Peer Feedback Among Nursing Students: Does it Enhance Learning?

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Recommended Citation

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Teaching is an important aspect of a nurse's role; they teach patients, their families, and novice nurses or newly hired nurses (Irvine et al., 2017). Students must learn the process of teaching in nursing school and develop teaching as they move through different clinical experiences. The process of teaching helps build relationships and improve outcomes (Wu et al., 2018) Giving peer feedback is one way the students can practice and develop teaching skills, benefitting them later in their careers with effective patient teaching. Additionally, giving feedback to another student and receiving feedback from another student will help the receiver and giver of feedback to retain the information (Stenberg et al., 2021). Peer feedback can be generally defined as the process among people of the same professional level critiquing each other's work and giving feedback intentionally to enhance learning and confidence in the performance of those skills. The purpose of this manuscript is to examine the literature on peer feedback and identify the benefits of peer feedback on student learning and information retention.

Definition: What is peer feedback?

Different terms are found in the literature to represent peer feedback. Peer assessment, peer coaching, peer tutoring, peer-assisted learning, and informal peer learning are some of the terms identified. The American Nurses Association (ANA) defines peer 'review' for nurses as:

> the process by which practicing registered nurses systematically access, monitor, and make judgments about the quality of nursing care provided by peers as measured against professional standards of practice…Peer review implies that the nurse is evaluated by individuals of the same rank according to the established practice (Haag-Heitman & George, 2011, p. 48).

The ANA Code of Ethics for Nurses and Peer Review Guidelines identified three contemporary focus areas for peer review—quality and safety, role actualization, and practice advancement (Haag-Heitman & George, 2011). For purposes of this review the term peer feedback will be consistently used. Box 1 describes the principles of peer feedback and these are

essential for excellent nursing practice and patient outcome. This literature review will focus on answering the question, "does peer feedback among nursing students enhance learning?"

Methods

Search terms such as peer assessment, peer coaching, peer tutoring, peer-assisted learning, and informal peer learning were used to identify peer-reviewed publications from databases such as *CINAHL, PubMed, and Google Scholar*. Publications within the last five years were used in this review. Overall, about 24 publications were identified initially. Secondary search and gray literature yielded additional information. The inclusion criteria were relevancy to the topic, conducted in an academic setting, and published within the last five years. A few older publications were included due to their significance to the topic. Only publications written in English were included. It was found that researchers have used different frameworks to examine peer feedback. Frameworks used to facilitate feedback, , use of peer feedback in health care disciplines, advantages and challenges of peer feedback, faculty and student preparation, and common tools used to evaluate peer feedback were identified from the literature and are elaborated below.

Frameworks Utilized to Provide Peer Feedback

Different frameworks can be used to provide peer feedback. Wray's Reflect, Inquire, Suggest, Elevate (RISE) model (Chicca, 2022; Wray, 2015) is suggested as a foundation for student guidance that allows for constructive, tactful, and meaningful feedback. This model aligns with Bloom's taxonomy for higher-order thinking, encouraging deeper and higher levels of critical thinking. Bloom's taxonomy supports the RISE model and facilitates the implementation and evaluation of peer feedback (Chicca, 2022).

Some researchers integrated theories and theoretical concepts on learning to form mastery learning and deliberate practice (Gonzalez & Kardong-Edgren; 2017; Kardong-Edgren, Oerman, & Rizzolo, 2019). These researchers found that initial learning, mastery of skill, and overlearning can improve learning. Feedback during the intermittent practice of the skill can be performed by peers.

The utilization of Objective Structured Clinical Examination (OSCE) often appears in the literature for assessing skills performance. OSCE provides an effective strategy for assessing psychomotor nursing skills using reliable, valid, and practical clinical competence assessment criteria (Cushing et al., 2011; Rush et al., 2012)). The use of OSCE can also enhance skill

acquisition and increase student confidence through simulation. Three roles can be assumed in OSCE, the candidate, examiner, and observer. The students can give feedback to each other in all these roles.

Magnet-designated hospitals use a shared governance model wherein a peer review strategy is used for evaluation of the performance of nurses. Peer review, according to the Magnet standard is defined as "components of an annual evaluation or performance appraisal by which Registered Nurses (RN) assess and judge the performance of professional peers against established practice or organizational standards." (Institute of Medicine, 1999, p. 47). Developing skills in peer feedback in nursing school will help them to understand and embrace the 'peer review' processes in Magnet-designated hospitals as they transition in their career.

While peer feedback is the term consistently used in this manuscript, literature on other terms such as peer assessment, peer coaching, peer tutoring, peer-assisted learning, and informal peer learning are included in this review. Although most of the literature involves students, some publications include others from which we can draw principles. Some activities for peer review included direct observation, writing assignments or active learning activities (Kim-Godwin et al., 2018).

Peer Feedback in Healthcare Disciplines

Peer feedback has been successfully utilized in diverse healthcare disciplines. According to Stenberg et al. (2021) and Carey et al. (2018), the goal of peer feedback (assessment) is to prepare students for collaborative care which is crucial in healthcare professions. They advocate for ongoing collaborative learning to be effective in practice. As healthcare disciplines focus on skill acquisition and competency, peer feedback can focus on the skills. Carey et al. add that it usually happens more in clinical settings and helps develop their clinical role. It has been found that video-based peer feedback has helped enhance robotic surgery skills in surgeons (Carter et al., 2014). The positive impact of video-based peer feedback approach in nursing has long been recognized. In nursing, the ANA published peer-review guidelines as early as 1988 (ANA, 2015). These guidelines laid the foundational principles and conceptual framework for the development of peer review processes and structures that exist today (Tornwall, 2018).

Some studies examined peer feedback among nursing students from different perspectives. Duers (2017) asserts that in addition to evaluating student psychomotor performance skills, human qualities should also be included in student evaluation. Student input

has a significant influence on success, and student involvement in developing peer feedback tools may be more effective and provide a greater positive experience to the students. Ideally, peer-reviewed feedback that is learner-driven and positively focused, builds confidence, raises self-esteem, and results in a positive exchange.

Benefits of Peer Feedback

Peer feedback offers several benefits to the students. It can enhance learning, empower, and increase confidence in students (Carey et al., 2018Stone et al, 2013;). Peer feedback can help nursing students to acquire and strengthen skills (George et al., 2918). The student's communication skills also can be enhanced while providing feedback to peers. It can improve collaboration and support in professional roles, develop clinical knowledge, competence and confidence, and reduce stress and anxiety (Carey et al., 2018; Stone et al., 2013; Topping, 2017)). Several themes regarding peer feedback emerged from the reviewed literature. Advantages of a peer feedback approach include enhanced learning, empowerment, promotion of teamwork and collaboration, critical thinking, and learning to provide constructive feedback (Chicca, 2022; George et al., 2018;Topping, 2017). Peer feedback improves collaboration among different levels of nursing students between junior and senior level students (George et al., 2018), peer feedback improved learning in the receiver and reviewer (Chicca, 2022) and provides a sense of healthy competition among the students, and a new way of learning and gaining experience. Giving feedback improves leadership skills, a perception of increased learning, and an added sense of independence. Giving feedback improves social skills as well (Topping, 2017).

Peer Feedback can Enhance Learning

Peer feedback can be used to stimulate thinking and critical self-reflection in students which will enhance learning. Peer feedback can allow the reviewer to think, self-evaluate, and improve knowledge and performance (Han et al., 2013). Peer feedback is a skill that fosters learner autonomy as demonstrated in formative objective structured clinical examination (OSCE) sessions involving medical and nursing students explored (Cushing et al., 2011). In this study the students took different roles in three sessions the participants gave and received structured feedback immediately after the sessions. Students reported this as valuable in learning; therefore, the researchers used this model to enhance learning both theoretical and skills development. In addition, the students preferred peer feedback over faculty feedback which built confidence and

self-esteem in the students. Tornwall (2018) emphasizes the relevance of peer feedback in sustaining autonomy and accountability in nursing. Cushing et al (2011) reported the transferability of skills to clinical settings in their study involving medical and nursing students. Peer feedback was found to improve metacognition and transferable skills (Topping, 2017). Overall, peer feedback enhanced learning of transferrable skills, and knowing what to look for in others helped the reviewer to improve self-performance.

Peer Feedback Empowers Students

Peer feedback improves learning quality and empowers students. Rush et al. (2012) in their review reported that assessment by peers helps develop judgment-making skills, academic and life skills, and higher future summative assessment scores. They reported many advantages to this approach, including deeper thinking by students on their peer-assessed activity, gained insight into how peers tackle similar clinical problems, how to give and receive constructive feedback to and from peers, and found a shift in perception of the lecturer from just a provider of knowledge to a facilitator of learning. This empowerment will prepare them to communicate effectively with patients and families and provide confidence to teach patient care topics in clinical practice. As patient teaching is an expectation for entry-level nursing practice (American Association of Colleges of Nursing (AACN, 2021), it is important to instill and develop these skills which can be initiated through peer feedback processes. When students give feedback to peers, learning can be achieved in a non-threatening environment.

Feedback from peers is better received than faculty feedback. Giving and receiving feedback fosters growth and independent thinking. however, it should be done in a sensitive and intentional way. The students should know the standards and the required elements of peer feedback and must be prepared to give feedback with respect, sensitivity, and empathy (Cushing et al. 2011; Sackstein, 2017). Students and faculty must learn how to provide feedback appropriately.

Peer Feedback Promotes Student Participation

Peer evaluation is another term used in literature that increases the quality of the learning experience and promotes student participation, particularly in lower-achieving students (Kim-Godwin et al., 2018). Peers evaluate the performance of their peers and provide feedback. Students are encouraged to be more critical thinkers with the use of peer evaluation. This

learning method can help overcome low student participation by necessitating collaboration and teamwork. Fertelli (2019) found that when students assess and give feedback to each other's nursing process in the clinical setting, their critical thinking increases. Thus, facilitating such peer feedback activities will enhance learning, and educators must create supportive learning environments. Students engaging in peer feedback think critically, applying metacognitive thinking processes.

While peer feedback is effective, the educator must be intentional in implementing this. In addition, it must be measured for effectiveness so that the process can be continued or modified for future use.

Facilitation of effective Peer Feedback: Educator Preparation

When designing peer feedback experiences in nursing education, the focus should be placed on supporting a culture of value for giving and receiving feedback. There are five stages identified for peer feedback: focused, descriptive, constructive, blended, and achievable (Tornwall et al., 2022). It is vital that nurse educators intending to create peer feedback experiences include the following elements for effectiveness (Burgess et al., 2020): (1) Provide empirical evidence supporting the role of peer feedback to improve patient safety and care quality; (2) Design the feedback process to encourage students to give high-quality and supportive feedback to peers; (3) Emphasize the significance of peer feedback in the professional duties of nurses and its role in the autonomy and accountability of the nursing discipline; (4) Emphasize the benefits of peer feedback to both the giver and receiver in the exchange of feedback; (5) Allow time during the experience to complete written or verbal peer feedback and implement peer suggestions for improvement; (6) Provide evidence-based instruction on how to give supportive peer feedback and prepare students emotionally to receive critical feedback. Feedback can be given either in written, verbal, or video-based format; it can be blind or open and can be formal or informal.

Students must be prepared to give and receive peer feedback, and this preparation strongly impacts success. In addition to formal training on its use, clear and detailed assessment criteria, rubric, and guidelines ought to be provided to peer assessors (Topping, 2017; Tornwall, 2018). Nurse educators should prepare students both emotionally and cognitively for peer feedback through assistive techniques, including examples of quality peer feedback, opportunities to practice, and training to give supportive feedback, especially negative or

constructive feedback. These techniques facilitate the exchange of supportive and high-quality feedback and increase its effectiveness. Regular and ongoing assessment using appropriate tools must be conducted to ensure the effectiveness of the program and if found deficient, must be revised. Usually, the students learn to give objective feedback with more ongoing opportunities (Topping, 2017). Initial supervision or a test run may allay anxiety in the receiver and giver of feedback. While peer and teacher feedback can vary, Li, et al. (2016) found a moderate correlation in a meta-analysis with a higher correlation in paper-based work rather than computer-based work. Opportunity to provide peer feedback consistently increases effectiveness. While Steckelberg and Li (2004) did not find any difference in learning between control and experimental groups, the students in their study reported positive experiences.

Evaluation of Peer feedback

Researchers have utilized various instruments to examine the effectiveness of peer feedback processes in education. The following investigations and the tools utilized were found relevant.

- Owen and Ward-Smith (2014) used a 10-item tool on a 5-point Likert scale (1 = strongly agree and 5 = strongly disagree) plus four open-ended questions

- Kim-Godwin et al. (2018) utilized the Revised Community of Inquiry (RCOI) instrument (33-item, 5-point Likert-scale questionnaire) and three open-ended questions

- Rush et al. (2012) implemented a Peer Assessed Clinical Skills (PACS) scheme that addressed the skills necessary for nursing students to show competence by the end of the year. Students were given a Clinical Skills Passport in which each skill identified served as a peer-reviewed assessment.

- Ross (2019) utilized an investigator-created, task-specific psychomotor skills competency checklist adapted from existing checklists in nursing textbooks.

While several tools are available, educators must use the right tool to evaluate their processes and have plans in place to improve the processes as needed.

Challenges to Peer Feedback

Peer feedback can present several challenges to the giver and receiver of feedback, as well as to the process. Even when students know the value of peer feedback and have skills, it may not translate into the peer feedback process (Tornwall et al., 2020). Students may feel a lack of expertise in the process. Individual differences may present subjectivity in feedback. Students

may also feel uncomfortable and find it difficult to give meaningful feedback (Chicca, 2022). Another possible challenge is the difficulty in ensuring the accuracy, validity, and reliability of student feedback (Rush et al., 2012). However, providing structure to the experience may help students with the process, and Wray's RISE model (as cited in Chicca, 2022) has been used by several institutions where students are trained to provide feedback to their peers. Conflicts in scheduling, time commitment, challenges in peer relationships, attitude to mentoring, poor communication, inadequate knowledge, and lack of preparation also could be challenges (Carey, et al. 2018; Wong et al., 2016;). The inability to give open feedback was another challenge for students (Ohaja et al., 2013). Maintaining confidentiality also may be a challenge (Shiu et al. 2012). Facilitating peer feedback to and among students in transcultural and multiethnic contexts also requires careful planning and preparation. A summary of the benefits and challenges of peer feedback is provided in Table 1.

Implications

With the current healthcare climate and emphasis on patient safety, it is vital for nursing education programs to prepare competent graduates who can provide all components of patient care skillfully and safely (Ross, 2019). Therefore, nurse educators are challenged to utilize evidence-based teaching methods to promote skill competence and retention that supports safe, high-quality nursing care in various care settings. Team-based learning experiences for students of similar academic levels must be provided to enhance their learning, as well as patient teaching skills. Research findings suggest that peer feedback provides significant student benefits and improves learning outcomes (Kim-Godwin, 2018). Therefore, educators must foster such opportunities. Students value peer feedback, however, may be reluctant due to lack of experience. Students must be trained on how to give and receive feedback and the best practices for such. Introduction of peer feedback skills earlier in the nursing program will help the student to be confident in providing feedback to peers and develop skills to teach patients and families as they transition to practice.

Conclusion

Peer feedback is an important topic to enhance learning in students and help develop skills for patient teaching. While being practiced by several nursing programs and Magnet hospitals, the new AACN essentials (2021) expects nursing programs to promote this through their competency statements. In addition, equipping nursing students to provide peer feedback

aligns with the ANA code of ethics as this practice will assist nursing students' transition to practice. Therefore, it will be prudent for all nursing schools to have peer feedback embedded in the curriculum as they strive to generate well-equipped, competent nurses. Confidence in providing peer feedback and respectfully receiving feedback will not only improve student, faculty, and nurse satisfaction, but also overall competence in nursing skills and practice, thus impacting patient outcomes.

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