Nurses’ perceptions of their competence in mentoring nursing students in clinical practice: a systematic review protocol of qualitative evidence

Anna-Maria Tuomikoski¹,² • Maria Kääriäinen¹,²,³

¹Oulu University Hospital, Oulu, Finland, ²Nursing Research Foundation, Finnish Centre for Evidence-Based Health Care: an Affiliate Centre of the Joanna Briggs Institute, and ³Research Unit of Nursing Science and Health Management, Faculty of Medicine, University of Oulu, Oulu, Finland

Review question/objective: The objective of this review is to synthesize the evidence relating to nurses’ perceptions of their competence in mentoring nursing students in clinical practice.

Keywords Clinical learning; clinical mentors; clinical practice; competence in mentoring; student nursing

Background

Nurses in clinical practice play an important role in facilitating the development of nursing students’ clinical skills and experience and acting as a source of support.¹² There is empirical evidence that the mentor’s support role is important to nursing students’ experiences of practice learning³ and that positive mentor experiences affect students’ decisions to remain in the nursing profession.¹ Much of the teaching responsibility⁴ and transfer of clinical knowledge to the nursing students is also the mentor’s responsibility;⁵ as a result there is an increase in workload with these clinical placements.⁴ A lack of mentoring skills and confidence in them by student mentors is one reason why units do not offer clinical placements to nursing students and educational institutions.⁶

In the last decade, the Organization for Economic Cooperation and Development countries has increased the number of students admitted to nursing education in response to concerns about current future shortages of nurses.⁷ Nurse education usually takes at least three years for a bachelor’s degree⁸ and includes a large amount of clinical practice. The Australian Nursing and Midwifery Accreditation Council⁹ has determined that 800 hours is the minimum number of hours of clinical training for a registered nurse program and at the European Union (EU) level, nurse education comprises at least three years of study or 4600 hours of theoretical and clinical practice. At the EU level, the clinical practice component should comprise at least 50% of the degree program in nursing and be performed in hospitals and other health institutions as well as in the community⁸ where the student is taught practical skills, converts theory into practice and familiarizes her/himself with the social and professional culture of the profession,¹⁰ learns how to work in and lead a team and organize overall nursing care.⁸ Other related concepts that are used include professional practice,¹¹ professional training,¹² nursing training,¹³ clinical training,¹⁴ clinical settings,¹⁶ work-based learning,¹⁷ work-based education,¹⁸ clinical learning and clinical practicum.¹⁹

According to an EU directive,²⁰ clinical practice should be carried out in the following fields: general and specialist medicine, general and specialist surgery, child care and pediatrics, maternity care, mental health and psychiatry, care of the elderly and geriatrics, and home nursing. This study uses the concept of clinical practice and regards it as a learning environment during student nurse education in which the student practises clinical skills with the guiding mentor.¹⁵

Nursing students must be mentored by a professional nurse in their placement during these clinical practice periods.⁸,¹³ The mentor plays an important role in the students’ learning and growth as professionals,⁶,₂¹–₂₄ although nurses and healthcare organizations have indicated that there is a need to improve clinical mentoring skills for student mentors.⁷

Correspondence: Anna-Maria Tuomikoski, annukka.tuomikoski@gmail.com

There is no conflict of interest in this project.
DOI: 10.11124/JBSIRR-2016-002987

©2016 Joanna Briggs Institute. Unauthorized reproduction of this article is prohibited.
There is no generally accepted definition of mentor or mentoring. In the literature, various concepts are used for mentor, such as preceptor, supervisor and facilitator.13 The concept of mentor is typically used in publications from the United Kingdom (UK) and Finland2,3,13,15,25,26 and the concept of preceptor in publications from Australia, Canada and the United States.9,16,19,27–29

Hurley and Snowden18 have defined a mentor as a person who is responsible for assessing proficiency, who takes on the role of providing support and guidance and is a role model for nursing students in the practice setting. The Nursing and Midwifery Council (NMC)30 has defined a mentor as a nurse or midwife on the NMC register who, following successful completion of an NMC-approved mentor preparation program, is entered on a local register and is eligible to supervise and assess students in a practice setting. The mentoring of nursing students has been defined as facilitating students’ learning in their clinical placement by creating a supportive learning environment and enabling individual learning, strengthening students’ professionalism by empowering the development of professional attributes and identity, and enhancing the attainment of professional competence.31

According to Jokelainen,31 preceptoring involves an element of mentoring in the beginning, but the focus is more on work and the working environment. A preceptor is a registered nurse who helps newly qualified nurses to develop their confidence and reinforce their knowledge and skills after their initial registration. A sign-off mentor is a person who has met the NMC’s additional criteria for assessing proficiency and is responsible and accountable for making the final sign-off in practice, confirming that a student has successfully completed all practice requirements.30 Health Workforce Australia10,14 uses the concept of clinical supervisor: an appropriately qualified and recognized professional who guides learners’ education and training during clinical placements. The clinical supervisor’s role may include educational, support and organizational functions. Supervising is goal-based working and is founded on the needs of the individual or team, as with mentoring, but the supervisor undergoes special education. She or he is typically external to the team, and the employer provides and pays for their services.31

Different concepts of mentoring are used by different professions and sometimes within the same profession. The concepts also vary across educational institutions and countries.8,14 This review uses the concept of mentor to refer to a nurse who mentors (guides and teaches) the undergraduate nursing students and has pedagogical responsibility for the mentoring process during the clinical practice in a clinical setting.71

In general, there is no congruent regulation of educating mentors. In the UK, for example, the mentor should have held her/his registration for at least one year, successfully completed the NMC’s preparation program for mentoring and met the defined NMC standards before she/he can act as a mentor,30 and all mentors are added to a local mentor register.32 In Finland, there are ministry-level recommendations33 for mentor education, but it is voluntary and a nurse can act as a mentor without any mentor education.

**Competence of student mentors**

According to Cowan et al.,34 competence includes good knowledge, skills, performance, attitudes and values. Health Workforce Australia35 has defined competence as a set of defined behaviors that provide a structured guide to the identification, evaluation and development of particular skills and knowledge in individual staff. A person is deemed competent when she/he has acquired sufficient competences to perform the work required of her/him to an acceptable and agreed standard. Although the concept of competence in nursing student mentoring is not universally defined, the NMC36 has defined the competences and outcomes of a mentor as establishing effective working relationships, facilitating and evaluating learning, assessment and accountability, and creating an environment for learning and a context for evidence-based practice and leadership. Health Workforce Australia37 has defined the competences of a mentor as the ability of an individual to do a job properly, clinical skills and knowledge, adult teaching and learning skills, the ability to give and receive feedback, communication, appraisal and assessment, remediation of poorly performing nursing students, and interpersonal skills.14 According to the literature and previous studies, a mentor should have qualities such as helpfulness, experience,2 clinical competence, communication skills, the ability to stimulate student involvement, enjoyment of teaching, the ability to motivate nursing students, empathy, respect,35 knowledge of adult learning and...
different individual learning styles, skills to teach and learn in a clinical context, a positive attitude toward students and others in the workplace, patience, and the desire to motivate others to learn.\textsuperscript{28} Mentors should support nursing students,\textsuperscript{1} be facilitative and knowledgeable,\textsuperscript{2,13,38} serve as role models and promote learning through reflection, such as in reflective discussions.\textsuperscript{1,25} Mentors and students believe that the most important roles of a mentor are as protector, evaluator, educator and facilitator.\textsuperscript{39} Prior studies have suggested that mentors have a positive attitude toward their role and enjoy it.\textsuperscript{13,29} Mentors have difficulty with the cognitive aspects of the role. Mentors should concentrate on understanding the structure of the nursing students’ theoretical studies, keep up-to-date with any changes, find ways of giving structured feedback and assess students’ knowledge and performance.\textsuperscript{13} The student-mentor relationship can be described as a cognitive apprenticeship in which theoretical knowledge can be linked to practice.\textsuperscript{40} The mentor’s role reaches its full potential when bridging the gap between theory and practice experienced by undergraduates during clinical practice,\textsuperscript{6,41} although there are research results that show that mentors do not have sufficient pedagogical tools to consider theory and practice together with the nursing students.\textsuperscript{1}

A systematic review has been conducted on mentoring nursing students in clinical placements, including the perspectives of mentors, leaders, students and educators.\textsuperscript{15} However, more specific and current knowledge about nurses’ perceptions of their competence in mentoring nursing students is needed. To date, there has been no systematic review that focuses on nurses’ competence in mentoring nursing students and that synthesizes the results of qualitative studies. Evidence of nurses’ competence in mentoring students could be used in the development of mentor education and new practices in the mentoring process. In this review, competence in mentoring nursing students refers to the qualities, performance, attitudes and values, knowledge and skills that a mentor should have so that she/he can mentor students during their clinical practice.

The aim of this systematic review is to synthesize the evidence related to nurses’ perceptions of their competence in mentoring nursing students in clinical practice. The review will answer the following research question: what kinds of perceptions of their competence in mentoring nursing students do nurses have?

**Inclusion criteria**

**Types of participants**

The current review will consider studies that include registered nurses (or their international equivalents) who have mentored undergraduate students in clinical practice. Studies that include healthcare professionals other than registered nurses (or their international equivalents) will be excluded. The duration of the registered nurses’ clinical practice or involvement with mentoring activities and the students’ phase of education are irrelevant.

**Phenomena of interest**

The current review will consider studies that investigate registered nurses’ perceptions of their competence in mentoring nursing students.

**Context**

The current review will consider studies that include healthcare organizations across acute care and primary care that provide clinical practice for nursing students.

**Types of studies**

The current review will consider qualitative or mixed methods studies if the results of the qualitative research are presented separately. The review is not limited to the different types of qualitative study designs such as phenomenology, grounded theory, ethnography, action research or feminist research. Studies that have only used quantitative research methods or mixed methods, in which the results of the research will not be presented separately, are excluded from this study. In the absence of research studies, other texts such as opinion papers and reports will be considered. The textual component of the review will consider expert opinions, discussion papers and position papers.

**Search strategy**

The search strategy will aim to find both published and unpublished studies. A three-step search strategy will be used in this review. An initial limited search of MEDLINE and CINAHL will be undertaken, followed by analysis of the text words contained in the title and abstract, and of the index terms used...
to describe the article. A second search, using all identified keywords and index terms, will then be undertaken across all the included databases. Third, the reference list of all identified reports and articles will be searched for additional studies. Studies published in English, Finnish and Swedish between 2000 and 2016 will be considered for inclusion in this review. Nursing education has changed during the 21st century, hence the time limit being set. The Bologna Process, which was established in 1999, aims to introduce a more comparable, compatible and coherent system for European higher education. The role of clinical teachers has changed, and teaching responsibility has been transferred to staff nurses. Nursing students are now commonly placed for clinical experiences with a mentor and without a clinical teacher.

The databases to be searched will include:

- CINAHL
- Med (Finnish database)
- PubMed (Medline)
- Scopus
- ERIC (CSA Illumine)
- ISI Web in Science
- OATD (Open Access Theses and Dissertations)

The search for unpublished studies will include:

- MedNar
- OATD

The initial keywords to be used will be:

**In English:** (MH “mentorship”) or (MH “learning environment clinical”) or (MH “education clinical”) or (MH “Students placement”) (MH “clinical practice”) or “clinical placement” or “clinical rotation” or “clinical training” or “clinical learning” or “clinical teaching” or “clinical learning environment” or “clinical education”

AND

- (competence” or skill” or knowledge or attitude” or perform” or value” or quality”)

**In Finnish:**

- (MH “opiskelijaohjaaj” or opiskelijaohjaaj” AND osaami” or kompetens” or ohjausosaami” or asen”

AND

“käytännön harjoittelu” or kliini” or harjo” or käytän”

AND

sairaanhoitaj” or opisk”

In Swedish:

- studenthandledare” or “klinisk lärandemiljö” or handleda”
- kompetens” or färdighete” or kunskape” or attityde” or undervisning”, handledarkompeten” or handledningskompetens

AND

“klinisk praktik”, “klinisk lärandemiljö” or “verksamhetsförlagd lärande/utbildning” or “verksamhetsintegrerad lärande/utbildning” or sjuksköterska”

**Assessment of methodological quality**

The papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review, using standardized critical appraisal instruments from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) and the Joanna Briggs Institute Narrative, Opinion and Text Assessment and Review Instrument (JBI-NOTARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer.

**Data extraction**

Data will be extracted from papers included in the review using the standardized data extraction tool from JBI-QARI and JBI-NOTARI (Appendix II). The extracted data will include specific details about the phenomena of interest, populations, settings, study methods and findings of significance to the review question and specific objectives.

**Data synthesis**

Qualitative research findings will, where possible, be pooled using JBI-QARI. This will involve aggregation or synthesis of the findings to generate a set of statements that represent the aggregation through assembling the findings rated according to their quality and categorizing these findings on the basis of similarity in meaning. These categories will then be subjected to a meta-synthesis to produce a single comprehensive set of synthesized findings that can be used as a basis for evidence-based practice. Where
textual pooling is not possible, the findings will be presented in narrative form.

Textual papers will, where possible, be pooled using JBI-NOTARI. This will involve the aggregation or synthesis of conclusions to generate a set of statements that represent the aggregation through assembling and categorizing these conclusions on the basis of similarity in meaning. These categories will then be subjected to a meta-synthesis to produce a single comprehensive set of synthesized findings that can be used as a basis for evidence-based practice. Where textual pooling is not possible, the conclusions will be presented in narrative form.

References


Appendix I: Appraisal instruments

QARI appraisal instrument

**JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Unclear</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is there congruity between the stated philosophical perspective and the research methodology?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is there congruity between the research methodology and the research question or objectives?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Is there congruity between the research methodology and the methods used to collect data?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Is there congruity between the research methodology and the representation and analysis of data?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Is there congruity between the research methodology and the interpretation of results?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Is there a statement locating the researcher culturally or theoretically?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Is the influence of the researcher on the research, and vice versa, addressed?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Are participants, and their voices, adequately represented?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overall appraisal: [ ] Include [ ] Exclude [ ] Seek further info. [ ]

Comments (including reason for exclusion)
### JBI Critical Appraisal Checklist for Narrative, Expert opinion & text

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unclear</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the source of the opinion clearly identified?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Does the source of the opinion have standing in the field of expertise?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Are the interests of patients/clients the central focus of the opinion?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Is the opinion's basis in logic/experience clearly argued?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Is the argument developed analytical?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Is there reference to the extant literature/evidence and any incongruency with it logically defended?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Is the opinion supported by peers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overall appraisal:** Include [ ] Exclude [ ] Seek further info [ ]

**Comments (including reason for exclusion):**

---

©2016 Joanna Briggs Institute. Unauthorized reproduction of this article is prohibited.
### Appendix II: Data extraction instruments

#### QARI data extraction instrument

**JBI QARI Data Extraction Form for Interpretive & Critical Research**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewer</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>Author</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td></td>
</tr>
<tr>
<td>Journal</td>
<td></td>
</tr>
<tr>
<td>Record Number</td>
<td></td>
</tr>
</tbody>
</table>

**Study Description**

- **Methodology**

- **Phenomena of interest**

- **Setting**

- **Geographical**

- **Cultural**

- **Participants**

- **Data analysis**

- **Authors Conclusions**

**Comments**

Complete: Yes ☐ No ☐
<table>
<thead>
<tr>
<th>Findings</th>
<th>Illustration from Publication (page number)</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Unequivocal</td>
</tr>
</tbody>
</table>

Extraction of findings complete: Yes ☐, No ☐
NOTARI data extraction instrument

JBI Data Extraction for Narrative, Expert opinion & text

Reviewer ___________________________ Date ___________________________

Author ___________________________ Year _______, Record Number _______

Study Description
Type of Text:

Those Represented:

Stated Allegiance/ Position:

Setting

Geographical

Cultural

Logic of Argument

Data analysis

Authors Conclusions

Reviewers Comments

Data Extraction Complete Yes ☐ No ☐
<table>
<thead>
<tr>
<th>Conclusions</th>
<th>Illustration from Publication (page number)</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Unequivocal</td>
</tr>
</tbody>
</table>

Include: Yes [ ] No [ ]