

The role of peer-assisted learning in enhancing the learning of undergraduate nursing students in clinical practice: a qualitative systematic review protocol

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Review question/objective: The objective of this qualitative systematic review is to identify and synthesize the best available evidence on experiences of peer teaching and learning among student nurses in the clinical environment.

The specific objectives are:

- To identify nursing students' experiences of peer-assisted learning (PAL) and teaching within the clinical setting.
- To identify qualitative data that highlight the strengths and weaknesses of PAL among student nurses in clinical settings.
- To explore whether PAL enhances the competence of student nurses' learning in clinical settings.

Keywords Nurse; nursing student; peer learning; peer tutoring; undergraduate

Background

Peer-assisted learning (PAL) is an initiative considering the benefits of peers working in collaboration and supporting each other in their professional role. Topping¹ defines peer learning as the “acquisition of knowledge and skill through active helping and supporting among status equals or matched companions”^{1(p.630)}. The use of peer teaching to facilitate learning had been used by universities for many years.¹ Peer-assisted learning is utilized for the facilitation and support of integrating students into university's teaching and learning.² Other areas of terminology that are associated with PAL include “peer teaching”,³ “peer support”⁴ and “peer mentoring”.^{5,6}

Evaluation of PAL within nursing has shown evidence of enhancement in the competence of student learning and self-efficacy in clinical settings.^{3,7} Evidence also suggests that student nurses should be encouraged to become peer teachers.⁸ Owen and Ward-Smith⁹ evaluated the interactions during simulated learning between third-year students playing the role of patients and mentors alongside first-

year students providing care and receiving guidance from senior students. This near-peer teaching approach provided a positive learning opportunity for all students and encouraged knowledge and skills attainment.⁹ There is also evidence in the area of peer mentoring between second-year nursing student mentors and first-year mentees within the academic environment.² Benefits of these partnerships support the transition from university to nursing practice by preparing students to be mentored in clinical settings and reducing students' anxiety.^{2,6,10} Thus, PAL in nursing seems to be beneficial to student's teaching and learning, although it has been argued that peers providing support lack the level of experience of professional teachers and educators.¹

Peer-assisted learning has been gathering momentum for the last few years in other health professions.¹¹ A review demonstrated key concepts of PAL within the areas of peer teaching, training and peer assessment among medical students.¹² However, when exploring domains for learning within medical programs, it is clear that the focus is rooted within Higher Education Institutes (HEI) without clear consideration of the clinical environment.¹¹ Peer-assisted learning has been limitedly explored in Occupational Therapy education. Reason for not using PAL in Occupational Therapy could be related to difficulties in placement areas. Students are often

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placed independently in clinical practice resulting in limited contact with peers in field.¹³ Further exploration among other healthcare professionals provided limited consideration within midwifery. However, one study explored the impact of PAL between undergraduate midwifery students and paramedic students providing respect and understanding of each other's roles.¹⁴ The limited evidence of the benefits of PAL in healthcare might be due to the differences in education and practice experience. Therefore, the structure, in particular to that of nursing programs, needs further exploration.

Within the United Kingdom (UK), not all nursing student learning takes place in HEI. The UK's Nursing and Midwifery Council standards for supporting learning in practice require 50% of learning to be undertaken within practice.¹⁵ The responsibility of learning within these areas belongs primarily to mentors providing learning opportunities, feedback and assessment of competencies.¹⁵ However, mentorship is not always perfect, and support varies in many ways. Andrews and Chilton¹⁶ discovered that not all mentors see themselves as teachers. Increased clinical workload also becomes a factor limiting opportunities for students to work together with their mentors.^{17,18} These situations often leave students feeling nomadic in their placement areas, which often lead students to seek out each other for support.¹⁹ This is made possible due to the likelihood of being allocated to the same placement area as another student.⁴

Most of the learning that takes place between nursing students in practice has been addressed as informal.¹⁹ The recognition of potential gaps in time spent with mentors and missed opportunity to learn alongside them has led to formal studies of peer learning in practice.⁶ However, there is limited evidence available exploring the value of PAL and the students' interactions and behaviors within acute clinical settings. Campbell *et al.*²⁰ were one of the first colleagues exploring how student nurses learn in clinical settings. They found that peer support emerged as one of the most influential factors of student learning. Specific areas in which peer support was most beneficial encompassed the areas of providing emotional support, sharing experience to facilitate learning and using peers to support with physical tasks.²⁰ It was a further ten years before development in the area of PAL began to produce specific research related to PAL within nursing.

Considering the responsibilities of mentors,¹⁵ a question that needs to be inquired is what competencies or competence exists between peers to facilitate learning. Competence has been difficult to define in nursing^{21,22}; however, Roach²³ defines competence as "The state of having the knowledge, judgement, skills, energy, experience and motivation required to respond adequately to the demands of one's professional responsibilities."^{23(p.3)} This should not be confused with the process of assessing specific competencies of student nurses in practice.²⁴ Chojecki *et al.*²⁵ found that the types of competencies that are developed by student nurses in clinical practice consist of knowledge, critical thinking, professionalism and psychomotor and technical skills. Prion *et al.*²⁶ explored competencies of preceptees' as knowledge, practical skills and attitudes. If these competencies are not reflected through PAL, the consideration of competencies such as attitudes and behaviors of peers that enable them to deliver learning to their peers needs to be explored.

Peer-assisted learning is gathering momentum in its formal recognition both within the UK and internationally.¹² With this in mind, a preliminary search of the literature identified numerous qualitative studies and limited quantitative studies that consider PAL and its associated terminology within nursing. To our knowledge, there was one related systematic review²⁷ published but none exploring the impact of PAL on nursing students' learning in the clinical environment. Therefore, this review protocol aims to explore the literature to synthesize and aggregate key themes that might emerge in relation to PAL among student nurses in clinical settings.

Inclusion criteria

Types of participants

The current review will consider studies that include undergraduate nursing students.

Phenomena of interest

The current review will consider studies that explore undergraduate nursing students' experiences of PAL within the clinical practice environment.

Context

Any clinical healthcare setting, including, but not limited to hospitals, emergency departments and outpatient clinics, will be considered.

Types of studies

The current review will consider studies that focus on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography, action research and feminist research.

In the absence of research studies, other text such as opinion papers and reports will be considered.

The current review will exclude quantitative studies, studies addressing PAL outside the nursing profession and studies within the nursing profession but not including undergraduate student nurses.

Search strategy

The search strategy aims to find both published and unpublished studies. A three-step search strategy will be utilized in this review. An initial limited search of COCHRANE, ERIC, 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 article. A second search, using all identified keywords and index terms, will then be undertaken across all included databases. Third, the reference list of all identified reports and articles will be searched for additional studies. Only studies published in English will be considered for inclusion in this review. Studies published in the last 12 years will be considered for inclusion in this review. This is due to the formal recognition and interest of PAL developing during that time, where previous occurrences were generally informal.¹²

The databases to be searched include:

ERIC

MEDLINE

CINAHL

COCHRANE Central Trials Register

ProQuest

Initial keywords to be used will be: “nurse*”, “nursing”, “Student*”, “undergraduate”, “Peer learning”, “peer tutoring”, “peer mentoring”, “peer support”, “clinical environment”, “practice environment”, “ward environment”

Assessment of methodological quality

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) (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 (Appendix II). The data extracted will include specific details about the phenomena of interest, populations, study methods and outcomes 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 the aggregation or synthesis of findings to generate a set of statements that represent that aggregation, through assembling the findings rated according to their quality, and categorizing these findings on the basis of similarity in meaning. These categories are then 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.

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Appendix I: Appraisal instruments
QARI appraisal instrument

JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research

Reviewer Date

Author Year Record Number

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

Overall appraisal: Include Exclude Seek further info.

Comments (Including reason for exclusion)

Appendix II: Data extraction instruments

QARI data extraction instrument

JBI QARI Data Extraction Form for Interpretive & Critical Research

Reviewer Date

Author Year

Journal Record Number

Study Description

Methodology

Method

Phenomena of interest

Setting

Geographical

Cultural

Participants

Data analysis

Authors Conclusions

Comments

Complete Yes No

Findings	Illustration from Publication (page number)	Evidence		
		Unequivocal	Credible	Unsupported

Extraction of findings complete Yes No