



Advantages and disadvantages of module practice model - a Literature Review

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Abstract

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The constant monitoring of quality, effectiveness and cost of health care has led hospitals to continuously develop their services. The pressure of producing cost-effective and quality services has also affected nursing students' clinical practices in the form of a different type of a practice model - a module practice model.

The module practice model is relatively new in Finland and there have not been many studies published about the subject. Therefore, the purpose of this thesis was to summarize the findings - the advantages and disadvantages of module practice - presented in recently published studies. The aim is to increase knowledge of nursing students, teachers and placement supervisors regarding module practice, and to assist wards develop and assess their module practice model.

To acquire relevant data, this literature review utilized trusted online databases such as Google Scholar, ProQuest and Theseus. The data was evaluated using content analysis, which resulted in to five research studies that fulfilled the inclusion criteria.

This literature review concludes that while there are several advantages and disadvantages to the module practice method, the consensus among nursing students and placement supervisors is that the practice method is well received and beneficial for the students' professional development.

More studies are required to further develop the module practice model in Finland.

Keywords: nursing studies, clinical practice, module practice model, student-nurse practice model

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1 Introduction

According to Ministry of Social Affairs and Health (2019), health care services are constantly monitored for their quality, effectiveness, and cost. This has led to a need for hospitals to continuously develop their services to ensure effective treatment without sacrificing quality while keeping the expenses low (Carrol N. & Lord J, 2016). This development has also affected nursing students' clinical practices, as the hospitals and wards try to be more efficient in the use of their personnel. In clinical practice, a student has previously been under one or several professional nurses' supervision, this type of practice model will be referred to as a student-nurse model in this thesis (Manninen, 2014). Luostarinen-Lindgren (2019) states in her study, that these days there has been a shift to a different type of clinical practice model, in which a group of students share a single professional nurse as their supervisor - a module practice model.

One way to improve the skills and knowledge of nursing students is to improve the guidance methods used in hospitals. Module practice model was first used in Sweden at Karolinska Institutet and has then later been brought here in Finland and adopted to several Finnish hospitals (Manninen 2014; Rahm & Vikström 2015.) The authors are going to describe the advantages and disadvantages of module practice model based on recent literature.

Interest in this topic grew after witnessing the implementation of module practice model within a surgical ward. We, the authors, wanted to increase our knowledge about the module practice model and its advantages and disadvantages for nursing students and wards. Some information had already been received through feedback from fellow students and reading a few articles regarding the module model, but neither of the authors had self been in this type of practice before, so we decided to search information about the topic and focused on the advantages and disadvantages.

We consider this topic to be very important and timely as the health care industry is constantly changing and the hospitals and wards are under constant pressure to be more efficient (Carrol N. et al. 2016). In addition, health care services in Finland are in desperate need of workers as the older nurses near retirement age (Helsingin

Sanomat, 2019). Review of nursing practice placements in Jobiili reveals that most of the surgical placements accept between one to three nursing students at a time, whereas the placements that utilize the module practice model can take up to seven students at once. The practice model would allow less personnel to be tied for the supervision of a group of students than if they all came individually.

The purpose of this thesis is to summarize findings from recently published studies regarding module practice into an easy-to-read information package for nursing students and teachers alike. The focus has been on what advantages and disadvantages the module practice model has. Module practice model is still new so students are going in with a blindfold which might hinder their learning, this thesis hopes to explain what students can wait from their practice.

2 Theoretical framework

Key concepts of this thesis include nursing students, clinical practice, student-nurse and module practice models. They are further defined in the following chapter.

2.1 Nursing studies & Clinical practice

According to Eriksson et al. (2015) the Finnish nursing program consists of 210 credits and approximately 85 credits of those will have to be completed in clinical practices within different fields of the health care sector such as in elderly care or in hospital wards with different surgical specialties. The clinical practices are usually several weeks long, and their purpose is to further enhance student's learning of key concepts, which include both theoretical knowledge and hands-on skills and combining those together when taking care of patients. In the placement, the students work under one or several professional nurses' supervision (Manninen 2014.)

The nursing education is based on the European Parliament and the Council professional qualifications directive (2013/55/EU), where it is written the minimum requirements for nursing professionals. The directive defines the requirements for nurse in charge of general care is 180 credits. In Finland, the required credits are 210, which means, that the Finnish nursing program is 30 credits wider than required

(Eriksson, Korhonen, Merasto et al, 2015). The clinical practices play an important factor for nursing students in the road to becoming professionals (Manninen 2014).

Nurses are required to possess multiple skills to be able to take care of patients. Those skills include, for example, being able to work in a multi-professional team, which can include professionals from doctors, physiotherapist, nutrition therapist and other nursing specialties. Patient orientated care, combining the theory with clinical skills, leading own work, guidance skills, progressive care of the patient, considering ethical dilemmas and problem-solving skills are just the skills nurses require to be able to work at the ward. Nurses need to also understand the patient and treatment laws the country has. According to Eriksson et al. (2015) nurses should always be ready to justify their doings with evidence-based information. To achieve these skills, nursing students are required to practice in the wards together with experienced nurses who supervise students' work by guiding them in the ward and showing how things are done. The practical application of the learned theoretical knowledge takes place in practices (Eriksson et al. 2015.)

Fukada (2018) explains the word "clinical" in nursing means practical patient centered work. Clinical skills are one of the corner stones of nursing profession and thus these skills need to be practiced repeatedly until those skills come from the backbone.

Clinical skills are a big picture, which includes a combination of theoretical knowledge, hands-on skills, emotional skills, and experience gathered from using said skills. Developing individual skills means that the person must acknowledge their own skills and areas that need improvement. Nurses should improve their own professional knowledge and skills when there is a possibility to do so (Selkänaho, Sulonen & Timlin 2017, 8).

2.2 Student-nurse practice model

Student guidance has been changing and evolving through years. Since the care time has been lowering with new and improved methods of treatment and new equipment to do an operation, the time needed to stay in hospital is shorter than it was years ago. This builds pressure and nursing students and their supervisor on how to guide

them properly so that they would be ready when graduated (Grahn, Pulkkinen & Vehviläinen 2015). Student-nurse model has been used for many years and it has proven to be a sufficient model to guide and teach nursing students while at clinical practice. The connection between the student and graduated nurse needs to be strong so that the supervisor nurse does not have to be afraid for the patient and allows student to learn by doing (Grahn et al. 2015).

Students going for their placements are still incompetent in the field and are not ready to take full responsibility of their work. Therefore, it is important that every student should be given a competent and experienced supervisor that is responsible of the end-result. When a student starts their placement, they are always assigned a supervisor at workplace and a supervisor from school. And together, these three people; the student, the supervisor, and the teacher, work as a team. This allows the student's placement experience and learning to be successful (Leppiniemi 2018).

Helgesen et al. (2016) mentions that the preparedness of the student before a placement starts, and the guidance received during the placement are essential factors that contribute in a major way in making the placement a positive experience for the students.

The workplace supervisor is supposed to guide the student to apply the learnt theoretical knowledge in real life situations. Different work tasks, rules, policies, etc. are taught to the student by telling and showing, and letting the student try on their own. A good supervisor is approachable and will support, encourage, and motivate the student and their professional development (Diak, 2020).

Student-nurse model is an old-fashioned model. The student learns the supervisor's ways of doing different tasks and does not think about own professionalism. The student can learn as much as the supervisor allows him or her to do. It has been often seen as narrow-minded way of guiding future nurses since the students does learn by mimicking the supervisor. Of course, the constant presence of the supervisor is reassuring for the student since the supervisor can tell if the student is doing something in the wrong way. Nature of the ward is in the key possession while choosing the right guidance method (Grahn et al. 2015; Helgesen et al. 2016; Leppiniemi, 2018).

Feedback is given, after every clinical practice by the students in the form of a questionnaire in the HUS area, this questionnaire is called CLES. Students are asked basic

questions like how happy they were for the guidance, what they would want more from the practice and on what level do they think the supervisor's guidance is. From these answers the nurses responsible of the student guidance make improvements so that future nurses have the best possible guidance in practice (Grahn et al. 2015).

2.3 Module practice model

In module practice the student takes more responsibility of the care of the patient. The role of student is there, but the student is no more a sole partner of an experienced nurse. This type of change challenges the student to think more, take more responsibility, students reflections skills get better, and their team-work skills increases. Also, students learn to share their knowledge with other students and their decision-making skills get better since they need to think and make decision for their patients care (Manninen, 2014).

In module practice the nursing students form their own group at the workplace. They work as individuals, but as a part of a team, by taking care of selected patients under one nurse's supervision (Manninen, 2014). This model allows the students to take more responsibility in the patients' treatment compared to the traditional model where a student works as a pair with his or her supervisor. According to Manninen (2014) the goal of this is to increase the students' team working, reflection and decision-making skills, as well as encourage the students to work as individuals. By working together, students train their problem-solving skills and since it is possible that the group can have students from different backgrounds and previous experiences, the more experienced students can mentor the less experienced ones if they have the skills and knowledge to do so (Koota, Kukkonen & Suikala 2016).

This type of practice model increases the learning opportunities as students interact more frequently with patients by themselves, their coworkers, and supervisor and with other students. Students can share their own knowledge and skills with each other and enhance their learning, as it is easier to listen and learn when the information and skills come from the students' peers and not from an authority, such as professional nurses or supervisors (Ojala, Manninen & Öhlberg, 2015).

Module type of practice has been used in a few hospitals in Finland. It was first introduced by a joint effort by Diakonia University of applied sciences and HUS Meilahti

hospital infection disease ward in 2014. Later in 2015, module practice was taken in at Jorvi hospital as well and Peijas and other hospitals around Finland followed thereafter (Rahm & Vikström, 2015). Module practice is a relatively new method to support students' learning during clinical practices. It was first implemented in a Swedish hospital, Karolinska Institutet, in 2005 (Manninen, 2014).

The thought behind the model is that the supervisor is more like a mentor or coach from whom you ask the permission to do something or make sure you are doing it correctly. Supervisor forces the students to evolve by not giving them the answer on a silver plate. Students have their own named supervisor or supervisors who will give them their final feedback and evaluation, but since nurses are required to cope with changing environment and situation, their shift supervisor might change day to day. It is important to get feedback daily so that the students know what there is to improve and what the next supervisor can do to help the students to improve in said skill or knowledge gap. The supervisor makes the student reflect on what areas they are good at and what areas they need to improve by asking them and not just giving them the answer. This forces the student to think more rational about their practice and learning (Ojala et al. 2015).

What module practice does not change is the personal learning outcomes that the student must do during the first week of the practice. Student will think about the practice and the environment and form their learning outcomes based on the ward and the year they are on at that point. The supervisor at the practice place can help the student to form the best possible outcomes which they see fit and the student is capable to learn or to achieve in the weeks of practice. During the middle of the practice, the student and the supervisor will talk about the progress and together think ways to achieve the missing wanted outcomes within time. Teacher from school can also participate in this conversation if needed or wanted. During the last week of practice, student will reflect the whole practice and then think about his or hers learning outcomes which she or he made during the first week and self-reflect if he or she got them all and which areas he or she needs to improve during the next practice (Ojala et al. 2015; Manninen, 2014).

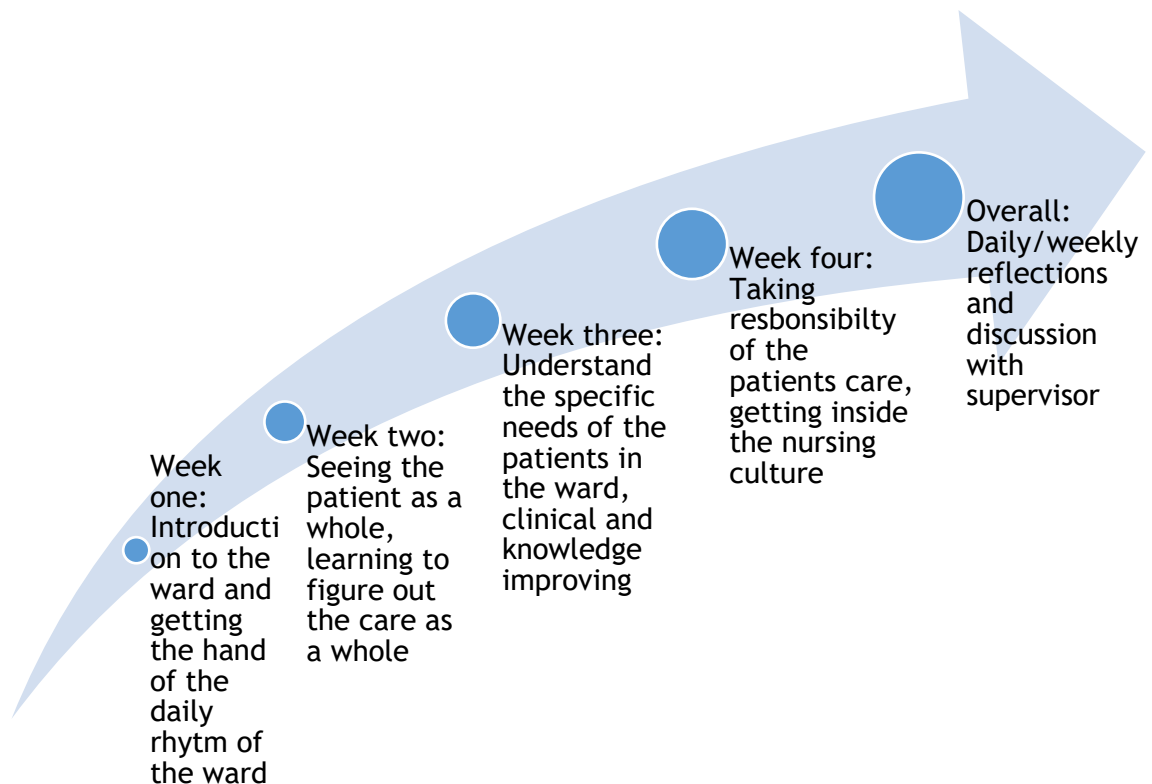


Figure 1: Outcomes of the module practice (In accordance with Ojala et al, 2016)

General learning outcomes (figure 1) is for a practice that is four weeks long. The longer the practice, more specific the outcomes should be and both clinical and knowledge skills should improve. Outcomes are not just learnt during a specific week; they will go on top of each other or happen in different times (Ojala et al. 2016.) Usually, the practice starts by a ward tour where the supervisor nurse walks the students thorough the ward and explain the patient cases the ward normally has and where everything can be found. During the second week, students will take more responsibility in the care of the patient and start discussion the treatment plan in the group and with the supervisor. This leads to improved critical thinking and team-working skills (Ojala et al. 2016).

By week three students have learned to take care of the patient and during this week they should start to think more of the possible risk-factors the patient might have, problems occurred during their stay at the ward and on the clinical test and outcomes which have been done to the patient. By week four, students should handle from daily care of the patient and start focus more on the medication side as well so

that they learn about the medications their patient have, why he has them and what the contraindications might be with other drugs (Ojala et al. 2016).

Katri Manninen, clinical lecturer, has been studying student guidance and has been developing the module model at the Karolinska Institutet in Stockholm. It has been used over ten years there and the feedback from the students who are working and practicing at that hospital are more than happy for the model (Manninen 2014; Ojala et al, 2016.) The model focuses on students and improving their skills and knowledge through giving them more responsibility and sharing the knowledge with others. Students have the possibility to learn by doing themselves and not just by seeing it be done by someone else, they also learn to work inside multi-professional team (Manninen 2014; Ojala et al. 2016).

3 Purpose & Aim

The purpose of this thesis is to summarize findings of recently published studies regarding the advantages and disadvantages of module practice and produce an easy-to-read information package. By doing this the students might have a better understanding of the module practice and it might get easier for them to utilize it better from the start.

This thesis aims to increase knowledge of nursing students, nursing teachers as well as placement supervisors regarding module practice. In addition, the aim is to produce an informative summary of recently published studies concerning module practice that can be used to assess and develop the practice model within a ward and increase awareness of this practice model in the health care sector.

Research question:

- 1) What are the advantages and disadvantages of module practice model?

4 Research Methods

The form of the thesis is a descriptive literature review. In this thesis we answer our research question “What are the advantages and disadvantages of module practice model”.

Content analysis was used to evaluate acquired data from trusted online databases such as ProQuest, Google Scholar, CINAHL and Theseus.fi. The analysis led to five research studies that fulfilled the inclusion criteria.

4.1 Literature Review

This thesis was carried out by using descriptive literature review as a research method. The goal of using literature review is to provide answers to specific questions for the target audience.

According to University of Arizona (2021), a literature review is a survey of published theoretical information regarding a particular subject. It can be a summary of chosen sources or a critical review of the literature surrounding the chosen topic, where the goal is to provide new perspective to the topic by combining older and more recently published research, finding gaps in the information, and assessing the publications' contribution to the topic (University of North Carolina, 2021 & Oxbridge Essays, 2018).

Conducting a literature review begins with establishing the rationale for the work; what makes it important and relevant for the target audience or chosen field. After this is done and the key issues and challenges have been identified begins the development of research questions, aim and specific objectives the work plans to address. (Smith, J. and Noble, H. 2016).

The actual search for literature begins with developing clear inclusion and exclusion criteria based on the aim and objectives of the review, for example patient groups and diseases. The search continues with justifying the used databases and years of publication, formulating search terms, and developing search skills. (Smith, J. et al. 2016).

After selecting studies and publications based on the set criteria begins the evaluation process of the quality of the chosen material. This is a time-consuming process, but there are several tools that can be used to assess the chosen articles, such as Critical Appraisal Skills Programme (CASP). Depending on the type of the literature review, different ways of synthesizing the data may be used, such as meta-analysis for quantitative studies or meta-ethnography for qualitative studies. (Smith, J. et al. 2016).

4.2 Inclusion & Exclusion Criteria

Inclusion criteria for publications included age limit, publications must be written in the last seven years, publications must be evidence based and from trusted sources. The publications must cover module practice, module, and guidance. Exclusion criteria included texts over ten years, the topic does not cover module practice or module or is not from trusted sources. (Table 1).

Inclusion Criteria	Exclusion Criteria
Written between (2014-2021)	Written earlier than 2014
Evidence-based, whole text	Point of views based on subjective opinions, full text not available
Connection to the module practice model used in nursing placements	Other module like studies used
Peer reviewed and in English, Finnish or Swedish language	Not peer reviewed and in a language other than English, Finnish or Swedish
Relevant to the research questions formed	Irrelevant to the research question

Table 1: Inclusion & Exclusion Criteria for Data Collection

Database	Search words	Results	Based on criteria	Based on abstract	Based on full text
Theseus.fi	“Moduuliharjoittelu”	24	3	3	3
Google Scholar	“Opetusmoduuli” “moduuliohjaus”	94 7	4 2	2 1	1 0
ProQuest	“Clinical education ward” “Clinical education model”	69,920 395,830	500 250	10 5	0 1
CINAHL	“Student module”	367	30	0	0

Table 2: Databases and Search Outcomes

4.3 Data Search Process

As we started the information retrieval process, the data bases were chosen after listening to Laureas’ lecturer in information management of information retrieval. Search terms were chosen “moduuliharjoittelu”, “opetusmoduuli”, “moduuliohjaus”, “clinical education ward”, “clinical education model” and “student module”. Finnish search words were chosen for the thesis as well, since the authors’ main language is Finnish. There were different terms used in Finnish papers for the module practice model (Table 2).

Module practice model is still relatively new in Finnish hospitals and thus there have not been relevant studies performed much. Because of this the topic was modified to: What are the advantages and disadvantages of module practice model?

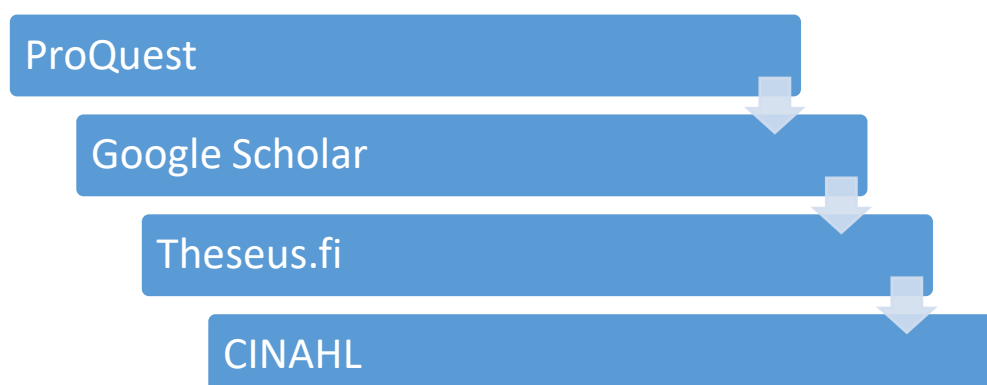


Figure 2: Data Bases Used

When searching information, both English and Finnish was used to widen search results. Inclusion and exclusion criteria are shown in table 1. Databases used include ProQuest, Google Scholar, Theseus.fi and CINAHL (figure 2).

The information retrieval was conducted as shown in figure 3. Search process started by going through the databases and reading headlines of the search results. After choosing the headlines, authors read the abstracts of chosen research. By analyzing the abstract, the authors got a clearer picture of the article and it was confirmed that the article would be suitable for use in the thesis. After abstracts, authors proceeded to read the whole paper and results of the studies. Research question was held closely in mind when reading studies, so that the focus would stay in the right path. Difficulties occurred when reading studies, since most of the studies did not answer the research questions, outcomes was that few studies answered the research question authors had made. Some problems occurred with translation from Finnish to English.

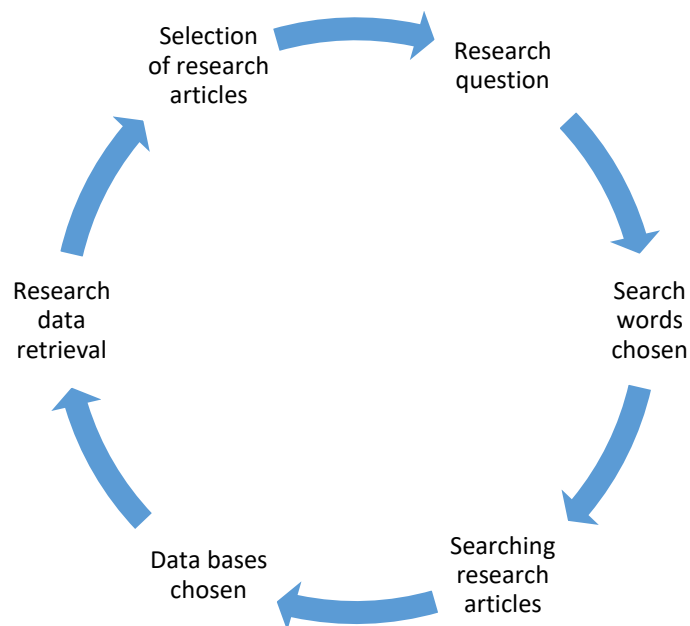


Figure 3: Path of information retrieval

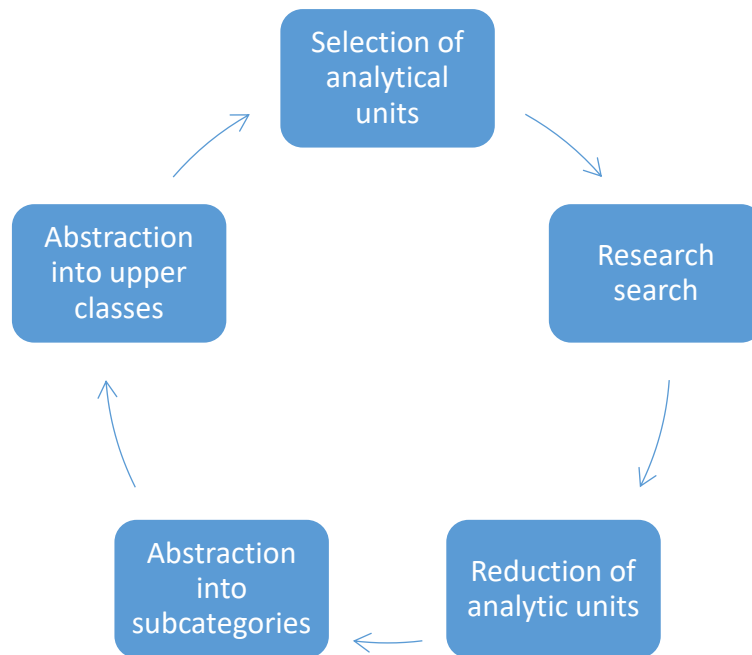


Figure 4: Qualitative content analysis

4.4 Qualitative content Analysis

Content analysis was chosen as the data analysis method since it is generally used in nursing and it is suitable technique for qualitative data (Elo & Kyngäs 2007). In literature review, data analysis is important due to the enormous amount of data the researchers are processing for their review. For this reason, the data was analyzed to be able to answer the research questions chosen for this thesis.

Content analysis is a technique, for analyzing visual, written, or verbal messages. It has been modified to be used as a method for analyzing documents, papers, and articles (Elo et al., 2007). Using this method, it was possible to make the acquired data into groups or categories, which share the same wordings or meaning. As Figure 4 shows the group forming progress and Figures 5 & 6 clearly explain the advantages and disadvantages for module practice model.

Content analysis can be used with quantitative and qualitative research method and it has been sub-categorized to inductive and deductive analysis. Inductive method is more frequently used when written knowledge or data cannot be found. Deductive content analysis is used when researcher wishes to test a theory (Elo et al. 2007).

Inductive method was more suitable for this thesis due to its ability to use concepts. The chosen articles were read, and then similar words were coded with same colors. After this it was possible to form groups which lead to generic categories. Generic categories were formed from the collected data. After forming the generic headlines, it was possible to name the main categories. With this method it was possible to move the literature review structurally forward. (Figure 5 & 6).

In Figure 5, the main category is “advantages of module practice”, upper-categories are “practice supporting learning and starting points supporting learning” and sub-categories include “peer learning, support from supervisors, teamwork, positive environment, orientation and taking into account individual skills of learning”.

In Figure 6, the main category is “disadvantages of module practice”, upper-categories are “practice hindering learning and starting points hindering learning”, and sub-categories include “big group of students, changing supervisor, lack of reflection, lack of orientation, environment not suitable and supervisors lack interest”.

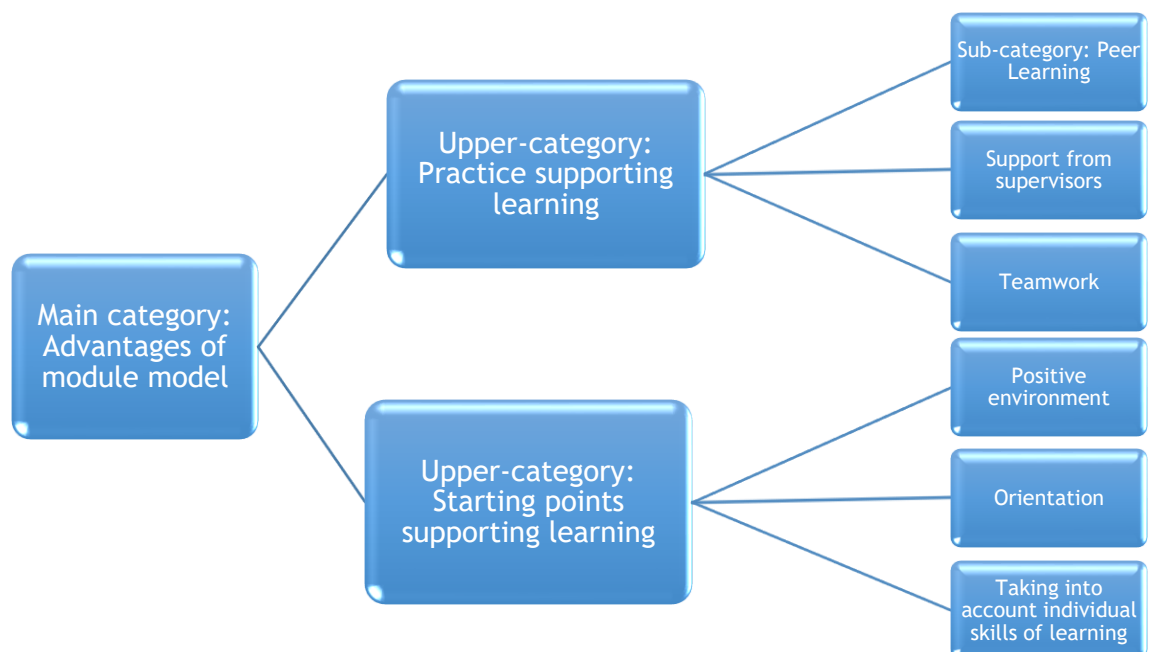


Figure 5: Advantages of Module practice

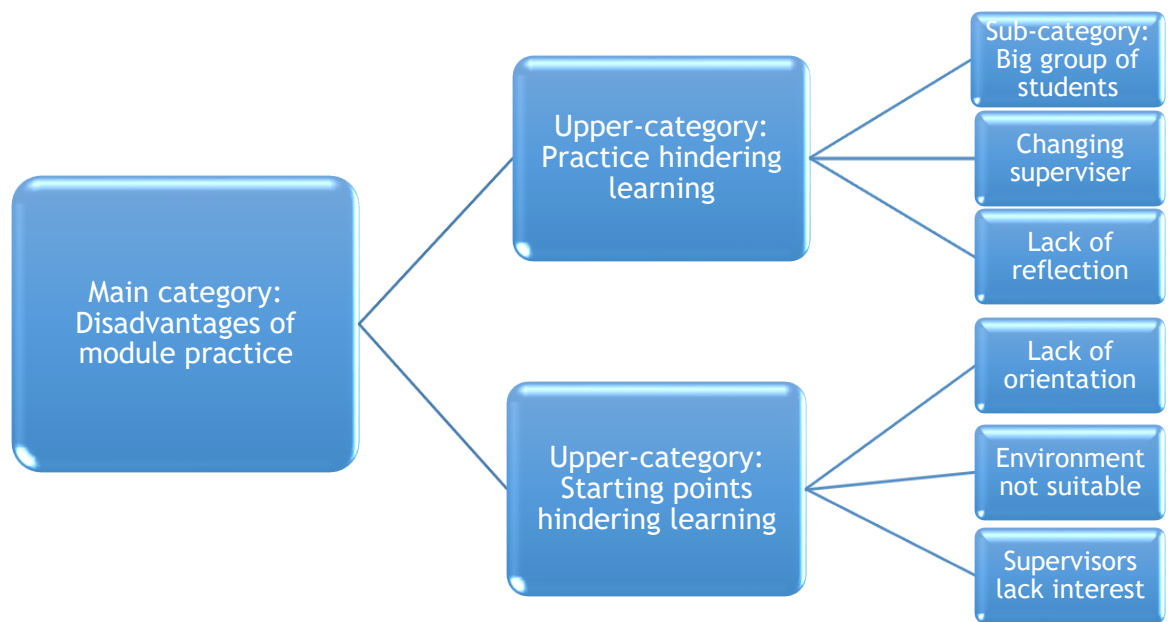


Figure 6: Disadvantages of module practice

5 Findings of the literature review

According to a study by Sirén & Bäcklund (2018), the module practice model has been overall well received among nursing students, however, it is not considered a deciding factor when choosing a clinical placement.

Studies found, five were chosen since those studies met the inclusion criteria and answered the research question to fullest. One paper was an international study, three University of Applied sciences thesis studies and one pro gradu -study. (Appendices 1.)

5.1 Advantages of module practice model

One of the biggest advantages the module practice model has over the student-nurse model is for the nursing students to work among their peers. Several recent studies, such as Kinnunen (2019) and Hintikka (2020) have highlighted that students feel that peer learning supports their professional development more than just following around their supervising nurse. Students also feel that some questions are easier to

process among themselves instead of discussing with their supervisor. According to Manninen (2014), this is especially true among first year nursing students, whereas last year nursing students might not benefit from peer learning as much.

Teamwork in general is considered to one of the better aspects of the module practice model. While the module is run as a group, the students still have their own patients whose treatment they are in-charge of. Being in-charge of a patient means that the nursing student also must work with a multi-professional team of doctors and physiotherapists as an example (Luostarinen-Lindgren 2019.)

According to Sirén & Bäcklund (2018) the students feel that the individual work and increased responsibilities promoted their professional growth. They also considered module practice to resemble more a professional nurse's workday compared to the student-nurse model.

Kinnunen (2019) also mentions in her work, that students felt that they received adequate support from their supervisors, and that the work between students, supervising teachers and supervising nurses worked seamlessly.

Studies also suggest that students have also been generally happy with a two-day introduction to the ward and the module practice model (Hintikka 2020), although they also feel that the introduction period should be spread out for a longer period to allow for all the new information be better absorbed. (Figure 5).

5.2 Disadvantages of module practice model

Peer learning was already mentioned to be one of the biggest advantages for module practice model, it does not however come without its disadvantages, as noted by Manninen (2014) and Luostarinen-Lindgren (2019) in their respective studies. While first year nursing students benefit from working among their peers, last year students and more experienced students see their peers as competition. According to Manninen (2014), this is largely due to the more experienced students' self-centeredness as opposed to being patient centered. This combined with their feeling of not belonging results into being uncertain about their work among their peers.

According to Sirén & Bäcklund (2018) and Hintikka (2020) one of the biggest weaknesses of module practice is the length of the practice combined with the fact that

the students are not given enough learning opportunities towards the end. The students are given one patient in the beginning and this continues throughout the whole practice, even when they feel that they could take in more responsibilities. This is considered very positive in the beginning of the practice, as there are lots of new things to learn but towards the end the students felt that their professional development stagnated.

Students and supervisors alike consider one supervisor to not be enough for the whole module, especially in the beginning of the practice. The students feel that their supervisor does not have enough time to answer all their questions and give proper guidance to them at the same time (Sirén & Bäcklund, 2018.) According to Kinnunen (2019), supervisors feel that the biggest issue is the number of students in the module and the workload of giving guidance to three or more students to be overwhelming. Some supervisors also feel that they have not received enough guidance to work as a supervisor in the module. Both studies and Hintikka (2020) also mention that the students and supervisors consider the module supervisor changing every shift to be a big issue for the continuity of the guidance.

Module practice requires a large space for its use and while there are different ways for wards to carry this out, they all have some negative aspects according to Sirén & Bäcklund (2018). In the study, the students mention office-like space to be well fitting for the module purposes, however, they feel that they are separated from the rest of the ward. On the other hand, a big open space in the ward creates a restless atmosphere and can potentially be harmful for patient data privacy. (Figure 6).

Advantages of module practice model	Disadvantages of module practice model
Larger groups, more students get their placements	Might highlight student's person in a negative way
Sharing knowledge with fellow students (skill sharing, book knowledge)	Not compatible for every hospital environment
Teamwork between students (support, help, communication)	Supervising nurses need more training to utilize module practice to the fullest

Multi-professional teamwork (different year nurses, physiotherapist).	Being isolated from other nurses in the ward (students' own area negative)
Reflection of own strengths and weaknesses	Difficult to give space to students
Self-confidence and responsibility are higher -> growing as a nurse is faster	Big group increases the workload of supervisors
Adequate support	Lack of challenges (towards the end of practice)
Responsibility	Supervising nurse changing in every shift (no continuity)

Table 3: Advantages and Disadvantages of module practice model

6 Discussion

6.1 Discussion of Results

The purpose of this thesis was to summarize findings of recently published studies regarding the advantages and disadvantages of module practice and produce an easy-to-read information package. The findings of this literature review are based on five studies that were thoroughly analyzed and met the inclusion criteria set in the beginning.

As the module practice model is relatively new in Finnish hospitals, there haven't been many studies made regarding the topic. The studies chosen for this literature review came to similar conclusions about the practice method. All of them also included recommendations to make the module practice a better experience, however, there have not been any follow-up studies regarding the implementation and whether any changes have been made.

According to the research found, module practice does have its fair share of advantages and disadvantages but based on the student feedback within the chosen

studies it can be said that the advantages out-weight the disadvantages and the practice model benefits most students. Most of the negatives related to module practice concern the implementation of the method, rather than the method itself, such as the space for students, group sizes or the amount and orientation of the supervisors. We view that these disadvantages could be corrected by better planning and referring to studies and student feedback when implementing the module in the ward.

In addition, nursing students must compete with other students to even get a clinical practice placement. Review of nursing practice placements in Jobiili reveals that most of the surgical placements accept between one to three nursing students at a time, whereas the placements that utilize the module practice method can take up to seven students at once. This in our opinion gives the module practice model a good foothold to become the most used practice model in long-term wards and round o'clock wards. Allowing more students to get their practical placement could potentially make their studies go smoother and some students could possibly graduate at faster pace than normally.

According to our research, the module practice model should be more utilized, and we believe it has the potential to become the most used practice model on the wards where it is possible to implement. Teachers and supervising nurses should be given better orientation and guidance on how the module model works and what are the responsibilities of supervisors within the module.

6.2 Limitations and trustworthiness

The chosen articles are of high standard and were found from trusted online databases, such as CINAHL, Google Scholar, ProQuest and Theseus.fi. Each article chosen followed the inclusion criteria which was set from the beginning. Thesis has been written as accurately as possible, by following the process of literature review. It should be noted that the mother language of the authors is Finnish, but the education language of the program is English. By using both English and Finnish articles the trustworthiness might have suffered after translating the Finnish articles. Mistakes may have been made when translating specific wording or meaning of certain sentences.

The limiting factor for research was that the module practice model is relatively new and for this reason finding specific articles answering research question was difficult. Databases used (figure 2), explain accurately the difficulties of the study. Several articles were found but after reading the abstract and skimming the whole text, the article number decreased massively.

Limiting factor involved language and year of being published. Few studies that were found could not be used because of the language. Those articles were written in Chinese and Spanish. Even using translator, it would not have made justice to the article and thus those had to be dropped from the research.

This literature review used information and articles which had been published before year 2020. Considering, that the field of nursing is constantly changing as new information and studies are released often, thus the information we have used producing this literature review may be inaccurate or outdated after a few years. Newest information should always be used when available and a new review should be made to have accurate information of the advantages and disadvantages.

6.3 Ethical considerations of the literature review

Ethical questions are related to the trustworthiness of the chosen articles and online databases. The authors have critically thought the trustworthiness and reliability of the chosen articles to the topic. In this thesis the other researchers' articles and documents have been cited appropriately according to the Finnish national board of ethics.

The data used in this thesis was found from trusted and the most well-known online databases, however these databases may show only a selected few articles and may lack studies manufactured in certain countries (Salmons, J. 2020). For transparency, the search strategy used in the writing of this thesis has been recorded and added to their respective tables (Table 1 & Table 2) that are included in this thesis.

6.4 Conclusion & recommendations

To summarize, both students and supervising nurses have given praises to module practice model. It has given the opportunity to have more students at the same time at practice which has been a huge positive side of the module model. Based on the studies in this thesis, we consider the practice model superior to the standard student-nurse model.

The field of nursing is rapidly changing and in a need of new practice methods to answer the demand for placement positions. Every student has their strengths and weaknesses, and module practice model has the possibility to answer those, since students have more responsibilities and room to think and share ideas with their peers. The practice model gives the opportunity to learn by doing with the supervising nurse in the background, to whom a student may ask for help and show something new that the student might not know.

For upcoming research for module practice model, we recommend that the focus should be how the module model can be implemented to different wards so that new hospitals would embrace the model on the wards they see it fits. Nursing programs, hospitals and students could benefit from research which focuses on the students and supervising nurses' view before, during and after the module practice. We also strongly recommend that a guidebook or a presentation would be made based on recent studies. This should be utilized in schools to teach and educate students before going to a ward which currently has the module model in place.

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Appendices 1: Articles used 35

Writer	Topic	Year and place	Main Results
Katri Manninen	Experiencing Authenticity - The core of student learning in clinical practice	2014. Department of learning, informatics, management and ethics, Karolinska Institutet, Sweden	<p>Research method was qualitative research.</p> <p>Main points included that authenticity is required for students to learn and that students need to have both internal and external authenticity. Clinical learning environment should try to create possibilities where authenticity can be experienced.</p>
Anu Kinnunen	Hoitotyön kliininen harjoittelu opiskelijamoduulina	2019 Pro Gradu, Itä-Suomen yliopisto	<p>Research method was feedback questionnaire from supervisors and students. Main points included that students and supervisors were happy and excited for the module model. Research focused on the improvements on how module model can be used better and how supervisors can utilize their guidance better.</p>
Asta Hintikka	Sairaanhoidajaopiskelijoiden moduulimallisen harjoittelun kehittyminen ja toteutuminen käytännössä	2020 Jyväskylän Ammattikorkeakoulu	<p>Research method was a literature review.</p> <p>Main points included that students were learning more with module model. Improvements should focus on the daily-life on ward, and how module model can be utilized best on ward.</p>

Emmeliina Luostarinen-Lindren	Käytännön harjoittelun toteuttaminen moduuliharjoitteluna kirurgisella vuodeosastolla	2019 Turun Ammattikorkeakoulu	Research methods were theme-interview for supervisors and a questionnaire for students. Main points included that both students and supervisors were happy for module model. Big differences did not occur in answers, both participants were happy of the pilot try.
Sanna Sirén & Nea Bäcklund	Opiskelijamoduuli sairaanhoitajaopiskelijan osaamisen kehittymisen tukena	2018 Laurea Ammatikorkeakoulu	Method was group interview. Main points included that students were happy of the module but would not participate in future. Supervisor feedback was also mostly positive with a wish for student-nurse possibility.

Appendices 1: Articles used