Clinical judgment is an essential skill needed by RNs. Employers expect new graduate nurses to enter the workforce with established clinical judgment skills. Therefore, nurse educators must ensure that prelicensure nursing students develop clinical judgment before graduation. This qualitative, interpretive description study reviewed the reflective journals of 30 prelicensure nursing students who participated in four progressive high-fidelity simulation (HFS) scenarios during a medical–surgical nursing course. Eight themes were identified in the reflective journals: (a) expectations about the patient, (b) recognition of a focused assessment, (c) interpretation of medications, laboratory data, and diagnostics, (d) communication with the patient, (e) collaboration and interprofessionalism, (f) prioritizing interventions, (g) skillfulness with interventions, and (h) incorporation of skills and information into real patient situations. This study indicated that reflective journaling following progressive HFS scenarios may be an effective teaching–learning strategy to assist prelicensure nursing students in the development of clinical judgment.

Graduates of prelicensure nursing programs are expected to have developed clinical judgment skills upon entering the workforce (Decker, 2012; Kantar & Alexander, 2012; Kupier, Murdock, & Grant, 2010; Lasater, 2011). Therefore, nurse educators must develop innovative and appropriate educational strategies for prelicensure nursing students to acquire clinical judgment decision-making skills (Kantar, 2010; Kupier et al., 2010). Traditional nursing education consists of lecture, skills laboratory, and clinical experiences. A strong consensus exists among nurse educator scholars that the traditional lecture-type format in the classroom setting does not support an active learning environment and therefore does not improve the development of clinical judgment in prelicensure nursing students (Alfes, 2011; Banfield, Fagan, Janes, 2012; Cazzell & Howe, 2012; Gates, Parr, & Hughen, 2012; Phillips & Dowie, 2011).

High-fidelity simulation (HFS) has become an innovative and successful approach to decreasing the theory–practice gap and improving clinical judgment among prelicensure nursing students (Cato, 2012; Lasater, 2007). Many studies suggest that HFS can improve student self-confidence, communication, interprofessionalism, patient safety, medication administration, critical thinking, and clinical judgment skills (Blum, Borglund, & Parcells, 2010; Coffman, 2012; Harder, 2010; Howard, Englert, Kameg, & Perozzi, 2011; Rizzolo, 2012). After an HFS scenario, oral debriefing is conducted. Debriefing has been identified in the literature as the most important aspect of the HFS scenarios because it narrows the theory–practice gap and assists in the development of clinical judgment (Mariani, Cantrell, Meakim, Prieto, & Dreifuerst, 2013; Neill & Wotton, 2011; Shinnick, Woo, Horwich, & Steadman, 2011; Thomas-Dreifuerst, 2009; Thomas-Dreifuerst & Decker, 2012; Wickers, 2010).

The purpose of the current study was to identify an effective teaching–learning strategy to assist prelicensure nursing students in the development of clinical judgment prior to graduation.

Background

Tanner’s clinical judgment model provided the theoretical scaffolding for this study. Clinical judgment is defined as “an interpretation or conclusion about a patient’s needs, concerns, or health problems, and/or the decision to take action (or not), use or modify standard approaches, or improvise new ones as...
deemed appropriate by the patient’s response” (Tanner, 2006, p. 204). The clinical judgment model utilizes four main components as methods of developing clinical judgment: noticing, interpreting, responding, and reflecting (Tanner, 2006).

Reflection is a process where one organizes thoughts, and those thoughts are placed in a sequence where each sequence has consequences to determine future outcomes (Dewey, 1910/1991). Reflective thought is an active process that is persistent and careful, with consideration of one’s beliefs that can form knowledge and future actions. In reflective thinking, one is looking for beliefs about a situation or event and evidence to support those beliefs. When looking at one’s beliefs reflectively, a state of confusion, perplexity, or doubt can develop, which will lead one to seek further clarification to bring the belief to truth (Dewey, 1910/1991).

Schön (1987) presented reflection as an important concept to nursing and identified two types of reflection: reflection-in-action and reflection-on-action. Reflection-in-action is concurrently critiquing one’s actions to determine whether a new intervention is needed to correct the problem. Reflection-on-action is thinking about a situation, event, or patient scenario after it has occurred to discover new ways of responding to a similar situation in the future (Schön, 1987).

One method nursing students could use to reflect-on-action is reflective journaling. The definition of reflective journaling is “an operationalization of the concept and process of reflection” (Steen-Lauterbach & Becker-Hentz, 2005, p. 31). Reflective journaling allows students to explore their ideas, feelings, and understanding of a patient situation, while also becoming self-aware and discovering new ideas for future patient situations (Decker, 2007; Hubbs & Brand, 2010; Kuiper et al., 2010; Padden, 2013).

Research Question

The research question that guided this study was “What is the nature of clinical judgment development as revealed in student reflective journals after participating in four progressive HFS scenarios?”

Method and Design

A qualitative interpretive description design was used for the current study. The four main components of the design included theoretical scaffolding, sample selection, data source, and analytic data analysis. With theoretical scaffolding, the researcher uses a theoretical model to frame the research study. The researcher determines the best sample for the study, as well as the sample size. Data source for qualitative studies can be focus groups, interviews, observation, or journals. The researcher chooses the appropriate data source based on the research question. Analysis of data is both iterative and inductive. The researcher alternates between a theoretical lens and emerging themes to conceptualize, theorize, and synthesize meaning that can be innovatively applied to the clinical phenomenon. Credibility and trustworthiness can be obtained by completing a member check focus group and by having experts in the field of study review the results (Thorne, 2008). A member check focus group provides rigor to a study by having the study participants review the data analysis and providing additional feedback or insights (Taylor, 2013).

Students participated in four progressive HFS scenarios during a medical–surgical nursing course. In the progressive HFS scenarios, each scenario built in complexity as the student’s knowledge and skill level increased. After each scenario, the students participated in an oral debriefing session. Each of the scenarios was video recorded and the students were expected to view the video recording within 7 days of completing the scenario. Within 2 days of viewing the video, students were expected to complete a guided reflective journal. The guided reflective journal included questions pertaining to the scenario and was reflective of Tanner’s (2006) clinical judgment model.

Study Sample

The sample for this study consisted of junior diploma nursing students who were in their second nursing course, medical–surgical nursing. The inclusion criteria for the study participants were (a) completed the medical–surgical nursing course with a grade of “C” or better; (b) completed all four progressive HFS scenarios during the medical–surgical nursing course; (c) completed oral debriefing, viewed the video recording of the HFS scenario, and completed a reflective journal after each of the four HFS scenarios; (d) signed informed consent; and (e) were older than age 18. The final sample comprised 30 students who met all inclusion criteria. Each student submitted a total of four reflective journals, for a total of 120 journals (Bussard, 2013).

Data Collection and Analysis

After institutional review board approval and student consents were obtained, student names were removed from the reflective journals and replaced with a unique code. This unique code prevented bias during data analysis. All reflective journals were analyzed using QSR NVivo 10 qualitative computer software. Data analysis consisted of reading each of the 120 reflective journals thoroughly two times by one researcher (M.E.B.). After the second reading, entries were coded and themes emerged. The number of comments coded was compared to Tanner’s (2006) clinical judgment model to identify whether they coincided with the model. To ensure credibility of results, a member check focus group was conducted with the study sample. In addition, two expert nurse educators reviewed the data (Bussard, 2013).

Findings and Interpretations

The nature of clinical judgment development was identified within the reflective journals as students progressed from journal one to journal four. The trajectory of patient illness, correlations, interpretations, skill acquisition, self-confidence, and communication were all evident and improved on as the students progressed from the first to the fourth reflective journal. The nature of clinical judgment was also consistent with Tanner’s clinical judgment model, as students were able to notice, interpret, respond, and reflect within the journals. During the member check focus group, students identified growth in clinical judgment from journal one to journal four. Students com-
mented that it was great to see the growth because many times they felt as if they were never going to fully understand how to be a nurse (Bussard, 2013).

Eight themes emerged: (a) expectations about the patient, (b) recognition of a focused assessment, (c) interpretation of medications, laboratory data, and diagnostics, (d) communication with the patient, (e) collaboration and interprofessionalism, (f) prioritizing interventions, (g) skillfulness with interventions, and (h) incorporation of skills and information into real patient situations (Figures 1-2) (Bussard, 2013).

Theme 1: Expectations About the Patient
Students identified expectations about the patient prior to entering the patient’s room. Report from the off-going nurse and the patient’s chart provided students with background information, which guided their expectations. Previous knowledge learned in the classroom or clinical setting also guided the students’ expectations about the situation. As students progressed from journal one to journal four, more complex background information was identified and correlated to the patient’s condition (Bussard, 2013).

Theme 2: Recognition of a Focused Assessment
Students recognized that a linear head-to-toe assessment was not appropriate in all patient circumstances. Focusing the assessment to the immediate patient problem was identified as a high priority. As the students progressed from journal one to journal four, various focused assessments increased in complexity and students were able to explain why those focused assessments were necessary (Bussard, 2013).

Theme 3: Interpretation of Medications, Laboratory Data, and Diagnostics
Students interpreted the purpose of medications and the meaning of abnormal laboratory data and diagnostic tests. As the students progressed from journal one to journal four, interpretations and correlations of medications, laboratory data, and diagnostics increased in complexity and became more holistic (Bussard, 2013).

Theme 4: Communication With the Patient
Students recognized that communication with the patient was essential for effective patient outcomes. Therapeutic, caring, and professional communication was identified. As the students progressed from journal one to journal four, it was evident that patient education regarding disease management, postoperative care, medications, and risk-reducing activities were essential components of nursing care (Bussard, 2013).

Theme 5: Collaboration and Interprofessionalism
Collaboration and interprofessionalism were noted as essential components of providing quality patient care and improving patient outcomes. Collaborating with team members was needed to prevent medication errors, communicate concerns, or ask questions. Interprofessionalism was identified when students needed to communicate with physicians and the respiratory therapy department to assist the patient during a critical moment. Orders were obtained and students identified the need to read back orders to ensure correct transcription. As students progressed from journal one to journal four, it was evident that collaboration and interprofessionalism increased in complexity (Bussard, 2013).

Theme 6: Prioritizing Interventions
Students identified prioritization of interventions as essential components of providing quality patient care. After students obtained report, interpreted data, and communicated with each other, they prioritized the interventions. Students recognized that prioritization was essential to optimal patient care and as they progressed from journal one to journal four, interventions evolved from task oriented to prioritized and individualized (Bussard, 2013).

Theme 7: Skillfulness With Interventions
Students reflected on their skillfulness in completing nursing interventions. Skillfulness in psychomotor interventions, as well as cognitive interventions, was identified. As students progressed from journal one to journal four, skills such as administering insulin injections, medication administration (oral, intramuscular, subcutaneous, and intravenous), Foley
catheter insertion, and dressing changes became more fluent. In addition, students increased their confidence while performing skills and had fewer errors (Bussard, 2013).

**Theme 8: Incorporation of Skills and Information Into Real Patient Situations**

Students identified the skills and information they would incorporate into real patient situations. Cognitive, affective, and psychomotor skills were identified, as well as knowledge gained about a specific clinical situation. Students identified that the video recording was beneficial in helping them determine what not to do in future patient situations. As the students progressed from journal one to journal four, self-reflection and information for future patient encounters was more in depth (Bussard, 2013).

**Discussion**

With the demand for prelicensure nursing students to graduate and enter the workforce with developed clinical judgment decision-making skills, nurse educators must identify effective teaching–learning strategies to ensure that students develop this salient concept. One strategy is reflective thinking, which has been identified in the literature as a means of developing clinical judgment. This study links the literature pertaining to reflective thinking and reflective journaling in combination with progressive HFS scenarios.

**Implications, Recommendations for Further Studies, and Limitations**

Reflective journals can be used to determine whether a student is achieving course and program outcomes. An educator can provide students with remediation as deemed necessary or provide the student with clinical experiences to enhance the reflective journal notations. Understanding the level of clinical judgment prior to graduation will help educators provide various activities for students to increase the development of clinical judgment. Further study is needed to determine whether the reflective journals improve clinical judgment beyond nursing school, whether the effects of reflective thinking are long lasting, and whether reflective thinking guides future practice when the graduate enters the workforce. Two limitations of this study exist. First, the sample included only diploma nursing students, rather than various prelicensure students. Second, the sample was from a medical–surgical nursing course and did not include other types of nursing courses, such as pediatrics, critical care, obstetrics, or leadership.

**Conclusion**

This study identified that reflective journaling after progressive HFS scenarios is an effective teaching–learning strategy to identify a student’s development of clinical judgment. The nature of clinical judgment was identified as a student progressed from journal one to journal four. Expectations, correlations, assessments, skills, confidence, communication, collaboration, interprofessionalism, and transfer of knowledge to the clinical setting were all identified as the nursing students completed the medical–surgical nursing course.

**References**


From conceptualization to evaluation (pp. 73-85). New York, NY: National League for Nursing.


