Several months after beginning work as a registered nurse, a new graduate shared how it felt to begin work in her chosen profession:

The biggest surprise about nursing is the fact that I am just overwhelmed at the fact that I am responsible for the care (and the lives) of seven people every night and I am only 22 years old! I always get all stressed at the beginning of shift getting all the meds and assessments done. I am on my own and ask tons of questions—nursing decisions call for all sorts of questions. I don’t have the experience to back up anything (Dyksterhouse, personal communication, April 2001).

Students report that when they first enter the nursing major they are unaware of the complexity of thinking and problem solving that occurs in the clinical setting. They often are unable to “think on their feet” and change a planned way of doing something based on what is happening with a specific patient at any given moment. In a small pilot study, Etheridge (1999) learned that nursing students were surprised by the amount and types of clinical nursing judgments required of nurses. They began nursing education with the idea that physicians would direct their actions and seemed overwhelmed with the clinical nursing judgments they were required to make following graduation.

This seems to indicate a lack of understanding of their role as nurses in making clinical judgments, in the process of decision making, and perhaps in the volume of knowledge needed to make clinical judgments. Thus, it is possible that many nursing graduates will not have accurate perceptions of the demand placed on them to make correct clinical judgments.

One aim of nursing education is to help students become beginning practitioners in nursing who are capable of making clinical judgments that ensure patient safety. Clinical judgments often determine how quickly nurses detect a life-threatening complication, how soon patients leave the hospital, or how quickly patients learn to take care of themselves. However, current research shows that new graduates do not perform well when making clinical judgments, despite having graduated from accredited schools of nursing and passing the NCLEX examination. This descriptive, qualitative study examined the perceptions of recent nursing graduates about learning to make clinical judgments. Graduates with baccalaureate degrees in nursing were interviewed three times in 9 months to determine their perceptions of how they learned to think like nurses. The results of this study should be useful in identifying strategies to help new graduates make the transition from students to registered nurses.
that the epistemological development of most college students at graduation remains at a low level (Baxter Magolda, 1992; King & Kitchner, 1994).

In addition, Frisch (1987) and Valiga (1983) found that nursing graduates were at the same stage of development as other college graduates, which means they did not have the knowledge or ability to make clinical judgments. When applied to the understanding of clinical judgments in nursing, these findings are troubling. The concern is that the epistemological demands are beyond what the new nursing graduate believes he or she is capable of meeting.

Our research addressed the following question: What are the perceptions of new nursing graduates about clinical nursing judgments and the education involved in learning how to make such judgments? By addressing the question, this study also explored experiences the new graduates considered helpful in learning to make clinical nursing judgments and their beliefs about their role in making clinical nursing judgments.

**METHODOLOGY**

This descriptive, longitudinal, phenomenological study used semi-structured interviews to study the meaning of making clinical nursing judgments. The contexts in which the subjects learned to make clinical nursing judgments are also described.

New nursing graduates who worked on adult medical-surgical units in acute care institutions in West Michigan were selected for this study. The institutions have between 200 and 500 beds. The new nurses, all females between 22 and 26 years of age, graduated from two different 4-year colleges with baccalaureate degrees in nursing, passed the NCLEX examination on the first attempt, and no longer worked with a preceptor.

After the study was introduced and confidentiality assured, the participants (fictitious names are used) gave written, informed consent for three tape-recorded interviews to be used for this study. The interviews occurred on three different occasions: within a month after the first attempt, participated in a nurse intern program after graduation, and no longer worked with a preceptor.

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**LEARNING TO THINK LIKE A NURSE**

In the initial interviews, the responses of the research participants suggested difficulties with understanding the phrase “making nursing clinical judgments.” When this phrase was replaced with the phrase “think like a nurse” (Heaslip, 2003), they responded more spontaneously and energetically. Thus, the focus of interviews changed somewhat from learning to make nursing clinical judgments to learning to think like a nurse. In the minds of the participants, these two ideas or phrases were synonymous.

The data analysis suggested these research participants saw the transition from being a student nurse to working as a staff nurse as a time when they learn to think like a nurse. This process of learning to think like a nurse is characterized by the emergence of confidence, the acceptance of responsibility, the changing relationships with others, and the ability to think more critically within and about one’s work. The ability to think like a nurse reflects an awareness of oneself and a belief in one’s ability for competence and accountability. These characteristics generally take time to develop and improve with encouragement and experience.

**Developing Confidence**

Confidence is the belief in oneself, in one’s judgment and psychomotor skills, and in one’s possession of the knowledge and ability to think and draw conclusions. In many instances, new nursing graduates either lack confidence or possess it to a limited degree. Maggie said, “Once you are out of school you do not feel as confident as you wish you did. It is just something that takes time.” Olivia stated that confidence is something that takes months to develop. Reese found that she just did not have the confidence to know what to do in all situations. According to Sue,

> I was not confident about what I was doing. I thought there would be a lot more time to spend with our patients, getting to know them, and understanding, like, who they are as people. I just did not think it would be as stressful. I did not think it was constant running and thinking.

The new graduates were afraid they would not know what was going on with each patient. They feared they would not know what the assessment data meant and that if they missed anything and harm came to the patient, it would be their fault. According to Sue, “It is taking the information that you get and knowing whether or not it is important enough to call the physician or whether it was something that could wait.”

Most important to these participants was the need to put the information together and know what it means. Luann wondered, “What do I do about an elevated temperature in a postoperative patient? Do I give Tylenol, have them cough and deep breathe, or have them use the spirometer, or call the physician?” She did not have the confidence to make the decision on her own.
Although the new nurses felt this initial lack of confidence, it was evident that, over time, they perceived a developing confidence in their work. After 6 months of experience, Maggie reported:

I feel more confident. I know when to call the physician or when it is something that can wait until the next day, such as how to deal with a situation in which they ordered the dressing removed. The wound was not ready to have the dressing removed. It was during the middle of the night. Therefore, I decided to leave a note for the doctor to deal with it in the morning.

Six months after beginning practice, Olivia reflected this growing sense of confidence in her ability and developed her own (correct) conclusion regarding a patient’s status rather than accepting a colleague’s statement about a patient:

By the end of the shift, the patient was not doing well, but a diagnosis had not been established. Twenty-four hours later, the nurse caring for her reported that she was just fine and had been sleeping all day. When I assessed her, she was not responding and her respirations were unusual. I conferred with more experienced nurses and called the physician, who ordered blood studies. Based on the results of the blood studies, the patient was transferred to the Intensive Care Unit.

Approximately 9 months after graduation, the new graduates had developed the ability to make decisions that are more complex and act on those decisions independently. Reese related one example:

Last night, I took care of a patient that called and said he was having a morphine withdrawal, but as I assessed him and got him to talk about how he was feeling, I concluded that he was having an anxiety attack. He thought because his hands were constantly moving and he felt restless that he was having a morphine withdrawal. I recalled that he had a history of anxiety. I had given him Valium and Xanax earlier, so I could not give him any more. I decided to give him a back rub, after which he said that he felt so much better.

The intervention of providing a back rub relieved the patient’s anxiety and was something that the nurse provided immediately and independently.

Learning Responsibility
Responsibility is the knowledge that a person is accountable for his or her decisions, actions, and critical thinking. Nurses are responsible for, accountable for, and in charge of patient care. This is contrary to what the students expected. They expected the physician to be responsible for patient care decisions. In addition, the new graduates were surprised at the amount of responsibility expected of them because they did not experience the same responsibility as students. The level of responsibility was overwhelming for some of them.

The new graduates recognized that taking responsibility appropriately is a significant part of being a nurse. The patient depends entirely on the nurse for watchfulness and decisions for his or her well-being. Katey said,

The responsibility was more than I thought it would be because I thought it was more the doctor’s responsibility. A lot of it is nursing responsibility, though. Almost more so sometimes because nurses are the ones who are with the patient 24 hours a day and the nurse is the one who decide[s] what will happen with the patient’s plan of care. . . . We have to apply with our hands, plus think and look at everything from nurses interacting together and interacting with their patients and families and other health care providers. All this working together is all on your plate. It is a lot of responsibility. It is not until you experience it, that you really understand the responsibility of being a nurse. It is my responsibility now and I didn’t expect the responsibilities to be so great.

Luann stated,

I did not realize people went to nurses for so much. They want you to tell them things, they want you to reassure them, and they just look to you for so much more information because the doctor does not always spend that much time with them.

Relationships With the “Other”
The “other” was the individual (or individuals) the new graduates looked to as an authority—the person they depended on to help them to think like a nurse. The “other” changed with time and experiences. The new graduates did not believe in themselves and therefore used the “other” in validating decisions they made. The “other” was initially the preceptor, then other experienced nurses, and finally their colleagues. As confidence grew and the new graduates encountered more experiences, which provided a greater understanding of the whole, they began to trust themselves and accept the responsibility of thinking like a nurse.

Initially, the new graduates asked the preceptor many questions. Then they learned that they did not need to know everything because they found support from the preceptor. During the first interview, Luann said, “I’m not too sure about the decisions I have to make. I do not always have the confidence I need. Although I am quite positive my thinking is right, I always check with my preceptor.” The preceptor’s statement that the new graduates “[wanted] me to confirm that what they are thinking about a situation is the same as what I am thinking” corroborated this idea.

Later, the new graduates found it less necessary to go to the preceptor for guidance because they preferred
working with experienced nurses. Maggie said, “I really want the experienced staff nurses working with me. I do not want just any other nurses, or former classmates. Experienced nurses know so much.”

Finally, the new graduates appeared to be more confident in their ability to think like a nurse and less worried about not knowing everything. Olivia recognized she did not have any experience with dying patients, but it did not worry her. She felt comfortable not knowing all that she wished she knew: “The husband asked questions, but I did not know what to tell him, so, I said I did not know, but I would find out.” She could finally trust her own judgments.

**Thinking Critically**

Learning to think critically about one’s work is a large part of nursing. Critical thinking occurs continuously, expands with experience, and eventually becomes second nature. In addition, critical thinking takes place independently, collaboratively with other nurses, healthcare team members, or both, and in concurrence with physician orders.

Thorough and exact evaluations are characteristics of thinking critically. It often occurs in a situation that is at a point of imminent change. Thinking about all of the implications of and options for each issue of patient care is thinking critically. It is multifaceted and includes gathering, evaluating, and reassembling the disparate pieces of data to identify a problem and determining the appropriate way to treat the problem. The conclusion reached by using this type of thinking may be to continue in the same manner or entirely change the approach to the problem. Sometimes a simple nursing intervention such as giving a patient a back rub solves the problem. Other times it may be necessary to confer with the case manager or the physician to solve the problem.

The new graduates found that knowing how to think critically was a larger issue than they initially thought. Incorporating critical thinking into their modus operandi was a function of time. Luann said, “Initially, I just thought there was kind of a flow sheet that would give directions. It is not like that. It was a big surprise when I first started practicing, there was so much thinking and that. . .thinking is always a big part of what nurses do.” Reese remarked, “When I started doing this, I just thought it was taking care of people, but it is a lot more thinking critically than I thought it would be.”

Olivia realized that thinking critically while taking care of patients includes more than performing psychomotor skills and procedures:

I think all the time—whether it is making a decision to give one or two pills for pain. Thinking critically includes decisions that are more complex, for example, independently identifying all the things that I have to monitor. When I hang a dopamine drip, I also needed to monitor urinary output. I was not told to do that [or] this, but if the doctor called and asked about the urine output, it would not be responsible to say that I was not told to monitor the urine output. [There are] just little things that I need to correlate mentally.

Thinking critically includes consulting with other members of the healthcare team. Sue wondered, “If a patient has a headache, do I apply a cold compress, give them the powerful pain medications, or call the physician at 3 a.m. to get an order for Tylenol?”

Thinking critically means knowing that just because patients have the same medical diagnoses, they do not all respond the same way to the treatment modalities of that diagnosis. Katey described thinking critically in the following way: “Patients do not always fit into the clinical picture that you get in school. That is the biggest thing—putting the information together and knowing what it means.” Sue said, “There are just a lot of things I have to think about, and it is hard to keep it all straight.” Maggie found that thinking critically was bigger than she thought it would be:

Within five minutes I can hang a bag of IV solution, go to the next patient because he is having chest pain, and another patient is vomiting. You constantly are reprioritizing what you need to think about and do.

Olivia stated,

I am always reprioritizing what I am doing. Does [a] blood sugar of 30 take a priority over someone having chest pain? Which patient do I see first, and whom do I call to help me in this situation? Can the unlicensed person help the patient with the blood sugar of 30 while I attend to the patient with the chest pain, or is the chest pain a repeated problem so the unlicensed person can talk with him? Is the patient with a blood sugar of 30 unresponsive and needs IV dextrose that I need to give because the unlicensed person cannot?

The new graduates also learned that at times it was necessary to disagree with the physician and other members of the healthcare team to provide patient care that was sound and based on scientific principles. The graduate nurses learned through experience that they needed to evaluate orders from the physician. They also learned that there needs to be ongoing analysis of the situation and that they needed to think about the meaning of implementing the physician’s orders. Maggie said,

I thought doctors would be around to tell you what to do. They are not. I had a patient in 4-point leather restraints who was very agitated. He was going through DT’s. I got an order to sedate him enough to be able to go
through that and, perhaps, rest through the night. I was constantly going in, checking respirations, and checking to see if he could be awakened. One time when I went in, he was breathing very hard and right then, I put on the oxygen and called another nurse and she called the doctor. They came up to the unit within seconds it seemed like. The patient was transferred to the Intensive Care Unit, was intubated, and put on a ventilator. That was a huge decision even to just notice how serious the situation was. I had just talked about the sedation plan with the doctor only an hour earlier. I felt like the things I was doing were directly ordered from the doctor, but I still had to use my own judgment.

According to Reese, “In reality, you have to decide what you want for the patient [and] then call the doctor and ask for it. It is important to learn that skill as well as the ability to think critically.” Maggie said, “It was really nerve racking for me when I started practice to call the doctor. I did not do that before graduating.”

How the New Graduates Learned

The new graduates learned how to think like a nurse through clinical experiences with a variety of patients, faculty help, and discussions with peers.

Clinical Experiences

The most helpful learning strategy for learning to think like a nurse was being in the clinical setting with patients and having varied experiences with patients. According to the participants, “Being with patients helps it all come together.” It was in the clinical setting that the correlation of classroom learning with actual practice occurred.

According to Katey, “There is a lot more going on with patients than I realized. It is far more complex than I knew because I didn’t see everything.” Sue said,

Now, I see the results of my clinical decisions. While in school I didn’t because I was not in the clinical setting long enough and didn’t have the opportunity to see the results of what I did for patients and what I thought about might happen. . . . Now we have four to seven patients instead of the one or two we had while we were in school. So, we have to constantly prioritize care and delegate some activities to unlicensed care providers because the conditions of patients are changing and we are the first to know about those changes rather than the last, as it was when we were students.

Olivia stated, “I check doctor orders and I didn’t do that in nursing school, so I’m more up to date on what is going on with the patient.” Reese said,

I know a lot more of the people [who] work here; while in nursing school I did not know the social workers and the doctors. I never discussed the plans for the patient with them and I do that now, so I have a better idea of what the overall plan for patients [is].

Luann believed,

Learning to think like a nurse may be comparable to learning a new language. It is difficult to learn a new language unless one is immersed in the culture and interacts with people who speak the language.

In the clinical setting, students practice nursing skills, have different experiences with a variety of patients, and interact with various team members—all experiences that have significance in completing their picture of how to be a nurse. Olivia remarked,

It helps to be exposed to all kinds of situations. Hands-on [experiences] are necessary for correlation of theory to clinical and to actually do many skills. Clinical is also the best place to learn big things such as delegation and prioritization. The more I did skills the better I got, but it takes a lot of practicing things repeatedly. It is just nice to get many different learning experiences in during school, like experiences with catheters and IV’s and stuff like that, and actually [do] it because then you have had those experiences, [and] you don’t need to look for them when first starting as a graduate nurse.

However, the new graduates found that they needed more than just direct patient care experiences; they also required exposure to all of the interactions between members of the healthcare team in a setting with multiple patients. Small parts of experiences seemed to add to an understanding of the whole picture of what happens to different patients. Repeated clinical experiences assisted the new graduates in becoming more adept at providing patient care and developing alternative approaches that were safe and beneficial. They also learned what aspects of patient care to address immediately and what could be postponed. For Luann,

Experiences with different types of patients, patients requiring different skills, interacting with health team members, asking patients questions like what helps them and what makes it worse, listening for lung sounds, a lot of experiences with catheters and IV’s and stuff like that, and actually doing it are the things I learned in the clinical setting after I got out of school. . . . The experiences all begin to add up to a total picture of what happens to patients. It happens a little bit at a time when the experiences are all put together for a whole picture. As you are going through the experiences and taking patients, it takes time to begin to understand what thinking like a nurse is all about.

New graduates did not think they had enough autonomy or opportunities to think for themselves dur-
ing their clinical experiences as students. When they worked with a preceptor, the preceptor often performed the nursing activity while the new graduates observed, rather than the reverse.

**Faculty Help**

Asking the students questions about the patients was one of the most helpful learning strategies faculty used. Luann said,

> Having faculty ask questions about what I was thinking about patient care and why I was thinking the way I was, to have faculty constantly ask questions like what would you do if such and such would happen or have you thought about this or that in the care of your patient. It was helpful to have the faculty help you put all the pieces of the patient care situation together.

Reese said, “Having faculty kind of talk you through making your own clinical decisions was very helpful in learning to think like a nurse.”

**Discussions With Peers**

Listening to and talking with other students was another type of experience for students. The new graduates said that as students they found discussing experiences with peers helpful. Reese noted, “It was helpful to talk about experiences and plans of care with the professor and other students.” Olivia said, “It seemed to ‘stick better’ when there was a discussion.” Luann added, “It was helpful to learn from other students and the patients they had, the patient diagnosis, and the care of that patient. Each of us did not have the opportunity to see everything, so it is helpful to hear about other students’ experiences.”

For the most part, over time the new graduates learned self-confidence and how to cope with the responsibility of nursing. They learned to trust themselves to make decisions while still collaborating with other members of the healthcare team. Thinking critically became the modus operandi for the entire time spent caring for patients.

Some of the developmental changes that happened with these subjects were their developing confidence, acceptance of responsibility, and awareness of the importance of thinking critically. As with the other components of development, incorporation of thinking critically into their modus operandi was a function of time.

**LIMITATIONS**

All research studies are prone to mistakes or misinterpretation. It is true of this study as well. Possible sources of misinterpretation for this study include situational contaminants such as the quality of the interviewer’s interation with the subjects. Use of similar questions with a larger population of new graduates should validate the findings of this research about how new graduates learn to think like a nurse.

**PRACTICE IMPLICATIONS**

New graduates believe faculty members are their role models and want faculty to ask them questions and challenge them to think like nurses. This mutual construction of knowledge is one of the best learning strategies they experience. Staff development educators and preceptors need to assist the learners in their development and construction of knowledge. It is best not to give answers to questions but rather to assist the new graduates in determining answers to the questions and thus help them enhance and construct their knowledge.

The way new information is presented to learners needs to be evaluated. Learners need to have hands-on experiences with the knowledge. In addition, the learners need to learn how to anticipate questions for which they need to find answers. This is more helpful than “hoping the knowledge sinks in” when instructors lecture or give information.

If discussions with peers are important learning tools for students, this method of learning can be expanded to that of the new graduates. The new graduates could be brought together for frequent short discussions about patient care situations and the other things they are learning. Alternatively, the new graduates could have a shared list server or chat room so they can talk about what they are learning.

Work schedules should be developed in which experienced nurses are assigned to the same shift and on the

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**key points**

**Clinical Judgments**

1. Nursing students and new graduates are often unaware of the level of responsibility required of nurses and lack confidence in their ability to make clinical judgments.

2. The process of learning to think like a nurse is characterized by building confidence, accepting responsibility, adapting to changing relations with others, and thinking more critically.

3. Multiple clinical experiences, support from faculty and experienced nurses, and sharing experiences with peers were critical in the transition from student nurse to beginning practitioner.
same unit as the new graduates rather than assigning the new graduates alone to a shift where few support systems are available. Ultimately, the above plan may be more cost-effective because the new graduates will feel the support that is needed in the first year of practice and changeover in staff would be less.

REFERENCES