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Learning transitions—a descriptive study of nurses’ experiences during advanced level nursing education

Marit Graue1,2,3*, Bodil Rasmussen4, Anne S. Iversen2 and Trisha Dunning5

Abstract

**Background:** Building capacity in a changing health care system is a challenge for advanced nursing education programs. Master-level nursing education is increasingly becoming the required education level for specialist nurses, and additional studies are needed to learn more about students’ experiences and learning transitions while undertaking such education. This study aimed to explore nursing students’ experience of their learning transitions while undertaking advanced nursing education and to describe how they translated the new knowledge and competence they gained into clinical practice.

**Methods:** We used a qualitative research design with narrative self-reported reflections. 34 nurses (95% women) from both urban and rural areas working with children, with adults in outpatient and inpatient endocrinology clinics in hospitals or with adults, including older people, attending primary health care services participated in the study. We collected data at two time points 15 months apart. Time one was the first week of the advanced nursing education, and time two was the completion of the education program. We used Malterud’s modification of Giorgi’s phenomenological analysis, otherwise known as systematic text condensation, to analyze the data.

**Results:** Two core themes captured the participants’ experiences. The first theme was “assessing the situation of people with diabetes from a different perspective”, with the subthemes “an expanded perspective of practice and higher level of reflection”, “applying critical thinking in practice” and “changing patient-nurse relationships in diabetes care”. The second core theme was “a change in participants’ perception of their professional position”, with the subthemes “a greater knowledge base enhancing professional confidence” and “a more equal position within the professional team”.

**Conclusions:** The study provides in-depth information about transition into advanced nursing education and can inform curriculum developers, nurse educators, policy-makers and nursing managers about how nursing education broadened participants’ perspectives of nursing and enhanced their confidence and professional position.

**Keywords:** Learning transitions, Nursing education, Qualitative research, Diabetes nursing

Background

Building capacity and encouraging professional development that enable health professionals to work in a changing health care system are challenges for advanced nursing education programs. Caring for people with complex needs involves a team-based approach, and health professionals need the knowledge and attributes to communicate with health professionals from different disciplines and in different settings [1]. Recognition is growing that the biomedical paradigm of the last century is inadequate today and may hamper effective nurse-patient communication [2]. Specialist nurses need to be able to support people with chronic conditions, to plan care that encompasses the complexity of care and to raise the standard of care [3].

According to the International Diabetes Federation’s *IDF diabetes atlas* [4], 382 million people had diabetes in 2013. This number will increase to an estimated 592 million by 2035, which means that 1 in 10 adults will have diabetes. Nurses and other health professionals

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therefore need to be educationally prepared to obtain positions in which they can advocate for a better health system, to prevent diabetes and its associated complications [4]. Many people with diabetes have complex needs, because many have more than one coexisting condition, such as obesity, stroke and cardiovascular disease. In addition, adults with comorbidity have been reported to have a 1.3 to 4.6 times higher risk of having diabetes [5].

Master-level education is increasingly becoming the required education level for specialist nurses, but the direct benefit of advanced nursing education programs to care delivery or improved patient outcomes needs to be explored further [6]. The wider community and people with diabetes expect diabetes specialist nurses to be well informed and confident and to have a strong commitment to their profession as well as sound intellectual, interpersonal and clinical skills. In addition, clinical and professional activities and outcomes are needed to capture the leadership contribution in future evaluations of advanced nursing roles [7].

Attaining these attributes to improve diabetes care involves making the transition from a general nurse to an advanced or specialized diabetes nurse. Transitional experiences are complex and multidimensional [8, 9] and are crucial for self-growth and development [10]. Transitional experiences are foundational to how people learn [11]. How people in transition perceive, comprehend and respond to change [12] influences how they manage change and adapt to their new roles. In the current context, transition refers to changing from general nursing to advanced nursing. Moreover, people in transition need to be able to recognize turning points, which usually signify the beginning of a change in their life, and to adapt to the new situation.

Some studies report students’ experiences while undertaking master-level nursing education [13, 14]. The students in these studies highlighted the altered content and demands of the nursing education and indicated that it led to frustration and uncertainty but enabled the students to develop new ways of critical thinking and questioning. Additional studies are needed to further explore students’ learning transitions while undertaking nursing education programs. The current study therefore aimed:

- to explore nursing students’ experiences of their learning transitions while undertaking an advanced nursing education program; and
- to describe how they translated the new knowledge and competence they gained into clinical practice.

Methods
We used a qualitative research design with narrative self-reported reflections [15]. The human experience in the current study focused on participants’ transition towards mastering advanced nursing skills as they moved from generalist to advanced practice [16] and as they adapted to and undertook a new professional role as advanced specialist nurses.

Participants and sampling population
We used purposive sampling. All 35 students from both rural and urban areas of Norway taking the first 60 European Credit Transfer and Accumulation System (ECTS) credits of a 120 ECTS master-level nursing education program were provided with written information about the study. One student declined to participate. The nurses (n = 34, 95 % women) worked in a variety of settings including working with children, with adults in outpatient and inpatient endocrinology clinics in hospitals or with adults, including older people, attending primary health care services.

Data collection
We collected data in the form of narrative self-reported reflections at two time points 15 months apart. Time one was the first week of the advanced nursing education (baseline), and time two was the completion of the education program. At baseline, the participants were invited to describe one actual patient situation they encountered in their clinical nursing role (Table 1). A group of course coordinators from various postgraduate courses over some years developed the guidelines for describing the situation. The reflection tool was refined regularly and was used among other student groups in training sessions on reflection communication. The tool effectively generated good discussions in groups. The tool was therefore considered appropriate to use to collect data in the current study. The participants included information about the clinical setting in which they worked and the nursing expertise required to provide diabetes care.

At the end of the nursing education program, we asked participants to reflect on the patient they wrote about at baseline. We encouraged participants to reflect on and describe how their newly acquired knowledge would influence the diabetes care they described at baseline and how new knowledge would help them to resolve the diabetes care challenges they encountered at that time (Table 1). We grouped the data from each student sequentially to capture the essence of their reflections on their learning trajectory. All quotes used in the findings are from the second time point and reflected changes in participants’ self-reported learning and clinical decision-making from the first time point.

Students wrote their reflections in Norwegian. Most used their own computers at home. Only a few students wrote their reflections by hand. Each student wrote two to three pages. The students submitted their reflections
<table>
<thead>
<tr>
<th>Table 1</th>
<th>Instruction guidelines for diabetes specialist nurses in writing reflection notes while undertaking an advanced nursing education program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study start</td>
<td>Describe 1–2 specific clinical situations in which you had the opportunity to function as a diabetes specialist nurse. Think of a patient or a user with whom you have been in contact who has a problem or a need that requires your expertise as a diabetes nurse specialist. You may describe a situation that had successful outcomes or one in which the outcome was not so successful.</td>
</tr>
<tr>
<td>Part 1</td>
<td>Briefly describe the patient or user and his or her life situation (make it anonymous). Describe the patient’s problems or needs. What happened or is happening with the patient or user in relation to the problem or need? When did the problem or need arise? Who was involved in the situation when the problem or need arose? In what ways were or are you involved in the problem or need? What action was carried out in relation to the problem or need? How do you evaluate the help that the patient or user was given? What were or are the most obvious nursing and health challenges concerning the problem or need? What would you do differently if you faced the same situation again?</td>
</tr>
<tr>
<td>Part 2</td>
<td>What are the specific factors in the situation you have described that make it important for you as a diabetes specialist nurse to be involved? What was it specifically about the situation(s) or the patient or user you have described that made it a source of learning for you? What did you learn from the experience you have described? What would be your thoughts concerning this same situation now that you have undertaken the diabetes nursing education program? How would you feel in this same situation now that you have undertaken the diabetes nursing education program? How would you act in this same situation now that you have undertaken the diabetes nursing education program? What would be similar and why? What would be different and why?</td>
</tr>
<tr>
<td>Part 3</td>
<td>In which areas do you feel you need to develop your own professional and personal expertise? What specific goals do you have for acquiring the learning you need to further develop your expertise as a diabetes specialist nurse? What do you feel you need to achieve these goals? In what ways has being a student in diabetes nursing education influenced your competence as a professional and also you as a person?</td>
</tr>
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</table>

End of study | You have previously described a clinical situation in which you had the opportunity to function as a diabetes specialist nurse. You are now being asked to return to the same clinical case you have previously described and to reflect on this situation based on the knowledge you have obtained as a student in the first year of the nursing education program. It is not always easy to know how one would experience a given situation a second time, but we would like you to reflect as much as possible on the issues below and to describe what you consider would be most realistic for you now if you were to experience this situation again. The same case described previously. |
to the researchers in a sealed envelope without identification. The researchers delivered them to a research assistant, who translated them from Norwegian into English. The research assistant is Norwegian and reads English fluently.

After translation, we organized the English and Norwegian versions in parallel columns in the same document and performed data analysis using both texts. One of the Australian researchers (BR) ensured the accuracy and consistency of the translated text. BR is a Dane, has family in Denmark and in Norway and speaks and understands both languages fluently. She has lived and worked in Australia for 30 years and speaks and reads English fluently. MG and ASI are native Norwegians and read and write English daily in their professional roles as researchers.

Data analysis
We used Malterud's [17] modification of Giorgi’s phenomenological analysis, otherwise known as systematic text condensation, to analyze the data. The method comprises four stages: 1) gaining an overall impression of the data by reading the entire description and searching for emerging themes; 2) identifying and sorting units of meaning: organizing the parts of the text to be explored more closely by identifying and coding units of meaning that relate to the themes that emerged in step one; 3) condensing and organizing the coded units of meaning into groups according to their code, sorting them into subgroups and condensing the content of the subgroups in the form of abstract meaning; and 4) synthesizing by summarizing or describing subgroups as analytical text, noting concepts in the information abstracted from each coded unit of meaning and their subgroups, including citations from the written texts [17].

We confirmed and substantiated the findings by examining the coded units of meaning and the emerging themes with each individual participant's data and then comparing them with other participants' data. MG and BR undertook the cross-comparison and searched the data systematically for other important data that did not fit the emerging core themes and subthemes. All authors then compared the themes and synthesized them into meaningful core and subthemes.

Validity and rigor
Qualitative research needs to be rigorous and must therefore be transparent and explicit. In this study, we enhanced validity by involving independent external experts with advanced knowledge and experience in diabetes education: TD (credentialed diabetes educator and recognized international and national diabetes researcher and curriculum developer) and BR (course leader and nationally recognized diabetes curriculum developer). ASI (course leader and curriculum developer for advanced pediatric nursing education) and MG (course leader and curriculum developer for advanced diabetes nursing education) are from Norway. Three researchers (BR, ASI and MG) independently read the nurses' reflections in Norwegian, and all four researchers read the English translation, analyzed the data independently and then discussed their interpretations to reach consensus.

Ethical issues
Ethics approval was granted according to Norwegian law and processes, which only required informed consent for anonymous data about nurses’ experiences and their learning trajectories. We gave the participants oral and written information about the project before they provided consent. We informed participants that all information would be treated confidentially and that their right to privacy would be protected by deidentifying data and using codes when reporting the findings. They were informed that they could withdraw from the study at any time during the ongoing nursing education without any consequences to them. Data from the two time points were deidentified at the end of the nursing education program, and personal identification was no longer possible.

MG was involved as the course co-coordinator and lecturer, and the students therefore knew her. However, the reflection notes were anonymous, and only the transcriber (the research assistant) could identify participants to connect the reflection notes from the two time points. None of the other three researchers were directly involved with the participants.

Results
The learning transitions identified in the study were complex and individual. However, two core themes clearly captured the learning transitions participants experienced while undertaking the advanced nursing education program. The first core theme was “assessing the situation of people with diabetes from a different perspective”. The second core theme was “a change in participants’ perception of their professional position”.

Assessing the situation of people with diabetes from a different perspective
An expanded perspective of practice and higher level of reflection
The participants indicated that they were more aware of the importance of new knowledge in their work and more likely to consider the evidence when providing care after finishing the advanced nursing education program. For example, they felt that the newly acquired knowledge gave them an expanded perspective of practice that enhanced their ability to solve problems and make decisions, enhanced their communication with people with diabetes