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Review

Reforming the undergraduate nursing clinical curriculum through clinical immersion: A literature review

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ABSTRACT

Clinical immersion is a method used by various academic programs to narrow the theory-to-practice gap and assist students to transition from school to a new work environment. In the clinical immersion model, students embark upon a concentrated and intensive clinical experience, typically at the end of a semester or program. This literature review explored the various methods by which programs carry out the immersion clinical experience model and if the experience improved students' readiness for entry level positions. Findings from students, faculty, and preceptors showed that immersion experiences are successful in increasing student confidence and nursing skills; however, additional objective evidence is needed to show that the use of immersion experiences can improve graduate readiness for practice. Research is also needed to explore if any differences in student performance outcomes exist between clinical immersion at the end of each semester versus one in a capstone course.

1. Reforming the undergraduate nursing clinical curriculum through clinical immersion

The traditional model of clinical nursing education is becoming increasingly difficult to execute. The prototype of one instructor for 10 students presents a challenge as the instructor cannot provide the individual attention and support the students need to learn about the complex world of healthcare. The traditional model provides students with a snapshot of patient care as clinical typically occurs one to two days a week for six to 8 h per day. The traditional model does not exposure students to continuity and progression in patient care. Additionally, there is often unproductive time during clinical when students are waiting for instructor supervision and faculty spend time on routine tasks rather than promoting clinical reasoning (Tanner, 2010).

Nursing faculty has been charged with creating innovative ways to educate students that are different from the traditional approach (NLN, 2003). Professional organizations have called for nurse educators to form partnerships with nurse clinicians to prepare students to be able to function effectively in rapidly changing patient environments and for clinical experiences to include strong nursing role models that will prepare them for practice in a complex environment (Altman et al., 2016; American Association of Colleges of Nursing [AACN], 2008; National League for Nursing [NLN], 2003). Clinical partnerships developed before graduation can help overcome the barriers of budgetary constraints, dwindling faculty, space limitations, and growing student enrollment (Kaddoura et al., 2012) and promote socialization, increase productive clinical time, and increase confidence, competence, job satisfaction, and retention (Starr and Conley, 2006). Partnerships have been found to increase critical thinking in students, increase patient safety, improve patient outcomes, increase efficiency of resources, and foster collaboration between the academic and practice communities (Rhodes et al., 2012). Educators need to partner with healthcare agencies in designing transition-to-practice programs that emphasize clinical reasoning, reflection, and constructive feedback for nursing students in both the didactic and clinical aspects of nursing (Altman et al., 2016; Ironside & McNelis; NLN, 2003; Spector, 2015). These programs can be defined as clinical immersion experiences.

Clinical immersion is defined as "a brief, structured, intense nursing practicum where the entire focus is in a particular clinical setting without the distraction of other academic classes." (Tratnack et al., 2011, p. 532) and as "instruction based on extensive exposure to surroundings" or "conditions that are native or pertinent to the object of study". (Immersion, 2018, n.d). End-of-program clinical immersion is needed to evaluate the students' ability to apply theory to practice (Phillips et al., 2013). The formation and use of clinical immersion experiences in the United States and abroad have attempted to enhance the ability of the student to transition into practice upon graduation

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(AACN, 2008; Caldwell et al., 2010; Dickson et al., 2015; Diefenbeck et al., 2006; Penprase et al., 2016).

To explore the impact of clinical immersion on student outcomes, a synthesis of the literature pertaining to clinical immersion was conducted. Specifically, this review focused on post-didactic clinical experiences in which students are immersed in clinical rotations after all or most of the didactic portions of the program have been covered as opposed to the approach of combining theory and clinical throughout the curriculum. Recommendations for improvement when using the immersion experiences are given.

2. Problem identification and purpose

Health care organizations and hospital executives report that new graduate nurses are not prepared to practice as registered nurses with the necessary clinical reasoning and collaboration skills needed to be safe and effective practitioners (Bridges et al., 2013; Rozmus et al., 2014; Spector et al., 2015; Watt and Pascoe, 2013). New graduate nurses are not equipped with the knowledge and expertise needed to manage complex patient care regimens because of nursing curricula that lacks standardization, instruction that does not promote clinical inquiry, and lack of assimilation between clinical and classroom components (Benner et al., 2010; Tanner, 2010).

The aim of this literature review was to investigate the current types of clinical immersion models being used by undergraduate nursing programs, how are these models being evaluated for their effectiveness in preparing nursing students for clinical practice, and identify gaps in the research that may exist and need further investigation.

3. Methods

A search of electronic databases was conducted using the Cumulative Index of Nursing and Allied Health Literature (CINAHL), MedLine, and Education Resource, and limited to the years 2005–2016. A 10-year review was done to ensure a more complete history of the evolution of clinical immersion and to be inclusive of innovation in front-loaded didactic models. Peer-reviewed articles in the English language were reviewed, including international articles. Combinations of key words used in the search were: curriculum reform, curriculum transformation, theory-to-practice gap, clinical immersion, preceptorship, transition-to-practice, and nursing education. A total of 469 articles were screened for suitability by reading abstracts, recommendations, and conclusions with attention to include research that used a front-loaded didactic approach, with a clinical immersion experience either toward the end of each semester or the end of the curriculum. A total of 24 articles met the specific criteria and are summarized in the matrix in Appendix A which displays the authors, study location, study design, participant characteristics, immersion design, and outcomes.

4. Conceptual framework

Immersion learning theory, also called brain-based learning ("Brain-Based Learning", 2011), is based on the premise that an individual's learning increases when he or she can be exposed to an environment that is representative of the one in which he or she will practice ("Immersion Learning", 2004–2009). Three instructional techniques that are based on immersion learning are: 1) "orchestrated immersion" in which teachers create learning environments that fully immerse students in an educational experience; 2) "relaxed alertness" that creates a challenging environment without fear; and 3) "active processing" which allows the student to integrate and internalize information. Active processing requires the student to gain insight into a realistic problem by analyzing different ways to approach it and then solving it using feedback from reality ("Brain-Based Learning", 2011). There are three ways a person learns: thinking, feeling, and experiencing. Immersion learning incorporates all three modalities by placing the person in a situation that allows them to learn by all three methods.

5. Results

Twenty-four articles were examined which evaluated student preparedness using a clinical immersion model. Participant characteristics, immersion design, and study outcomes are discussed.

5.1. Participant characteristics

Fifteen of the 24 articles studied generic undergraduate baccalaureate students, six studies researched accelerated baccalaureate (ABSN) students, and one included associate degree nursing students. Two articles surveyed alumni, three included preceptors, and one study surveyed baccalaureate faculty.

5.2. Immersion design

The clinical curriculum models described in these research articles have several terminologies: practicum, clinical immersion model, preceptorship, clinical coach model, externship, and clinical partnership. The designs all seem to follow a similar pattern to what the North Carolina Board of Nursing describes as the clinical practicum, or the Focused Client Care Experience (North Carolina Board of Nursing (NCBON), 2014). It is defined as a "clinical experience that simulates an entry-level work experience" (NCBON, 2014). The experience may be supervised by either faculty or by a preceptor who is guided by a faculty person and should contain activities that involve direct patient care and reflect behaviors of the entry level nurse (NCBON, 2014). The practicum also gives the student an opportunity to refine skills, gain clinical judgment, become socialized into the nursing practice role, and transfer theoretical concepts from the classroom to the clinical setting (O'Connor, 2015).

Most models in this review were designed with the clinical immersion experience sometime in the final year of school with the following exception: first semester (Ballard et al., 2006), second semester (Caldwell et al., 2010) and at the end of each semester (Kaddoura et al., 2012). The length of clinical immersions varied widely, from six days (Tratnack et al., 2011) to one year (Bridges et al., 2013; Tilley et al., 2007) with most being around 16 weeks. Medical-surgical acute care was the primary setting in 18 of the studies. One immersion experience was in neonatal care (Wilkerson and Faber, 2015), one in psychiatric/mental health (Tratnack et al., 2011), two in perioperative units (Chappy et al., 2014; Penprase et al., 2016), and two in critical care (Ballard et al., 2006; Leasure et al., 2011).

Five of the 24 articles did not specify whether the immersion experience took place with or without didactic content. Eleven immersions took place along with some didactic course content. Three immersions involved the entire senior year with no didactic content, or only included a seminar and one or two elective courses (Diefenbeck et al., 2006; Paulson, 2011; Rozmus et al., 2014).

Only four articles were identified as having immersion experiences that were free of concurrent theory content including a last semester summer immersion (Walker et al., 2008), a 210-h perioperative immersion (Penprase et al., 2016), and a six-day psychiatric/mental health experience (Tratnack et al., 2011), The remaining model was unique in that the 5–6 week immersion experience was implemented in each semester of the traditional and accelerated programs after a two-week didactic component with simulation. (Kaddoura et al., 2012).

Preceptors comprised the majority of the people who were primarily responsible for the direct clinical education of the nursing students, usually in a 1:1 or 1:2 ratio and supported by academic faculty and academic and clinical administrators. In a few cases, the instructors were identified as clinical coaches or mentors (Bridges et al., 2013; Lujan and Vasquez, 2010; Ralph et al., 2009; Tilley et al., 2007). One baccalaureate curriculum was designed to have an immersion at the