoughts and/or reflections about your work situation or this study that you want to share and which were not covered in the survey?”

2.1. Data and sampling

The experience of nursing care may vary according to specialty and type of patients. Therefore, to minimize this potential variability and increase clinical relevance of our findings, we extracted data for analysis from a specific sub-group: RNs providing care to patients with cancer, either in specialized oncology wards or in general medical/surgical wards, using a similar sampling procedure as in a prior study (Lagerlund et al., 2015) using the same database. An additional rationale was the long-term research interests and experiences of cancer care in the research team.

Figs. 1 and 2 present the sample selection process for this study. As shown in Fig. 1, from the full Swedish RN4CAST database we selected all RNs (n = 8655) who had reported that patients with a cancer diagnosis were usually cared for in their ward. A second question was then used to categorize the RNs into two sub-groups: a) those who answered that ≥80% of patients on their ward generally had a cancer diagnosis, (n = 1432 RNs) (termed Specialized Cancer Care (SCC) here) and b) those who responded that 10–70% on their ward generally had a cancer diagnosis, (n = 6129) RNs (termed General Cancer Care (GCC) here). From these two groups we identified all RNs who had responded to the final open-ended survey question.

As illustrated in Fig. 2, we first screened the open responses from each group, 2128 in total, to exclude responses that were not relevant for this study, i.e. comments about the survey itself or a blank page, resulting in 1626 remaining relevant responses. We then used a randomized sampling procedure to select 200 responses, in proportion to each group, i.e. 164 responses (82%) from the GCC group and 36 responses (18%) from the SCC group, as the database for further analysis. This was done to assure heterogeneity in the study sample without biasing the sample. We chose 200 responses for analysis to ensure a robust sample, as the free-text responses were relatively short (ranging from 1-2 pages). The 200 selected responses were then merged into one joint database, with SCC or GCC group classification not visible to the researchers analyzing the data. Responses written by hand were transcribed into digital form by the first author. Names of hospitals, workplaces or people, which could potentially identify a respondent, were removed to ensure anonymity.

2.1.1. Description and analysis of the RN sample

The database for this study was thus composed of written responses from 200 RNs working with patients with a cancer diagnosis in a variety of acute care hospital settings in Sweden. The 200 RNs ranged in age from 22 to 63 years (median 39 years) and consisted of 6% men. They had worked as RNs from 0 to 39 years (median 8 years) and at the time of the survey, 44% worked in a medical ward, 46% in a surgical ward and 11% in a mixed ward. A majority (62%) worked fulltime. The 57 acute care hospitals in which respondents worked ranged in size

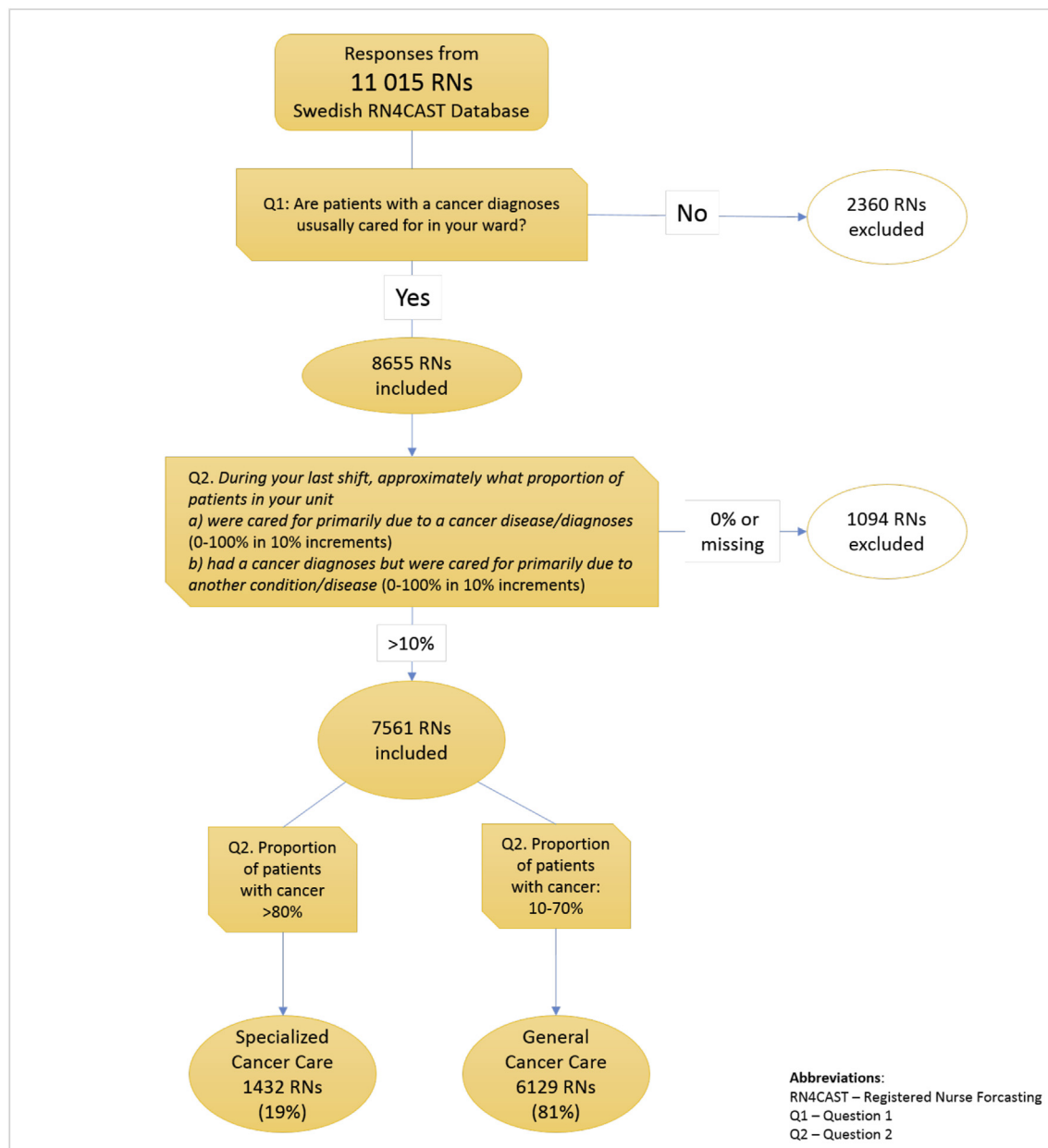


Fig. 1. Sampling process, part 1.

from just over 30 beds to 1100 beds (median 290 beds), with 30% teaching hospitals.

To identify possible differences between those responding and not responding to the open survey question, and to better contextualize the open responses, we examined responses to the items about work environment on the PES-NWI, as well as four items addressing the relationship between work life and private life, described below.

Using Chi²-tests (PES-NWI items) and Wilcoxon rank sum tests (work life-private life items), we compared the study sample who had responded to the open-ended question ($n = 1626$, termed *responders* here) with the full group of respondents who had reported caring for $> 10\%$ patients with a cancer diagnosis but who had not responded to the open question or whose responses were previously deemed as irrelevant ($n = 5935$, termed *non-responders* here).

PES-NWI item responses are on a 4-point Likert-scale, with two positive and two negative options, which we dichotomized. Results from the PES-NWI items showed significant differences between the two groups in 30 of the 32 items. Overall, a larger proportion of the

responders were generally negative compared with the non-responders, with differences ranging from 2% to 15.5%. The largest differences were seen in the dimension *Staffing and resource adequacy*, where a greater proportion of the responders were negative ($> 10\%$ difference) on three of four items. However, both responders and non-responders shared response patterns in terms of being predominantly negative or positive, with the differences only a matter of degree; four items differed in direction, so that responders answered negatively while non-responders answered positively.

In a total of four items RNs were prompted to rank the degree to which their work life affects their private life, and, vice versa, the degree to which their private life affects their work life in a positive or negative manner. Two questions were asked for each direction, one about positive influence and one about negative influence, resulting in four questions. Here, the results were similar to those above in that three of the four items showed significant differences between the groups such that a greater proportion of the responders were negative than in the non-responder group.

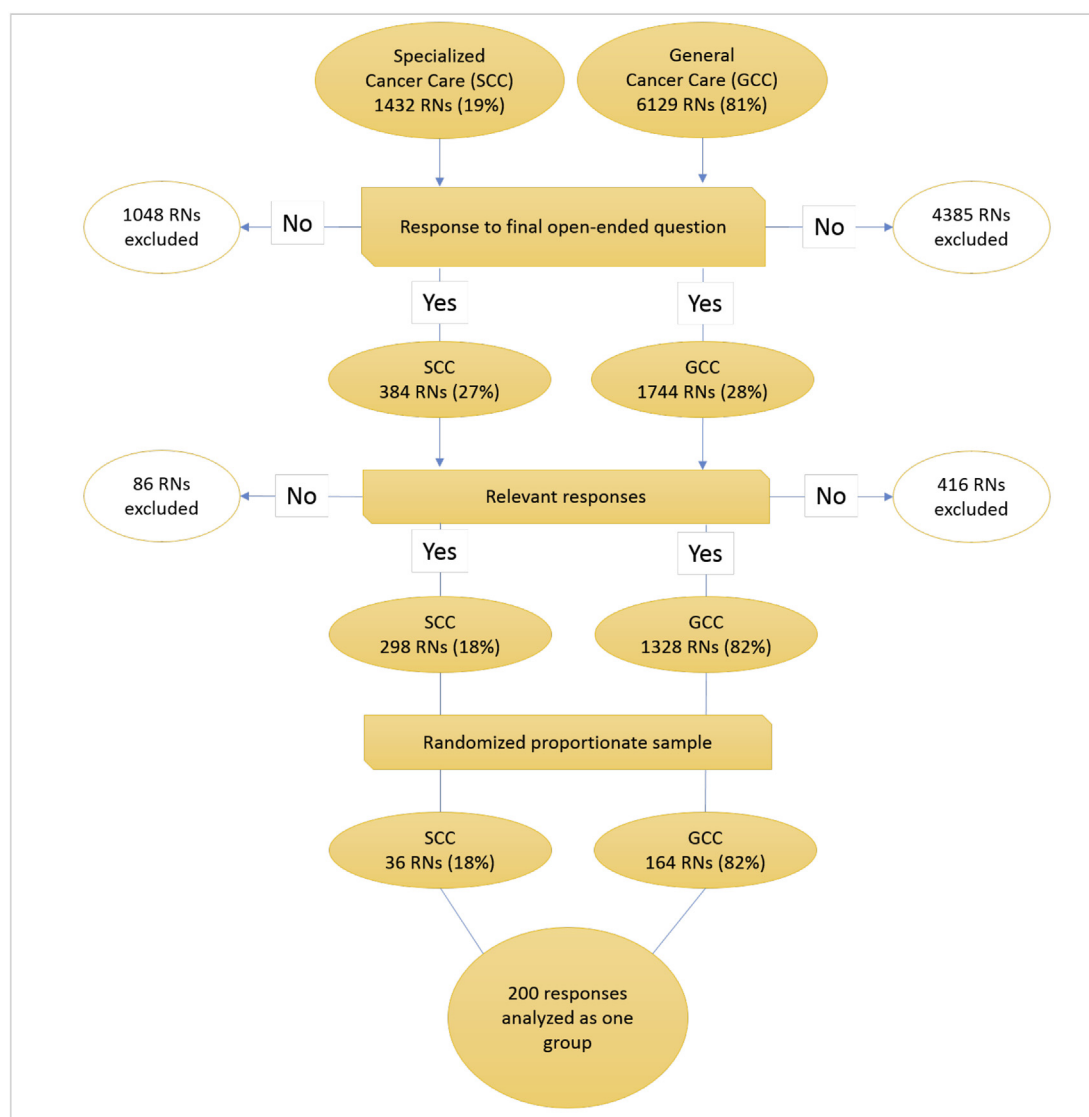


Fig. 2. Sampling process, part 2.

In summary, of the RNs who chose to respond to the open-ended question and who constitute the database for the study presented here, a greater proportion were negative than was the case among the RNs who did not respond to the open question; the largest differences seen were in items regarding staffing and resource adequacy.

2.2. Analysis of open responses

The Framework Analysis approach, developed by Ritchie & Spencer (Ritchie and Spencer, 1994) inspired the qualitative analysis process. We began the analytic process with preliminary themes based on what was already known from the research literature. In the current study we used the five dimensions of the PES-NWI used in the RN4CAST nurse survey as part of an initial coding framework. Since the respondents had already been steered by these and other survey questions, we expected that these themes might be further addressed in the open responses.

The PES-NWI categories were complemented by a category derived from an earlier, preliminary qualitative analysis of another sub-set of RN open-responses to the survey (Hansson, 2014). This category *Sense of agency*, described RNs' sense of their own ability and authority to influence their practice environment. In addition to these six categories, we sorted text that did not fit the already formulated categories as

'Other'. Fig. 3, below, illustrates the analysis process, showing the initial thematic framework, as well as the categories, sub-categories and overarching themes derived through the analysis process described below.

To begin the analysis, the first author read and re-read the free-text responses to become familiar with their content, making notes of thoughts and recurring issues in the data. Ideas for coding based on the initial thematic framework were discussed with the last author, who had also read through the responses. Next, the data was sorted into the seven pre-determined categories, using NVivo 11 software. In a meeting with co-authors the coding was discussed and the coding scheme adapted. We noted that much of the data did not fit into the initial thematic framework but was instead sorted as 'other'. The analysis continued through an iterative process of going back and forth between data and the developing thematic framework, re-sorting and re-coding the data to create the final categories and sub-categories seen in Fig. 3. The authors met repeatedly in different constellations to discuss the ongoing analysis and results. To assure the stability of our findings, after completing analysis of the sampled responses, we read through un-analyzed responses from the full GCC/SCC groups, although this did not change or add to our analysis.

While Antonovsky's salutogenic model (Antonovsky, 1987), introduced above, did not guide the design or analysis of our data, we

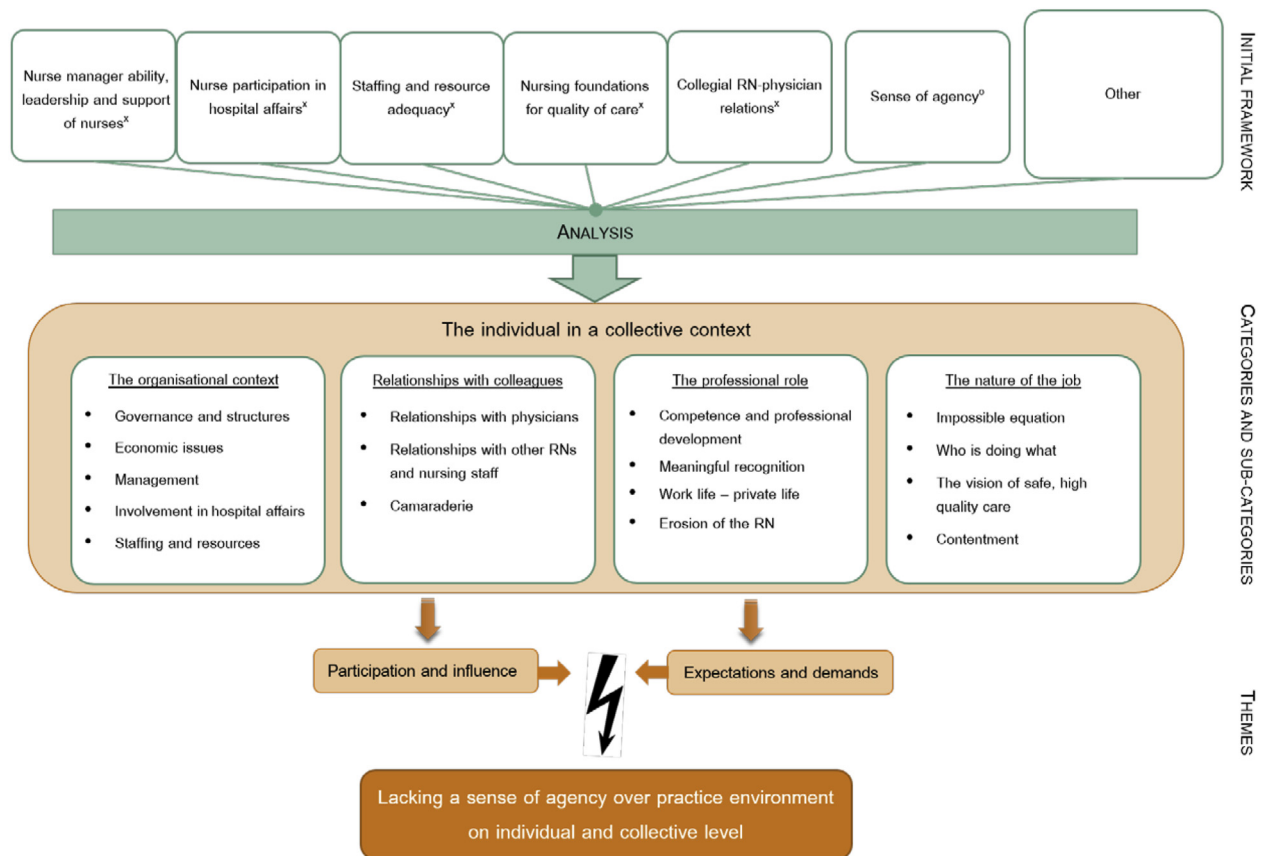
^xFrom the PES-NWI^yFrom our preliminary analysis prior to this study

Fig. 3. Initial framework, final themes, categories and sub-categories.

found it to be a relevant means of further understanding the results of our analysis, once completed.

We present the findings of our analysis with illustrating quotes shown in Table 1. The quotes have been translated from Swedish to English by the three of the authors, two native Swedish speakers fluent in English, and one native English speaker fluent in Swedish. When deemed necessary quotes have been truncated for brevity and clarity, without altering the meaning of the quote. Three dots/ ... /were used to signify omitted phrases and brackets [] to indicate authors' comments. As categorization is not exclusive, i.e. the same quote can be relevant to more than one category, a quote can be referred to several times to illustrate different analytical points. In this article, the quotes are presented in numerical order, with numbers referring to individual informants.

3. Findings

One overall impression of the responses in this data set, is of a sense of engagement and strength of feeling, evidenced through the use of emotive language (e.g. "I love my work ..."; "I feel ..."), capital letters and/or underscoring certain words (e.g. "TIME for each patient ...") and exclamation marks, sometimes several at once (e.g. "wiped out after each weekend with 3 nights!!!") to emphasize points. The length of responses (from 58 to 7986 characters, median 422, with 18 responses longer than 1000 characters), many times using all the available space on the survey, also suggests that many respondents appreciated the opportunity to express their views of their work situation.

The analyzed responses were written from a personal, subjective point of view, which was not visible when coding the data using the initial framework. This "human" aspect is central in the RNs'

descriptions in each of the four categories constructed and presented in Fig. 3. The text responses often depict both the individual RN using the first-person singular, but also a more collective, plural "we", together represented by *The individual in a collective context*, a feature permeating all categories in Fig. 3. The four categories—*The organizational context*, *Relationships with colleagues*, *The professional role*, and *The nature of the job*—with sub-categories detailing the content in each—are presented and described below with illustrating quotes presented in the table.

Two themes run through all four categories, *Participation and influence* and *Expectations and demands*. The theme *Participation and influence* refers to RNs' desire, will, interest and the experienced 'right' to play an active part in and affect the organizations which they are a part of, thereby impacting the conditions prerequisite for optimally executing their work. The theme *Expectations and demands* refers to those experienced as coming from management, colleagues, patients and their families, and the nursing profession, as well as one's own expectations and demands. The high voltage sign in Fig. 3 represents tension between the RNs' ambitions to exert influence to meet this plethora of expectations and demands and the perception that they lack an effective voice and mandate to realize such ambitions. This tension appears to be a feature that underlies the overarching theme: *Lacking a sense of agency over the practice environment*, both on an individual and collective level.

3.1. The organizational context

This category includes descriptions of organizational contexts and internal structures and systems in the hospital in which the RNs work. These RNs also describe different aspects and challenges of working within, as well as being a member of, a complex organization.

Table 1
Illustrative quotes.

#1	<i>It should be a priority to raise RN salaries! The salary levels of today are beneath contempt! This in light of the workload with its' responsibilities, stress and the physical and psychological pressure that often comes with working with people who are severely sick. The appreciation you get as an RN primarily comes from patients and their families, not from management. I have recently gotten a new job at the hospital. Changing from a ward to an out-patient clinic. Not because of the work team or the work duties as such but because of the heavy workload.</i>
#8	<i>/ ... /Demanding work which require specialist education needs to pay off financially.</i>
#11	<i>There's a need to measure work load on the wards. Staffing is the same but the amount of work can vary a lot, for example when several patients with extensive care needs are admitted at the same time./ ... /It's unclear what can be demanded in regard to hospital care. For example, should all patients be able to shower every day? There are many new guidelines, for example about hygiene. It's impossible to follow them because there's not enough time.</i>
#12	<i>Some doctors still have an attitude that "nurses can wait for doctors, but doctors can't wait for nurses". When it's time for rounds, you're supposed to drop everything and come otherwise they will start muttering about it. Impossible when you are e.g. administrating pain relief to someone.</i>
#13	<i>During the years I've worked as an RN, the same job is to be done in shorter time with fewer hands. It's an impossible equation. I often feel like the resources are too small, that despite skipping my break and having a shorter lunch I haven't managed/haven't had time to do what I think is needed to be considered good care. It is very unsatisfying!</i>
#16	<i>My clinical department consists of three parts (medicine, surgery and nursing). An RN is head of the nursing part and is in charge of all RNs/assistant nurses at the department. She is on an equal level with the other two department heads and has the same authority to make decisions. No difference is made between doctors and nurses with regard to resources and a lot is invested in nursing.</i>
#21	<i>Staff on long-term sick leave aren't being replaced with other staff. The ward is relying on us 'being nice' and working double shifts. They're wearing out the existing staff.</i>
#22	<i>I still feel like many RNs don't see nursing as equally important as medical aspects. It just doesn't have as high status to be good in nursing as to have a lot of medical knowledge.</i>
#24	<i>Staff sense of impotence/frustration from the employer not listening to logical arguments, decisions being made over the heads of the staff, most often a lack of long term consideration/description of consequences when the employer makes different decisions.</i>
#29	<i>I love working as a nurse, but it wears you down when you feel that your work situation—like lack of staff, materials and other resources, poor support from management—keep me from doing my work in the way I want to, so that I can feel satisfied and content and don't have to feel that my patients are not getting all they need.</i>
#35	<i>/ ... /We're seen as the doctors' helpers/ ... /Our status is low, we are underpaid, but we have to pull the heavy load in order to maintain high quality care and do our work without mistakes, at the lowest possible cost for society/ ... /</i>
#44	<i>I often work nights, where I am the only RN along with two assistant nurses. Then I'm responsible for 26 patients, we are often overcrowded which can lead to me being responsible for up to 29 patients. Since it's a surgical ward with three different surgical fields, we have a lot of newly operated patients who can be in very bad shape. I often have to leave the ward to get patients from the post-op ward. Then there is no RN on the ward. Those of us who work nights have pointed out for quite some time that the situation is untenable, that there isn't adequate surveillance of the patients, they often have to wait a long time for pain relief and, in reality, we have no means of taking care of more than one patient in really bad shape at a time. In addition, we often get patients who really need to be in an Intensive Care Unit, but when the ICU is full, we have to take those patients who are 'least bad off'. We are not staffed for that. But despite our loud protests, the management ignores our concerns. Also, the last few months we've had a reorganization, we have gotten 2 new [surgical] areas which are completely new for us ... Even though we requested education in advance [of the reorganization], management hasn't given us any real education. This means that many times we don't have the slightest idea of what to expect in terms of post-operative complications or what's normal and what's not, since no one on the ward has any experience of these kinds of patients. What about patient safety?</i>
#45	<i>How many tasks can be assigned to an RN without errors "reasonably" occurring? You often point to the few RNs, who can juggle 10 balls in the air at the same time, as if they were role models for an RN today. TIME for each patient doesn't exist anymore!</i>
#49	<i>Management is cutting back on staff, they're not replacing staff who are sick or on leave because of the financial situation—a deficit in the millions/ ... /We have to work extra hard because of their failures. We take responsibility for 25 very sick people and have to take RESPONSIBILITY for every little incident—every mistake. We get reported. Besides they say that cutting back on us staff doesn't affect patient safety! HA HA HA.</i>
#53	<i>Demands on the staff increase all the time. More is supposed to be done, but staff resources are still cut back. Fewer people have to do more work/ ... /The ward has gotten dirtier. We reached 'the limit' a long time ago. It's a mess. Lack of time. We hear all the time that we need to be frugal, but the work still has to be done. Management doesn't listen. The boss: 'do the best you can in the situation. Prioritize. We don't have more money for staff'. There is a big lack of patient beds. A ward can't already be 100% full in the morning. At 9 a.m. for example, there might be new patients coming for admission. But those who are supposed to go home won't be discharged until 4 p.m. You can't see those patient numbers in the statistics/ ... /I think the worst part is that care that is visible in mass media is prioritized. What's left over for a 'regular' ward with old, e.g. cardio-vascular, patients? That's where cutbacks and priorities come in.</i>
#54	<i>I miss enjoying my work—and that you help one another without moaning and groaning.</i>
#55	<i>As an RN on the ward where I work, I think that a lot of one's time is spent on doing the work of other people (doctors and a potential secretary). As RN you are everyone's service woman or man, a spider in the web who is expected to keep everyone's juggling balls in the air! (And a real lack of updated documents/guidelines leads to uncertainty. Even job descriptions and written documents about roles and responsibilities).</i>
#61	<i>Often it works well between doctors and RNs. But very often communication fails. For example, the doctor might have cancelled certain examinations and prescriptions but hasn't notified the relevant staff or patient about this. This leads to a lot of work being done unnecessarily/ ... /you make lots of calls and arrange different things, it can amount to several hours of unnecessary work. Unfortunately, things between doctors and RNs often don't work very well. They simply don't value us, don't read our notes, and are nonchalant and don't listen to us. Of course, this doesn't apply to all doctors.</i>
#64	<i>A big negative factor that I can't influence/control is the work schedule. Working 50% night, 50% day/evening as well as almost every other weekend. Am very unhappy with this. Mostly it's the working hours that negatively affect my private life. Which in turn means that my private life affects my job negatively because of lack of sleep.</i>
#66	<i>More frequent weekend shifts, poor physician staffing which means that more and more medical responsibility is put onto RNs. We're expected to produce more and better care with worse and worse resources.</i>
#73	<i>It is completely horrible that we are forced to work every other weekend—both day and night staff! You are totally wiped out after each weekend with 3 nights!!! And then you are supposed to go home and have the energy to take care of 3 kids as a divorced mother!</i>
#75	<i>I think that there is too little time for continuing education and too little time for reflection. Health care is so hard pressed and there is so little staff, so the possibility to acquire new knowledge doesn't exist. But we're still supposed to know everything. Are we supposed to use our time off for that? I think there are few who have any stamina left if you work on an inpatient ward. Instead the result is that you develop a kind of bitterness. Unfortunately. Such a stimulating and varied job, but no one is more than human. When you work as a nurse, you use yourself as a tool. Are there any craftsmen who work with broken tools? No, because you can't. Because you need to maintain them. What I want to say is invest a little in us in terms of continuing education. Let us learn more if the will and desire is there. Create the conditions for it. Both with more staff and higher pay.</i>
#80	<i>Since we can have more RNs than assistant nurses on some days, RNs are counted as heads that cover for all staff. We RNs cover everywhere, the ward kitchen, nurse assistants and other nursing staff who are off sick.</i>
#82	<i>The head of our ward & the department head has less and less power, soon everything is steered from the top. This makes it a bad work environment; many small problems become big ones. It's not just the staff who suffer, but also patients.</i>
#84	<i>I think it is deplorable and indefensible that we have patient beds in the corridors. We have really sick patients in bad shape and we both rinse and change catheters, patients who vomit etc. in the corridor. We are supposed to cut the number of hospital acquired infections in half. They get agitated about long doctors' gowns but have patients lying in the corridor which are cold and drafty. It is a real scandal I think.</i>
#87	<i>I wish RNs would get to speak more; we're the ones who really see and know how it is on the floor.</i>
#91	<i>My experience is that we as RNs don't share a common language with hospital management. We on 'the floor' feel like a lot of what is imposed on us to do are "desktop products" not well anchored in the realities of care provision. Economy is always more important than good nursing care and a good work environment. But that's my perspective, if you ask the hospital management they think they are working hard to improve care for our patients.</i>
#96	<i>/ ... /An assistant nurse as help would have been worth gold, both for the patients but also for us.</i>
#105	<i>The system for incident reporting works badly. There are few who reports mistakes, errors and deficiencies. Very bad follow-up/actions taken from incidents. No interest from management.</i>

(continued on next page)

Table 1 (continued)

#108	The reason I don't continue to educate myself is financial. I work full time, can't afford to work less in order to study/ ... / [with] no financial compensation
#110	/ ... / [On day shifts, I] have a hard time getting the assistant nurses to understand that e.g. giving out meds demands time and is important. The assistant nurses see from their perspective that we should manage to get as many patients as possible up. You feel torn and never have enough time for the work that is only done by RNs.
#114	/ ... / Collaboration with the municipal care system [responsible for home care, social and elder care] isn't optimal. Patients are often admitted for care planning due to an unsustainable home situation. Doesn't feel like a job for inpatient acute care hospitals/ ... /
#131	On the ward where I work, we collaborate with the ward next to us, in order to save money. This means that we move our patients to that ward on the weekends. It doesn't feel safe for the patients or it doesn't feel ok at all to move seriously sick patients with cancer who may sometimes be in the end-of-life.
#134	Working with the doctors, I think, is probably the most fun, I know, it might not be the correct thing to say, but I feel like that's what develops me the most, but I really want to clarify that I keep the banner high when it comes to the nursing profession, so it's not about serving the doctors the way it was in the past. I feel they have and they show me a great deal of respect for carrying out my professional role and especially for the knowledge I possess as an RN.
#135	On the ward where I work the doctors expect the RNs to perform a lot of the doctor's work, like getting them referral forms, serve them with results from tests and x-rays, writing new medication charts so they can just sign them off. This is very time consuming as well as frustrating for RNs on my ward since it means less time for MY work + less time for the patients.
#144	I feel like the management closest to us, those bosses support the staff. But the overarching management (running the hospital) don't give a crap about us. They don't respect us, they see us as marionettes, we are exchangeable, experience and knowledge has no value.
#155	The doctors have good salaries, even though we do a lot of their work and have to introduce new doctors to a lot. Doctors = protected staff group/ ... / There are cut-backs on staff and the benefits that we have. Despite this, you're expected to provide the same patient/staff safe care (both by management and some [patients'] families). The doctors, however, are allowed to keep their benefits and the high costs seems to be ok.
#158	About career development and how much support you get to continue education, I believe that is ones' own responsibility. You can't just sit and complain about management etc. If you want to develop yourself, just do it.
#159	Our ward introduced Lean [Production] last spring, which we all still work with in different groups. This has freed up a lot of time, lessened the running around and the stress and led to a more even work load across all shifts without employing more staff. Collaboration and the team spirit has become better and more clear, everyone can put forth ideas and suggestions for improvement and complaints in a simple manner—and then solve it together. I absolutely believe that this benefits the health and safety of the patients! And of course even RN's own health, since we can work at a calmer pace, get to take our breaks and make our voices heard and feel that we are involved in deciding how health care should be run.
#162	We have a way of working that is a bit different, we work in pairs on weekdays. That is two RNs! To improve medical and nursing competency, our oncology dept has decided to only have RNs on the floor. Works excellently! Collaboration and the atmosphere among staff is good./ ... /
#163	We don't have ward doctors. Right now only agency doctors. Bad for continuity and team feeling. High turnover of RNs on the ward/ ... / After 6 years there are only 3 RNs left from the original group.
#167	We are an incredibly good work group, we have fun together, and that means you can cope with this, sometimes chaotic, situation.
#169	/ ... / Evening, night and weekend shifts are of course unavoidable, but when you realize that a teenager in a grocery store [names store] gets paid more for an evening shift, it is easy to become bitter. But having said that, I would never switch my job as an RN, mostly because it is so much [uses a strong Swedish curse word for emphasis] fun and rewarding.
#180	/ ... / we're working ourselves to death. Everything you've been passionate about and found to have been a fun, interesting and very stimulating profession ... you just don't have the energy anymore ... you feel listless, dejected and inadequate.
#181	/ ... / How are we supposed to have time in the future, when more is being cut back and we have to run faster? But of course, our hospital director has stated that nursing is not to be carried out in the hospital, only medical care, but how are we as RNs supposed to relate to that when nursing is the foundation in our RN education?
#183	The doctors/surgeons don't really prioritize the work at the ward and they are careless when it comes to certain investigations and drug prescriptions. Also sloppy when it comes to ordering tests and also following up on the results. It's us (those of us who are thorough) who, to a large extent, correct the doctors' mistakes.
#190	/ ... / We 'nights' chose not to be included in the 'working time model' to avoid doing 3-shifts. The day staff joined the model. The day staff refuses to do nights because they don't 'dare' be alone with 28 pats. We 'nights' feel like we're on the warpath when they don't help us with nights./ ... /

In the quote by respondent #53, four of the five sub-categories related to the organizational context are explicitly addressed, i.e. *Governance and structures*; *Economic issues*; *Management*; and *Staffing and resources*, while only the content of the sub-category *Involvement in hospital affairs* is not directly referred to here.

3.1.1. Governance and structures

The health care system as a whole is described as dysfunctional with the acute care hospital having little control over patient flow (#53), which raises questions about the match between what the acute care hospital can provide and the complexity of patient needs (#114).

Descriptions paint a picture of often unclearly motivated prioritizations, steered by a variety of factors not always related to the RNs' conceptualizations of care at an acute care hospital (#53); this seem to result in a sense of an arbitrary inequality. However, not all responses are negative. Plans and processes seen as understandable, logical, motivated and inclusive of the staff seem appreciated and are discussed in favorable terms (#159), although such examples were the exception rather than the rule in these data.

3.1.2. Economic issues

Comments about financial and fiscal decision-making were commonly raised in these data, on both a system and individual level. Decisions made on a policy level need to be translated into practice by the individual RN (#53) and a perceived gap between perspectives becomes clear in many of the RNs' statements (#91). Many describe feeling taken for granted, rather than perceived as an asset (#35).

RNs point to economic cutbacks' effects not only on staffing, but also on availability of beds, materials and assistive devices, many times calling for systematic evaluation of the effects on care quality and

patient safety, and also raising issues of accountability (#49).

3.1.3. Management

Management is described in terms of its' functions in a dysfunctional system, e.g. relating to different levels in the organizational hierarchy, where there may be good intentions but not always means for implementation due to limited leeway for maneuvering (#53, #82).

RNs also describe distance to and lack of contact between those RNs working on a ward and higher management levels. They describe management as lacking insight into the everyday challenges of the care environment, which seem to give the sense of not being seen as individuals, but as interchangeable, where differences in staff competence and skill are not appreciated (#144). In contrast, some respondents describe a management organization that signals equality among different professions in positive terms (#16).

3.1.4. Involvement in hospital affairs

Negative descriptions of RNs' involvement – or lack thereof – with their organizations are recurrent in the data. The lack of information and sense of being peripheral to organizational decision-making processes described seems to result in many RNs feeling impotent, frustrated and in turn, also lacking opportunity to be engaged (#24). Some describe their perspective on patient care and the environmental factors influencing it, as unique and complementing that offered by other actors/stakeholders, and yet frustration is expressed that these insights are not fully heard (#87).

In contrast to the multitude of negative descriptions of unsatisfactory interactions with their organizations, there are a few, but notable descriptions of positive examples of particular ways of working (#162).

3.1.5. Staffing and resources

The responding RNs describe a frequent lack of flexibility and co-ordination in relation to patients' changing needs and the staffing and resources available to meet those needs in the context of an acute care hospital with 24-h care provision (#11). Evening, night and weekend shifts are described as especially vulnerable.

RNs describe a gap between their competence and the responsibilities they are expected to assume to compensate for low staffing in other staff groups as well as unclear reasoning in planning staff deployment (#66, #80). The system is described as fragile in its dependence on generosity and loyalty on the individual level, rather than on long-term, stable organizational planning (#21). It is described as left up to individual creativity to get the work done despite inadequate staffing and resources (#53).

The strained work situation is described as related to increasing staff turnover with a loss of collective competence (#163).

3.2. Relationships with colleagues

This category contains descriptions of their social and collegial work context. Many RNs describe their colleagues as a source of job satisfaction with potential to reduce the negative impact of other aspects of work. At the same time, friction among colleagues and in relationships with other staff groups is described as creating feelings of stress and frustration.

3.2.1. Relationships with physicians

Many descriptions of collegial relations with physicians portray complex work relationships. RNs describe how the actions and behaviors of physicians sometimes give rise to a feeling of not being respected or taken seriously as health care professionals, e.g. experiencing that physicians' time is seen as more valuable than that of an RN (#12) or when important information fails to reach relevant staff (#61). In relation to the hospital organization, RNs perceive physicians to be a more valued staff group (#155) with more influence and voice in the development and organization of the hospital.

RNs describe experiencing expectations or demands to perform many tasks they see as being within the role of physicians, and to double-check physicians' work, being seen as "*the doctor's helper*" (#35). Whether explicit, implicit or self-imposed, this expectation or demand to facilitate for physicians is sometimes said to be met to the detriment of their own work (#135), or as taking on more responsibility for patient safety and quality of care as a form of additional 'safety net' between physician and patient (#183).

Although many RNs described negative aspects of working with physicians, some RNs also describe feeling respected and appreciated by physicians (#134), particularly by physicians with whom they work closely. This seems to mirror RNs' relationships with management, as described in the sub-category *Management*, where an increased sense of support was described from more proximate levels.

3.2.2. Relationships with other RNs and nursing staff

Assistant nurses are described by some RNs as invaluable team members with a supportive role that is indispensable for both patients and RNs (#96). Other RNs describe frustration and stress based on their experience that assistant nurses lack understanding of RNs' roles and responsibilities (#110).

There are also descriptions of friction arising among RNs working different shifts; in one notable example this appeared to result from individual RNs being left to solve structural problems without clear leadership (#190).

3.2.3. Camaraderie

RNs describe a strong collective "we", across professional borders, with membership that seemingly varies across settings, but most often appears to consist of staff on their own ward (#167).

In the descriptions there is also a sense of "we" as distinguishable from "them", expressed explicitly or implicitly in relation to those working together on a ward versus hospital management (#91 and #144).

Camaraderie is referred to as a unifying factor, which can counterbalance the disruptive and sometimes chaotic aspects of the RNs' work situation (#167). In contrast, lacking camaraderie at work is described by some RNs as negatively affecting their passion for their jobs (#54).

3.3. The professional role

This category relates to RNs themselves as individuals in their professional role, but also as part of a professional collective. It contains descriptions of the interplay between the nature of the work itself, the workplace, and the individual professional RN. Dreams, ambitions, desires and needs are described from an individual as well as collective perspective – often portrayed as an initial and persistent ambition to help people, and the abrupt, and sometimes harsh, collision with the realities of modern health care and what it means to be and work as an RN today.

The quote by respondent #75 addresses three of the four sub-categories found in this category: *Competence and professional development*, *Recognition*, and *Erosion*. The sub-category *Work life – private life* is not specifically addressed in this quote.

3.3.1. Competence and professional development

Quite a number of RNs described their interest and ambition to further educate themselves and develop their professional roles as RNs, as a personal motivation but also to benefit their ward and patients. However, there are repeated descriptions indicating that in many cases, nursing and RN competence is not valued or prioritized by the organization (#75), the employer (#181), other staff groups (#110), or even within the RN staff group itself (#22). Also, further education is pointed to as a personal investment with potential negative consequences for private economy (#108). With no guarantee of higher pay or career advancement, several respondents write that there is little incentive to make that personal investment (#8). In contrast, other RNs put forth the individuals' own responsibility to progress in their career (#158).

RNs also describe wanting their competency to be better utilized in their organization. Frustration and dissatisfaction is expressed about the lack of conditions to provide the type of care they see is needed and which they believe they would be otherwise able to provide, given their competence and training (#29).

3.3.2. Meaningful recognition

RNs describe the importance of receiving meaningful recognition in relation to their position and role as RNs, as a way of showing them that they are valued, respected and appreciated by the organization, by colleagues, as well as by patients. Salary levels, a recurrent issue in these data, are described as not corresponding well with their responsibilities, their duties, or their level of competence and skill as RNs (#1). Meaningful recognition in the form of individual appreciation is described by some RNs to be scarce or even non-existent between colleagues and from the organization, but often described as present in contacts with patients and their families (#1).

3.3.3. Work life-private life

The demand to further educate themselves, using their free time if needed, as seen in the quote by #1, and the resulting economic consequences for the individual RN (#108) is described as affecting the RNs' private life.

A strained work situation and irregular working hours are seen as complicating private life, resulting in less energy to engage in social activities or hobbies. Many describe how a pressured work schedule in

which they have little or no influence or control over their own working hours, creates a negative spiral where work affects their private life, which in turn affects their work (#64). The irregular working hours also create difficulties finding child care services or organizing their work schedule to suit different types of family situations (#73).

3.3.4. Erosion of the RN

A gradual erosion of the RNs as persons in a professional role may be discerned in RN descriptions. In trying to maintain safe quality care standards in an organizational system and work environment, which in many ways seems to impede rather than facilitate their efforts (#29), some RNs describe feeling demoralized in their professional role with a faltering of their passion for and engagement in their work (#180).

3.4. The nature of the job

In this category, RNs describe work itself, what it entails and the distribution of work among different categories of staff, as well as their goals and visions for providing safe, high quality patient care. The quote by RN #44, explicitly describes her view of consequences for patient safety and her experience of working 'between a rock and a hard place'. The quote address three of the four sub-categories, *Impossible equation*, *Who is doing what* and *The vision of safe, high quality care* which are elaborated upon below. The fourth sub-category, *Contentment*, is not specifically addressed in this quote.

3.4.1. Impossible equation

The statements—with several explicitly using the term “equation”—generally illustrate a conflict between RNs' perception of needs and conditions for providing care, with many statements directly addressing consequences for patients and occasionally, for families.

RNs describe a strained work setting (#44) where they are confronted an impossible equation to deal with – maintaining high quality and safety, with diminishing resources (#13), in combination with unclear expectations and demands for care that meets ever-changing recommendations (#11).

3.4.2. Who is doing what

RNs describe an unclear distribution of work among the different staff groups. In the absence of formal descriptions of roles and responsibilities (#55), it is up to the individual to define for him/her self what one should do or not do, or what other staff groups should or should not do. Many statements, in addition to the initial quote (#44), seem to suggest a lack of understanding or knowledge of nursing and its role in patient care, within the organization. RNs describe being deployed to cover for other staff in ways which seem to pay little regard to their competence and skill (#80) (see also sub-category *Staffing and resources*).

Descriptions of negative changes in work situations are recurrent in these data, with described increases in administrative tasks, documentation load, and compensating for lack of manpower in other staff groups, as previously noted. Some RNs question the “multi-tasking” role model of the modern RN (#45), who also seems more and more divorced from care and activities closest to patients.

3.4.3. The vision of safe, high quality care

In many of the responses there seems to be a theoretical consensus about a vision of safe, high quality care on all organizational levels; however there seems to be little agreement on how to implement this goal in practice (#91). Unclear priorities or seeming disinterest from management makes well-intended efforts to improve patient safety seem impotent (#84) and discourages staff from engaging in systematic safety improvements (#105).

The extent to which different hospitals prioritize safe, high quality care is also questioned in relation to evening, night and weekend shifts, which, as noted in section 1.5 above, are described as shifts with

increased risk for patient harm (#44). Individual staff seem to be put in difficult moral and professional positions as they try to balance patient care needs with the finite resources and efficiency demands in their organizations (#131).

3.4.4. Contentment

In stark contrast to much of the data containing negative statements, contentment with a variety of aspects of one's work was also referred to by RNs. These aspects varied from recognition by patients and their families, (see sub-category *Meaningful recognition*), to camaraderie among work colleagues (see sub-category *Camaraderie*), to a sense of doing meaningful work. Many responses make apparent a sense of contentment with the choice of career as RNs (#29), despite dissatisfaction with specific issues at one's workplace. Working as an RN is repeatedly described as meaningful, rewarding, important, and fun, which in part is said to balance some of the negative aspects of the working conditions described in many statements (#169).

4. Discussion

In this data set, consisting of descriptions from 200 RNs working in varied degrees with people with cancer in 57 different acute care hospital organizations in Sweden, we found that RNs described their work situations from three different perspectives; as persons, as professionals and as employees. As noted previously, *Antonovsky's (1987)* salutogenic model did not guide the analysis process itself. However, upon completing analysis, we found consideration of the manners and extent to which RNs described their work situation as meaningful, comprehensible and manageable to be a relevant theoretical framework for further interpreting these results.

The feelings of disenfranchisement expressed by RNs in a variety of ways bring to mind the idiomatic expression of being stuck 'between a rock and a hard place', with expectations and demands to uphold high quality and safe care on one side, and the experience of working in an environment in which RNs are unable to influence prerequisite conditions for care delivery on the other. Using *Antonovsky's (1987)* terminology, we find that these RNs appear to experience work situations which, while often described as meaningful, for the most part, appear neither comprehensible nor manageable.

Although surveyed in 2010, the RNs' descriptions of excessive work demands, lack of support from co-workers and management, low staffing, and perceived lack of control over factors they believe to be most influential on nursing practice standards and care quality, are similar to those reported in other, both older and more recent, studies (*Attree, 2005, Geiger-Brown et al., 2004, Holland et al., 2019, MacPhee et al., 2017*). This implies a degree of commonality and relevance of our findings over time and across context. Also, recent Swedish reports (*Mörtvik, 2018; Nilsson et al., 2018; SCB, 2017*) and recurring accounts in mass-media suggest that little has improved since the time of the survey. Another caveat to be considered is that the RNs who responded to the open question tended to be somewhat more critical than those who did not, particularly regarding staffing and resource adequacy. However, the degree of negativity is not an issue in this qualitative analysis but it is important to recognize that the overall response patterns were the same as those among other survey respondents.

For the most part, these RNs describe working in dysfunctional systems with unclear leadership on many levels of the hospital organization, seemingly leading to structural problems which often appear to be left to the individual to deal with, adding to a weak sense of manageability and comprehensibility (see e.g. #53). Nonexistent or unclearly defined guidelines on distribution of work and responsibilities appear to leave much room for individual interpretation as well as allowing varying expectations within and among different staff groups as to who should/should not be responsible and accountable for different tasks. Changes in RN deployment are described as distancing them from direct patient care, giving less opportunity for adequate surveillance of

patients and potentially leaving necessary care undone, which Ball et al. (2016) found to be a mediator for added risk of patient harm. RNs' distance from direct patient care might well also affect a sense of meaningfulness, as many RNs describe contact with patients as important for enjoyment of their work.

RNs expressed frustration stemming from not being recognized as individual professionals with specific expertise and skills, but rather being seen as interchangeable 'pawns', seemingly deployed with little strategy or long-term planning. Antonovsky (1987) argues that manageability is contingent on the comprehensibility of a situation, and how these concepts are applied on an organizational level. The imprecise use of competencies within a hospital organization, and the experience, recurrently described in our data, of nursing and nurses being undervalued with their competence not well understood within the organization (see e.g. #144), seems to beg several questions. Is it possible for individual nurses to effectively manage their work situations if they do not fully comprehend the rationales underlying organizational decisions? What are potential signs of an organization struggling to effectively deploy and manage workforce competencies that the organization does not seem to fully understand?

To promote resilience on both individual and organizational levels, health care staff—including RNs—require a degree of autonomy and room to use their professional judgement (Wears et al., 2015). However, the lack of a sense of agency we discern through this analysis, both for individual nurses and at a collective level, suggests the existence of factors within the hospital organization, which impede nurses' ability to work autonomously and as professionals, i.e. to use their own specific competence to make clinical decisions and to govern practice (Davies, 1995) within their professional scope. According to Antonovsky (1987), having a voice in what one does increases ones' desire to invest energy in it, in other words, having a voice increases a sense of meaningfulness. RNs in our study instead describe a sense of impotence in response to expectations and demands from management, patients and their families, other staff groups, as well as from within the nursing profession itself, to uphold standards of care without seeing real means of influencing necessary prerequisites. RNs' weak sense of meaningfulness thus seems linked with their sense of manageability (see e.g. #180). The challenges and lack of agency are also described by RNs as a systematic issue in the wider health care organizations to which they belong. This can be seen in many RNs' recognition of the constrained position of ward managers in organizations where power and control is described as becoming more centralized, but is not matched by accountability.

For RNs to be able to work to their full capacity, and thus potentially strengthen organizational resilience, stressful and unhealthy aspects of work should be minimized. However, in a challenging and complex acute care hospital setting with 24/7-care provision, it seems impossible to eliminate all negative aspects. By employing Antonovsky's (1987) key components and identifying supportive structures to strengthen RNs' sense of comprehensibility, manageability and meaningfulness, the current study also offers insight into positive features in the work situation of RNs. These were in part described as balancing some of the negative aspects of strained work situations, i.e. contentment with their choice of career as an RN; seeing their work as important and enjoyable; receiving meaningful recognition from patients and families; camaraderie among colleagues who work together through tough times; engagement and ambition to improve patient care; and commitment to further educate themselves and develop their professional roles as RNs. Many of these features relate to a sense of meaningfulness, which may be seen as an essential part of RNs' willingness to continue investing time and energy in their work. In our data, inclusive ways of organizing work with clear rationale for decisions made and strategic staff deployment demonstrating equality among different professions were described in positive terms and can be seen as possible examples of work environments with a stronger sense of comprehensibility (see e.g. #16, #159), a contingent part of experiencing a stronger sense of manageability.

The knowledge derived from this study could be applied by hospital organizations to consider factors potentially impeding RNs' contributions to their organizations. It also seems crucial that RNs have a sense of agency and voice, to support their sense of meaningfulness in their work. RNs' central role should be acknowledged, along with that of other health care professions, in organizing, developing and providing safe and high quality patient care and promoting a resilient organization, thereby making their work situation more meaningful, comprehensible and manageable.

In conclusion, RNs describe challenging work situations which appear neither comprehensible nor manageable. We also find descriptions of positive features related to a sense of meaningfulness, that mitigate these situations. However, our finding of the lack of a sense of agency, on both an individual and a collective level, could potentially erode RNs sense of meaningfulness and readiness to invest in their work.

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CRediT authorship contribution statement

Lisa Smeds Alenius: Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing - original draft, Writing - review & editing. **Rikard Lindqvist:** Conceptualization, Methodology, Formal analysis, Writing - original draft, Supervision, Funding acquisition. **Jane E. Ball:** Formal analysis, Writing - original draft, Supervision. **Lena Sharp:** Conceptualization, Methodology, Formal analysis, Writing - original draft. **Olav Lindqvist:** Conceptualization, Formal analysis, Writing - original draft. **Carol Tishelman:** Conceptualization, Methodology, Formal analysis, Writing - review & editing, Supervision, Funding acquisition.

Declaration of competing interest

The authors have no conflicts of interest to disclose.

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