

linical teaching is as important to nursing education as classroom teaching. Interpersonal and inter-relational teaching-learning activities in clinical settings create opportunities to develop the clinical knowledge and clinical reasoning competencies of students. It is in the clinical setting that student nurses practice their practical skills and develop clinical reasoning by caring for multiple patients with complex needs. Clinical instructors must be carefully chosen and strategically positioned to supervise practice and to prepare students for efficient, effective, and safe practice as they perform and acquire new clinical skills.

Aggregate data from a 1995-2004 competency assessment using the Performance Based Development System involving 31,401 nurses from 180 health-care agencies in the United States revealed that newly graduated Registered Nurses, regardless of educational preparation, have adequate psychomotor skills and good knowledge content but lack the ability to use clinical reasoning to deliver effective and safe care.1 Benner, Sutphen, Leonard, and Day² noted that in acute health-care situations, nurses are increasingly challenged to make quick decisions based on sound reasoning.

Regardless of where they work, nurses need to become more responsible, autonomous, and accountable for patient care. Shorter hospital stays, advances in technology, and increasing complexity and severity of patients' clinical conditions require nurses to think clearly, exercise good judgment, and initiate action to resolve problems. Clinical reasoning, which focuses on the nurse's use of thinking

strategies, is the precursor to decisionmaking and informed action. Decision-making under conditions of risk, uncertainty, and complexity have become standard professional practice.3 Therefore, the role of clinical instructors and preceptors (hospital staff nurses) in helping students develop and apply clinical reasoning along with clinical skills is very important.

Clinical instructors should mentor students to quickly recognize the nature of the whole clinical situation and prioritize the most-pressing and least-pressing concerns.4 Progressive development of clinical reasoning skills is critical to this ability in order to avoid adverse events or failure to save a patient's life.5 Clinical reasoning can strengthen nursing practice by improving decision-making, reducing risks, promoting safety (including

BY SUSY A. JAEL and LUCILLE

fewer medication errors), and improving patient outcomes, all of which can result from good clinical teaching.⁶

Nurse educators have many questions related to clinical teaching. Drs. Susy Jael from Adventist University of the Philippines (AUP) and Lucille Krull from Walla Walla University (WWU) in the United States sat down with Dr. Patricia Jones of Loma Linda University to compare and contrast key points related to clinical teaching in nursing education from two diverse parts of the world.

Question 1: How much clinical time is required for the bachelor's degree in nursing, and how is it computed?

Dr. Jael: At AUP, the required clinical units in each professional course are mandated by the Philippine Commission on Higher Education (CHED).7 The current Bachelor of Science in Nursing curriculum requires a total of 46 Related Learning Experience (RLE) units. RLE is composed of nursing-skills laboratory hours and clinical practicum. Nursing-skills laboratory requires 12.5 units (637.5 hours) and 33.5 clinical units (1,708.5 hours), a total of 2,346 hours for the whole program. One clinical unit is equivalent to three clock hours a week or 51 clock hours over an 18-week semester, which does not include exam week.

Dr. Krull: In the United States, a precise number of clinical hours is not always explicitly mandated by our accrediting agency, but minimums may be set by individual state boards of nursing. Each school is free to design its own curriculum and number of required clinical hours based on its mission, setting, and desired outcomes. At this time, WWU requires a total of 900 hours of clinical experience for a bachelor's degree in nursing, although the State of Washington mandates a minimum of 600 clinical hours for the same degree. WWU exceeds the minimum because it offers several clinical courses

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not typically found in other programs, including a course in critical care and another in chronic illness.

North American colleges and universities structure their academic year in either quarters or semesters. Walla Walla University uses the quarter system, which is usually 10 weeks plus an exam week. Therefore, one credit of clinical lab is equal to three hours each week, for a total of 30 clock hours per term. Other universities use a 15- or 16-week semester; therefore, one unit of credit for clinical practice is equal to three hours per week for a total of 45 clinical-experience hours.

Question 2: Who should facilitate the clinical instruction? What qualifications are necessary? Do all clinical instructors need to be Seventh-day Adventist employees?

Dr. Jael: At AUP, a clinical instructor is a full-time faculty member who teaches professional courses and takes responsibility for both classroom and clinical instruction. He or she is required to have academic and clinical preparation specific to his or her clinical assignment. Based on CHED requirements for BSN programs in the

Philippines, faculty members teaching professional courses must be a Registered Nurse (RN) and have a Master's degree in nursing, with at least one year of clinical experience.

All employees, including the clinical instructors, must be Seventh-day Adventists so that they will be able to integrate and model an Adventist caring and healing philosophy. It is important that clinical instructors have a full-time appointment to ensure quality and consistent clinical supervision of students. Hence, at AUP, clinical instructors are full-time, regular denominational employees with benefits. Benefits add value to service rendered and usually contribute to retention of faculty.

Dr. Krull: In the United States, the qualifications of clinical instructors are often mandated by state boards of nursing and national nursing-accreditation agencies. The typical expectation is that clinical instructors be an RN with a degree higher than the students being taught. For example, in Associate in Science Nursing programs, clinical instructors must have a bachelor's degree in nursing; whereas in bachelor's degree programs, the clinical instructor must have a Master's degree in nursing. Depending on the state in which the program is located, the clinical instructor must also have two to three years of full-time experience in the specific clinical area where he or she will be teaching.

At WWU, clinical instruction is done by both full-time and part-time faculty. Each clinical course is taught and coordinated by a full-time lead instructor who has several part-time instructors assisting with clinical instruction. All full-time faculty must be members of the Seventh-day Adventist Church, but this is not always possible for part-time clinical instructors. While Seventh-day Adventist clinical instructors are strongly preferred, a sufficient number cannot always be found. The few non-Adventist parttime clinical instructors are carefully selected and are often alumni or an

employee at the agency where the clinical experience is being taught. These non-Adventist instructors must subscribe to a Judeo-Christian belief system and be well oriented to Adventist philosophy and practices. Many part-time clinical instructors are also employed full-time as staff nurses in another health-care agency that provides employment benefits.

Question 3: How do you verify that clinical instructors are spending the required time in direct supervision of students?

Dr. Jael: A clinical-instruction plan for every professional course is in place. It includes the objectives and activities, tasks and responsibilities for both the clinical instructor and students in their assigned clinical area. This serves as a guide to the clinical instructors. The nursing administration of the school has a monitoring device to ensure that clinical instructors are directly supervising the students in their clinical activities. This includes clocking in and out by both clinical instructors and students. Moreover, the charge nurse of the hospital or clinical facility is expected to evaluate the performance of the clinical instructor at the end of the clinical rotation and submit a report to the school of nursing administration.

Dr. Krull: At WWU, there is no monitoring procedure for clocking in or out for clinical instructors. Each clinical instructor reports directly to the lead full-time nursing faculty member and develops a trust relationship with that instructor. Most full-time faculty members meet weekly with the clinical instructors in person, by phone, or electronically to discuss student performance.

Question 4: How do you ensure consistency in clinical supervision by different clinical instructors in the same course?

Dr. Jael: The clinical instruction plan and the course syllabus describe the clinical activities for each professional course, serve as a guide to the clinical instructor, and, to the extent possible, ensure consistency in clinical

supervision among clinical instructors.

During faculty meetings, all concerns and policies are discussed and accepted. Each faculty member is aware of what is expected, and works in an environment of trust and honesty. However, an unannounced spot check or area visit by the clinical coordinator, department chair (or dean) happens occasionally.

Dr. Krull: Each lead instructor is responsible for orienting, monitoring, and evaluating his or her clinical instructors. He or she is responsible for building a team and ensuring that grading and other evaluations are done consistently by all clinical instructors for that course.

Question 5: Is there a structured orientation program for new clinical instructors? If so, what is included?

Dr. Jael: Yes. A structured orientation program is done at the start of every semester. When the new assignments are announced, a shadowing period of at least two weeks (or however long the hospital requires) is arranged for immersion to the agency's protocols and policies.

The clinical instructor should undergo orientation to the course and to the clinical practicum site before being allowed to supervise students. The dean or the department chair should orient the clinical instructor to the policies, standards, guidelines, activities, and expectations of the course in the clinical area. The nursing-administration office of the clinical agency should conduct a clinical orientation to ensure safe, effective, and quality practice by both the clinical instructors and the students. This should include an orientation regarding the policies of the hospital/agency, the hospital administration, the key personnel and staff of the specific clinical area, the clinical forms to be used by the students, routine procedures and activities in the specific clinical area, its facilities and equipment, and an orientation to the physical setting. The clinical instructor

should also undergo clinical duty for at least two weeks to have a feel for the specific clinical area.

Dr. Krull: Orientation of clinical instructors is done individually, and typically includes three areas: orientation to the university and school of nursing, orientation to the course, and orientation to the clinical agency where instruction will occur. Orientation to the university is conducted by the school of nursing dean, and includes information about Seventh-day Adventist beliefs and practices if the clinical instructor is not an Adventist or an alumnus. Policy manuals are shared, and key policies regarding payroll, expectations, and evaluation are reviewed. Orientation to the course is conducted by the lead instructor for that course. This includes orientation to the syllabus, course, and clinical expectations; as well as evaluation forms and clinical assignments to be graded. If a newly hired clinical instructor is already an employee at the agency where the lab will be taught, immersion at the agency is not necessary. If not, he or she may be requested to shadow an agency employee or the lead instructor before the class begins.

Question 6: What is the role of the clinical instructor in integrating theory into clinical practice?

Dr. Jael and Dr. Krull: Clinical practicum should be offered simultaneously or immediately following completion of theory. The clinical instructor must ensure that clinical activities are congruent with the objectives of the course and implement the clinical activities as outlined in the syllabus. Ideally, the faculty member teaching the didactic part should supervise students in their clinical practicum. However, in the case of team teaching, the clinical instructor coordinates and collaborates with the lecturer of the course.

For supervision in the clinical area, what has been taught in lecture should be enhanced or reinforced as it is applied in the clinical setting. Ideally, the theory instructor also does the clinical instruction; but if that is not possible,

another member of the team-teaching group does it and sees that the principles are put into practice. An important aspect to remember is that clinical experience related to the theoretical content of the course needs to be offered during the same academic term in order for it to be recognized and accepted internationally.

Question 7: How should performance in clinical practice influence the course grade?

Dr. Jael: Credit for the completion of the course is based on the fulfillment of the curricular requirements in both theory and clinical practicum. The grade for the professional course is based on the course credit (theory units and clinical units). A student will not be permitted to enroll in the next professional course unless he or she has a passing grade in the prerequisite professional course.

Dr. Krull: Theory performance is points-based and graded with a letter grade of A-F based on percentage of points earned on tests, guizzes, and assignments. Clinical instruction is competency-based and is graded as pass/fail. Absolute minimum clinical performance is identified, and students must demonstrate that they can safely care for patients according to these standards. Standards increase in expectations as the student progresses through the program. It is possible for a student who is performing well in theory to fail in the clinical portion of the course and vice versa.

Question 8: What happens when a student fails in clinical practicum?

Dr. Jael: When a student fails in the clinical practicum, he or she is advised to obtain additional supervised practice and given a repeat performance of the skill/checklist. If still unable to pass, the student is required to repeat the whole course—both theory and practice. A student is allowed to repeat the whole course one time. Mastery of the knowledge and skill(s) on one level

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prepares him or her for more complicated clinical tasks on the next level.

Dr. Krull: If a student fails in the clinical practicum, he or she fails the whole course and must repeat both theory and clinical portions at a passing level to progress in the program. Only one nursing course can be failed for the student to remain in the program. If a student fails a second course, he or she is no longer eligible to be a nursing major.

Question 9: What policies should be in place to promote safe clinical practice by nursing students?

Dr. Jael: The Related Learning Experience (RLE) is composed of skills laboratory hours followed by practice in the clinical area. Before going to the clinical area, students are required to practice and perform the specific clinical skills in the skills laboratory that they will be assigned in the clinical area the following week.

A clinical pre-conference should be conducted by the clinical instructor before exposing the student to the specific clinical area to ensure that the student is ready to safely perform nursing skills on actual clients. **Dr. Krull**: There should be specific policies about safe practice specifically oriented to the area of medication administration; also, certain skills should not be allowed for lower-level students. For example: Beginning students cannot administer any medications without direct supervision. More-advanced students may administer some oral medications once their medications are checked by their instructor or the RN assigned to the patient. No student can ever administer chemotherapy or conscious sedation.

Question 10: What is the difference between clinical instructors and preceptors?

Dr. Jael and Dr. Krull: Clinical instructors are faculty members employed by the nursing school assigned to supervise, guide, and implement structured clinical-learning practicum to a group of students. Clinical instructors allow students to apply knowledge gained in the didactic portion of a professional course to clinical practice.

Clinical preceptors are hospitalemployed practicing nurses who mentor the clinical learning experience of a specific nursing student. Most of the time, it is a one-to-one guided clinical practice.

Question 11: What requirements of clinical instructors can be described as applicable worldwide?

Dr. Jael and Dr. Krull: Around the world, the role of clinical instructors is to supervise students in the clinical area during their clinical practicum. They are expected to perform preand post-conferences, orient students to the clinical area, ensure that clinical activities are congruent with the objectives of the course; assist students in the performance of nursing care, medication administration, nursing procedures, carrying out doctors' orders, writing nursing care plans and nurse's notes; and evaluate student performance.

The clinical instructor and the

nursing-service personnel of the hospital/affiliating agencies should collaborate in the planning, implementation, and evaluation of the clinical experience of the students.

Question 12: What is an accepted ratio of students per instructor in the clinical area?

Dr. Jael: Faculty-to-student ratio, and student-to-client ratio policies should be in place and carefully followed. In the Philippines, the general guidelines for ratio of faculty to students in the clinical setting depends on the year level of the students as mandated in the Philippine Commission on Higher Education Memorandum Order. CHED limits the ratio to eight students per instructor for firstand second-year levels, 12 students per instructor for the third-year level, and 15 students per instructor for fourth-year-level students. The nursing school and the clinical facility have the option to further limit the ratio considering the complexity and severity of patients' clinical conditions, particularly in areas like intensive care, critical care, dialysis, emergency, operating, and delivery units for quality clinical supervision.

Dr. Krull: In the United States, the maximum legal student/teacher ratio is mandated by the state board of nursing. The State of Oregon limits the ratio to eight students per instructor at any one time. The State of Washington allows 10 students per instructor. Both of these states have policies requiring a lower limit if needed to maintain patient safety. While schools are not allowed to exceed the legal student/teacher ratio, the actual ratio can be further limited by the clinical facility based on factors such as number of patients available, the complexity of a patient's condition, unit staffing shortages, or newly hired staff being oriented. From my personal experience, clinical supervision is much easier when students are located close to one another rather than spread over several floors or units. Another factor to be considered is the level of experience of the student. Groups need to be smaller for beginning students as opposed to students who are more advanced.

Summary

In spite of slight variations in laws and accreditation standards from one state or country to another, the overall approach to clinical teaching remains similar around the world. With increasing numbers of schools of nursing within and outside of the Seventh-day Adventist educational system, the demand for access to clinical sites for student practice is becoming a challenge. Documentation of adequately supervised student practice by qualified clinical instructors or preceptors, and demonstration of safe performance with minimum errors are standard expectations by accrediting agencies and even more for Seventh-day Adventist Christian nurses who are called to provide care. Programs may be judged as "out of compliance" by accrediting agencies if the adequacy or qualifications of clinical instructors, or any other aspect of the clinical instruction, are deemed below what is expected. The day when schools of nursing could assume that hospital nursing staff would be available to assist or supervise students is past. Therefore, the availability and cost of expert clinical instructors needs to be considered when establishing a nursing program. Clinical instructors should develop expertise in clinical teaching not only to prevent loss of accreditation, lawsuits, and adverse patient outcomes, but to educate future nurses who will exhibit safe levels of clinical practice.



Susy A. Jael, PhD, RN, is Associate Professor and Dean of the College of Nursing at Adventist University of the Philippines in

Silang, Cavite, Philippines. She is an appointed member of the accrediting team of the Association of Christian Schools, Colleges, Universities Accrediting Agency, Inc. (ACSCU-AAI), 2011-present, and formerly served as an appointed member of the Commission on Higher Education (CHED) Regional Quality Assessment Team (RQAT), 2014-2015.



Lucille Krull, PhD, RN, is Professor and Dean of the School of Nursing at Walla Walla University (WWU) in College Place, Washington,

U.S.A. In her 21 years at WWU, she has served as an accreditation visitor for the Northwest Commission on Colleges and Universities, and as secretary for the Adventist International Nursing Education Consortium—North America.

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