Original Research Article

Supplementing Clinical Practice in Nursing Homes With Simulation Training: A Qualitative Study of Nursing Students' Experiences

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Abstract

Introduction: Limited access to nurse supervisors, insufficient learning support and staff with high workloads are well documented in the research literature as barriers to nursing students´ learning in clinical practice in nursing homes. Due to these barriers nursing students may benefit from additional learning support from nurse educators during their clinical practice period.

Objective: The study aimed to explore nursing students' experiences of supplementary simulation training as a tool to support learning during clinical practice in nursing homes.

Methods: A descriptive qualitative design was used. Twenty-seven first-year nursing students from a university college in Norway were interviewed after attending a seven-week practice period in nursing homes with supplementary simulation training. Three semi-structured focus group interviews were audio recorded, transcribed, and analysed using systematic text condensation.

Findings: Three categories of student experiences were identified: enhancing the reasoning behind care, transferring knowledge and experiences between the learning environments and enhancing the sense of mastery.

Conclusion: The supplementary simulation training seemed to complement clinical practice by consolidating the students' learning during the clinical practice period, enhance the students' motivation and sense of mastery, and consequently their efforts to seek out new challenges, explore and learn both in the clinical and the simulated environment.

Keywords

simulation training, clinical practice, nursing homes, nursing education, clinical learning, motivation, confidence, mastery, feedback, supervision

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Effective, adequate learning experiences in clinical practice are vital to preparing nursing students for their future responsibilities as nurses. To ensure optimal learning outcomes in clinical practice, nursing students need a supportive atmosphere, supervision and feedback (Jonsén et al., 2013; Sundler et al., 2014). In most countries, on-site nurse supervisors have the dominant role in supporting students learning in clinical practice

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(Arkan et al., 2018; Gates et al., 2012; Jayasekara et al., 2018). However, supervision of students is often a responsibility added to nurses' workload, and consequently, balancing patient care and student supervision may be challenging (McIntosh et al., 2014; Kristofferzon et al., 2013).

Because many clinical practice sites face nurse shortages and thus may have few nurse supervisors to accompany and support nursing students′ learning, nurse educators are looking for innovative ways to provide the clinical education their students need (Breymier et al., 2015; Zapko et al., 2018). One educational strategy in nursing education is the use of simulation training with human patient simulators (HPS).

Background

The use of simulation training with HPS has increased as an educational strategy in nursing education programs (Davis et al., 2014). HPS are computerised mannequins that imitate patients' verbal and physiological reactions to care. Such simulations have the potential to integrate practical and theoretical knowledge, as well as to provide students with supervised learning situations (Jeffries, 2015). Although clinical experiences with actual patients form the most important component of clinical education, research support the use of simulation training as a teaching strategy in nursing education programs to enhance students′ clinical expertise (Cant & Cooper, 2017; Zapko et al., 2018). Systematic reviews have found that simulation training may improve students' knowledge levels, clinical skills and general nursing competences (Cant & Cooper, 2017; Haddeland et al., 2018). Simulation training also seem to enhance self-efficacy and confidence, which are important prerequisites for further learning and competency building (Cant & Cooper, 2017; DSouza et al., 2017). Internationally, there is an ongoing debate whether or to what extent simulation training can replace clinical hours in nursing education (Bogossian et al., 2019; Sullivan et al., 2019), and in some countries this approach has gained acceptance (Gates et al., 2012). Some researchers have recommended simulation as a substitute for clinical hours among nursing students (Gates et al., 2012; Hayden et al., 2014; Soccio, 2017). However, research replacing clinical hours with simulation training report varied and sometimes conflicting results regarding students′ clinical competency, critical thinking, knowledge acquisition, and self-confidence (Curl et al., 2016; Hayden et al., 2014; Larue et al., 2015).

In Norway, the bachelor's degree in Nursing is a 3-year bachelor program that follows the European Union (EU) directive under which 50% is dedicated to clinical practice supervised by on-site nurses (Zabalegui et al., 2006). Thus, replacing clinical hours with simulation training is not an option according to the EU directive. The nurse educators primarily act as contact persons in clinical practice and conduct mid-term and final assessments of students in collaboration with the students′ clinical nurse supervisors. In nursing homes, nurses often constitute the smallest segment of the workforce, not all are specialized supervisors, and some lack experience and competency in supervision of students (Harrington et al., 2012; Jayasekara et al., 2018). Consequently, the on-site nurses often have limited capacity and sometimes limited competence to provide supervision and feedback on students' learning (Adamson et al., 2018). Due to the way the nursing education program in Norway is organized, the nurse educators′ presence and function in clinical practice are limited. The lack of presence of nurse educators, limited communication between clinical staff and nurse educators, limited focus on the application of knowledge and critical thinking, and an inefficiency of student time spent in the clinical setting has been highlighted in studies as barriers to learning among students in clinical practice (Jonsén et al., 2013; Morrell & Ridgway, 2014; Sullivan et al., 2019).

Given the clinical resource constraints, nursing students may benefit from additional learning support from nurse educators during clinical practice, for example by simulation training (Killam & Heerschap, 2013; Morrell & Ridgway, 2014). Studies found that students experienced enhanced confidence before doing nursing procedures in real patient situations, felt more prepared and gained confidence for their subsequent practice placement after attending simulation training (Crafford et al., 2019, Ogilvie et al., 2011). In addition to enhanced confidence, Morell-Scott (2018) found that students experienced simulation training as a learning tool that aided deeper learning by linking theory and practice. Simulation training offered students opportunities to reflect on own performance with peers and teachers. However, studies also report that simulation training may lead to negative student experiences such as anxiety and uncomfortable feelings related to being watched by others (Morell-Scott, 2018; Nielsen & Harder, 2013).

Although studies have explored student′ experiences with simulation training, there is a lack of knowledge about experiences with supplementary simulation training during clinical practice in nursing homes to enhance learning. Only one previous study by Khalaila (2014) has investigated simulation training during practice in nursing homes. The study used a pretest–post-test design and found that students' self-reported caring ability and self-confidence rose, while the level of anxiety decreased after clinical practice with simulation (Khalaila, 2014). The study's lack of a control group, however, makes it difficult to decide whether this was a result of the

Table 1. Participants' Characteristics.

Sample groups	Group 1 March 2017	Group 2 March 2018	Group 3 May 2018	Total
Participants	10	9	8	27
Female participants	10	9	7	26
Male participants	0	0	1	1
Age <21	3	3	5	11
Age 21–25	4	1	3	8
Age 26–30	2	3	0	5
Age >30	1	2	0	3
Former work experience in health care related services	6	5	0	11

supplementary simulation training or from actually caring for patients in the clinical setting. To the best of our knowledge, no qualitative studies have been published to describe the students' experiences with the combination of the two learning environments simultaneously without replacing clinical hours. Therefore, the aim of the study was to explore nursing students' experiences of supplementary simulation training as a tool to support learning during clinical practice in nursing homes.

Methods

Design

This study employed a qualitative descriptive design using focus group. Such design is suitable when the aim is to generate rich descriptions and gain inside knowledge about a phenomenon from those who have the experience (Bradshaw et al., 2017). Focus groups were chosen because the interactive process of sharing and comparing understandings and views in a group, and engage in discussions generated by other group members, may yield more and other insights than individual interviews (Kitzinger, 1995; Krueger & Casey, 2015). Furthermore, the researcher takes a peripheral role moderating discussion between the participants. This could enable students to explore the issues of importance to them in their own vocabulary, generating own questions and pursuing own priorities (Kitzinger, 1995). The reporting of the study was guided by the Consolidated Criteria for Reporting Qualitative Studies (COREQ).

Setting and Participants

The study was conducted at a Norwegian university college offering bachelor's degree in nursing. A purposeful random sampling strategy was chosen (Patton, 2015). In the spring of 2017 and 2018, a total of 350 first-year students received both written and oral information about the study. Thirty students were drawn randomly

from the 71 students who reported their interest to participate in the study to the first author, while the remaining 41 students were excluded from the study. After signing informed consent forms, three students withdrew because they left the education program, leaving a total of 27 participants assigned to three groups. None of the participants had any prior experience with simulation training with HPS and attended their first clinical practice placement in their nursing education program. Participant characteristics are presented in Table 1.

Simulation and Scenarios

The participants performed three 3-hour scenario-based simulation training sessions during their continuous seven-week of compulsory clinical practice in a nursing home in the second semester of their education program. The first session was conducted in week two of the clinical practice, while the final two sessions were conducted in week three and five.

The simulation training was designed by the first author in collaboration with two teachers at the university college, both familiar with the students´ curriculum. Standards of best practice and the National League for Nursing (NLN)/Jeffries simulation theory guided the design and implementation of the simulation training (INACSL, 2016; Jeffries, 2015). The NLN/Jeffries Simulation theory is a mid-range theory that provides a theoretical foundation and a framework with systematic steps for developing and implementing quality simulation experiences (Jeffries, 2015).

The three scenarios covered content in the first-year students´ curriculum such as areas within respiration, circulation, elimination, and drug handling. The scenarios were complex and challenging but closely linked to the students´ prior lectures and real-life clinical situations. The fidelity level of the scenarios was considered to be high due to the technical equipment, use of patient simulators (NursingAnne®; Laerdal™) and students' involvement as autonomous clinicians. The scenarios' overall aim was for the students to systematically

Table 2. Scenarios and Objectives of the Simulations.

Scenarios	Situation presented for the students	Objectives presented for the students
Day 1: Nursing home patient with chronic pulmonary disease deterioration	Nursing home patient, female, 75 years old, sufferers from COPD, uses Ventoline 2 mg × 4 administered by inhalation. The patient is anxious. Her skin is warm and sweaty.	– Perform relevant clinical observations and measure vital signs – Identify the patient's problems, needs and possible complications – Make clinical decisions, prioritize actions based on vital sign assessments, knowledge and trained skills – Evaluate effect of actions and make decisions for further actions
Day 2: Nursing home patient with delirium caused by urinary retention	Nursing home patient, male, 89 years old with a mild degree of dementia, and a chronic urinary retention. Permanent catheter, and a urine sample for bacteriological cultivation are ordinated. The patient's behaviour has changed, with a deteriorating confusion. The patient has been given Stesolid 2 mg without effect.	
Day 3: Administration of medications to nursing home patient with left ventricular heart failure	Nursing home patient, male, 75 years old, sufferers from a left ventricular heart failure. The patient uses heart medications, and is scheduled for his intramuscular injection with B12 depot 1 mg. The patient is not cooperating, seems to struggle with his breath while lying down. He does not want his medication.	

apply the nursing process during patient encounters. Before each simulation training commenced, the students were informed of the objectives and the patients' basic details as presented in Table 2.

The first step of the simulation sessions (30 minutes) involved a briefing that offered an overview of the surroundings and equipment and reiterated the objectives. In the second step (30–40 minutes), three or four students participated as nurses in an active simulation, while the remaining students in the group were active observers. In the third step (90+ minutes), the students deconstructed and analysed the scenarios in a teacher facilitated debriefing. The Promoting Excellence and Reflective Learning in Simulation framework (PEARLS) was used to guide the debriefing (Eppich & Cheng, 2015). The PEARLS is a framework that outlines four distinctive phases of debriefing; the reaction, the description, the analysis and the summary phase, and provides guidance on their implementation (Eppich & Cheng, 2015).

The first author acted as facilitator, while an operator served as the patients' voice and co-facilitated the debriefing. Both were trained and experienced facilitators.

Data Collection

Focus group interviews (60–75 minutes) were conducted with the three groups of the participants at the end of their clinical practice in March 2017 and March and May 2018. The first author acted as a moderator, along with an assistant moderator. It was taken into account that the moderators, especially the first author as both facilitator and moderator, held superior roles to the participants. We ensured that the students were in an independent relationship with the moderators who had no responsibilities to evaluate or grade the participants. The moderator emphasized asking open-ended questions and held back her own opinions to let the participants be the experts on the topic. To encourage open, honest sharing of experiences, the participants were assured that shared information would be treated confidentially and would not affect any student evaluations.

To initiate dialogue and focus the discussion, the semi-structured interview guide covered aspects related to the participants' experiences of clinical practice with supplementary simulation training, their learning in these two environments and their perceptions of the learning outcomes. To validate the participants' statements, the moderator asked questions such as 'What do you mean when you say…'. The interviews were audio-recorded and transcribed verbatim by the first author.

Data Analysis

The data material was analysed inductively using systematic text condensation to emphasise the participants' descriptions and perspectives (Malterud, 2012). In the first step, the transcripts were read several times through

Table 3. Example of the Analytical Process.

Category (selected): *Enhancing the sense of mastery*

Meaning units (selected)	Subgroups	Condensate
The simulations enhance your confidence because the fact that you actually have a lot of knowledge, gets confirmed. (Student 1, Group 3)	Getting knowledge confirmation	Knowledge confirmation in the simulations enhance your confidence
After the simulations you feel more confident in the way you think, and that your knowledge is correct. (Student 7, Group 3)	Getting knowledge confirmation	Simulations make you more confident in the way you think and your knowledge
Due to the simulations, I know more about what́s normal about a patient's condition and what́s not. I can more easily spot a change in the patient and if the patient is experiencing a deterioration. I also know a bit more of how to act, because I know what́s common with a disease and what that could indicate a deterioration of the patient condition. (Student 1, Group 3)	Ability to contribute and act	I know more about what́s normal and not in patients´ conditions and can spot changes and signs of deteriorations more easily
Due to the simulations, I got a sense of mastery. I feel that I have a lot more to offer if I meet a similar situation in real life because I have been practicing how to react and act in difficult patient situations in the simulations. (Student 6, Group 3)	Ability to contribute and act	I got a sense of mastery and have more to offer in real life situations

the lens of the study aim to get an overall impression of them and to identify the preliminary themes. In the second step, the transcripts were read line by line to identify the meaning units and mark them with codes related to the preliminary themes. The codes were used to organise the related meaning units into code groups. In the third step, the meaning units in each code group were sorted into subgroups. The meaning units within every subgroup were then reduced into a condensate maintaining the original terminology used by the participants. In the fourth step, the content of each code group was summarised into categories to generalise descriptions and examine the descriptions against the empirical data. An example of these analytical steps is presented in Table 3.

Research Ethics

The study received approval from the Norwegian Social Science Data Services (ref. number 51842 and 57344). Participation was based on written informed consent and performed in accordance with the 2013 revised version of the Declaration of Helsinki. None of the participating teachers had any connections with the nursing homes studied.

Findings

Three categories of student experiences were identified in the data analysis: enhancing the reasoning behind care, transferring knowledge and experiences between the learning environments and enhancing the sense of mastery.

Enhancing the Reasoning Behind Care

The students reported that the supplementary simulation training provided time for collective reflections during their clinical practice period, enabling them to complement each other's knowledge and explore theoretical explanations of nursing care. In the nursing homes, the students struggled to balance 'being at work' while meeting their need to study and reflect on care reasoning. Some felt that they were simply used as extra workers and that spending time to explore theory was not appreciated:

> I feel like the staff think that I'm trying to get away from, for example, emptying the dishwasher if I'm trying to update myself by reading. (Student 1, Group 2)

Furthermore, the students experienced that group reflections were given a low priority due to high workloads and daily routines. Many students worked mostly on their own and had no one they could reflect or reason with. The students said that supervision of practical skills was prioritised more than reflections on patient care and reasoning behind care. Consequently, questions that arose while caring for the patients remained superficially answered:

> I miss having someone in the nursing home to actually explain in depth why and how things are

related. Instead, they just answer that the patient has kidney failure, so that's why we do this. (Student 1, Group 3)

Many students felt that they could discuss issues in the simulation training they did not dare to address in the nursing homes due to a fear of revealing their insufficient knowledge or creating an unfortunate impression of themselves. The simulation environment was experienced as safe because the students got well acquainted with each other and the simulation teachers. Furthermore, the students experienced that the teachers accepted their thoughts and feelings and challenged them to think by themselves, ask questions and share their perspectives. They expressed that they did not feel a pressure to perform well but could concentrate on learning together and were allowed to make mistakes without being judged. However, some students said that they had wished for more feedback from the teachers on their potential mistakes in order to learn from them. On the other hand, students reported that the teachers' perspective and additional explanations as professional nursed helped them gain new, broader understandings of nursing responsibilities and care. One student explained:

> In the simulation sessions, you can discuss things in depth that you may not have the time to do in practice, and you can get other perspectives. You may not always get a blueprint answer, but you can get perspectives from teachers with a lot of experience and knowledge you don't yet have yourself. (Student 7, Group 2)

All the students agreed that no simulator could replace interactions with complex, unique human beings. Nevertheless, the students expressed that the collective reflections in the simulations helped them to focus on understanding the individual needs of the patients and to provide a more holistic patient-centred care while practicing at the nursing homes.

Transferring Knowledge and Experiences Between the Learning Environments

In contrast to working mostly alone in the nursing homes, the students valued meeting their fellow students in a joint learning atmosphere during the simulation training. In addition to be given an opportunity to share knowledge and to support each other, they experienced the scenarios as recognisable and relevant, enabling them to transfer knowledge and experiences between the two learning environments. The students expressed that the way they were trained to approach their patients in the simulation training, helped them to see new learning opportunities while caring for their

patients in the nursing home. The students reported that daily routines in the nursing home, such as helping patients with their personal hygiene, were more actively used to perform clinical observations and to map the patients' condition rather than just performing the task:

> The simulations have helped me focus on what kinds of observations I should perform in the nursing home, what kind of vital measurements and observations I need to do when caring for my patients. (Student 1, Group 3)

The students also found that the simulation training enabled them to use their knowledge more actively to understand and assess their patients' symptoms during care situations. However, the students experienced that they best learned and developed interpersonal and communication skills in interactions with real patients. Furthermore, the students considered interactions with real patients to be an important prerequisite for active engagement and learning in the simulation sessions, and important to transfer knowledge and skills between simulated and clinical experiences. One student explained it this way:

> I have a patient who has chronic obstructive lung disease, so the first simulation was very exciting for me—I learned so much! It was very easy to transfer that simulation day to my patient, and it helped me to understand how to handle him. (Student 1, Group 2)

The students highlighted that there were differences in their access to training in skills such as catheterisations, injections and blood-pressure measurements in the nursing homes. Some students felt that they were not trusted to perform such procedures, while others had placements in nursing home wards with limited need for such procedures. The students expressed that the simulation training provided supplementary experiences that contributed to more equal learning possibilities and learning outcomes during the practice period. One student stated:

> At "my" nursing home, the nurses often are those who perform the measurements on the patients, in the simulation training I get to do it myself. (Student 5, group 1)

Enhancing the Sense of Mastery

The students expressed fear of harming patients. Many reported that they had achieved relevant knowledge and skills in nursing school, but differences, for example, in explanations, assessments and patient care from the nursing home supervisors and the staff sometimes led to confusion. The students found that the feedback

from their teachers and peers during the simulation training reassured them and increased their feelings of confidence and mastery. Through the simulation training the students discovered that they had more knowledge than they initially thought they had which was described as encouraging and motivating. One student stated:

> If we didn't have the simulations in between the nursing home practice, we would have been thinking that we don't know much. Instead we are thinking: We know a lot! (Student 4, group 2).

Several students expressed that due to the simulation training, they had more to offer and could contribute to and act in real-life situations. In addition, the students perceived that the simulation training reduced their fear of experiencing acute patient deteriorations:

> To have the courage to enter a situation and dare to see what I can contribute with (...) the simulations have certainly helped me get to know that I actually can. (Student 6, Group 3)

The students expressed that the simulation training enhanced their skills in conducting clinical observations and assessing various patient situations in the nursing homes. Some felt that their enhanced knowledge and skills to recognize changes and assess patient situations were limited to the patient conditions that they had experienced in the simulations. Nevertheless, the students experienced that their enhanced skills and confirmed knowledge motivated them and gave them courage to actively challenge themselves and expand their learning both in the simulations and the nursing homes. Furthermore, students experienced that they increased their learning by asking more questions of their nurse supervisors at the nursing homes. One student stated:

> It feels good to have knowledge and [to] ask questions [and to] somehow dig a little deeper and gain more knowledge while being in the nursing home as you have already got knowledge in simulation. (Student 5, Group 3)

Discussion

This study suggests that the supplementary simulation training during clinical practice in nursing homes may have enhanced the students' ability to reason and reflect on practice, their opportunities to socialise and learn with their peers, raised their confidence and mastery in

practice, and encouraged their active exploration of learning opportunities during their clinical practice.

Research suggests that nursing students value some scope to work independently in clinical practice but also need direction and support in bedside nursing (Ford et al., 2016; Holmlund et al., 2010). In line with previous research (Adamson et al., 2018; Algoso & Peters, 2012; Sundler et al., 2014), our students reported that they had limited influence on their own learning in the nursing homes, and that the nurse supervisors had little time to commit to the student supervision. Such experiences may have led the students to behave in certain ways, and they experienced little or no autonomy. According to Ryan and Deci (2000), autonomy must be supported to enhance students´ motivation and thus their efforts to learn. However, autonomy is not synonymous with self-direction and independence of others in the learning process. Little (1991) describes autonomy as a capacity for detachment, critical reflection, decision-making, and independent action, and that this capacity may be promoted in interaction with peers and teachers. An autonomy-promoting learning environment focus on the needs of the learner, encourage learner involvement and challenges the learner (Niemiec & Ryan, 2009, Little, 1991). The simulation teachers were entirely committed to the students' learning, and the students experienced being encouraged to ask questions, challenge others, take on challenges and share their perspectives, thoughts and feelings—all components of teaching strategies supportive of autonomy (Kristofferzon et al., 2013; Niemiec & Ryan, 2009; Reeve, 2009). The simulation training may have complemented clinical practice by balancing the students´ need to be challenged and their need for supervision and support. This learning support may have contributed to enhancing the students' sense of autonomy and, thus, their motivation and efforts to learn in both environments (Niemiec & Ryan, 2009).

A need to feel competent may drive students to only take on challenges and tasks they think that they can grasp and master (Levett-Jones et al., 2009; Niemiec & Ryan, 2009). Learning, as phenomenon, demands the courage to move out of one's comfort zone. The feeling of competence is a sense of confidence and effectiveness in one's action, not an attained skill or capability (Deci & Ryan, 2002). When students are introduced to difficult and demanding tasks or asked challenging questions, supervisors need to recognise students' need to feel competent and to provide appropriate support and feedback (Arkan et al., 2018; McCloughen et al., 2020; Niemiec & Ryan, 2009). The students in the current study reported that the simulation training was crucial for them to develop knowledge and confidence in practice. They verbalized that the simulation training gave them a chance to analyse and synthesize nursing approaches to the care of complex patient needs. The safe, supportive

atmosphere in the simulation environment may have enhanced the students' feelings of competence by exposing them to challenging experiences, questions and tasks without the risk of harming patients or being evaluated negatively, allowing them to test and expand their capacities.

Nursing students entering clinical practice expect to learn necessary skills and practical applications of theory (Holmlund et al., 2010). However, in line with previous research (Adamson et al., 2018; Algoso & Peters, 2012; Arkan et al., 2018), some of the study participants encountered unclear supervision and a lack of integration of theory and practice in the nursing homes. Unclear supervision may impact the students´confidence in own knowledge and capabilities (Adamson et al., 2018; Killam & Heerschap, 2013). In the present study, the simulation training seems to have enhanced students´ opportunities to reason and reflect on practice and receive feedback on learning progress both from peers and teachers. The findings indicate that the supplementary simulation training may have provided additional feedback needed to enhance confidence and consciousness of own knowledge and capabilities, which may have motivated the students to more actively seek out new challenges (Deci & Ryan, 2008).

In line with Baglin and Rugg (2010), the students expressed concerns that they might not have been able to develop best practice approaches to care as they did not receive adequate supervision and worked mostly alone in the nursing homes. Experiencing belongingness towards others in a caring, secure way, has been described as one of the needs that has to be met for autonomous motivation to flourish (Ryan & Deci, 2000). In practice, belonging involves a feeling of being connected to a group of clinical nurses and having professional and personal values aligned with that larger clinical group (Baglin & Rugg, 2010; Levett-Jones et al., 2009). Intersubjectivity, or shared understanding, therefore, may be vital to students' learning motivation and progress. In the present study, the students experienced the simulations as a safe haven where their peers and experienced teachers learned together through engagement, role modelling and intersubjectivity. The teachers were experienced nurses and served as important role models who guided the students to gain knowledge and insights, they could utilise in the nursing homes. The safe laboratory setting of the simulation environment and the teachers' pedagogical education and experience may have contributed to creating a non-threatening social atmosphere that provided guidance and constructive critiques (Kern et al., 2014; Killam et al., 2013).

Access to nurse role models may enhance students' sense of belonging, their confidence and their feelings of competence (Donaldson & Carter, 2005; Ford et al.,

2016). Conversely, a lack of role models may foster unsafe clinical practices (Killam et al., 2013) and feelings of being an outsider (Jonsén et al., 2013; Kern et al., 2014). Our findings support the concept of belonging as a need influencing the students' learning, motivation and confidence (Grobecker, 2016; McCloughen et al., 2020). In addition, the findings indicate that the supplementary simulation training may have enhanced students´ ability to handle experiences of limited supervision and feelings of being alone at the nursing homes by adding to their sense of social integration.

Strengths and Limitations

We conducted focus group interviews with three groups of students who had received simulation training as a supplement during clinical practice. The three focus group interviews were considered to provide sufficient information power (Malterud et al., 2016). The participants were recruited from only one urban university college, so some experiences and nuances might not have been identified. Transferability was enhanced by reporting the context of the simulation training, description of the sample, the research process and rich descriptions of the results.

The first author's dual role as facilitator and moderator may have influenced the data, and we may not rule out that this might have made the participants reluctant to share negative experiences (Creswell, 2014). Nevertheless, the first authors involvement and familiarity with the simulation training, context and educational practice, though, may also have strengthened the study in design of the simulations, development of the interview guide and as moderator in focus group interviews (Mercer, 2007). Throughout the research process, we reflected upon own roles to be aware of how they could affect the study. It was clearly stressed to the participants that they were promised full confidentiality and that grades or evaluations would not be not be affected by what they shared. The participants were active, spoke openly and shared positive and negative experiences regarding both learning environments during the interviews.

The analysis was an iterative process. All the authors read the transcripts, and the first author analysed the data, while the other authors asked critical questions during each step of the analysis. This investigator triangulation enhanced the credibility and reflexivity (Krueger & Casey, 2015). The authors' diverse pedagogical and research expertise also enhanced competing interpretations during the analysis and interpretation of the findings.

The amount of supplementary simulation training in this study may seem brief, a total of 9 hours. However, research have suggested a 2:1 clinical to simulation ratio

due to the intensity and efficiency of the simulation setting compared to the clinical setting (Breymier et al., 2015; Curl et al., 2016; Sullivan et al., 2019).

Implications for Practice

The study provides useful information for educators in their efforts to develop and improve clinical practice placement models in nursing homes. Incorporated academic and practice focused simulation training as learning support during clinical practice may mitigate students´ learning challenges while practicing in nursing homes. The findings may also be useful for clinical supervisors to optimize students´ clinical learning experience during clinical practice placements. Nurse educators and clinical supervisors should be aware of unexperienced nursing students need for support, confirmation and collective reflections as this may enhance students´ confidence to actively take on challenges and learn while practising. Nursing students need to be challenged under supervision to develop and utilize knowledge and expand their capabilities, as this is essential for promoting professional development and patient care.

Conclusions

This study suggests that supplementing clinical practice in nursing homes with simulation training may mitigate some of the learning challenges students may report while practicing in nursing homes. The simulation training seemed to complement clinical practice by consolidating the students' learning, enhance the students' motivation and sense of mastery, and consequently their efforts to seek out new challenges, explore and learn both in the clinical and the simulated environment.

Future studies with experimental designs should examine effects on areas such as knowledge acquisition and self-efficacy when supplementing clinical practice in nursing homes with simulation training. We also suggest that future studies explore the nurse supervisors´ experiences to ascertain if simulation training as learning support during clinical practice demonstrate improved nursing skills and patient outcomes.

Authors' Note

The study was approved by the Norwegian Social Science Data Services (ref. number 51842 and 57344). Participation was based on written, informed consent.

Authors' Contributions

Camilla Olaussen has been responsible for design, data collection, analyses and interpretation of data, and has worked out the drafts and completion of the submitted version of the manuscript. Co-authors have contributed with comments and ideas during the process, analyses and interpretation of the data and revision of the manuscript. All co-authors have given their final approval of the version submitted.

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