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Model for Improvements in Learning Outcomes (MILO): Development of a conceptual model grounded in caritative caring aimed to facilitate undergraduate nursing students’ learning during clinical practice (Part 1)

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A R T I C L E   I N F O

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A B S T R A C T

Aim: The aim was to describe the development of a caritative caring conceptual model aimed to facilitate undergraduate nursing students’ learning during clinical practice.

Design: An explorative design was used.

Methods: The Delphi method with a panel of 12 experts together with a literature search with a systematic approach were used and data were analysed according to content analysis.

Results: The Model for Improvements in Learning Outcomes (MILO) consists of eight core concepts divided into four intrapersonal concepts (nursing, a reflective approach, a critical approach, quality and safety) and four contextual concepts (peer learning, co-clinical teachers, student-centred and student-active supervision, a good learning environment). MILO is grounded in the theory of caritative caring with a hermeneutic approach and the understanding of caring and learning as parallel processes. Tools such as reflection, structure and guiding pm are used to intertwine caring, nursing, pathophysiology and medicine.

Conclusions: MILO intertwines didactics with concepts important for nursing students’ learning with a foundation in caritative caring and may facilitate undergraduate nursing students’ learning in clinical practice.

1. Introduction

The primary aim of undergraduate nursing programmes is to provide a broad education, including theoretical and practical skills, to prepare students for their future professional role. Access to real-life situations and skilled supervisors grounded in a theoretical foundation is important for students to facilitate integration between theory and practice and gain clinical competence (Ekebergh, 2011; Eriksson, 2018). In recent years, demands in clinical practice have increased; with a lower number of staff, wards are overcrowded, and a high proportion of patients have a severe illness (National Board of Health and Welfare of Sweden, 2018). Requirements from the Swedish government to educate an increasing number of undergraduate nurses (Government Offices of Sweden, 2013) add further challenges. Such circumstances may have a negative effect on nurses’ ability to supervise students during clinical practice (Carlson et al., 2010). A lack of clinical skills is seen in newly qualified nurses (Missen et al., 2016) and reports show increasing complaints regarding health care professional skills in how to approach patients and communicate with them (Sundler et al., 2017). Theory and practice need to be brought together and caring, as the core in nursing, needs to be guiding the care (Eriksson, 2018). Students’ understanding and development of a caring approach is therefore of importance.

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A variety of didactic approaches and models has been used to facilitate supervision, i.e., the learning process (Holst et al., 2017; Jayasekara et al., 2018). However, these approaches and models have focused predominantly on phenomenology as well as didactics from a theoretical perspective and not so much on interlinks between specific nursing aspects and problems and demands in clinical practice, specifically not students’ development of caritative caring with a hermeneutic approach. A model intertwining didactics with important nursing aspects, pathophysiology and medicine combined with a clear focus grounded in a caritative caring theory with a hermeneutic approach could be used in supervision to facilitate learning in clinical practice. This article (part 1) describes such a model development. A secondary article (part 2) describes the use of the model in reality.

2. Background

Nursing is about what the nurses work with, nursing actions and caring is about the patient’s experiences and the relationship between the nurse and the patient, the core of nursing (Eriksson, 2002, 2018). To learn nursing, learning and nursing need to have a common fundamental ground (Ekebergh, 2011; Eriksson, 2018). This was in the early nineteen eighties shaped and adapted by Eriksson (1985) and is by Eriksson and Mailatunen (2004, p.1) described as: “A didactics that, with a human science and hermeneutic basis and an ethos, based on caritas, is an open world, where the hermeneutic movement creates an epistemology that seeks new horizons, with focus in tradition and the theoretical core of caring science”. Ekebergh (2018) has further explored caring science didactics in relation to phenomenology and the lifeworld theory.

Marton et al. (1993) describe different ways (conceptions) that learning is conceptualised and means that through learning, a new way of seeing a phenomenon or phenomena develops and change a person’s way of seeing the world from a new perspective. A new perspective can be achieved using reflection, which is highlighted as being essential for students to widen their perspectives (Knutsson et al., 2015). Reflection can be based on experience and done with openness (Gadamer, 2013) but can also be guided by a method, for example, Gibbs’ reflective cycle (Gibbs, 1988).

The way that teaching and supervision are performed in clinical practice is important for learning (Lauvås et al., 2015). The traditional and commonly used supervision model is based on one registered nurse acting as supervisor for one student. This offers consistency and possibilities for immediate feedback on clinical performance, but it relies on positive encounters between the student and supervisor (Luhanga et al., 2010). Sometimes this model does not challenge the student enough and creates a dependency between student and supervisor that leads to model learning (Lauvås et al., 2015). More challenging models are when, instead, the supervisor follows the student (student active learning) (Ekebergh, 2011) and peer learning (Nygren and Carlson, 2017), whereby students learn from one another as peers by being involved and active and taking responsibility for their own learning (Stone et al., 2013) and independence towards the supervisor has been shown to be gained when students in different semesters learn in pairs (Holst et al., 2017). Models are found which support students’ development of clinical decision-making, reflection and critical thinking (Perry et al., 2018) and models with use of clinical education units has been found to provide a greater engagement as well as an enhanced learning environment (Jayasekara et al., 2018). However, involvement, theorization and visualisation of the caritative caring perspective has not been found in these models.

Several aspects must be considered regarding clinical supervision in undergraduate nursing programmes. First, the educational directives of the European Union (77/453/EEC, 2020; 89/594/EEC, 2020) state that nursing education shall comprise at least one-third theory and that clinical practice shall comprise at least half of the entire educational programme. Second, supervision in clinical practice is challenged by the nurses’ possibilities to supervise students. Meanwhile, students need support from their supervisors in their learning (Carlson et al., 2010), which may be influenced by organizational changes. High workload, lack of competencies and lack of staff are highlighted as major factors contributing to patient injuries (National Board of Health and Welfare of Sweden, 2018) and there is criticism of communication and approach to patients in health care. These problems need to be addressed from an educational perspective in relation to patient safety (Sundler et al., 2017). Nursing students, need to develop interpersonal skills, learn how to have positive encounters and how to care for patients in a compassionate way (Raphael-Grimm, 2015).

There is a need for a caritative caring learning model that could facilitate intertwining between theory and practice, based on a sound pedagogic foundation, including core concepts important for nursing and that illuminate the importance of the intertwining of pathophysiology and medicine and contribute to structured learning and development of a caritative caring approach during clinical practice. To our knowledge a model combining all these elements is missing. Such a model could be important for the students’ learning, the supervisors’ didactic approach and at the end, the patients’ health. The aim of this study was to describe the development of a caring conceptual model aimed to facilitate undergraduate nursing students’ learning during clinical practice.

3. Method

3.1. Design

An explorative design (Polit and Beck, 2016) including the Delphi method according to Keeney et al. (2006) and a literature search with a systematic approach (Polit and Beck, 2016) were used. The Delphi method is a structured process involving experts in the topic in a series of rounds to gather information. The rounds continue until consensus is reached (Keeney et al., 2006).

3.2. Sample

A panel of 12 informed individuals (McKenna, 1994), perceived as representative experts, from university and health care faculties in southern Sweden were convened. The inclusion criteria for selecting the panellists were that they should be registered nurses with experience in working with learning in clinical practice as a teacher or as a researcher from the university or as a head supervisor/clinical teacher from the health care faculty. The panel included one researcher, an associate professor at a university in southern Sweden (the last author) and three teachers from one university, six head supervisors/clinical teachers from the health care faculty at a medium-sized hospital (one is the first author) and two head supervisor/clinical teachers from the community health care faculty in the same region as the university. The participants were all women aged between 40 and 65 years (mean, 52 years) and with work experience between 20 and 42 years (mean, 31 years) in their fields.

3.3. Data collection and data analysis

The Delphi method (Keeney et al., 2006) based on four rounds, together with timing and results are described in Fig. 1. The literature search (i.e. databases, search terms, inclusion criteria) and data analysis are described in Fig. 1 and further in detail below. All 12 panellists participated throughout the model development process. One of the participants (the last author) monitored the whole process and gave the experts clear instructions as to their specific area of expertise of the phenomenon being sought. To increase transparency in the process, three senior lecturers with extensive knowledge, not involved in the study, acted as “critical friends”.

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### Literature search and data analysis

A literature search with a systematic approach (Polit and Beck, 2016) was performed between rounds 2 and 3 to assemble knowledge about nursing students’ learning during clinical practice (Fig. 1).

The analysis (Polit and Beck, 2016) started with a comprehending step where the articles were read several times to gain initial understanding of the phenomenon “students’ learning during clinical practice”. This was followed by a synthesizing step. This part involved a sifting of the data, putting pieces together to get a sense of what is essential for the phenomenon. Then the data were sorted systematically (theorising). Aspects that mirrored the phenomenon were revealed. In the final step, reconceptualization was undertaken to see if any aspects could be moved from one context to another. This was done because there is an expectation that the model can be used in other contexts. The result of the Delphi method (Keeney et al., 2006) and the analysis of the literature together with own experiences (Polit and Beck, 2016) revealed eight aspects which when integrated into the model transitioned into concepts (Fig. 1).

### Ethical considerations

The study was carried out in accordance with the principles of the Declaration of Helsinki (World Medical Association, 2013). No ethical approval was required since the study did not involve humans or was conducted using clinical data (International Committee of Medical Journal Editors, 2019). Discussions with diverse opinions did occur but were reflected on by the group during rounds 1–3, in line with the Delphi method (Keeney et al., 2006); individual panelist’s opinions expressed in e-mail correspondence (round 4) were not disclosed to any other panelist.

### Findings

The literature search and the Delphi method (Keeney et al., 2006) were used to identify important factors for learning and by that develop the Model for Improvements in Learning Outcomes (MILO) (Fig. 2). MILO consists of eight core concepts, four intrapersonal and four contextual, with the intention of unifying separate concepts to a wholeness and with that facilitate students’ learning during clinical practice. The intrapersonal concepts, i.e. the students’ own characteristics and abilities, are essential for the students’ learning. The contextual concepts, i.e. concepts in the environment, may facilitate the learning process. The concepts derived through the literature search and was decided by the 12 panelists. The eight core concepts depend on and a caring relationship and a caring approach is vital, and that caring and learning are understood as parallel phenomena (Biebergh, 2018).

### Fig. 1. The data collection (Walker and Avant, 2019).
The theoretical foundation is based on Gadamer’s hermeneutical philosophy of knowledge and understanding based on past experience, openness and context (Gadamer, 2013), Eriksson’s (2002, 2010) theory of caritative caring that stresses caring is the core in nursing and that a caring relation and a caring approach is vital, and that caring and learning are understood as parallel phenomena (Ekebergh, 2018).

Fig. 2. The theoretical foundation and the eight core concepts in MILO with a description of how they are divided into intrapersonal concepts and contextual concepts.

Initially described by Eriksson (1985) and further developed and described by (Ekebergh, 2018). Caring is the core in nursing. The caring relationship and caring approach were found to be important for understanding nursing and are characterised by openness, compliance, a willingness to care and to listen, respect, trust, affirmation, dignity, seeing the patient, being positive, present and committed, responsibility, reflection, comforting, understanding, supporting, informative, creating hope and meaningfulness, being clinically competent and care for the mutual dependence between people. How a life is cared for and what responsibility a caregiver takes depends on the caregiver’s ontological attitude to life and care (Eriksson, 2002). Both students and supervisors need to have an understanding of that didactics in nursing have the same characteristics as the caring relationship and are based on the experience and understanding of the learner; it is about being open to the learner’s experience. Caring and learning are thus parallel phenomena, which means that what should be included in the meeting with the patient should also be included in the meeting with the student (Ekebergh, 2018). The intrapersonal concepts and the contextual concepts are described in the following sections and examples of how to apply the eight core concepts are given in Tables 1 and 2.

4.1. Intrapersonal concepts

4.1.1. Nursing

It is important for all involved to have an in-depth understanding and awareness of what nursing means and what the learning process should focus on, i.e. what to guide the student towards (Ekebergh, 2011). Nursing, in MILO, involves co-productive care, which emphasizes good communication and a good relationship between the patient, the patient’s relatives and the nurse to get a shared understanding of the patient’s situation (Batalden et al., 2016). The patient should be seen as a whole (Eriksson, 2002) and should be involved and active in their own care, person-centred care (Sherwood and Zomorodi, 2014). Skills in nursing actions, pathophysiology and medicine (Eriksson, 2018) are vital (Table 1).

4.1.2. A reflective approach

In MILO, incorporation of a reflective approach in an open environment is vital for a successful supervision and learning. Both supervisors and students should use an open questioning approach based on tolerance, imagination and creative thinking (Ekebergh, 2018; Horton-Deutsch and Sherwood, 2017). Gadamer (2013) sees learning as new knowledge/new understanding and reflection, with a starting point in pre-understanding (i.e. biases) and assumptions, as the key to new knowledge. Gadamer stresses the importance of pre-understanding and openness in reflection and does not advocate reflection as a method. However, Gadamer also recognises the notion of ‘situatedness’ and therefore involvement that we have in situations can never be completely transparent, a meaningful context is of value and therefore it is valuable to reflect when students are in clinical practice. Reflection is a consciousness within a person that makes sense through the consideration of thoughts, feelings and experiences (Table 1).

4.1.3. A critical approach

In MILO, incorporation of a critical approach is understood as important. This level, where reflection includes higher order of cognitive thinking, self-awareness is included. Thinking with critical consciousness the “way”- questions leads the learner to look for reasons and to understand what choices of actions and responses means (Horton-Deutsch and Sherwood, 2008). Clinical reasoning involves clinical
### Table 1
Examples of how the intrapersonal concepts within the core concepts are applied in MILO.

<table>
<thead>
<tr>
<th>Intrapersonal concepts</th>
<th>Core concepts and a description of their content</th>
<th>Applied in:</th>
<th>Descriptions with a given example:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nursing</strong></td>
<td>Caring is the coreCaring relation and caring approachCaring and learning are a parallel phenomenonCo-productionNursing skills</td>
<td>A checklist - containing nursing actions/practical skillsLearning activities - based on nursing actions, learning goals, peer learning and quality and safety</td>
<td>The checklist contains tic boxes that includes 21 areas within nursing for example: the nursing process, nursing practical skills (insertions of catheters, needles) communication, collaboration, information etc. The students should choose a situation where a patient needs teaching in self-administration of medication. One of the students performs the activity and the peer is an observer and writes down the following: Are the patient’s individual needs identified? Is support given to the patient? The students take turns in performing the activity and afterwards they reflect upon the questions and give each other constructive feedback.</td>
</tr>
<tr>
<td><strong>A reflective approach</strong></td>
<td>Starts in students past experiences and pre-understandingOpenness and compliance is vital</td>
<td>A verbal reflection between supervisor and peersA diaryA reflection sheetReflection seminars</td>
<td>The students should continuously reflect with each other and with their supervisor. The students should write down own reflections for private use. The students should write down daily reflections and the supervisor should give daily written responses. The supervisors should ask open-ended questions about the students’ experience in question, about its meaning, to help the student to think through preconceived opinions and to explore the assumptions that the student makes that affect their thoughts in the specific situation. How did you think? How did you feel? How would you act instead? A questioning approach with use of use of reflection according to ‘head, heart and hand’.</td>
</tr>
<tr>
<td><strong>A critical approach</strong></td>
<td>A questioning approachConstructive feedback</td>
<td>Probing Questions “debriefing with good judgement”</td>
<td>The supervisor should ask questions instead of giving answers directly: How do you think you can solve this? Supervisors should use ‘advocacy’ (a statement) combined with ‘inquiry’ (a question). Starts in the students’ pre-understanding.</td>
</tr>
<tr>
<td><strong>Quality and Safety</strong></td>
<td>QSEN competenciesHighlights the importance of integrating quality and safety throughout the students’ clinical practice</td>
<td>Learning activities based on nursing actions/practical skills, learning goals, peer learning and quality and safety</td>
<td>The students should for example choose a situation where a patient needs support when changing position safely in bed. One of the students is responsible for giving the patient information before the activity. The students should take turns in performing the activity and afterwards reflect on the following questions and give each other constructive feedback: Were the patients’ individual needs taken into account? Did the patient understand the information given? Was the activity performed in a safe way?</td>
</tr>
</tbody>
</table>

### Table 2
Examples of how the intrapersonal concepts within the core concepts are applied in MILO.

<table>
<thead>
<tr>
<th>Contextual concepts</th>
<th>Core concepts and a description of their content</th>
<th>Applied in:</th>
<th>Descriptions with a given example:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Peer learning</strong></td>
<td>Knowledge exchange between peersReveals a structure in clinical practiceTo learn by both doing and observing</td>
<td>Learning activities based on nursing actions/practical skills, learning goals, peer learning and quality and safety</td>
<td>The students should for example choose a situation where a patient is transferred to another ward. One of the students is responsible for giving the information about the patient to the nurse on the ward. The peer observes the situation. They take turns in performing the activity and afterwards they should reflect on the following questions and give each other constructive feedback: Was the information given in a structured way? Was any information missed? Answer questionsReflect with the studentsSupport the students’ performance of learning activitiesSupport the supervisors in their reflection with the students and in their supervision of the students</td>
</tr>
<tr>
<td><strong>Co-clinical teachers</strong></td>
<td>Supports the organisationCreates and evaluates the learning environment</td>
<td>Visits to students and supervisors on the wards</td>
<td>Support the supervisors</td>
</tr>
<tr>
<td><strong>Student-centered and student-active supervision</strong></td>
<td>A supervision based on students’ experienceFollowing the patients’ path through care and secondly prioritise practical tasks at other patients A questioning approach where questions are asked to the students instead of giving answers directly</td>
<td>A PM</td>
<td>Concreate suggestions to supervisors and students of how to outline and plan the weeks in clinical practice, content and progression for maximum learning outcomes, for example in semester 3: Week 1: Bedside care, communication, hygiene Week 2: Practical skills in nursing, following the patients’ path through care, for example to surgery, to x-ray department etc. Week 3: Performance of care plans Week 4-5: Identification of improvements in care</td>
</tr>
<tr>
<td><strong>A good learning environment</strong></td>
<td>A welcoming environmentA safe and stimulating place</td>
<td>A caring approach Affirmation A straightforward communication</td>
<td>Individual meetings between supervisor and student should be characterised by openness, proximity and compliance, responsiveness, trust, respectSupervisors should pay attention to, see, listen to, and give feedback to the student A trustworthy and honest communication, they should listen, explain, have an open mind, they should give information to the student about what is going to happen and should use a questioning approach with a desire to see the unique in every situation</td>
</tr>
</tbody>
</table>
judgements in nursing, where alternatives are generated from evidence or from intuition. This complex process of problem solving requires understanding of pathophysiology, medicine as well as other areas involving patient care and requires multiple types of knowledge to consider the full dimension of care (Tanner, 2006) (Table 1).

4.1.4. Quality and safety

To facilitate learning and secure quality and safety in the student’s meeting with the patient during clinical practice, the competencies included in the Quality and Safety Education for Nurses (QSEN) (Sherwood and Barnsteiner, 2017; Sherwood and Zomorodi, 2014) are deemed essential. Six different areas, i.e. core competencies, are particularly important and therefore incorporated in MILO: person-centred care, collaboration in team, evidence-based care, improving knowledge for quality development, safe care and informatics (Table 1).

4.2. Contextual concepts

4.2.1. Peer learning

Peer learning as an environmental factor was, in MILO, identified as important to facilitate students’ learning from both students’ and supervisors’ perspectives. Peer learning is a social phenomenon whereby students through communication share each other’s insights and understanding, reason and acts and thus acquire knowledge. One or more supervisors tutor two students working in pairs, i.e. they have the same schedule and use each other and the supervisor as reflection partners. The supervisor has responsibility for two students at the same time and aims to create an attractive learning environment where the students find support in each other (Nygren and Carlson, 2017; Stone et al., 2013) (Table 2).

4.2.2. Co-clinical teachers

Co-clinical teachers, i.e. one clinical teacher from the university faculty and one from the health care faculty, is part of MILO with the role that together support the organization, the students and the supervisors (Islamoska, 2014). Their mission is to support learning and organize the units to create time for students at the clinical practice and to assess the students. The co-clinical teachers are responsible for implementing MILO in clinical settings. The clinical teacher from the university faculty has formal responsibility for the students’ assessment. The clinical teacher from the health care faculty is responsible for supporting the unit and the supervisors (Table 2).

4.2.3. Student-centred and student-active supervision

Supervision in MILO should be based on the student’s experience (student-centred learning) and use a student-active approach, i.e. the student should first actively seek answers, evidence and knowledge before asking the supervisor. The student should not follow the supervisor, but instead follow the patient (person-centred care). Experience-based knowledge is important and should not be neglected; it should be used with evidence-based knowledge and be reflected on (Lauvås et al., 2015). Supervision should start with the student’s past experiences (Ekebergh, 2011) and the supervisor should have a questioning approach, stand back and not give the answers directly (Lauvås et al., 2015) (Table 2).

4.2.4. A good learning environment

A welcoming environment where the students feel safe and know what is going to happen and what is expected of them (Ekebergh, 2018) was identified to be important for learning. For this to happen, the learning environment should be student-centred, supporting student-active learning and supervision with a caritative caring approach and, by this, promote the student’s ability to develop independent knowledge, critical thinking, reflection, problem solving and a quality and safety approach (European Association for Quality Assurance in Higher Education, 2015) (Table 2).

5. Discussion

This study describes the development of a caritative caring conceptual model to facilitate undergraduate nursing students’ learning to tackle the challenges and demands associated with students’ learning during clinical practice. Important concepts relevant to learning in nursing are presented in MILO with the intention of unifying separate concepts to a wholeness. The concepts are broad and, in a way, intertwined. However, all identified concepts are perceived as important and when looking at the model as a “whole”, understanding and structure emerge. The understanding is related to the human being (intrapersonal) and structure is related to the organization (contextual). Fawcett and Desanto-Madeya (2013) describes that the propositions that describes concepts as well the phenomena of interest, provides a theoretical rationale.

The model, MILO, reveals that learning depends on intrapersonal- and contextual concepts that gives understanding and structure which combined with an understanding of caring and learning as parallel processes, a caritative caring learning model is shaped where the essence is to unify and hermeneutically move from parts to wholeness rooted in Gadamer’s (2013) thoughts on how humans understand and achieve new knowledge.

5.1. Understanding

The intrapersonal concepts: nursing, a reflective approach, a critical approach and quality and safety show the students’ own characteristics and abilities essential for the students’ learning. These intrapersonal concepts can, in different ways help the students to reach understanding. Sandvik et al. (2015) have identified understanding, as well as becoming, as ongoing processes of appropriation when learning nursing involving professional and personal altering.

In MILO, the development of a caring relationship and a caritative caring approach characterised by openness and reflection (Eriksson, 2018) was identified to be essential. The importance for students and supervisors of understanding nursing in this way has been highlighted in previous studies (Isaksson et al., 2014). MILO’s focus on nursing action skills combined with a co-productive- person-centred care intertwined with pathophysiology and medicine may have a positive influence on the students’ ability to intertwine theory and practice, to achieve understanding and new knowledge, which according to (Eriksson, 2018) is essential for learning. Achieving understanding may contribute to good care and supervision originating from the heart, doing good, with a caritative approach (Eriksson, 2002, 2010). Gadamer (2013) stresses that when reflection is used; pre-understanding and new experiences are challenged. When these two horizons fuses, new knowledge and understanding can be developed. To reflect means to use questions. Gadamer also discusses the importance of openness and context, stressing that it is important to dare to open up and take in new information in the situation. To take in new knowledge effectively, the context needs to be meaningful for the student. This approach should by the students be used when they reflect with each other or in groups but also when they use the learning activities. Learning and caring have similar prerequisites for students, supervisors and patients, which means that pre-understanding of the situation and openness towards each other, as well as the ability to listen and confirm, are important. Students and patients should be approached, communicated with and cared for in the same way. Caring and learning are interlinked and by Ekebergh (2018) described from a phenomenological perspective. In MILO, this interlinking is grounded in a hermeneutical perspective (Eriksson, 1985). Reflection is the key to interlinking caring and learning and gaining new understanding/knowledge (Ekebergh et al., 2018). To reflect in light of Gadamer (2013) thoughts means that the reflection should not be applied according to a method but instead be open and
compliant. Therefore, in MILO, reflection should be done by asking questions using Eriksson et al. (1999) approach “head, heart and hand”: What happened? How did you think? How did you feel? How would you like to act instead and what evidence do you have that strengthens it? The use of this narrative approach gives student’s time to think, delayed thinking, which in turn will promote students’ development of feelings connected to their described experience and thereby contribute to learning and understanding (Ekebergh, 2018). Teachers have a fondness for using reflection based on methods, knowledge and concepts and not based on experiences (Ekebergh, 2005; Horton-Deutsch and Sherwood, 2017). The narrative pedagogy, however, enables students’ learning on how to individualize care by developing sensitivity and understanding from the patients’ perspective (Ekebergh, 2018). This reflection approach should be used in MILO and the purpose of reflection sheets, student diaries and patients’ stories in reflection seminars and students’ dialogue with patients included in the learning activities in MILO is to support students in incorporating a reflective approach and an understanding of the patient and thereby their development of a caring approach. The learning activities in MILO are provided to the students as a “learning activity bank” and include different activities; patient cases (medical and nursing problems), nursing process, drug use/drug calculations, quality and safety. The aim is to offer the freedom to choose, promote curiosity and responsibility during learning, which is described as essential (European Association for Quality Assurance in Higher Education, 2015). Students’ knowledge and understanding of human physiology, pathophysiology, medicine and practical skills in nursing (insertions of catheters, needles, etc.) are essential and is therefore included through a checklist of nursing actions/practical skills in MILO.

In MILO, having a critical, clinical reasoning and questioning approach was identified to be beneficial. This means the ability to see things from different perspectives and not to be a copycat. Giving and receiving feedback is key in this process, where both supervisors and students play a part (Anderson, 2012). For students to incorporate a critical approach to reach understanding/new knowledge and for supervisors to give constructive feedback and reflection, the “debriefing with good judgement” approach (Rudolph et al., 2006) is used in MILO. The approach is based on theory and empirical findings on how to improve professional efficiency through “reflective practice” and states the importance of reflecting on the student’s natural stance, i.e. past experiences/assumptions because these reflect their actions.

The QSEN competencies were identified as important to support students’ learning of quality and safety care. Sherwood and Zomorodi (2014) point out the importance of integrating the QSEN competencies in care, but also that they should be clarified in nursing education, both in terms of content and progression. Armstrong and Barton (2013) emphasize that students need to be familiar with quality and safety aspects early and throughout their education. The learning activities connected to QSEN in MILO were designed through close collaboration between the clinical and university faculties with the intention to support students to internalize quality and safety. Didion et al. (2013) showed that clinical partnership promotes students’ understanding of quality improvement, teamwork and critical system thinking. The intention with the learning activities connected to QSEN in MILO is an achievement of students’ understanding of the importance of quality and safety through supporting students’ learning of skills and integrate quality and safety together with a caring approach. Students’ understanding is shown to be catalysed through responsibility and understanding is described as the heart of the matter in nurse education (Sandvik et al., 2015).

5.2. Structure

The contextual concepts: peer learning, co-clinical teachers, learning with student-centred and student-active supervision as well as a good learning environment are concepts in the environment that may facilitate the learning process. These contextual concepts can, in different ways provide structure to learning. Positive impacts on individualized instruction for students, level of support as well as view of the clinical environment for learning have by Nguyen et al. (2020) been found when partnership models are used. These offer consistency for students when strengthening the communication between the parties involved in the students’ learning.

Peer learning was identified to give structure to students’ learning. Learning through peer learning is described as an acceptable and beneficial learning approach by most undergraduate nursing students and contributes to development of a sense of responsibility (Stenberg and Carlson, 2015) and self-efficacy (Pålsson et al., 2017). Learning in pairs has been shown to rely on a supervisory approach that entails being attending, but yet not too prominent (Holst, 2017). In MILO, peer learning offers structure in clinical practice for both students and supervisors. The learning activities provide structure when the students perform their learning activities in pairs, take turns in learning activities, reflect with each other and give each other constructive criticism. The students also reflect with the supervisor and this triad viewpoint is described as developing (Nygren and Carlson, 2017).

Support from co-clinical teachers (Islamoka, 2014) was identified to provide structure to students’ learning. The intention with shared responsibility between the university and clinical faculties is to offer support to both students and supervisors. In MILO, this means that the co-clinical teachers conduct visits to meet students and their supervisors during clinical practice, are available to answer questions, create opportunities for reflection, support students’ performance of the learning activities and thereby support students’ learning. As shown by Håggman-Laitila and Rekola (2014), partnership between higher education and clinical practice is important for development of education.

Learning with student-centred and student-active supervision was identified to be essential and to offer structure. The supervisor needs to be sensitive towards the students’ pre-understanding and supervision should be based on students’ experiences with openness to the student’s thoughts and acts (Ekebergh, 2018). Therefore, in MILO, with the use of patients’ stories and letting the student follow the patients’ path through care, the supervisor through a questioning approach challenges the students to reason and reflect on evidence-based knowledge, as well as experience-based knowledge and to take on responsibility in their learning. This approach is in line with studies where supervisors’ use of a questioning approach is described as a tool that, when used in a skilled manner, promotes students’ cognitive reasoning and critical thinking (Nicholl and Tracey, 2007). In MILO, the aim of the pm (Table 2) which is outlining the weeks is to offer support and structure to both students and supervisors and to invite students to take on responsibility in their learning.

Finally, learning in a good learning environment was identified to be a structural process of importance for learning in MILO. A caring approach towards the patient and towards the student as described by Ekebergh (2018) is a foundation for trustworthy communication between students and supervisors as well as between students and peers. Loss of learning opportunities and students’ hesitation on asking questions because of difficult relationships have a negative impact on learning. A welcoming approach between supervisor and student is critical for students’ success in learning (O’Mara et al., 2014).

5.3. Strengths and limitations

The Delphi method according to Keeney et al. (2006) was used to achieve agreement when building the conceptual model. External validation, i.e. credibility of the study, is established through this method with reference to member checking (Lincoln, 1985; Polit and Beck, 2016). Peer debriefing is yet another recommended strategy (Lincoln, 1985; Polit and Beck, 2016) and in this study, to address the potential risk of pre-understanding and disproportionately views as the researcher held academic seniority in the panel, “critical friends” was used.
Suggested techniques to enhance authenticity are pilot testing or use of focus groups (Keeney et al., 2006) and as neither of these techniques was used, this might be considered a potential weakness and limitation of the study. A level of consensus set at 75% is suggested (Keeney et al., 2006), but as there are no guidelines, no level was set beforehand in the present study.

The participants selected for the panel were chosen according to perceived expertise in the subject area, but this may lead to potential bias. Neither anonymity (Polit and Beck, 2016) nor quasi-anonymity (Mckenna, 1994) could be achieved because the panel members were colleagues.

The model development process (Fig. 1) was carried out over ten months, which might be considered a moderately short period of time. However, it seems to have been a motivating factor for the participants for active involvement, returning responses and remaining as participants during four rounds, which strengthened the results. There is usually a potential risk of response exhaustion after two rounds (Mckenna, 1994).

The literature search revealed only four models in supervision focusing on caring, no one based on caritative caring. The concepts revealed from the literature search, with limitations taken into account of missed articles due to not performing a full-scale systematic review and the literature analysis together with panel members’ analytical skills (Polit and Beck, 2016) defined together with thick descriptions of the research settings and observed processes (Lincoln, 1985) during the model development process, exposes a model transferable and applicable in other contexts (Polit and Beck, 2016), not only in nursing. However, the validity (Polit and Beck, 2016) of the model when used in the students’ learning situations needs to be examined.

6. Conclusions

In MILO, the theoretical foundation and concepts are built on learning cornerstones that promote understanding and structure. Important parts are hermeneutically unified to a wholeness. The intrapersonal concepts reflect understanding, and the contextual concepts reflect structure. To reach understanding and new knowledge, there is a need to start with the individual patient’s/person’s story and pre-experience and the approach should be caring, reflective and questioning in an open manner and emphasize quality and safety. To achieve structure, there is a need for documents that can organize and help fulfill learning goals. Supervision in a good learning environment consisting of an open and caring approach and structured in a student-centred, student-active way and with a questioning approach and learning with support from co-clinical teachers and peer learning are structures identified to facilitate learning. MILO can, through the foundation built on hermeneutics with an ethos grounded in caritas, contribute to understanding and structure and be able to facilitate learning in clinical practice and promote patients’ health and wellbeing in the long term.

Ethics approval and consent to participate

The study was carried out in accordance with the principles of the Declaration of Helsinki (World Medical Association, 2013).

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CRediT authorship contribution statement

Maria Koldestam: Conceptualisation, Methodology, Investigation, Writing – original draft, Writing – review & editing, Visualization. Christina Petersson: Writing – original draft. Anders Broström: Writing – original draft, Writing – review & editing. Susanne Knutsson: Conceptualisation, Methodology, Investigation, Writing – original draft, Writing - review & editing, Visualization, Supervision, Project administration.

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Conflict of interest

None.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.nepr.2021.103144.

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