Effective learning activity to facilitate post-graduate nursing students' utilization of nursing theories – Using the fundamentals of care framework

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Abstract

Aims: To explore how postgraduate nursing students used the Fundamentals of Care framework in a written assignment based on a clinical situation, and describe their learning process in using the framework.

Design: A qualitative descriptive study design applying the Fundamentals of Care framework.

Methods: Postgraduate nursing students' theoretical written assignments (n = 35) based on self-experienced clinical cases were included. The data were collected in 2021 in five specialties in a postgraduate nursing programme in Sweden. The data were analysed using content analysis.

Results: Applying the framework to a self-experienced clinical case illuminated the importance of nurse–patient relationships and clarified the meaning of person-centred care. The students assessed the framework as easy-to-use bedside as a guide to providing nursing care. By using the framework, the students were aided in reasoning about the fundamental values of care such as ethics, equality in healthcare and patient rights. When students reflected on their learning process, they stated that the assignment taught them how to use the framework, as well as paving the way for finding and applying other theories of nursing.

Conclusion: Learning activities with an opportunity to practice analysing nursing care guided by a theory, combined with a self-evaluating element, are conducive to deepening students' learning and improving their ability to use theories in clinical practice.

Impact: The framework illuminated the importance of the nurse–patient relationship in nursing care to the students and made them recognize and value the clinical use of theories. It is the responsibility of leaders in nurse education and healthcare to provide the next generation of specialist nurses—future nursing leaders—with regular opportunities to analyse nursing care through theories and frameworks. Nurses call for continuous learning on theories; leaders in nurse education and healthcare must meet these needs.
1 | INTRODUCTION

Nursing theory has previously been described as the guide for all nursing practice, demonstrating the value of the art and science of nursing. It outlines how nursing is ever-changing and evolving both as a discipline and as a practice profession (McCarthy and Aquino-Russell, 2009). Implementing nursing theory into clinical practice is fundamental to providing a more purposeful and systematic approach for practice (Fawcett and Desanto-Madeya, 2013) and increasing evidence-based practice (Younas and Quennell, 2019), which also improves patient safety and quality of care. Today, nursing theory does not substantially guide nursing practice (Voldbjerg et al., 2016). To increase evidence-based and person-centred care, postgraduate nursing students need to be taught how to apply theory, through effective learning activities—here exemplified with the Fundamentals of Care (FoC) framework (Feo et al., 2018; Kitson, 2018). Postgraduate nurses are the next generation of leaders in patient care, and it is of utmost importance to provide them with the skills to implement nursing theory into clinical practice.

1.1 | Background

Nursing theory-guided interventions are useful to increase evidence-based practice and improve care (Younas and Quennell, 2019). Nursing theory can also be helpful for students trying to grasp the complexity of nursing care, to improve their performance (Merino et al., 2018). Furthermore, newly graduated nurses (NGN) experience a gap between education and clinical practice, where what they have been taught about nursing theories and models is not used (Voldbjerg et al., 2016). There are few studies regarding use of nursing theory education for postgraduate nursing students, although one study (Merino et al., 2018) showed that using nursing theory in professional training for postgraduate nursing students increased scientific thinking and professional performance.

Translating nursing theory into clinical practice is a demanding process (Fawcett and Desanto-Madeya, 2013) and nursing theorists have not always focused on translating theory in a way meaningful to clinicians (Kitson, 2018). This might offer a partial explanation as to why NGNs use such evidence to a limited extent. Another explanation can be found in the structure of the healthcare system, where the biomedical model has long been the dominating model, reducing the value of other dimensions, for example, the psychological, social and behavioural aspects included within nursing theories (Farre and Rapley, 2017). The suppression of these important dimensions has led to a situation where nurses are prevented from caring for patients in a holistic way (Eley et al., 2001). In addition, nurses in leading positions within the healthcare organization are forced to perform merely as managers, rather than as nursing managers (Sieloff and Raph, 2011). Since postgraduate nurses will assume the role as leaders in patient care, it is of utmost importance that they gain the skills necessary for using nursing theory in clinical practice. This is a challenging task, since postgraduate students may not have experiences from applying nursing theories in their daily work.

The FoC framework is a conceptual framework that can support nurses in translating theory into acts of person-centred care (Feo et al., 2018). It consists of three interrelated dimensions for the delivery of fundamental care: the establishment of a trusting relationship with care recipient; the integration and fulfilment of a person's physical and psychosocial needs and the importance of the nurse–patient relationship in recognizing and managing these needs; and a care context that is supportive of relationship development and care integration (Feo et al., 2018; Kitson, 2018). The framework is unique in that it depicts these dimensions clearly and with such a multidimensional focus. The framework has also been identified as a ‘point of care’ theory (Kitson, 2018) that supports nurses and leaders in shifting from a task-oriented approach to care (Kitson et al., 2014) and can be used in a clinical reasoning process to address patients’ fundamental care needs. The framework has been used in the development of the caring life-course theory, expanding to involve individuals’ lifespan and personal history in relation to their care needs (Kitson et al., 2022). Thus, the FoC framework has the potential to provide NGNs and graduate students with theories in a more graspable form for use in practice (Mudd et al., 2020). It can enable them to work with a holistic approach to nursing care, instead of a biomedical one, with an inherent risk of fragmented, task-based nursing care (Jangland et al., 2018b). Previous research has demonstrated that the framework can be valuable as guidance for clinicians (Feo et al., 2017) as well as in the context of education (Alderman et al., 2018; Voldbjerg et al., 2020). Still, research reveals that fundamentals of care are often overlooked in nursing education (Jangland et al., 2016, 2018a); there is limited empirical research on how to teach fundamental care (Kitson et al., 2019). Thus, there is a need of research describing how to transform the framework into effective learning activities (Voldbjerg et al., 2020).

Educators need to facilitate knowledge transfer by developing learning activities that include both subject content and cognitive processes. This challenging task can be facilitated by using Bloom’s taxonomy (Su and Osisek, 2001). By using a taxonomy, students are challenged to analyse their learning process and outcome in relation to cognitive processes. This helps the students not only to understand what they have learned, but also what level of knowledge they have acquired, and to identify their potential for further knowledge development.

To enable the transformation of theory into clinical skills, it has previously been recommended that educators develop and use clear models (Berndtsson et al., 2020). Case-based learning is a well-known...
model, previously shown to engage students, promote lasting knowledge (Forsgren et al., 2014) and enhance students’ critical thinking (Li et al., 2019). Furthermore, case-based education can be enhanced if the professional context in a case is highly relevant for students (Kennedy, 2018), indicating that it could be useful to allow students to use self-experienced cases from their clinical training. However, as previously stated, there is a lack of consensus on how to transform the framework into effective learning activities. The purpose of this paper was to contribute with new knowledge within the field.

There is a challenge in teaching and inspiring postgraduate nursing students to apply nursing theories—both in their degree projects and during clinical training. The students often find it difficult to use theories and most often have not used such knowledge after graduation at the preregistration level. Applying theory to self-experienced patient cases can be a way of motivating students to use theory to deepen their knowledge and understand how nursing care is delivered to patients. This can also increase students’ scientific thinking and impact on their professional performance in clinical practice. Post-graduate nurses are expected to be leaders in patient care bedside, as well as taking on leading positions in nursing care in the future, and will thus impact on the nursing care delivered. Hence, leadership for implementing education at the postgraduate level that can encourage the students to value and use nursing theories is warranted. The framework has been integrated into some courses in a postgraduate nursing programme in Sweden. In this study, we describe and evaluate how the students used the framework in one of these courses.

THE STUDY

2.1 Aims

The aim was to explore how postgraduate nursing students used the FoC framework in a written assignment based on a clinical situation, and to describe their learning process when using the framework.

2.2 Design

A qualitative descriptive study design based on postgraduate nursing students’ theoretical assignments was used. Such a design is favourable when a phenomenon is being described and the collected data consist of documents to be examined. The researcher is close to the data and the phenomenon (Patton, 2015). The FoC framework (Feo et al., 2018; Kitson, 2018) was used as the theoretical lens in the development of the assignment and in the interpretation and discussion of the study findings.

2.3 Participants

Students in a postgraduate nursing programme at a Swedish university were included in the study by convenience sampling. This national programme is at the advanced level and awards a protected professional title with a European 1-year Master’s degree. At this university, the programme is organized and offered at multiple departments. Students from five specialties (anaesthesia care, ambulanc care, intensive care, surgical care and operating theatre care) at one department were invited to participate. All students took the course ‘Scientific method and theory’ during the first semester in the programme, covering 5 weeks full-time. The inclusion criteria were having an approved assignment at data collection and there were no exclusion criteria. Before the start of the course, written information about the study was presented to all course students through a learning platform. At the start of the first classroom seminar in the course, all attending students were invited to participate in the study. The students received both verbal and written information about the study and had the opportunity to ask questions about it. Fifty-seven students were registered for the course, 37 students attended the introduction class (non-compulsory) and gave informed consent. Two participants were excluded since their assignments were not approved when data were collected. At the first classroom seminar in 2019, participants completed a paper-based questionnaire covering non-sensitive information on demographic data: the specialty the participant was enrolled in, current nursing experience, theories used in Bachelor’s degree project and nursing theories used in clinical practice (if applicable). The students wrote their assignments in early 2020 and data were collected through the learning platform in 2021, when all students had completed the programme.

2.4 Data collection

The assignments were collected through the learning platform in May 2021. During the course, the assignments were deidentified before being graded by the teachers. For data collection, each assignment received a code. The assignments were thus anonymised to the authors of the study.

2.5 Learning activity guided by fundamentals of care

A pedagogical project was outlined in the aforementioned specialties of the programme. The objective of the project was to develop, test and evaluate how to teach postgraduate students to use and integrate nursing theories by designing an effective learning activity. The students were introduced to the framework during a seminar. Ahead of the seminar, they were expected to read a chapter in a book about nursing theories, an article about the framework (Kitson, 2018) and an article using the framework as its theoretical lens (Jangland et al., 2016). During the seminar, the theoretical foundation and the three dimensions of the framework, as well as other nursing theories, were presented and the articles were discussed. After the seminar, the students studied on their own to gather necessary knowledge and prepare for the assignment. They were asked...
to identify a clinical case within their specialty from their clinical training. The students had access to the assignment instructions from the start of the course.

The assignment was developed by the first and last authors. In the first version, the students could choose any theory/model. In the present version, the students were encouraged to use the FoC framework, although with the option to choose another theory/model if the FoC’s range did not cover the self-experienced clinical case. In this study, all students chose the FoC framework. The students described their self-experienced clinical situation. A self-evaluation of their learning process was included in the assignment. The students were asked to use a learning taxonomy of their choice and the course’s learning outcomes when reflecting upon their learning process. The assignment could encompass 1600–2000 words (Table 1).

### 2.6 Ethical considerations

According to national ethical directives in Sweden, studies not collecting data related to health, sensitive personal data or sexual, political or religious orientation do not require approval by an ethical committee. Nevertheless, ethical consideration and confidentiality were carefully discussed and the research was conducted in accordance with ethical standards. The course coordinator, who informed the students about the study, had not met the students before. The students knew that the course coordinator and two of the teachers in the course were also part of the research team, so great care was taken to ensure that the students were informed about voluntary participation and that their assignments would be treated with confidentiality and would not be collected until some time had passed after the students had graduated from the programme. The students were thus informed, ahead of the start of the course, both verbally and in writing, that participation in the study was voluntary. Thereafter, written informed consent was collected. When asked to participate, the students were informed that their assignments would be collected after their graduation from the programme. They were informed that no assignment could be connected to any student. All data were handled confidentially. The students were informed that they could at any time withdraw their participation in the study without giving an explanation.

### 2.7 Data analysis

The anonymised data were extracted into a Word file and imported into NVivo software (data on how to use the framework) and Excel (data on the learning process) for analysis by a research assistant. The analysis was conducted using conventional content analysis without pre-determined categories (Hsieh and Shannon, 2005). All authors (female registered nurses with doctoral degrees and extensive clinical knowledge in the relevant field) read the entire dataset. One of the authors (a researcher without involvement in the students’ course) coded the cases that the students used and identified which dimensions or elements each student had chosen in the framework (Table 1, paragraphs A & B). The first author (researcher with extensive experience in qualitative research methods and of the framework) thereafter coded the units of analysis, focusing on how the nursing students described how to use the framework in the case from their clinical training (Table 1, paragraph C). The last author (researcher with experience in qualitative research methods and extensive knowledge of higher education and learning, and in particular the postgraduate nursing programme) coded the units of analysis focusing on the students’ reflections about their learning process in conducting the assignment (Table 1, paragraph D). The first and last authors met on three occasions where the coding was discussed back and forth until consensus was reached. Necessary adjustments were then made accordingly. This analysis was presented to the entire research team, which then met with the first and last authors on several occasions and discussed the findings until consensus was reached within the team. Citations from the students’ assignments were added to illustrate the contents of the categories. The findings were not returned to the participants. Examples of the analysis process, from a student’s text to categories, are presented in Table 1.

### 2.8 Rigour

Trustworthiness was considered throughout the research project (Patton, 2015), with the use of the FoC framework applied consistently. The credibility of the assignment is ensured, since it has been tested in student groups for several years. Revisions have been made based on students’ evaluation and discussions among educators in the postgraduate programme (not involved in the research team). Credibility is further enhanced by the extensive knowledge about the framework within the team, as well as familiarity with the assignment and the method used in the analysis. Confirmability was enhanced as the research team involved in the analysis, with multiple team meetings discussing the findings until consensus were reached. Since the assignments were anonymised (no link to a specific student), the research team was not influenced by a possible preunderstanding of any particular student. To strengthen credibility, citations were discussed and added to support the findings. Furthermore, translation of the citations from Swedish to English was performed by an independent translator.

### 3 FINDINGS

### 3.1 Sample characteristics

A total of 35 students from the postgraduate programme agreed to participate in the study and 33 of them answered the questionnaire. The participants’ age ranged from 23 to 45 years (mean 31 years). Analysis of students’ nursing experience showed that 16 students (48%) had 1–3 years’ experience as RN; 13 students (40%) had 4–9 years’ experience and 4 students (12%) had more than 10 years’ experiences. The
TABLE 1 Overview of the written assignment and analysis using an example from one student

<table>
<thead>
<tr>
<th>Instruction to the student (shortened version)</th>
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</thead>
<tbody>
<tr>
<td>A. Choose a self-experienced case from your clinical training</td>
<td></td>
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<tr>
<td>• Describe the patient case.</td>
<td></td>
</tr>
<tr>
<td>• Define the phenomenon in your case.</td>
<td></td>
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<tr>
<td>B. Choose a dimension or an element from the Fundamentals of Care framework</td>
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</tr>
<tr>
<td>• Describe the central parts of the framework and how they are applicable to the phenomenon in your case.</td>
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</tr>
<tr>
<td>• References should be used in this part of the assignment (Fundamentals of Care key publications available for students).</td>
<td></td>
</tr>
<tr>
<td>C. Discussion</td>
<td></td>
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<tr>
<td>• Use the framework to analyse and explain your case. Connect the framework to the nursing care within your specialty and discuss this in relation to research.</td>
<td></td>
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<tr>
<td>• Identify strengths and weaknesses of the framework, within your specialist field of training.</td>
<td></td>
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<tr>
<td>• Discuss your case from a clinical, societal and ethical perspective. Use the framework, scientific publications, legislation and policy documents relevant in your assignment. Include a discussion how you as a specialist nurse are responsible for providing safe person-centred fundamental care and how you put this into action.</td>
<td></td>
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<tr>
<td>D Self-evaluation</td>
<td></td>
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<tr>
<td>• Use a learning taxonomy of your choice and the educational goals to reflect upon your learning from this assignment.</td>
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</table>

A. Choose a self-experienced case from your clinical training

A man with chest pain and fear of hospital (Context: prehospital care). The daughter of a middle-aged man with chest pain alerts the emergency number, activating ambulance service. The man has a fear of hospitals in general. The daughter has noticed that her father is not feeling well and is trying to urge him to seek care. The man does not want to contact the hospital. Arriving in the patient’s home, we (i.e., nurses in the ambulance) observe that the man is noticeably stressed and uncomfortable. The man can talk to us and explains that he has had persistent chest pain during the evening. He expresses a phobia and fear of hospitals. He agrees to an initial assessment. The man’s condition and health history lead us to believe that there is an urgent need to take him to hospital. During our initial assessment of vital signs, we explain to him that it can be a serious health hazard if the symptoms are not taken care of. Still, he prefers to stay at home and hope for recovery. Step-by-step, through communication and patience, we manage to build trust, and he agrees to go down to the ambulance, where we can take an ECG. We continue our “talk” and he explains his fear of hospitals. Finally, after getting information about the care in the ED, he agrees to go to the hospital. He expresses how much he appreciates that we are patient and show him understanding.

Analysis: The case was coded to ‘Patients’ perspective on participation and communication’.

B. Choose a dimension or an element from the Fundamentals of Care framework

Starting from the patient case presented above, the student chose to write about the dimension of a trusting nurse–patient relationship based on the framework. The student described the dimension as applicable to this patient case, since establishing a relationship with the patient was crucial to assist him with adequate acute care.

Analysis: The dimension identified was ‘Relationship established’.

C. Discussion

The student’s discussion is illustrated by two paragraphs:

‘The patient was noticeably strengthened by receiving our undivided attention, which is one of the building blocks of the relationship (Kitson, 2018). By explaining what he could expect and what we could do to help him, we showed the patient that we could anticipate his needs and that we understood his concerns and fear. I experienced this as vital part of strengthening the relationship with the patient. Based on my experience, this ultimately made him experience trust and we were able to provide the acute nursing care he needed.’

Analysis: Coded to the category ‘Illuminate the relationship in complex interactions’.

‘As a specialist nurse, I believe that I have a responsibility that comes with higher education. I need to value this knowledge and ensure that my colleagues, regardless of education level, respect these values in each patient interaction. The described care situation (the man with chest pain and a fear of hospitals) can be used as an example in discussions with colleagues regarding how work can be improved and facilitated by focusing on the patient and his/her wishes. Although it may sometimes feel easier to do things the way you are used to. I believe that the FoC is a well-developed framework for guiding staff in how to focus on the patient and provide good and safe nursing care.’

Analysis: Coded to the category ‘Applicability in quality improvement work and education’.

D. Self-evaluation

The student used Bloom’s taxonomy in the self-evaluation.

‘Analysing the self-perceived care situation based on the Fundamentals of Care framework has been an educational exercise. I now understand the benefits of having a theoretical framework as a guide to achieve person-centred care. I find it important and interesting to investigate this further and have identified that I need to develop my knowledge in various nursing theories. I consider myself to have good factual knowledge in nursing. However, I need to gain deeper knowledge about theories, models, and structures, and how these can be applied in nursing. I need to develop more knowledge in distinguishing when different models are suitable for use. Previously, when I have tried to use nursing theories, I have found it difficult. I consider FoC to be easier to use in everyday clinical practice.’

Analysis: Coded to the category ‘Student’s self-evaluated learning process’.

The text is an abbreviated version of a student’s assignment. The original text was about 1600 words.

students had work experience from several places, most commonly surgical wards, followed by medical wards, see Table 2.

When the students were asked to name nursing theoreticians, they were familiar with, they mentioned ten names; the ones most often mentioned were Dorothea Orem and Katie Ericsson. Eight students stated that they had used nursing theories (by Katie Ericsson and Joyce Travelbee) in their education at the Bachelor degree level (Table 2). One student had experience of using
TABLE 2 Students’ demographic characteristics and theoretical alignments

<table>
<thead>
<tr>
<th>Variables</th>
<th>In total n = 33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years) mean/range</td>
<td>31/23–45</td>
</tr>
<tr>
<td>Current nursing experience (n)</td>
<td></td>
</tr>
<tr>
<td>Surgical ward</td>
<td>16</td>
</tr>
<tr>
<td>Medical ward</td>
<td>11</td>
</tr>
<tr>
<td>Ambulance care service</td>
<td>4</td>
</tr>
<tr>
<td>Child care ward</td>
<td>3</td>
</tr>
<tr>
<td>Emergency department</td>
<td>2</td>
</tr>
<tr>
<td>Years in the profession (n)</td>
<td></td>
</tr>
<tr>
<td>0–3</td>
<td>16</td>
</tr>
<tr>
<td>4–9</td>
<td>13</td>
</tr>
<tr>
<td>&gt;10</td>
<td>4</td>
</tr>
<tr>
<td>Theoreticians/theories that the students were already familiar with (n)</td>
<td></td>
</tr>
<tr>
<td>Katie Ericsson</td>
<td>21</td>
</tr>
<tr>
<td>Dorothea Orem</td>
<td>21</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>10</td>
</tr>
<tr>
<td>Joyce Travelbee</td>
<td>4</td>
</tr>
<tr>
<td>Fundamentals of Care</td>
<td>3</td>
</tr>
<tr>
<td>Patricia Benner</td>
<td>2</td>
</tr>
<tr>
<td>Madeleine Leininger</td>
<td>2</td>
</tr>
<tr>
<td>Lennart Fredriksson</td>
<td>1</td>
</tr>
<tr>
<td>Virginia Henderson</td>
<td>1</td>
</tr>
<tr>
<td>Kari Martinsen</td>
<td>1</td>
</tr>
</tbody>
</table>

Theoreticians who the students had cited in their Bachelor’s degree project

- Katie Ericsson: 4
- Joyce Travelbee: 4

Some students specified more than one alternative.

Katie Ericsson’s and Dorothea Orem’s nursing theories in clinical practice.

3.2 Using the framework in the written assignment

Four categories regarding how postgraduate nursing students describe use of the framework in clinical situations were identified. An overview of the categories is presented in Figure 1, with a detailed description below. The categories are illustrated by citations from the students’ assignments.

The self-experienced cases from clinical training that the students chose to describe in their assignments were categorized into five groups, described with examples in Table 3. The most commonly described case was related to information and self-care, or lack thereof. The dimension of FoC that most students used to describe the cases was relationship, followed by integration of care/psychosocial.

3.2.1 Illuminate the relationship in complex interactions

The students identified that the framework illuminated the importance of the nurse-patient relationship. They stated that many of the interactions with patients within their clinical field of expertise were not only complex, but also had to be performed in urgent situations or within a short timeframe. They described nursing care in their...
specialist field as complex, which impacted on how interactions with patients could be prioritized and performed. Complex nursing care was exemplified by a nurse having to build trust at the same time as preparing advanced medical-technical equipment (e.g. in anaesthesia care) or make an initial assessment of a patient’s status in a public environment (ambulance care). Other examples of complex situations challenging interactions with patients were those occurring in pre- or peri-operative settings, or an intensive care setting and when patients were orally intubated during the majority of their care.

Students described that establishing a relationship with a patient was not always possible due to both limited time and a lack of interest (among colleagues) due to the many short patient interactions occurring during a day. However, the opposite was also described, with students stating that it was possible to use the elements within the dimension ‘establishing the relationship’ within all fields and situations in nursing. The students underscored the importance of relationships, specifically mentioning collaboration and partnership with patients. Awareness of the core elements in establishing a relationship—and deepened knowledge of the elements impacting on patient outcomes—was described as very valuable to guide the specialist nurses in common situations, as well as in dealing with new and challenging situations within their specialist field. A student training in anaesthesia care described a common interaction with a patient in the peri-operative context:

‘If the patient feels trust in the nurse, then the option of receiving healthcare is probably less frightening. The patient reciprocated this trust by allowing us to care for him. My experience is that Fundamentals of Care was a good framework to implement in that situation [preparation for general anaesthesia]. The strength of taking the time to create a good relationship and build trust instead of forcing the patient to do something led to a successful result.’ (Participant 5).

3.2.2 | Usefulness bedside in advanced nursing care

The students described how the framework truly put a focus on advanced nursing care and was useful bedside in their specialist field. Students underscored that the focus on fundamental care was absolutely essential in their future role as a specialist nurse. Overall, they found the framework to be easy to use bedside as a frame for how nursing care should be performed, both for long-term patients with complex care needs (e.g. in intensive care or on a surgical ward) or in the many short patient interactions (e.g. prehospital care, anaesthesia care, operation theatre care). They highlighted the importance of focusing more on patients’ fundamental care needs since in their specialist fields focused mainly on medical care. One participant expressed this as follow:

‘The care given to emergency surgical patients is often very medical. Care time is short and the caregiving environment can be hectic. Many of the patients have multiple diagnoses and require extensive medical care, but also lots of nursing. Fundamentals of Care can be used beneficially in regard to those patients. It enables nurses and patients to cooperate in identifying which needs a patient has and how healthcare staff can support the patient in order to satisfy them.’ (Participant 44).

Although most students found the framework to be easy to use in clinical practice, they also mentioned that fundamental care was just seen as ‘common sense’ by many nurses.

‘The framework is based on a caregiving perspective with a focus on fundamental care. Since fundamental care has a low status among nurses, often being seen as “common sense”, that can lead to nurses being reluctant to use it.’ (Participant 5).

The students believed that this way of understanding ‘nursing’ could lead to specialist nurses neglecting to use the framework. Furthermore, the students described that the framework could be used beneficially as a reflective tool, both for development of nursing and for supporting professional development as a specialist nurse.

‘If the common attitude in the operative ward during the described care situation is to approach everything from your own perspective, and not the patient’s, FoC can be used as a basis for discussion to gain insights into how the patient’s integrity may be harmed by that.’ (Participant 11).

The students also identified the need of adding contextual examples into the literature regarding how to use the framework in different specialist areas (e.g., intensive care and anaesthesia care). They stated that contextual examples could attract specialist nurses in clinical practice to use nursing theory even in fields of practice that usually prioritized and focused on ‘medical care’. However, the students were divided as to the value of using the framework in their area of specialty. Some students described a need to deepen their knowledge and use situation-specific theories in their practice. No examples of specific theories were given.

The students also viewed the framework as a useful theoretical lens in clinical practice, to support and achieve person-centred care. However, they described one strength of the framework as being that it described person-centred care in a non-abstract way. The students stated that the framework truly focused the most vulnerable patients, e.g., patients cared for in intensive care, as illustrated in the citation below:

‘At the clinic, Fundamentals of Care can be used to illuminate how the work should be constructed in a person-centred and humane fashion and can reveal what and why one performs certain caregiving actions. It’s a kind
3.2.3 | Applicability in quality improvement work and education

The students reflected on how the framework was applicable within nursing care in general and in their specialist field in particular. They identified that the framework could be used both in quality improvement work and in education in clinical practice. The framework was found to be a useful tool to identify ‘missed nursing care’ and when routines were amended. It was also suggested as a tool for nurse managers in continuous improvement of nursing care.

‘In the situation at hand, it’s a strength to be able to use FoC’s third dimension which describes that more resources are needed, as well as continued training and support in difficult situations. FoC can also be used as a tool for discovering the reasons for flaws in a caregiving situation, knowledge which can then be used to make changes in work routines. FoC could also be used by managers with the aim to develop and improve the existing care.’ (Participant 52).

3.2.4 | Reflections on fundamental values for care

Supported by the framework, the students also reflected on issues related to ethics, equality in healthcare, patient rights and human rights. To support their statements, they used the contextual factors in the framework, including both culture (values and norms) and factors at the policy level. They supported their arguments with references to Swedish legislation supporting the patients’ right to be involved in care. They also said that the Code of Ethics for nurses, integrated with the framework, could support and guide nurses in their work regarding these issues.

‘In the caregiving situation, the patient’s possibilities to communicate or express their wishes are diminished and, as a result, their rights may be neglected. If Fundamentals of Care could be used as a framework for the daily caregiving work of nurses, that could lead to the patient’s needs and rights being met in a systematic manner.’ (Participant 32).

The students pointed out the importance of using the framework as a routine in their daily work, potentially leading to fulfillment of fundamental care and human rights.

3.3 | Learning process

Students described their learning process from two angles: what they had learned and how far they had reached in the learning process.

3.3.1 | What the students had learned

By reflecting on clinical situations, with guidance from the framework, the students were able to describe and identify concepts in different aspects of nursing, for which they had previously lacked words. They were able to analyse the clinical situation in itself and their own actions, and they became aware that FoC could be applied in nursing. They could also translate this insight into suggestions for possible actions. By using the framework, students became more aware of how organizational factors were related to nursing, and the importance of such awareness, than they were before the learning activity.

‘Using a framework like Fundamentals of Care creates the possibilities of reviewing the care being given and an opportunity to reflect on all its complex elements and their importance. The application of a framework to a clinical situation which I have been a part of enables me to express in words and concepts things that I’ve known to be important but which I haven’t been able to explain clearly before.’ (Participant 53).

‘Through this assignment, I’ve become aware of the importance of analysing care situations and my own actions using different care science theories, models and concepts. With FoC as a starting point, different dimensions can be applied to cast light on problems but also to find solutions.’ (Participant 11).

The two citations above also show that students identified the complexity of care using the framework, and that they understood how nursing theory could help them detect problems at different levels in clinical situations and find solutions to these problems.

3.3.2 | Students’ self-evaluated learning process

Students stated that applying the framework to a self-experienced clinical case showed them how to use a theory to analyse nursing care and they expressed that this also paved the way for them to find and apply other theories or framework upon nursing.

‘However, FoC turned out to be a theory which I can use more easily in the future, which will hopefully lead to increased knowledge of caregiving theories and how they
When reflecting on their learning process, guided by the learning taxonomy of their choice, the students were able to identify their level of learning in relation to the learning outcomes and their knowledge gaps regarding theories and also to form strategies for further learning. Almost all students could identify their own knowledge gaps regarding the framework or any theories, but some students could also reason about other theories and concepts in relation to their learning process. They reasoned that merely remembering facts or replicating knowledge is not sufficient; that they needed to reach higher levels of learning in order to make use of theories or frameworks in a way that would have a positive impact on their clinical work and achieve person-centred care.

From this standpoint, some students were able to describe strategies and goals for further learning activities. These students expressed a need to read more articles and literature about theories and frameworks and have more practice in applying theories to clinical situations. They described this as being necessary in order to reach higher levels of knowledge and develop skills to analyse clinical situations from a theoretical perspective.

4 | DISCUSSION

Applying the framework to a self-experienced clinical case illuminated the importance of the nurse–patient relationship and clarified the meaning of person-centred care. The students assessed the framework as easy-to-use bedside as a guide for how nursing care should be performed. Through using the framework, the students were aided in reasoning regarding the fundamental values of care such as ethics, equality in healthcare and patient rights. When students reflected on their learning process, they stated that using the framework not only showed them how to use this framework but also paved the way for them to find and apply other theories of nursing. Reflecting on their learning process, guided by the learning taxonomy of their choice, enabled them to identify their level of learning and their knowledge gaps regarding theories, and to form strategies for further learning.

Most students stated that they had limited experience of using theories in clinical work and few could account for which theories they had used during their preregistration programme. The sparse use of theories among these students is in line with literature showing that nursing theories do not guide nursing practice to the desirable extent in preregistration programmes (Voldbjerg et al., 2016). However, it should be taken into consideration that students may not recall all events from their preregistration programme. We were interested in if and how the framework was applicable at an advanced level. Our findings showed that the students found the framework user-friendly. More important, they could exemplify this by reasoning regarding how the framework illuminated the importance of the nurse–patient relationship and clarified the meaning of person-centred care (Merino et al., 2018). Im and Meleis (2021) have stressed that the new generation of theorists are driven by the experiences that are embedded in nursing practice. A learning activity in the form of an assignment focusing on how to apply the framework to a self-experienced clinical case seems to be a promising way to facilitate students’ identification of the value of being theoretically guided in their profession. We believe that our results are in line with previous studies showing that case-based learning activities can be successful (Forsgren et al., 2014; Kennedy, 2018; Li et al., 2019).

However, as nurse education leaders, we have a responsibility to not only embed theories in the nursing curriculum, but also to challenge students to translate this knowledge into practice. By using a close-to-care theory like FoC (Kitson, 2018), we can inspire a new generation of specialist nurses—future leaders in nursing care—to educate and guide their colleagues on how theory-based nursing care can influence the quality of nursing care for patients.

The FoC framework is being empirically tested within a range of different settings and healthcare systems. The students in the present study highlighted the need for more context-specific examples related to their different specialist fields. The framework has been used and evaluated in several of the specialist fields included in our study (intensive care (Dale et al., 2020), surgical care, prehospital care (Jangland et al., 2016). However, we do agree with the students that the framework needs to be systematically evaluated further within these fields, as well as others. Such evaluations and contextual development or use of the framework would probably attract students and specialist nurses to embed the framework into their daily practice.

An important finding was how the students, by using the framework, were able to reason regarding the fundamental values of care such as ethics, equality in healthcare and patient rights. In the assignment, the students had to discuss how their cases could be understood in the light of contextual issues in the framework as well their societal responsibilities as specialist nurses. This challenged them to put the framework and their case into a social context, instead of a bedside context. We found this part of the learning activity particularly important. Our responsibility as nurse educator leaders at the advanced level is to ensure that the students are not only prepared and trained for performing advanced nursing care, but also that they, in line with their Code of Ethics, are educated to protect human rights and fight discrimination. This is also supported and included at the system level of the framework (Kitson, 2018).

By challenging students to first apply theories to a self-experienced case and then to reflect on their use of theories and their own learning process, at least at a meta-level, the students’ abilities to connect clinical work to theoretical thinking were increased. We have not seen this type of learning activity in the literature and we suggest further evaluation and research on the topic of developing effective learning activities. The learning activity of analysing a self-experienced case through the framework appears to have paved the way for students to apply other theories to cases as well. Again, this may indicate that the framework is valuable as a close-to-care theory (Kitson, 2018). It also indicates that the framework may be
user-friendly as a starting point for analysing clinical situations. The value of and need for analysing cases, using theories as guidance, needs to be captured in the clinic by allocating time and forums, so as to provide nurses with opportunities to practice this continuously. To succeed, any such process needs to be led by nursing leaders in clinical practice. The process would also benefit from close partnership with education leaders (e.g., with shared positions), so nurses and educators can, in collaboration, develop and test how to apply theory in nursing practice.

The fact that the students were able not only to identify their own knowledge gaps, but also to reason about their need to reach higher levels of learning, could be interpreted as a sign of deepened learning and that the students did reach an advanced level of learning, as was stated in the learning outcomes. Although they could choose a learning taxonomy themselves, it seems reasonable to assume that knowledge transfer was promoted, regardless of the taxonomy chosen. As Su and Osisek (2011) stated, with reference to Bloom’s taxonomy, students must gain knowledge of thinking paradigms related to a specific content (here: the assignment) for effective knowledge transfer to take place. We believe that the students’ use of the ‘knowledge of thinking paradigms’ from their chosen taxonomy proved that a knowledge transfer might have taken place. Most students were able to identify that achieving higher levels of knowledge is a prerequisite for being able to apply theories to clinical work and achieve goals like improving care quality and providing person-centred care. The students were also able to reason about nursing care using the framework and describe how the framework illuminated aspects of nursing. This was strengthened by the students’ reasoning regarding what levels of knowledge they had achieved in the assignment and what other learning activities they might need in the future. It should be a clear mission and an important role for specialist nurses to guide colleagues at their clinics through this process.

Taken together, the students’ evaluations of their learning process and knowledge, using a taxonomy of their choice, contributed to their being able not only to evaluate their learning—in terms of having ‘learned a lot’ and ‘needing to learn more’—but also to create future learning activities. The students expressed a need for further learning which needs to be met in both clinical and educational settings.

4.1  |  Limitations

Dependability may be challenged due to the first author’s experience and knowledge of the framework, as well as being an author of a textbook on FoC. However, all authors—none of whom were involved in the development of the framework—participated in reading, analysing and interpreting of the assignments. The results and the chosen citations were discussed until consensus was reached. The students were in a dependent situation in relation to us, as we were also the teachers grading their assignments. To counteract vulnerability, the students were informed that their data would be treated with confidentiality, that they could withdraw from participating at any time and, perhaps most importantly, that their assignments would not be analysed until some time had passed after their graduation. It is unknown which students chose to participate in the study, but it is our assessment that the sample contains a wide range of students as regards their levels of performance. Some of the assignments were approved as presented, while others needed to be amended once or more. This could indicate a purposeful sample, at least to some extent. One limitation is that the data collection was performed at only one university, which may limit the transferability of the findings. However, the thick description of the process of the learning activity and analysis could enable other educators to use the same approach to evaluate similar educational materials.

5  |  CONCLUSION

We conclude that learning activities with an opportunity to practice analysing nursing care, guided by a theory, in combination with a self-evaluating element, is a fruitful way of deepening students’ learning and improving their ability to use theories in clinical practice. The framework illuminated the importance of the nurse-patient relationship in nursing care to the students and made them recognize and value the clinical use of theories. It is our responsibility as leaders in nurse education and healthcare to provide the next generation of specialist nurses—future nursing leaders—with regular opportunities to analyse nursing care using theories or frameworks. Nurses call for continuous learning on theories, and leaders in nurse education and healthcare must meet these needs.

CONFLICT OF INTEREST STATEMENT

The authors have no conflicts of interest to declare.

AUTHORS CONTRIBUTIONS

All authors meet all four of the following criteria:

1. Have made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;
2. Been involved in drafting the manuscript or revising it critically for important intellectual content;
3. Given final approval of the version to be published.
4. Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

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