Featured Article

High-Fidelity Simulation to Teach Accountability to Prelicensure Nursing Students

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Abstract
Background: Accountability is a skill required of professional nurses. Little research has been done over the last 15 years discussing how to educate prelicensure nursing students in developing the skill of accountability.
Method: A qualitative, interpretive description study evaluated prelicensure nursing students to identify how they felt high-fidelity simulation assisted them in developing accountability skills.
Results: Five themes emerged from the data analysis and included (a) being aware of nursing actions, (b) practice and repetition of skills, (c) communication with peers and patients, (d) performing to the best of ability, and (e) errors and omissions.
Conclusion: This study indicated that high-fidelity simulation may be a method of teaching prelicensure nursing students how to become accountable nurses.

Accountability is the hallmark sign of professional nurses (Plant, Pitt, & Troke, 2010). Employers expect all nurses (experienced and new graduates) to enter the workplace with developed accountability practices (Krautscheid, 2014). For nurses to enter the workforce with established accountability practices, they must be educated on the components of accountability and how to incorporate those criteria into practice. However, there is limited current research available that describes how educators can facilitate the development of accountability in prelicensure nursing students. Therefore, nurse educators must identify teaching strategies to assist prelicensure nursing students in developing accountability skills before graduation (Bergman, 1981; Plant, et al., 2010). High-fidelity simulation (HFS) with computerized manikins is a teaching method used by many schools of nursing to facilitate student learning in psychomotor skills, communication, self-confidence, critical thinking, clinical judgment, and interprofessionalism. This teaching method has countless possibilities in nursing education, and accountability is just one aspect that can be studied.

Background

Accountability

Accountability has been in evolution for more than 100 years. The trends of accountability include (a) public expectation,

(b) reporting, (c) effectiveness, and (d) appropriateness (Bergman, 1981; Kurtzman, 2010; Scrivener & Hooper, 2011). In 1977, accountability was added to the watchword list of professional nursing by the International Council of Nursing. Bergman (1981) developed a model for account-

> **Key Points**
> - Accountability is a professional standard for nurses.
> - Accountability must be taught in prelicensure nursing programs.
> - Teaching strategies must be identified to prepare graduate nurses to be accountable members of the health care team.

ability based on a literature review and International Council of Nursing recommendations for accountability. The model is a pyramid format that has the basic elements of accountability at the bottom (ability: knowledge, skills, and values) and moves to the top of the pyramid with accountability as the ultimate goal. Responsibility and authority are the two middle components of the pyramid (see Figure 1). When a nurse has ability (knowledge, skills, and values), he or she is capable of making a decision and acting on that decision. The nurse has responsibility and authority to carry out the decision(s), which results in accountable nursing actions (Bergman, 1981).

Accountability has many various definitions within the literature. Krautscheid (2014) did a literature review and based on the most common terms associated with accountability, developed the following definition: "taking responsibility for one's nursing judgments, actions, and omissions as they relate to lifelong learning, maintaining competency, and upholding both quality patient care outcomes and standards of the profession while being answerable to those who are influenced by one's nursing practice" (p. 46). The code of ethics established by the American Nurses Association (2001) states that accountability is the nurse's ability to answer to self for his

or her own actions. By a nurse answering to self, he or she will have moral and ethical conduct to ensure professional and accountable actions, which are upheld in nursing practice (American Nurses Association, 2001). Measuring accountability is necessary for nurse educators and nursing leaders to ensure that optimal patient outcomes are met, standards of care are followed, and patients are provided safe nursing care (Krautscheid, 2014). Measurement can occur through validating competency, ongoing continuing professional education, and following organizational policies and procedures (Scrivener & Hooper, 2011).

High-Fidelity Simulation

Simulation is defined as "a pedagogy using one or more typologies to promote, improve or validate a participant's progression from novice to expert" (Meakim et al., 2013, p. s9). HSF is the use of a computerized manikin, virtual simulation, or standardized patient (live actor) that provides nursing students with a life-like, realistic patient learning experience (Hinchcliffe-Duphily, 2014; Meakim et al., 2013; Phillips, 2011; Reese, Jeffries, & Engum, 2010). The computerized simulators are capable of producing cardiopulmonary sounds, bowel sounds, pulses, pupillary changes, clenching of the jaw, pneumothorax, cry, become diaphoretic, have a seizure, and bleed (Bailey, Johnson-Russell, & Lupient, 2011). In HFS scenarios, students are given guided learning experiences that are similar to real-life clinical scenarios. The experiences are evidence-based and assist in developing clinical judgment, psychomotor skills, and self-confidence (Aerbersol & Tschannen, 2013; Grant, Moss, Epp, & Watts, 2010; Jeffries & Rogers, 2012; Lasater, 2007a, 2011; Oldenburg, Brandt, Maney, & Selig, 2012). Many research studies have been completed indicating that supplementing clinical or theory time with HFS provides students with an active, safe learning environment that fosters improved clinical judgments (Cato, 2012; Jeffries & Rogers, 2012; Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014; Hinchcliffe-Duphily, 2014; Kaddoura, 2010; Lasater, 2007a; Thomas, McIntosh, & Allen, 2014). Current research indicates that many educators are using HFS to address concerns about interprofessionalism and communication within the health care system. Both interprofessionalism and communication are aspects of an accountable nurse; therefore, HFS can potentially be used as a teaching method for accountability.

HSF scenarios can be guided by the National League of Nursing/Jeffries simulation framework. This framework was originally developed in 2005 to provide simulation facilitators with a framework for designing, implementing, and evaluating evidenced-based HFS scenarios (Jeffries, 2005). The major constructs of the framework are "educational practices, teacher, students, simulation design characteristics, and outcomes" (Groom, Henderson, & Sittner, 2014, p. 338). Within each of the constructs are subconcepts (see Figure 2). In 2014, results of a plenary group

Figure 1   Themes 1-3 fit with abilities (knowledge, skills, and values), Theme 4 fits with responsibility and authority, and Theme 5 fits with accountability. Bergman, R. (1981). Accountability—definition and dimensions. *International Nursing Review*, 28(2), 53-59. Copyright 2015 by Wiley.