Clinical Simulation in Nursing (2021) 54, 10-16

Clinical Simulation in Nursing

www.elsevier.com/locate/ecsn

Featured Article

Students as Facilitators: Experiences of Reciprocal Peer Tutoring in Simulation-Based Learning

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Keywords
simulation-based learning;
reciprocal peer tutoring;
student-led;
nursing students;
facilitator

Abstract
Reciprocal peer tutoring is a form of peer-assisted learning involving structured switching of tutor–tutee roles amongst students of the same academic year. The study aimed to explore students' experiences of being a facilitator in simulation-based learning. The pilot study had a hermeneutic explorative qualitative design. Data were collected through two sets of semi-structured focus-group interviews with four final-year nursing students. Data were analysed using thematic analysis. Three themes were important for facilitating peer students: (a) being familiar with simulation as a learning method, (b) prior theoretical knowledge, and (c) the learning environment. Tutors expressed a genuine interest in preconditions for learning. Hence, they facilitated the simulation for peers to achieve mastery experience. The experience as tutors was found valuable for their clinical practise. Student-led simulation as an active learning strategy promotes deeper learning and transfers communication competence into clinical experiences.

Cite this article:
Svellingen, A., Røssland, A. & Røykenes, K. (2021, Month). Students as Facilitators: Experiences of Reciprocal Peer Tutoring in Simulation-Based Learning. *Clinical Simulation in Nursing*, 54, 10-16. https://doi.org/10.1016/j.ecns.2021.01.008.

Introduction

By focusing on collaborative learning, a student-led simulation may prepare nursing students for professional practise. Simulation-based learning (SBL) is a learning method mainly used to develop knowledge and competence in medical–technical skills (Cant & Cooper, 2017), but the method also gives opportunities to practise nontechnical skills, such as communication (Martin & Chanda, 2016). In a student-led simulation, the students prepare the learning objectives and patient scenario in student groups and facilitate the three phases—briefing, simulation and debriefing—for their peer nursing students.

Peer-assisted learning (PAL) is an umbrella concept for active learning approaches that focus on deep learning, and is understood as 'students learning from each other' (Gazula, McKenna, Cooper, & Paliadelis, 2017; Olaussen, Reddy, Irvine, & Williams, 2016; Schunk, 2012; Williams & Reddy, 2016). Several concepts are described

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https://doi.org/10.1016/j.ecns.2021.01.008

under the PAL umbrella, including reciprocal peer teaching (Schunk, 2012), peer teaching, peer learning, peer mentoring, peer assessment, reciprocal peer tutoring (RPT) (Gazula, McKenna, Cooper, & Paliadelis, 2017) and peer-to-peer learning (Williams & Reddy, 2016). The understanding of the term 'peer' within these concepts varies from 'students at a higher academic level teaching students at a lower level' (peer teaching) to situations where 'students at the same academic level mentor and learn from each other' (RPT) (Gazula et al., 2017).

However, there is disagreement over the understanding of the concepts related to PAL and the nuances between them, which makes it challenging to use them for research purposes (Gazula et al., 2017; Olaussen et al., 2016). Olaussen et al. (2016) argue in their scoping review that clear terms will be helpful for effective and efficient research.

Gazula et al. (2017) found the same variety amongst researchers using the concept RPT, saying that reciprocal peer teaching, near-peer teaching and reciprocal peer coaching were similar to RPT. To complete a systematic review specific to RPT, Gazula et al. (2017) defined the concept to be 'when students from similar educational background, that is, in the same year of study, alternate roles of tutor and learner to meet identified learning objectives. They found eight articles addressing the defined concept of RPT, concerning only medical and physiotherapy studies. The results support RPT as a learning strategy that has the potential to 'enhance cooperative learning, communication, metacognition and teaching skills apart from an enhanced understanding of the topic under study' (Gazula et al., 2017).

Student-led simulation is derived from both 'PAL' and 'simulation' and is understood as a learning activity in which students supervise each other through simulated practise learning (Brown, Collins, & Gratton, 2017). In present study, student-led simulation corresponds to RPT.

Previous research on simulation in nursing education mainly focused on the students' role as nurses, developing nursing competence in clinical settings (Cant & Cooper 2017). However, recent research on student-led simulation within undergraduate nursing programmes has found that students benefit from peer learning in general; peer-led simulation promotes new learning, provides a supportive safety net and is, therefore, a valuable educational approach (Li, Petrini, & Stone, 2018; Valler-Jones, 2014). Moreover, Brown, Collins, and Gratton, (2017) found that students who led simulations developed their mentoring skills and reinforced their self-awareness. Hence, student-led simulation is a good method and supports students developing skills on the path from novices to more advanced practitioners (Menard & Maas, 2019).

To summarise; previous studies on student-led simulation do not distinguish between students as facilitators, defined as tutors, and the active students simulating the role as a nurse, defined as tutees. Previous studies are mainly based on student-led simulations with students at a higher-level facilitating students at a lower level. The purpose of the present study was, therefore, to explore nursing students' experiences as facilitators, facilitating peer students at the same academic level.

Methods

Design

This qualitative study is an interpretative, hermeneutic design, inspired by Gadamer's approach (2013), investigating students' experiences of being facilitators in a student-led simulation using the Simulation in Nursing Education (Jeffries, 2012) and INACSL Standards of Best Practice: Simulation^{SM} Simulation Design (INACSL Standards Committee, 2016) as a framework.

Context

The student-led simulation took part in the final year of a three-year Bachelor of Nursing Programme at one university college in Norway. Students had participated in SBL in earlier academic programs.

As part of the educational program, a cohort of students participated in a two-day simulation course before clinical placement in mental health care and home care. Before the two-day simulation experience, they attended a workshop focusing on different communication skills, for example, verbal/nonverbal communication, active listening skills, paraphrasing, communication mirroring. Additionally, students worked in groups to prepare mental health and clinical scenarios. Each group of four or five students designed one scenario and was supervised by a teacher with facilitator competence (Forstrønen, Johnsgaard, Brattebø, & Reime, 2020). To ensure the quality of the simulation intervention, the teacher guided the group developing the specific simulation scenario objectives. The two-days schedule was planned so that half of the student cohort carried out their scenarios for the other half of the cohort. The next day they switched roles. Under the guidance of the teacher, one of the students in the tutor group attended the role as the facilitator in all parts of the simulation: briefing, simulation and debriefing. One student took on a patient role. The rest of the group took roles as observers. In the following simulation sessions, they switched roles.

This learning activity was not an instructor course; students were facilitators to practise their communication skills and increase their communication competence.

Participants

The qualitative study took place over six months and focus-group interviews were conducted. Invitations to participate

were sent to all students participating in the simulation, and four informed consent forms were returned. A sample of four female students met twice for the focus-group interviews. The first focus-group interview took place one week after simulation training, but before the clinical placement in mental health and home care services, and the second interview took place after the clinical placement.

The informants participated voluntarily, and data were handled confidentially. The Norwegian Social Science Data Services approved the study. Written consent was gained from participants, who were assured that their responses would be confidential and anonymous. The participants were informed that they could withdraw from the study at any time.

Data Collection

Utilising focus group interviews as data collection method was employed (Creswell & Creswell, 2018). Focus groups were semi-structured and explored students' perceptions of their experiences of facilitating a simulation scenario, and their learning as facilitators during the simulation and after their clinical placement. The interviews lasted for 60 minutes and were electronically recorded.

Data Analysis

Qualitative content analysis was carried out following the steps recommended by Graneheim and Lundman (2004). The two interviews were analysed separately. In the first step, the interviews were transcribed verbatim and read through several times to obtain an overall understanding of the content. In the second step, the text was divided into meaning units that were condensed. Each meaning unit comprised words and sentences containing aspects related to each other. In the third step, the condensed meaning units were further condensed and labelled with codes. In the fourth step, the codes were classified into categories and subcategories based on similarities and differences. Three themes were generated: 'Factors affecting students leading the simulation', 'To facilitate a fellow student' and 'The facilitator role–development of communication skills.'

Results

Several positive effects of facilitating a simulation, such as enhancing skills, intellectual gains and personal growth, were reported. During the debriefing, tutor-students themselves felt challenged to reflect on clinical communication skills. Being a tutor provided support for increased confidence and motivation to learn more about communication with patients in home care and mental health care.

Factors Affecting Students' Leading the Simulation

Preconditions for Reciprocal Peer Tutoring

The participants stated that leading the simulation was both fun and challenging. They pointed out some necessary preconditions for successful student-led simulations.

The participants perceived the timing of implementing student-led simulations in the last study year to be appropriate. They had used simulation as a learning activity ever since they were first-year nursing students and were familiar with the method. They, therefore, thought it was an appropriate time to practise the facilitator role.

Previously gained knowledge, experience and competence were highlighted as important preconditions for creating scenarios and preparing the simulations and were described as a necessity for being able to practise the facilitator role. Creating the scenario and leading the simulation provided them with an opportunity to apply acquired knowledge and competence and put it together. They claimed that facilitating simulation sessions was easier with previous similar clinical experience because they found that developing suitable scenarios was quite challenging.

> 'When you are a facilitator, you get a feeling of mastering: "I know this". For me, this gave me a great sense of mastery experience.'

The students thought that the teacher's presence positively supported them and secured them in the session. However, the teacher did not take an active role—just being there was enough. They knew that the teacher would intervene if necessary.

Learning Environment

The participants stated that a safe learning environment was a factor of great importance for being a facilitator in the tutor-group. This was highlighted several times during both interviews. Being familiar with the method contributed to achieving a safe learning environment. Another important factor was the group dynamic, which contributed to a feeling of acceptance and belongingness.

> 'Many of us know each other very well after being together for almost three years. Previously, we were uncertain of each other. Now, we are very confident of each other.'

A psychologically safe environment was essential to express and to challenge their limitations in the group. The participants emphasised the importance of acknowledging group members' differences and individual competences. The relational aspect, knowing each other throughout the educational program, was fundamental to achieve a psychologically safe environment. Several times, participants highlighted the importance of adjusting the scenarios to facilitate the tutees' learning. They emphasised the impor-

tance of a safe learning environment to promote peers' mastering experiences.

> 'The goal is to share knowledge and to learn from each other—to make each other better!'

To Facilitate a Fellow Student

As the simulation was student-led in all parts of the session, the sense of responsibility for peer-students' learning resulted in the tutor-students striving to see the whole of the situation. In the second interview, the participants expressed that taking the lead was a way of practising organisation skills and having control of several parts of a process. They were able to foster their growth because they had an active role in the simulation session.

A challenge for the tutors was to strike the appropriate balance between presenting a scenario that was sufficiently challenging, designed to promote learning and complex but not too difficult for the tutee. The results showed that the tutors cared for their peers. Therefore, the challenges in the scenario were adjusted to tutees' knowledge and abilities.

> 'In the debrief, I focus on my peers' strengths to support their mastering experiences, asking questions to promote knowledge.'

Being the tutor, the one responsible, and running the scenario, made the participants aware of their impact on their fellow students' learning processes. It was a mix of feelings, to be responsible for peers' learning and helping them build clinical competence. Earlier attendance in simulation sessions in the first and second academic school years gave them the view that debriefing is important for the learning process. In the debrief tutors were concerned about their peers' experience of coping. If a tutee started to focus on negative perspectives, tutors reframed their reflections positively.

Tutors defined their role differently from teacher-facilitators because they were at the same academic level as tutees and therefore better understood how it was to be in a student's position. However, the teacher's presence was important in case tutors needed knowledge support.

The Facilitator Role—Increasing Communication Competence

This part of the results focuses on participants' experiences of practising communication skills as tutors. The main learning outcome for the simulation session was to practise communication skills. Awareness of developing communication competence was enhanced as they became responsible for the simulation session. Participants emphasised increased awareness of the need to ask open and reflective questions, and to avoid using rhetorical or 'yes/no' questions. In the debriefing session, they expressed a genuine interest in fellow students' coping and their progress, to uncover what had been learned.

In the second interview, six months after the simulation, participants reflected that the tutor role prepared them for their clinical placement. Being quiet and making room for reflections in a conversation and at the same time feeling confident was a challenge in both the simulation session and in clinical practise. In clinical practise, it was difficult to invite the patient into the conversation, when he or she did not share their thoughts. Their experience in facilitating peers reminded them to be patient and give people time to gather their thoughts.

In the role of the tutor, they were aware of their choice of words and the ways they asked questions to stimulate discussion in the group. When they wanted the tutee to clarify and share thoughts and reflections, tutors asked questions in ways that made the group feel confident. Participants reported that the use of positive body language was important when being a tutor. In the second interview, participants identified this as being important in their clinical practise when caring for patients with mental health issues, to build trust and make room for a good conversation. Tutors also indicated that practising communication skills in the debriefing was valuable; in clinical practise, they were less afraid to speak out or take part in a conversation that seemed to be challenging or daunting.

Participants stated that practising both communication skills and leadership skills as tutors was valuable for their future nursing, where they would need to organise daily work caring for real patients. They felt more confident and prepared to focus on decision-making and patients' needs. This was highlighted in both interviews. Further, they believed the tutor experience to be important in conversations with co-workers and had learned effective ways to communicate in staff meetings. They found the tutor role to provide valuable practise for their role as a future nurse and stated that student-led simulation provided confidence, competence and independence.

In summary, student-led simulation enabled final-year nursing students to be involved in their learning process, preparing them for clinical practise and the role of a nurse. Participants described using communication skills in small groups and giving support to peers who had taken part in the simulation session as personal ways of learning.

Discussion

The study aimed to explore nursing students' experiences of being the facilitator in SBL. The study results can be understood as three different levels of communication; communication competence when preparing the simulation, as tutors and in clinical practise. In the discussion, we highlight and discuss these themes in light of curriculum pre-

conditions, RPT, transformative learning and deeper learning.

Communication, Curriculum and Students' Preparedness for Developing and Facilitating a Simulation Scenario

The first level of communication was the simulation preparation phase. Here, the students had to focus on communication theory and tools to develop a relevant patient scenario for the simulation. During the educational programme, students were taught theories of communication, which they were able to transform when planning and developing scenarios. Moreover, earlier clinical experiences communicating with patients were highlighted as important for developing realistic scenarios. The importance of methodological knowledge is essential, and therefore, it is important to be aware of the timing for RPT.

In the present study, tutors gained improved levels of confidence and feelings of preparedness. This is also highlighted by Luctkar-Flude, Wilson-Keates, Tyerman, Larocque, & Brown (2017) who found that while novice nursing students preferred instructor-led simulation, a progression from instructor-led to student-led simulation training can enhance learning by prompting greater knowledge and confidence.

Communication and Being a Facilitator in Simulation

The second level of communication took place when the tutors had facilitator roles in practising communications skills. The tutors transformed communication skills and were supportive of the tutees, to let the tutees achieve confidence during their learning process. By being present and aware of the power of communication in the debriefing, tutors helped the tutees to put experiences into words, by focusing on their mastery experience. This study found that tutors rated the ability to listen actively and empathetically as being of great importance to tutees' learning. These findings support the understanding of RPT as a meaningful pedagogical teaching method for enhancing student learning (Schunk, 2012). The role as a tutor made the students aware of their peers' learning circumstances and became very conscious of their role, providing support by mentoring the tutees and maintaining a safe learning environment for them. Gazula et al. (2017) also found in their systematic review that RPT gave strength to competency building in teaching and mentoring.

Tutors built their communication competence by leading the debriefing using positive body language and asking good and relevant questions. Research shows that simulation can be a stressful experience (Al-Ghareeb, Cooper & McKenna, 2017). Our study found tutors eager to make simulation experiences comprehensible for tutees.

Communication and Transformative Learning

Learning is about transformation to bring new competence to other situations. According to Illeris (2014, p 160), transformative learning is connected to the development of competence when 'changes in mind and behaviour are followed by more concrete changes in understanding and acting.' These changes were mainly expressed in the second interview. Here, participants reflected on their experiences using communication to facilitate peers using these skills during clinical practise. They reflected upon the importance of the tutor experience for the communication competence towards future patients, colleagues and students. This we define as the third level of communication.

Being a tutor provided a greater emphasis on transformative learning to think like a nurse. RPT is a valuable approach, where tutors ultimately gain courage, take action in simulation and can, therefore, become better prepared for future performance.

According to the present study, students' feelings of preparedness for achieving leader and communication competence increased as a result of RPT. From a reciprocal perspective, tutors saw their attendance as likely to enhance their performance and help them care for real patients more confidently. This is supported by Lusk Monagle, Lasater, Stoyles, & Dieckmann (2018) who present challenges for new graduate nurses and the lack of preparedness to communicate effectively. Final-year students are soon to be caring for real patients and this makes RPT uniquely suited as an active learning strategy to promote communication competence.

The present study shows that RPT appeared to have an impact on students' deeper learning. In both interviews, participants reflected on their overall learning through transformative learning. Findings revealed increased deeper learning for tutors leading the simulation in both the preparation phase and the simulation experience. Further, participants expressed their ability to use their confidence and competence to care for future patients. New graduate nurses highlighted increased confidence throughout their critical care nursing training (Kaddoura, 2010), emphasising the need for educational programmes to help students become more confident.

As students during the educational programme master progressively more complex nursing concepts, the student-led simulation in the final year allows the application of deeper levels of learning. The findings support the positive effects of RPT in simulation, including cognitive gains and improved communication skills (Gazula et al., 2017). Curtis et al. (2016) proclaimed that peer-to-peer facilitation may enable large numbers of students to engage in simulation and at the same time increase confidence in achieving clinical skills. Prior research also shows that student-led simulation can actively contribute to the development of clinical skills, confidence and leadership

(Edwards, Lee, & Sluman, 2018; Menard & Maas, 2019; Ramm, Thomson, & Jackson, 2015).

The findings indicate that transformative learning requires maturity and the ability to motivate oneself both personally and professionally. This is an essential aspect of the simulation experience to develop the ability to apply knowledge to new contexts.

Implications for Practise

RPT combined with simulation allows nursing students to progress in communication competence. Simulation with students as facilitators ought to be integrated throughout the curriculum to support the progression of transformative learning. Knowledge of simulation as a method reduces tutor stress and makes it possible to achieve deeper learning. Implementation of simulation as an active learning method in the first academic year begins the process and helps students become confident in the role of facilitators in their final academic year.

Limitations

The participants may have an interest in the research topic and, therefore, the sample may not be a true representation of the entire population. The small sample size may also be a limiting factor.

Conclusion

Implementation of RPT in simulation has been shown to increase knowledge transferability such as communication competence. Student-led simulation performed as described in the article supports simulation as a strategy to promote transformative learning. The findings suggest that allowing students to be facilitators is a priority when organising simulation for final-year students, to prepare them for clinical practise. Communication competence is important to the creation of a nurse-patient relationship and needs to be practised before graduation.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of Interest

No conflict of interest has been declared by the authors.

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