



A model for guidance and reflection in practice studies for nursing students

Lindis Kathrine Helberget^{a,*}, Frøydis Vasset, PhD^a, Marianne Louise Frilund, PhD^a,
Barbro C. Teige^b, Sven Inge Molnes, Associate professor^a

^a Assistant professor. Department of Health Sciences Ålesund. Faculty of Medicine and Health Sciences. Norwegian University of Science and Technology (NTNU), Norway

^b Head of Section. Medical department 2, Ålesund. Møre and Romsdal Hospital Trust, Norway



ARTICLE INFO

Keywords:

Nursing education
Reflection
Supervision
University college
Qualitative study

ABSTRACT

A qualitative study conducted at a university in Norway examines how a guidance model can affect students' learning situations in practice studies in specialised health care. Different factors in practice studies can affect the learning situation of nursing students. This qualitative study is characterized by a hermeneutical design approach. Two focus group interviews were conducted. Three different perspectives were examined in the interviews: working with a patient case during practice studies; the collaboration between nursing students and supervisors; and the collaboration between nursing students and teacher. Themes that arose were used to cluster and further analyse the data. The study shows that working with a patient case means that nursing students focus more on practice studies, concentrating on one specific task. Furthermore, it appears that nursing students experienced increased continuity and collaboration with their supervisors, as they experienced that the supervisor had ownership of the patient cases prepared at the ward. The nursing students wanted the teacher to be more prepared and focused on the learning outcomes. We recommend more research on roles and role clarification for supervisors and teachers, as well as the responsibilities of the university and the institutions that offer internships.

Introduction

In European Union (EU) countries, clinical practice makes up an important part of the preregistration nursing programme, accounting for 50 percent of the entire programme, with the minimum being a three-year programme covering 180 European Credit and Transfer System (ECTS) (European Council, 2005). In Norway, nursing education is a three-year bachelor's degree programme (180 credits), and the requirements for supervised practice is 50 percent of the study programme.

Supervised practice is an important part of the study programme, and throughout the nursing studies, the students must reflect on the situations they experience. Being able to reflect is fundamental in the student's development towards becoming a professional nurse. They must be aware of their own reactions, be able to think about others' perspectives and consider several solutions in one action.

To become a competent nurse, nursing students practise reflecting on their own actions regarding current learning outcomes. The bachelor's programme emphasises the development of knowledge and understanding of theory and practice (Ministry of Education & Research, 2008). Nursing students experience a constant alternation between theory at university and challenges in practice studies. Nursing students must

have knowledge, understanding, skills, assessment competence and ethical competence to handle everyday life complexities in practice. This is to ensure patient safety. Nursing students see the usefulness of combining theoretical and practical knowledge as they interact with patients, relatives, and other health personnel professionally. Nursing students' previous reflections and challenges help influence their nursing competence (Helberget, Frilund & Molnes, 2020).

According to a white paper, Meld. St. 33 (Ministry of Education & Research, 2012), the need for increased competence and communication across levels and sectors in the health-care system requires constant renewal and adaptation. In relation to the nursing students it is necessary that they achieve increased competence and communication in the health-care system. Another white paper, St. Meld. no. 27 (Ministry of Education & Research, 2001), provides guidelines for how universities can ensure students an optimal learning environment. This makes a useful guideline for how the teaching at the university and the instruction in practice studies should be. Both the field of practice and the university have a common responsibility for facilitating a learning environment that provides students with learning outcomes in line with the plan's framework. The Norwegian Association of Higher Education Institutions (UHR) (2016) confirms the need for clearer and better cooperation in the daily work between educational and practice institutions, with

* Corresponding author.

E-mail addresses: lindis.helberget@ntnu.no (L.K. Helberget), fv@ntnu.no (F. Vasset), mafr@ntnu.no (M.L. Frilund), Barbro.C.Teige@helse-mr.no (B.C. Teige), svmo@ntnu.no (S.I. Molnes).

<https://doi.org/10.1016/j.ijedro.2021.100060>

Available online 23 June 2021

2666-3740/© 2021 NTNU Norges teknisk-vitenskapelige universitet. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)

explicit clarification of the parties' roles, responsibilities, and resource inputs. This is also reflected in the report's recommendations. Two important measures are 1) better integration between theory and practice in education and 2) formalized supervision competence amongst the supervisors. These measures are something the universities are working with and are making improvements on.

Several supervision models for nursing students in practice have been described. In health and social work education, supervision has been characterized by a "master-apprentice" relationship (Lauvås & Handal, 2014). In recent years, new models have emerged, such as the establishment of a common case management team for students (Bjerkvold, Sørli & Myhren, 2003; Lundestad & Oddvang, 2007), a group-orientated collaboration where a nurse is responsible for supervising several students (Anvik & Westvig, 2005), and student collaboration in pairs (Gregersen, 2006). Nursing students also experiences reflection as one of the motivational and educational factors in their studies (Karimi, Haghani, Yamani & Kalyani, 2017). Clinical learning is an integral element of nursing studies and a good clinical teaching is necessary (Tang & Chan, 2019).

Background

Reflection is a key phenomenon for students' development into professional nurses. Schön (1987, 2001) views reflection as a process in which a professional build up their competence in the face of complex and unpredictable practices. Caldwell and Grobbel (2013) point out that the student-supervisor relationship is fundamental for students' practical learning. Trust and honesty between the student and the supervisor can lead to students that are open to reflection and learn as much as possible. Chong (2009) argues that reflecting on practice helps to develop one's practical abilities. Seeing clinical situations from several perspectives identifies different learning methods and develops action competence. Students must experience a connection between the teaching and practical exercises they encounter in school and what they encounter in actual practice for them to be able to achieve learning outcomes (Melender, Jonsén & Hilli, 2014).

Students construct their own learning within different social frameworks. According to Kolb's theory, learning is a process in which competence is formed by transforming experience in four stages (Kolb, 1984). First, students experience a given situation. Next, students reflect on their experiences and what they mean. Based on reflective observations, students' structure, generalize or formalize the learning outcomes of their experiences. Later, this competence can be tested in new contexts. Reflection is a key phenomenon for students' development into professional nurses (Kolb, 1984).

Several studies also indicate that students' maturity, individual and cognitive abilities, and collaboration between students and teachers are central to developing reflection and knowledge levels in future nurses (Bagheri, Taleghani, Abazari & Yousefy, 2019; Bjerkvik & Hilli, 2019; Dale, Leland & Dale, 2013; Henderson, Cooke, Creedy & Walker, 2012; Papathanasiou, Tsaras & Sarafis, 2014). Developing critical thinking is central to students. Sweet, Bass, Sidebotham, Fenwick and Graham (2019) and Chan (2013) mention four factors that must be in place for students to achieve critical thinking: asking questions and being curious, evaluating situations, being open to solutions, and seeking out literature.

Research shows that students' supervisors are their key person in practical studies for learning and achieve learning outcomes (Kristoffersson, Mårtensson, Mamhidir & Löfmark, 2012; Walker, Dwyer, Moxham, Broadbent & Sander, 2012). Thus, it is fundamental concerning the student's learning that the supervisors are present and visible to the students (Jonsén, Melender & Hilli, 2013). Sandvik et al. (2012) point out that if the supervisor does not receive sufficient training and support, there is a risk that the student focuses on different work tasks and skills more than reflection concerning the patient's need.

It is important that the supervisors are open for several suggestions to the students so they can reflect and achieve competence in practice studies. Supervision knowledge is developing positively for the students to learn in practice studies (Bengtsson, Kvarnhäll & Svedberg, 2011). Another study that have examined the supervisor's perspective show that the supervisor feels unprepared for their role (McClure & Black, 2013) and can have a feeling of flood of responsibility (Olsvold, 2010). According to Bennet and McGowan (2014), different preparation and support types are fundamental for learning in practice. There are didactic strategies and models for integrating theoretical and practical knowledge in the field (Andersson, 2015).

In our study the students worked with a written patient case in the practice studies in specialised health care. The supervisors had most of the responsibility in the evaluation process and guidance of the students, and the teacher were more like a mentor for the supervisor and to a certain extent for the students also. The project manager and the project group were appointed in the autumn of 2019, and planning started. The medical department's head of section appointed supervisors, and they developed a patient case that dealt with infection, kidney and gastrointestinal subject areas. The supervisor prepared patient cases from clinical patient situations that were complex regarding observations, measures, and nursing. In this way, the students could work with relevant patient cases throughout the practice studies. At the same time, the supervisor could be more involved in supervision and reflection together with the student.

Before the students started in the practice study, a meeting was held between the supervisors and the teacher. The focus was on the practice study's curriculum, learning outcomes, student supervision, patient cases, and information about the project. The teacher was concerned with the supervisor's needs and the supervisor needed some more guidance on how to supervise the students. The teacher's role had somewhat changed, as the focus had shifted from supervising students to supervising the supervisor.

The first meeting between students and teachers took place a few days before the practice studies began. The teacher informed them of the new programme, presented the patient case, and arranged meetings and reflection days with the students. Patient cases were published on the learning portal Blackboard. Each student worked with only one patient case, which was the patient case that dealt with the team the student was part of. The scope of the written assignment was 3000 words (+/- 10 percent).

The supervisor then conducted a dialogue with the students without the teacher present. Students were encouraged to solve patient cases in line with the various phases and questions. Students used current research and academic literature, procedures in the EQS (Extended Quality System), and other available documents at the department. The students had a continuous dialogue with the supervisor, who guided them further in the assignment. In addition to syllabus literature and more, patient contact helped the students find answers to the questions.

During the project's implementation, the teacher was present at the midterm evaluation to observe how the supervisor and student conducted a midterm evaluation based on the patient case and the learning outcomes in the clinical studies syllabus. For the midterm evaluation, the students submitted a document that reflected and discussed various solutions to the patient case. The patient's nursing was described, reflected on, and discussed based on the curriculum's learning outcomes. It gave them a basis for reflecting on why they made the choices they made and to be constantly aware of the choices they made, what the result was and what could have been done differently. In the midterm evaluation, the patient case was discussed, and there was a professional dialogue between the student and the supervisor about why, how, and what challenges the student had experienced.

In the midterm evaluation, it was fundamental to get the students to reflect and tell about the patient's case and what they could have done differently. The teacher acted as a moderator, where the role was to ask the student questions as the supervisor simultaneously steered the dis-

discussion in the correct academic angle. From the teacher's side, this was about the desirability of a concretization from the general to the relevant patient case, what the student's actions as a nurse meant for the patient, and what could have been done differently. The teacher emphasized obtaining information from the student about all the learning outcomes to ensure that they had visited all the syllabus points in their practice study. After the midterm evaluation, the student continued the patient case based on the academic discussion.

Regarding the final evaluation, the supervisor and student completed this without the teacher present, but the teacher was available if there was a need. The content was the same as in the midterm evaluation, but it was now expected that the student continued to work with the patient case, including the feedback from the midterm evaluation. The supervisor filled in the evaluation document.

The study aimed to explore how the guidance model affected students' learning situations in practice studies in specialised health care.

Method

Sample

The participants in the study were seven nursing students at a university in central Norway, and the students were in their third year of the nursing programme. The study was conducted during spring and autumn 2020. Participation were voluntary and informed consent was obtained prior to the interviews. A total of seven students were included in the study. Four of the students were in the first time we had the project, and three students in the last time we fulfilled the project period.

Design

This qualitative study is characterized by a hermeneutical design approach (Creswell, 2014; Kvale & Brinkmann, 2015). It is based on the informants' experiences and opinions and their interpretation and construction of meaning. In this study we wanted to hear the informant's opinions and experiences and therefore the choice of focus groups was chosen. Two focus group interviews were conducted with nursing students at one university. The research adopted a retrospective perspective on the experiences of third-year nursing students who were involved in patient cases. This study adopted an inductive approach and was conducted according to Creswell's (2014) recommendations, which describe a holistic approach that involves reflection and discovery.

Focus group interviews

Focus group interviews were conducted with students in their third year of nursing studies who had their practice studies in specialised health care. There were two focus groups with four students in the first interview and three students in the second interview. The sample was selected by those students who were in practice in this specific unit at the hospital. The students were given information before they chose this unit to have practice in. The interviews focused on experience with the guidance model. Focus groups are a suitable method for exploring shared experiences, views, or attitudes in an environment in which people collaborate (Malterud, 2012). An interview guide was used, and the questions were as follows:

- 1 How did you experience working with the patient case for the midterm and final evaluation?
- 2 What do you find most instructive: working with specific patient cases or implementing the original work requirements for practice studies?
- 3 What is your main impression in regard to this model?
- 4 Describe how you reflected on the learning outcomes when you focused on the patient case for the midterm and final evaluations.

- 5 Has the role of the supervisor been different in this practice study than in other practice studies?
- 6 What do you think about the teacher not being present at the final evaluation?
- 7 Tell about what you are left with at the end of this practice study.

The focus groups were conducted on Microsoft Teams in April and October 2020. The interviews were conducted on Microsoft Teams because of the COVID-19 pandemic. During the interviews, the participants were engaged in the topic and openly shared and exchanged experiences and opinions with each other. Each interview lasted approximately 45 min. A moderator led the interviews, and a secretary took notes during the interviews. The first and last authors of the article completed the interviews. The interviews were audio-recorded and transcribed verbatim. After two focus groups, we identified patterns and preliminary themes across the interviews and therefore considered the data to be saturated. The transcripts were looked at several times by the authors, and the first and last author conducted the analysis. When the subcategories were identified all authors were involved in the abstraction process. This work continued until an agreement was reached that the main categories reflected the meanings of the statements.

Ethical considerations

The study was approved by the Norwegian Centre for Research Data (NSD), Project no. 710,066, with no additional approval required for ethical clearance. All phases of the study were conducted according to the Declaration of Helsinki (2001). Data were transcribed and anonymized accordingly. It was emphasized that participation was voluntary and that the informants could withdraw at any time without giving reasons.

Data analysis process

Content analysis was chosen for the analysis. It focused on the context and internal similarities and inequalities in parts of the text. As an analytical strategy, an inductive method was used, and through the interpretation and abstraction of the texts, we found meaningful units (Malterud, 2017). We are inspired by Giorgi's (1985) analysis strategy for analysing transcribed interviews or systematic text condensation, as Malterud (2017) calls it. The four steps of the analysis strategy (Giorgi, 1985; Malterud, 2017) start with the overall impression. The transcribed material was thoroughly read several times by the first and last authors to form an overall impression. We then prepared meaningful units, or themes as they are often called. The transcribed text was divided into several meaningful units. Colour codes were used to keep them separate. Third, text abstraction and condensation were performed. This process contributed to the development of more meaningful units. The meaningful units were condensed into several subthemes, with two or three under each unit. The first meaningful unit was "working with a patient case during practice studies" and had three subthemes: working with the case whenever the student wanted, more focus on the practice studies, and increased concentration in one area. The second meaningful unit, "collaboration between nursing student and supervisors", had three subthemes: increased supervision from the supervisor, stronger continuity, and a stronger relationship with the supervisor. The third meaningful unit, "collaboration between nursing student and teacher", had two subthemes: the students wanted a more prepared teacher and a teacher who focused more on the learning outcomes.

In the end, we summarized the meaning of the text. The text is exemplified with quotations that derive the essence of the data. The analysis was performed using the data program NVivo version 20.3.0.535. Direct quotes from students are presented in italics and marked as focus group numbers and informants, for example, FG1/1. See also Table 1 for more information about the process.

Table 1
with meaningful units, subthemes, and quotations from the informants.

Meaningful unit	Subthemes	Quotations from the informants
Working with a patient case during practice studies.	<ul style="list-style-type: none"> - Working with the case whenever the student wanted. - More focus on the practice studies. - Increased concentration in one area. 	"I felt calmer in the practice studies than just by having only one task to relate to and a date to relate to. And while working on the case, you got a lot of information and knowledge about both observations and measures to the patients"
Collaboration between nursing student and supervisors.	<ul style="list-style-type: none"> - Increased supervision from the supervisor. - Stronger continuity. - Stronger relationship with the supervisor. 	"Since they (supervisors) are the ones who have prepared the case, I feel they have more ownership of the case in a way because before it has been a bit like that... as I said before, they do not quite know what we do when we are not on duty. But for my part then, they kept asking, "How is the case?" And, "What we just did now, you can include in the case on that." The follow-up was very good then throughout the practice".
Collaboration between nursing student and teacher.	<ul style="list-style-type: none"> - The students wanted a more prepared teacher. - A teacher who focused more on the learning outcomes. 	"It turned out that if you had questions about the case, then you asked the supervisor who had prepared the case, while earlier you contacted the teacher if there was something you were wondering about because the supervisors had, in a way, nothing to do with it before. So now it was a bit like that. The teacher came to a conversation in a routine way then. It was not talked about how the practice was, but how the case had been solved".

Results

The present study explores how the guidance model affects students' learning situations in practice studies in specialised health care. The results are presented in three meaningful units: 1) working with a patient case during practice studies, 2) collaboration between nursing students and supervisors, and 3) collaboration between nursing students and teacher.

Working with a patient case during practice studies

All the students stated that working with one patient case during the practice studies was satisfying, and it was nice to work at their own pace. One of the students expressed that *"I felt calmer in the practice studies than just by having only one task to relate to and a date to relate to. And while working on the case, you got a lot of information and knowledge about both observations and measures to the patients"* (FG1/4). Several of the students said that they could concentrate on one case, and it also gave them more opportunities for in-depth learning and an overall understanding of the patients they met. Another student told that *"I think you get a slightly better overall understanding of what is going on"* (FG2/1). Another student commented this on working with the patient case: *"It is quite exacting because it is a big case so I think it was a bit difficult to know where to start writing, but when I talked a bit with my supervisor then it went easier to get started"* (FG1/1). One of the students said, *"You had the whole practice period to do the case, make changes to it based on patients you got in the ward, and then you learned a lot about the diseases that are in the ward because you are reading about them. While previously you had much less time to read on relevant subject matter for the ward you are in because there are so many other work requirements that must be submitted all the time, which are not so theoretical, again, but more your opinions and your experiences"* (FG1/4). The students found it easier to have one written focus on practice studies. Another informant told that: *"I think the patient case was instructive and we could focus on one case"* (FG2/3). They did not see the value of expressing their own opinions regarding the practice studies' regular work requirements.

Working with one patient case during the practice studies helped the students achieve an overall understanding and the learning outcomes.

It also helped both the supervisor and the teacher help the student see the learning outcomes more easily.

Collaboration between nursing between students and supervisors

Collaboration between nursing students and supervisors increases when the supervisor has more influence. It seems that the supervisor feels greater ownership of the case and shows more interest in the students and their work. They were asking and wondering how the student was doing. It seemed that the supervisor took more responsibility for the student to a greater extent. One student said, *"Since they (supervisors) are the ones who have prepared the case, I feel they have more ownership of the case in a way because before it has been a bit like that... as I said before, they do not quite know what we do when we are not on duty. But for my part then, they kept asking, 'How is the case?' And, 'What we just did now, you can include in the case on that.' The follow-up was very good then throughout the practice"*. (FG1/1). There was a good relationship between the nursing students and the supervisors, leading to better learning situations for the student because they felt cared for by the supervisor. Another student said, *"I had a good experience and felt that the supervisor and I collaborated more than what I have experienced before. The supervisor asked about the case and if I needed any help with something"* (FG2/3). The students said they experienced security and openness with the supervisor, and the supervisor was available to them. One of the students told that *"It was a security when you are already unsure to know who you could go with"* (FG2/1). One of the students had a different experience than the other students, as the supervisor told her at the beginning of the practice studies that the supervisor did not want anything to do with the case. She was not one of those who had been working on leading-edge cases. The supervisor did not want to involve herself because she thought it was a task for the student and the teacher. The supervisor also thought that the case took more time and attention than needed, and she wanted more focus on practical tasks. Despite this, the student felt that the case was very educational, and she learned a great deal working on it, although she did not receive much leadership on the case from the supervisor.

Collaboration between nursing students and supervisors was important, and it was necessary for the students to feel free to reflect and voice their opinions. In this way, it was easier for the students to achieve the

learning outcomes in practice studies and ultimately become good professional nurses.

Collaboration between nursing students and teacher

Several students stated that the teacher was not very involved in the practice studies compared to prior practice studies. Despite this, several of the students said that it was easy to call or e-mail the teacher for some supervision if they needed it if they had any problems. One of the students said, *“It turned out that if you had questions about the case, then you asked the supervisor who had prepared the case, while earlier you contacted the teacher if there was something you were wondering about because the supervisors had, in a way, nothing to do with it before. So now it was a bit like that. The teacher came to a conversation in a routine way then. It was not talked about how the practice was, but how the case had been solved”* (FG1/4). The students said they wanted the teacher to be more prepared and have more insight into the actual case the students were working on, as well as to have a greater focus on the learning outcomes in the practice studies. The teacher was accessible to the students but could have been more involved in the students’ work, especially in terms of the reflection portions and the practice studies’ learning outcomes. Another student also said, *“We actually had more relationship with the supervisor than the teacher in this practice period. Well, I received an e-mail where she wondered how it was going and hoped everything was well in practice”* (FG1/3). Another student also commented that *“In fact, I think it was less stressful, because when the teacher comes, it is a bit like performance anxiety. Even if you have done what you were supposed to do in practice then, it will be a bit like that, yes when the teacher suddenly appears you get a little scared then”* (FG2/2). Several of the students noted that one of the positive things with a less involved teacher was that this strengthened their relationship with the supervisor. Some students said that if the supervisor relationship did not work, they would make a greater effort to involve the teacher. The students said they had confidence in the teacher, and they knew for certain that the teacher would be there if they needed her. One of the students told that: *“It can be good to have a teacher to ask if there have been any problems or something. Then I think it is very good that the teacher can be part of that conversation”* (FG1/1).

The collaboration between the nursing students and the teacher was important despite less contact with the teacher. Having confidence in the teacher was especially important.

Discussion

This study focused on exploring how the guidance model affected students’ learning situations in practice studies in specialised health care. Nursing students practise reflecting on their own actions concerning the learning outcomes in practice studies to become competent nurses. This is according to the [Ministry of Education and Research \(2008\)](#), which emphasizes the development of knowledge and the understanding of theory and practice. Several of the students in our study stated that they spent more time reflecting on one case, which may improve in-depth learning. According to [Kolb \(1984\)](#), reflection is key for students’ development into professional nurses. Students experience a situation and subsequently reflect on their experiences, making it easier to structure and formalize learning ([Kolb, 1984](#)). The students in the described study reflected about the patient case and reflected about their experiences both orally and during the written assignment. As reflection is an effective method for dealing with various issues, reflections on what and how to learn more about the patients can serve as a didactic tool in nursing education and improve in-depth learning ([Kolb, 1984](#)). Students indicated that it was generally easier to reflect on situations after they had written about the patient and experienced it in the practice studies. According to research, different preparation and support types are fundamental in practice studies ([Andersson, 2015](#); [Bennet & McGowan, 2014](#)), and reflection is one of the preparations. [Kolb \(1984\)](#) sees this as students learning to structure and generalize

the learning outcomes from their experience. This could also be a way for students to feel a sense of autonomy in the learning process.

This study also shows that reflection on the case was necessary for the students to improve their understanding of the patients and perform good nursing actions. [Schön \(1987, 2001\)](#) views reflection as a process in which professionals develop their competence in the face of complex and unpredictable practices when dealing with complex and unforeseen situations. This may indicate that nursing students are training both their theoretical and practical skills in practice studies and that they experience a constant alternation between theory at university and the challenges they face in the practice studies. Nursing students’ previous reflections and challenges help influence the nursing they practise ([Helberget et al., 2020](#)).

Our study showed that it is important for students to have a relationship and collaborate with their supervisor. Students feel free to reflect when there is a relationship characterized by openness in communication. In our study, the supervisors had more responsibility in evaluating the students, and they had the main responsibility for the final evaluation of the students. The students noted that if the dialogue between them and their supervisor was good, it was easier to learn more in practice studies. Previous research shows that the supervisor must be visible and play an important role in the student’s learning process ([Jonsén et al., 2013](#); [Kristofferson et al., 2012](#); [Walker et al., 2012](#)). The dialogue must be respectful to help students learn as much as possible in practice studies. Research also shows that the nursing student and supervisor’s relationship is fundamental to learning in practice studies ([Caldwell & Grobbel, 2013](#)). One of the students in our study said that her supervisor did not want to involve herself in the case the student wrote about. This may indicate that the supervisor felt she had certain responsibilities to the students that she might not be ready for. It can present some challenges for supervisors, as the increased responsibility in evaluating students can also place pressure on nurses such that they experience a “responsibility flood” ([Olsvold, 2010](#)). Previous research also shows that if the supervisor does not receive enough training and support, there is a risk that the supervisor is not able to help the student reflect satisfactorily ([Hilli, 2012](#)) and can feel unprepared in their role as a supervisor ([McClure & Black, 2013](#)). This may indicate that it is necessary for the teacher to be available to control the situation and support the supervisor.

Several practice models can be used in practice studies for nursing students. [Lauvås and Handal \(2014\)](#) refer to a supervision model characterized by a “master-apprentice”. Another model other than ours is the model of strengthening supervision in practice (SVIP). The SVIP model consists of guidance on two levels: 1) the supervisor’s supervision of nursing students and 2) the teacher’s supervision of the supervisor.

The SVIP model can ensure the quality of internships by strengthening internship supervisors’ role and developing professional and pedagogical collaboration between the internship and the university. The model means that the internship supervisors receive supervision from employees at the university in three sessions during the student’s internship period. The three meetings take place in advance of the student’s expectations and at the midterm and final evaluation. The meetings are attended by supervisors who have students in the same or similar units. Groups of between four and seven supervisors receive guidance on their supervision. Here, they can ask questions and reflect together with the teacher about the students’ learning in practice and how they can prepare for the next evaluation with the students. The teacher meets the students before they go out to the practice study and in reflection groups during the practice study, guiding them on compulsory work requirements. In sum, this means that the supervisors will have a greater responsibility for supervising the students on the learning outcomes, as well as for evaluation, but this is done in consultation with the teachers and based on the supervision they have ([Bogsti et al., 2013](#); [Bogsti, Nordhagen & Struksnes, 2019](#)).

The differences between the practice model in our study and the SVIP model are that supervisors prepared the patient cases in our study.

In the SVIP model the teacher is not present at any evaluation but receives guidance for taking the responsibility in the evaluation process by the teacher. In our study the teacher was involved in the midterm evaluation, but not in the final evaluation and the supervisors did not receive any guidance for taking care of the final evaluation. The teacher was easy to ask if there were any troubles. We find it interesting to use a combination of the SVIP model and our model for guidance in practice studies with casework as a work requirement. This can be a good working model in practice studies for nursing students. According to the learning outcomes in practice study it is a useful way of learning to solve the patient case and the students learn to be independent as a prospective nurse. Also, the supervisors can find the model motivated because they get more responsibility for the students in practice. According to Tang and Chan (2019) clinical learning is an integral element of nursing studies and a good clinical teaching is necessary.

This study shows that collaboration between the nursing student and the teacher is important despite having less contact in this practice study, especially for having confidence in the teacher. Previous research shows that the teacher-student relationship is crucial, and it is important for students to experience trust and confidence with teachers to achieve learning outcomes (Chan, Tong & Henderson, 2017). In our study, the students had less contact with the teacher, although they felt they could call or e-mail the teacher whenever they wanted. A teacher is still an important person for the students according to coordinating the practice studies, but the supervisor's role is growing and will become even more essential. Research also shows that students' supervisors are key in practical studies for learning in practice and achieving learning outcomes (Kristoffersson et al., 2012; Walker et al., 2012). This indicates that both the teacher and the supervisor are important for the students in learning as much as possible in practice studies. Both the supervisor and the teacher have an important job with uniting theory and practice studies. The supervisor takes up more and more space in the learning situations in practice for the students, and it is necessary for the supervisors to have enough knowledge and feel of responsibility for the students. Furthermore, the students will become reflected and responsible nurses in the future.

Limitations

There were two focus group interviews with nursing students in this study. The groups were small. However, the informants had lively discussions. Some of the informants were more active than others which might be a limitation. The project periods were limited to only two practice periods therefore the data material is small. Despite this, the findings in the study is transferable to other practice situations.

Conclusion

The major findings indicate that working with one patient case during practice studies helps students achieve an overall understanding and learning outcomes in their practice studies. It could also be relevant for the supervisor and the teacher to help the student see the learning outcomes easier and achieve in-depth learning in practice studies. Collaboration between nursing students and supervisors should be maintained more, and it is essential for students to be able to safely reflect and voice their opinions. In this way, it could be easier for students to achieve learning outcomes in practice studies and ultimately become good professional nurses. The supervisors could also get more responsibility for the students which might lead to more satisfied students in practice. More research is needed on this topic from the perspectives of both supervisors and teachers.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.ijedro.2021.100060.

References

- Anderson, N. (2015). *När vårdande och lärande sammanfaller - Patienters, studenters och handledares erfarenheter av möten på en utbildningsvårdavdelning inom psykiatrisk vård. (When care and learning coincide - Patients, students and supervisors' experiences of meetings in an educational care department in psychiatry care).*
- Anvik, V., & Westvig, L. (2005). Praksis som læringsarena: Situert læringsformer i et samarbeidsprosjekt. (Practice as a learning arena: Situated forms of learning in a collaborative project). Høgskolen i Bodø, HBO-rapport 3.
- Bagheri, M., Taleghani, F., Abazari, P., & Yousefi, A. (2019). Triggers for reflection in undergraduate clinical nursing education: A qualitative descriptive study. *Nurse Education Today*, 75, 35–40. [10.1016/j.nedt.2018.12.013](https://doi.org/10.1016/j.nedt.2018.12.013).
- Bengtsson, M., Kvarnahl, J., & Svedberg, P. (2011). Svenska sjuksköterskors upplevelser av handledningsprocessen vid sjuksköterskestudenters verksamhetsförlagda utbildning. (Swedish nurses' experiences of the supervision of nursing students in clinical practice). *Nordic Journal of Nursing Research/Vård i Norden*, 31(4), 47–51 <https://doi.org/10.1177%2F010740831103100410>.
- Bennet, M., & McGowan, B. (2014). Assessment matters-mentors need support in their role. *British Journal of Nursing*, 23(9), 454–458. [10.12968/bjon.2014.23.9.454](https://doi.org/10.12968/bjon.2014.23.9.454).
- Bjerkvik, L. K., & Hilli, Y. (2019). Reflective writing in undergraduate clinical nursing education: A literature review. *Nurse Education in Practice*, 35, 32–41. [10.1016/j.nepr.2018.11.013](https://doi.org/10.1016/j.nepr.2018.11.013).
- Bjerkvold, M. P., Sørli, K., & Myhren, A. B. (2003). Alternativ praksismodell for sykepleiestudenter. (Alternative practice model for nursing students). *Sykepleien*, 91(17), 39–42.
- Bogsti, W. B., Nordhagen, S. S., & Struksnes, S. (2019). Kan SVIP-modellen bidra til å styrke vurderingskompetanse hos praksisveiledere? (Can the SVIP-model contribute to strengthening assessment competence among practice supervisors?). In B. Christiansen, K. T. Jensen, & K. Larsen (Eds.), *Vurdering av kompetanse i praksisstudier – en vitenskapelig antologi. (Assessment of competence in practical studies – a scientific anthology.* Oslo: Gyldendal Norsk Forlag AS.
- Bogsti, W. B., Solvik, E., Engeli, R. I., Moen, Ø. L., Nordhagen, S. S., Struksnes, S., et al. (2013). Styrket veiledning i sykepleierutdanningens praksisperioder. (Strengthened supervision during clinical practice in nursing education (SVIP)). *Nordic Journal of Nursing Research/Vård i Norden*, 33(1), 56–60 <https://doi.org/10.1177%2F010740831303300112>.
- Caldwell, L., & Grobbel, C. C. (2013). The importance of reflective practice in nursing. *International Journal of Caring Sciences*, 6(3), 319–326. <http://www.internationaljournalofcaringsciences.org/docs/4.%20us%20La.Caldwell.pdf>.
- Chan, Z. C. Y. (2013). A systematic review of critical thinking in nursing education. *Nurse Education Today*, 33(3), 236–240. [10.1016/j.nedt.2013.01.007](https://doi.org/10.1016/j.nedt.2013.01.007).
- Chan, Z. C. Y., Tong, C. W., & Henderson, S. (2017). Power dynamics in the student-teacher relationship in clinical settings. *Nurse Education Today*, 49, 174–179. [10.1016/j.nedt.2016.11.026](https://doi.org/10.1016/j.nedt.2016.11.026).
- Chong, M. C. (2009). Is reflective practice a useful task for student nurses? *Asian Nursing Research*, 3(3), 111–120. [10.1016/S1976-1317\(09\)60022-0](https://doi.org/10.1016/S1976-1317(09)60022-0).
- Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches.* International student ed., los angeles (4.eds.). Calif: SAGE.
- Dale, B., Leland, A., & Dale, J.G. (2013). What factors facilitate good learning experiences in clinical studies in nursing: bachelor students' perceptions. *international scholarly research notices* 2013, Article ID 628679, 7 pages. <https://doi.org/10.1155/2013/628679>
- Declaration of Helsinki. (2001). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *Bulletin of the World Health Organization: The International Journal of Public Health*, 79, 373.
- European Council (2005). European directive 2005/36/EC of the European parliament and the council of 7 September 2005 on the recognition of professional qualifications. Retrieved from (7.1.2021): <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32005L0036>
- Giorgi, A. (1985). *Sketch of a psychological phenomenological method. phenomenology and psychological research:ESseys.* Pittsburg, PA: Duquesne University Press.
- Gregersen, A.-. G. (2006). *Tospann i Utdanningspost ved Smedbakken sykehjem. (Team of two in education post at Smedbakken nursing home). Høgskolen i Østfold rapport 5.*
- Helberget, L., Frilund, M. L., & Molnes, S. I. (2020). Studentenes evne til å reflektere påvirker sykepleien de utøver. (Students' ability to reflect affects the nursing they practice). *Sykepleien*, 108(82259). [10.4220/Sykepleiens.2020.82259](https://doi.org/10.4220/Sykepleiens.2020.82259).
- Henderson, A., Cooke, M., Creedy, D. K., & Walker, R. (2012). Nursing students' perceptions of learning in practice environments: A review. *Nurse Education Today*, 32(3), 299–302. [10.1016/j.nedt.2011.03.010](https://doi.org/10.1016/j.nedt.2011.03.010).
- Jonsén, E., Melander, H.-. L., & Hilli, Y. (2013). Finnish and Swedish nursing students' experiences of their first clinical practice placement. *Nurse Education Today*, 33(3), 297–302. [10.1016/j.nedt.2012.06.012](https://doi.org/10.1016/j.nedt.2012.06.012).

- Karimi, S., Haghani, F., Yamani, N., & Kalyani, M. N. (2017). A qualitative inquiry into nursing students' experience of facilitating reflection in clinical setting. *The Scientific World Journal*, 7 pages <https://doi.org/10.1155/2017/6293878>.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Kristofferson, M.-L., Mårtensson, G., Mamhidir, A.-G., & Löfmark, A. (2012). Nursing students' perceptions of clinical supervision: The contributions of preceptors, head preceptors and clinical lecturers. *Nurse Education Today*, 33(10), 1252–1257. [10.1016/j.nedt.2012.08.017](https://doi.org/10.1016/j.nedt.2012.08.017).
- Kvale, S., & Brinkmann, S. (2015). *Interviews: Learning the craft of qualitative research interviewing* (3.eds.). Thousand Oaks, CA: Sage Publications.
- Lauvås, P., & Handal, G. (2014). *Veiledning og praktisk yrkesteori. (Guidance and practical vocational theory)* (3 Ed.). Oslo: Cappelen Damm akademisk.
- Lundestad, R., & Oddvang, T.K. (2007). Du må være på hugget som sykepleiestudent for å lære i praksis. En ny modell for veiledning i sykehuspraksis. (You must be on the cutting edge as a nursing student to learn in practice. A new model for guidance in hospital practice). *Nordisk tidsskrift for Helseforskning*, 2.
- Malterud, K. (2017). *Kvalitative forskningsmetoder for medisin og helsefag. (Qualitative research methods for medicine and health sciences)* (4 Ed.). Oslo: Universitetsforlaget.
- McClure, E., & Black, L. (2013). The role of the clinical preceptor: An integrative literature review. *Journal of Nursing Education*, 52(6), 335–341. [10.3928/01484834-20130430-02](https://doi.org/10.3928/01484834-20130430-02).
- Melender, H. L., Jonsén, E., & Hilli, Y. (2014). Quality of clinical education – A three-year follow-up among undergraduate nursing students in Finland and Sweden. *Asia-Pacific Journal of Cooperative Education*, 15(4), 305–319. https://www.ijwil.org/files/APJCE_15_4_305_319.pdf.
- Ministry of Education and Research. (2001). St.meld. nr. 27 (2000-2001). Gjør din plikt krev din rett. Kvalitetsreform av høyere utdanning. (Do your duty, demand your right. *Quality reform of higher education*). Oslo: Kunnskapsdepartementet (Ministry of Education and Research) <https://www.regjeringen.no/contentassets/eebf61fb4a204feb84e33355f30ad1a1/no/pdfa/stm200020010027000dddpdfa.pdf>.
- Ministry of Education and Research. (2008). *Rammeplan for sykepleierutdanning. (Curriculum for nursing education)*. Oslo: Kunnskapsdepartementet (Ministry of Education and Research) https://www.regjeringen.no/globalassets/upload/kd/vedlegg/uh/rammeplaner/helse/rammeplan_sykepleierutdanning_08.pdf.
- Ministry of Education and Research. (2012). *Meld. st. 13 (2011-2012). Utdanning for velferd. Samspill i praksis. (Education for welfare. Interaction in practice)*. Oslo: Kunnskapsdepartementet (Ministry of Education and Research) <https://www.regjeringen.no/contentassets/ac91ff2dedee43e1be825fb097d9aa22/no/pdfs/stm201120120013000dddpdfa.pdf>.
- Olsvold, N. (2010). *Ansvar og yrkesrolle. Om den sosiale organiseringen av ansvar i sykehus. (Responsibility and professional role. About the social organization of responsibility in hospitals). doktoravhandling. Universitetet i Oslo, Institutt for helse og samfunn*.
- Papathanasiou, I. V., Tsaras, K., & Sarafis, P. (2014). Views and perceptions of nursing students on their clinical learning environment: Teaching and learning. *Nurse Education Today*, 34(1), 57–60. [10.1016/j.nedt.2013.02.007](https://doi.org/10.1016/j.nedt.2013.02.007).
- Sandvik, A. H., Melender, H. L., Jonsén, E., Jönsson, G., Salmu, M., & Hilli, Y. (2012). Sjuksköterskestudenters erfarenheter av sin första kliniska utbildningsperiod: En nordisk kvantitativ studie. (Nursing students' experiences of their first clinical education period: A Nordic quantitative study). *Nordic Journal of Nursing Research/Vård i Norden*, 32(3), 20–25 <https://doi.org/10.1177%2F010740831203200305>.
- Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass Inc., Publication.
- Schön, D. A. (2001). *Den reflekterende praktiker. Hvordan profesjonelle tenker når de arbeider. (The reflective practitioner. How professionals think when they work)*. Randers: Forlaget Klim.
- Sweet, L., Bass, J., Sidebotham, M., Fenwick, J., & Graham, K. (2019). Developing reflective capacities in midwifery students: Enhancing learning through reflective writing. *Women and Birth*, 32, 119–126. [10.1016/j.wombi.2018.06.004](https://doi.org/10.1016/j.wombi.2018.06.004).
- Tang, F. W. K., & Chan, A. W. K. (2019). Learning experience of nursing students in a clinical partnership model: An exploratory qualitative analysis. *Nurse Education Today*, 75, 6–12. [10.1016/j.nedt.2019.01.003](https://doi.org/10.1016/j.nedt.2019.01.003).
- The Norwegian Association of Higher Education Institutions (2016). *Kvalitet i praksisstudiene i helse- og sosialfaglig høyere utdanning: Praksisprosjektet. (Quality in the practical studies in health and social sciences higher education: The internship project)*. <https://www.regjeringen.no/contentassets/86921ebe6f4c45d9a2f67fda3e6eae08/praksisprosjektet-sluttrapport.pdf>
- Walker, S., Dwyer, T., Moxham, L., Broadbent, M., & Sander, T. (2012). Facilitator versus preceptor: Which offers the best support to undergraduate nursing students? *Nurse Education Today*, 33(5), 530–535. [10.1016/j.nedt.2011.12.005](https://doi.org/10.1016/j.nedt.2011.12.005).