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The Barriers to Perinatal Team Training Combined with Simulation as a Continuing Education Strategy

Allysia Jenkins
St. Catherine University

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Allysia M. Jenkins

St. Catherine University

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Abstract

Many articles have discussed benefits of using simulation as an adjunct for learning in acute care settings. Team training combined with simulation can enhance learning and improve communication in perinatal settings. This paper identifies perinatal team training combined with simulation and how this dual methodology has been proven to promote effective communication within the interdisciplinary team. This enhancement in communication of the interdisciplinary team has resulted in a direct increase in perinatal outcomes. Despite this knowledge, significant barriers exist toward implementing perinatal team training combined with simulation as a continuing education strategy in nursing education. The barriers hindering this teaching strategy are discussed and explored. The paper also summarizes recommendations to address this educational challenge in the context of continuing education.

Keywords: simulation, team training, barriers, perinatal, nursing education, interdisciplinary communication.

Research shows that team training combined with simulation produces a stimulating learning environment that enhances perinatal learning outcomes. Perinatal simulations allow healthcare providers to practice communication and technical skills using an integrative, multidisciplinary, and collaborative environment. The benefit of using perinatal simulation as a teaching methodology is that healthcare professionals can practice communication and technical skills in a safe environment, with no risk of causing patient harm. Unfortunately the education perinatal nurses receive prior to assuming their role in acute care environments does not adequately prepare them to function in these teams.

The education model used in many hospitals is one in which continuing education focuses on homogenous groups of professionals such as perinatal nursing or provider groups. There are few opportunities for interdisciplinary collaboration when it comes to continuing education. Education models based on homogenous groups of professionals do not represent the reality of the professional work environment and fail to prepare healthcare professionals for work in clinical care teams (Krautscheid, Kaakinen, & Warrner, 2008). The reality of the clinical setting is that nurses do not provide care in individual silos. Perinatal nurses provide care in complex, dynamic, interdisciplinary teams. Despite research that has shown the effectiveness of team training combined with perinatal simulations as an evidence-based teaching strategy, the wide adoption of this strategy is commonly criticized and many times rejected by healthcare professionals.

Identifying the barriers to team training combined with perinatal simulation is important for nurse educators because they are responsible for fulfilling continuing education requirements in hospitals for nursing staff. Continuing education models need to focus on significant learning experiences. Integration is one dimension of a significant learning experience, as defined by Fink

(2003). Integration is achieved when learners are able to think critically and make connections between ideas. Fink takes this one step further when describing interdisciplinary integration.

Interdisciplinary integration is an educational strategy that recognizes that any problem or crisis in the hospital is greater than any single discipline. These problems can only be resolved when multiple disciplines interact effectively with each other. Team training combined with perinatal simulation is an example of interdisciplinary integration. Educators are responsible for designing and implementing integrative learning experiences. Educators from diverse disciplines must come together to collaborate and coordinate strategies that embrace different perspectives based on each disciplinary focus. Educators are challenged to be progressive and push the paradigm shift from content-centered to learner-centered education. Learner-centered education focuses on incorporating progressive instructional methods, which embrace multiple learning dimensions, including interprofessional, collaborative learning (Fink, 2003).

Description of Simulation

Simulations can enhance participant learning by producing a safe, high fidelity, and cognitively stimulating learning environment. Team training combined with simulation is effective in improving the cognitive, affective and psychomotor domains of learning (Shepard, McCunnis, Brown, & Hair, 2009). The simulation environment also promotes higher level learning such as critical thinking. Simulations replace real-life scenarios with guided experiences that allow healthcare teams to work collaboratively (Jeffries & Clochesy, 2012). Improvement in interdisciplinary communication, collaboration, technical skills, and work flow processes leads to improvements in patient safety (Gaba, 2004). This is the ultimate goal of perinatal simulations. One benefit of using simulation as an adjunct teaching strategy is that participants

can improve skills in a safe, non-threatening experiential environment (Medley & Horne, 2005).

This environment promotes learning by providing participants an opportunity to engage in

decision-making and critical thinking while simultaneously ensuring the inability to harm

patients.

Definition of Terms

For the purpose of this paper, team training combined with simulation is a high fidelity

teaching strategy that aims to promote interdisciplinary communication and collaboration in

order to improve perinatal outcomes. An example of this type of team training combined with

perinatal simulation is currently being implemented at the University of Minnesota Medical

Center (UMMC). At UMMC perinatal simulations are taking place in a unit called the

Birthplace. The Birthplace consists of a labor and delivery, postpartum, antepartum, newborn

nursery, and the neonatal intensive care units. Staff from other departments that regularly engage

with the Birthplace are incorporated into the simulations. These departments include the lab,

blood bank, anesthesia, and medical residency programs.

Team training combined simulation was originally developed by Stanley Davis, MD and

Kristi Miller, RN, MS. Davis and Miller proposed this change to Premier, an insurance company,

in response to a perinatal initiative that was attempting to improve perinatal outcomes and

decrease malpractice suits. Davis and Miller have conducted multiple research studies using this

education strategy. One study showed that improving communication and teamwork through

simulation-based education decreased perinatal adverse events by 37% (Riley et al., 2011).

Davis and Miller implemented this interdisciplinary team teaching strategy by

identifying a team lead at the UMMC. Becky Gams RN, MS was first recruited because she is

the perinatal safety lead at the facility. Gams in turn, recruited Allysia Jenkins, RN who is the

nurse educator for the Birthplace as well as the author of this paper. An RN champion worked

with the author to organize and implement the simulations as well as recruit fellow nurses,

providers, actors, and distractor participants for each simulation. They also collaborated with

physician and certified nurse midwife champions to promote the research and reduce opposing

barriers. Champions are individuals that support the mission of the team training combined with

simulation program.

Team training combined with simulation consists of two parts. First staff receives

education through a team training program called Team STEPPS, sponsored by the U.S.

Department of Health and Human Services (2012). The Team STEPPS, team training program

focuses on improving the communication between interdisciplinary teams of providers that

collaborate during perinatal emergencies. This interdisciplinary team includes physicians,

midwives, nurses, neonatal intensive care providers, respiratory therapy, anesthesiology, lab,

blood bank, and paraprofessional team members. Team training aims to reduce communication

errors by teaching nontechnical skills to groups of perinatal healthcare professionals.

Nontechnical skills are the cognitive and interpersonal skills that are necessary to ensure

patient safety. Nontechnical skills commonly refer to communication skills. Specific

communication skills highlighted during team training combined with simulation are closed loop

communication, communicating a shared mental model, thinking out loud, and verbally

acknowledging the receipt of information (Miller, Riley, Davis, & Hansen, 2008).

The second part of this process, is the actual in situ simulation of perinatal emergency

scenarios. In situ simulation is a "team-based simulation strategy that occurs on actual patient

care units involving healthcare team members and organization processes and can create a much more engaged learning experience" (Miller et al., 2008, p. 106). This simulation process consists of a briefing, the simulation, and a debriefing.

The actual simulation consists of obstetric emergency cases that are depicted using actors, patients, and high fidelity manikins. The facilitators and actors simulate an obstetric emergency over the course of 15-20 minutes. Some of the perinatal scenarios include postpartum hemorrhages, sepsis, pulmonary edema, eclampsia, shoulder dystocia, and precipitous deliveries. The simulation experience is videotaped for use during the debriefing.

The debriefing follows the simulation. The debriefing is the longest part of the process and where the bulk of the learning occurs. Debriefings typically take 45 minutes to complete. The debriefing is a conversation between the simulation facilitators and participants aimed at closing the gap between the educational instruction and the kinesthetic or simulation experience (Miller et al., 2008).

Description of Problem

Communication failure between healthcare providers is identified as the cause of 72% of perinatal adverse events (Riley et al., 2011). Studies suggest that simulation can significantly improve communication within the interdisciplinary team. A study conducted by Riley et al. showed a decrease in perinatal morbidity of 37% after healthcare professionals received combined simulation and team training to improve communication within the interdisciplinary team. These data strongly support a change in current continuing education practices. Multiple and complex barriers exist that interfere with the adoption of this dual continuing education methodology in healthcare settings.

Simulations are easily adaptable and can be used to replicate almost any healthcare situation. Technologies such as high-fidelity manikins are rapidly evolving. This provides a realistic environment in which healthcare professionals can prepare for obstetric emergencies. Simulation as a teaching methodology is not specific to only obstetric environments. This learning model has been implemented and studied in virtually every healthcare setting.

Barriers to simulation have been superficially identified in research studies. Research has barely scratched the surface of investigating of these barriers. Research is especially sparse when focusing on perinatal simulations in the context of continuing education for nurses. Some of the barriers that have been identified are inadequate preparation time to conduct simulations; performance anxiety for participants; expenses related to equipment, resources, and personnel to facilitate the simulations; lack of reliability given spontaneous nature of implementation; lack of technical support; and unclear communication to participants of expectations and expected outcomes (Jeffries & Clochesy, 2012).

Implications for Learning

Barriers to simulation as a continuing education strategy significantly impact the quality of learning for participants. The profession of nursing is characterized by constant change and highly stressful work environments. These factors lead to increased resistance to more changes (Brailsford, 2005). When barriers are encountered it is essential that educators respond to each of the issues identified in order to improve the integrity of the simulation. If the barriers are ignored they perpetuate and snowball into a dynamic obstacle that is difficult to overcome. These obstacles frequently result in educators resorting to outdated methods of instruction that have previously been proved ineffective.

Standards and Competencies of Practice

Standards of practice help to guide and promote the system change of team training combined with perinatal simulation. The American Nurses Association (ANA) Nursing: Scope and Standards of Practice (2010), provides a standards-based approach to integrate team learning, using simulations in the perinatal setting.

Nursing Practice Standards

Standard 8 of scope and standards, states that nurses receive knowledge that reflects current nursing practice (American Nurses Association, 2010). Current practice follows a learner-centered approach to education. Simulations provide an opportunity to learn in the context of actual work environments and allow nurses to share educational findings and ideas with interdisciplinary team members. The competencies within this standard also state that nurses must acquire knowledge appropriate to their role and setting. Nurse educators can use this competency to support in situ simulations by providing education unique to the nursing role but inclusive of other disciplines.

Standard 9 of professional performance (ANA, 2010) describes evidence-based research and practice. To fulfill competencies associated with this standard, registered nurses must utilize evidence-based knowledge and research to guide practice. Simulations are current, evidence-based learning strategies that have been shown in the research to improve perinatal outcomes. Nurse educators are responsible with changing nursing education to incorporating this strategy.

Standard 11 addresses communication (ANA, 2010). Team training is an education strategy that aims at improving communication within the interdisciplinary team. Educators must assist nurses to identify their communication styles. Once these styles have been identified,

educators are able to provide learning opportunities to improve the communication skills. Accuracy in communication is vital when it comes to perinatal emergencies. Simulations provide the vehicle for this assessment. During the debriefing portion of the simulation, the educator allows participants to observe the interactions and describe concerns related to communication errors (ANA, 2010).

Standard 13 identified by the ANA (2010) states that outcome and communication based collaboration is essential to the plan of care for patients. This professional performance standard also emphasizes partnering with other disciplines through education and technological development to enhance patient care. These standards are the foundation for professional practice and directly support a change in education that is outcome and communication based.

Nursing Professional Development

The *Scope and Standards of Practice for Nursing Professional Development* (ANA & National Nursing Staff Development Organization [NNSDO], 2010) reflects the rapidly evolving, dynamic environment in which nurses practice. Some of these standards of practice include assessment, identification of issues and outcomes, planning, implementation, and evaluation. The emphasis for these standards is nursing practice as a whole and less on individual nurse development. One aspect of nursing professional development is continuing education. Simulation can be used in the context of continuing education to teach nurses to apply knowledge to their practice. The role of the educator in simulations is to create, manage, coordinate, and evaluate how simulation meets continuing education standards. The standards of nursing professional development, support team training through simulation as an education strategy.

Theory

The theory of experiential learning (Kolb, 1984) has been used to support this education strategy. The theory of experiential learning is defined as "The process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb, 1984, p. 41). In short, Kolb's learning styles theory is based on the concept of learning through reflection and doing. This is in contrast to the routinely utilized didactic models of learning. In his learning styles theory, Kolb discussed four learning styles. These include concrete exploration, reflective observation, abstract conceptualization, and active experimentation.

Team training combined with simulation address all four of these learning styles. A continuing education model that supports team training combined with simulation reinforces the principles of this theory because it prioritizes multiple learning styles. Perinatal simulations allow learning to take place within established teams of patient care providers. These teams learn through real-life case studies that simulate daily work environments. This increases the accuracy and reality of the learning experience. Perinatal nurse educators use this theory to plan simulations that are complex, realistic, and integrate multiple learning styles. This allows participants to practice communication, team, and decision-making skills at various levels, depending on their backgrounds and experiences (Jefferies & Clochesy, 2012).

The symbolic interaction theory by Herbert Blumer (1969) is another theory that supports this integrative, interprofessional teaching strategy. Blumer described that the way humans act or perceive things is entirely based on the meanings they ascribe to those things. He stated that "These meanings are handled in, and modified through, an interpretative process used by the

person in dealing with the things he/she encounters" (Snow, 2001, p. 371). Implications which

can be drawn from this theory are that simulations are only successful when participants believe

them to be helpful. According to this theory, perinatal healthcare providers will only support and

promote simulations if they are convinced that they are meaningful and relevant to their practice.

Using Blumer's (1969) theory nurse educators need to evaluate the effectiveness of the

simulations to ensure they are providing a good learning experience for participants, healthcare

provider satisfaction, and good learner performance. One measure that educators can use to

evaluate a quality simulation is the Educational Practices in Simulation Scale (EPSS). The EPSS

is a 16 item tool that measures best practice during simulation (Jeffries & Clochesy, 2012). The

principles of best practice were derived from Chickering and Gamson (1987). Chickering and

Gamson identified quality teaching activities that improved student learning. Jeffries (2005)

believes that best practice is extremely important when implementing simulations. Out of the

comprehensive EPSS four primary factors were identified through a factor analysis (Jeffries,

2005; see appendix A). Using the EPSS as a guide, educators can evaluate the quality of the

simulation to promote learning. This information can be used to convince healthcare

professionals of the importance of simulation.

A third theory that supports simulation is the diffusion of innovation theory by Everett

Rogers (2003). The diffusion of innovation theory describes the way in which a new technology

is adopted over time. The process for dissemination occurs through a communication network.

There are five stages in this process: (a) knowledge and understanding of the function, (b)

persuasion or forming a favorable attitude to it, (c) decision to commit to adoption, (d)

implementing the new strategy, and (e) confirmation of positive outcomes to promote continued

use. An omission in any of these steps results in an incomplete dissemination of the new strategy.

Identifying these breaks in disseminating an innovation such as the use of simulations to promote team training in perinatal care, can be used to propose process improvement strategies for perinatal simulations.

Literature Review

Team training combined with simulation improves communication within the interdisciplinary team (Freeth et al., 2009). Research has identified that improved communication directly correlates with improved perinatal outcomes.

A study conducted by Reising, Carr, Shea, and King (2011) found that interprofessional communication was enhanced after interdisciplinary teams participated in high-fidelity simulations. Findings indicate that 98% of participants had a better sense of their role in the clinical team after the simulated crisis. Qualitative data collected included "It is so much better to know what to expect in the future and have respect for your colleagues" (Reising et al., 2011, p. 326).

A larger study done by Freeth et al. (2009) examined the theme of improving teamwork through interprofessional simulations, using a specific team training modality. Freeth et al. used Multidisciplinary Obstetric Simulated Emergency Scenarios (MOSES), combined with simulation. This study was more comprehensive than the Reising et al. (2011) study because a direct correlation between improved communication and improved patient outcomes was made. The researchers synthesized common themes from the qualitative analysis and reported that simulations provided a positive interprofessional learning environment. These simulations enhance participant learning through personal engagement, self-analysis, and self-reflection. A lack of transferability was identified as a imitation in this study due to the small sample size.

A larger study conducted by Riley et al. (2011) showed that team training combined with simulation improved perinatal outcomes. This study was the first to directly address the use of team training combined with simulation and improved patient outcomes in perinatal care. Riley et al. hypothesized that if errors in communication were identified and corrected, perinatal outcomes would improve. The sample of interdisciplinary team members was more diverse than participants in the Freeth et al. (2009) study. Riley et al. concluded that improved communication through team training combined with simulation resulted in a 37% decrease in perinatal morbidity. Riley et al., Freeth et al., and Reising et al. (2011) studies identify limitations encountered during the research but none addressed barriers to the process of using simulation to improve perinatal outcomes.

Barriers to simulation are also prevalent in the healthcare literature. Barriers have not been studied in the context of perinatal simulations but have been studied in other healthcare specialties for example emergency medicine (Heitz, Eyck, Smith, & Fitch, 2011) and mental health (Guise, Chambers, & Valimaki, 2012). A study by Brailsford (2005) compares the use of simulations in the hospital industry versus the manufacturing industry. In the study, Brailsford highlights that the manufacturing industry widely adopted simulation as a business strategy. This decision resulted in significant resource conservation and increased profits for the industry.

Only a few successful simulation implementations have occurred in healthcare settings (Brailsford, 2005). These rare successes were attributed to the individual researcher's personal affiliation and credibility within the institution being studied. Healthcare providers have difficulty adopting the use of simulations in continuing education despite evidence that supports it. Brailsford identified the following barriers to simulation: healthcare culture, provider hierarchies, poor research data quality to support simulations, lack of personal incentives, and

vague application of simulations when trying to generalize them to all healthcare specialties. Brailsford's study was much broader in scope than previous studies.

Starkweather and Kardong-Edgren (2008) identified barriers to simulations in the context of continuing education. This study was directed toward academia. Researchers described faculty resistance to incorporating simulation in curriculum, despite the supporting evidence. The faculty acknowledged that simulations promoted patient safety, decreased errors, improved critical thinking, and judgment of students. Barriers identified by Starkweather and Kardong-Edgren were lack of buy-in, technology fatigue, costs to continuously update equipment, time away from the clinical setting, conflicting learning styles among faculty and students, and time constraints. These barriers also have relevance to the use of simulation as a continuing education strategy.

Based on findings reported in the literature, team training combined with simulation promotes critical thinking and learning in acute care environments. Simulations also enhance learning outcomes and increase perinatal safety outcomes (Jeffries& Clochesy, 2012). Notably this dual teaching methodology has been credited with improving perinatal outcomes. Barriers to simulation are identified in the majority of research studies that have used simulation as a teaching strategy. However, strategies to eliminate these barriers are needed to transition current continuing education models and facilitate the incorporation of simulation technology in perinatal healthcare settings.

Recommendations

The recommendations for strategies to address the barriers to simulation may be directly related to the *Core Competencies of Nurse Educators* (National League for Nursing [NLN], 2005; see Appendix B). The first competency is to facilitate learning. According to the NLN,

nurse educators are responsible to provide learning experiences based on evidence-based teaching practices. They are also responsible for creating a learning environment that promotes learning in the cognitive, affective, and psychomotor domains.

According to competency IV of the core competencies (NLN, 2005), nurse educators are responsible for designing a continuing education curricula that reflect healthcare trends and prepare participants to practice in a dynamic, complex healthcare environment. The workflow patterns in the hospital settings consist of a complex web of interactions among many disciplines.

The initial cost investments associated with simulations are one of the top barriers identified in almost every study. Therefore nurse educators must function as change agents to develop innovative, creative teaching strategies that integrate simulation and advocate for financial support from their healthcare organization. Nurse educators have also engaged in research that supports simulation as a highly effective instructional methodology. They must take the findings of this research forward to advocate for organizational change. For example, the findings of this research can be brought to a hospital's chief nursing officer, chief executive officer, president, the American Congress of Obstetricians and Gynecologists (ACOG), the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN), and/or legislative bodies. Providers of continuing education can no longer use ineffective instructional methods educational needs of healthcare professionals in the perinatal setting are increasing. Teaching methods must be innovative to support learning. One recommendation of how costs can be minimized is for hospital organizations, especially within the same system, to form partnerships with other hospitals and learning institutions and share the costs of the equipment necessary to support the simulations (NLN, 2005). Collaborative partnering would spread the cost of

equipment between all partners, reducing the financial impact for each. Collaboration would also give opportunity to partners who wouldn't normally be able to afford the cost of purchasing all of the equipment individually (Jeffries & Clochesy, 2012).

The eight *Core Competencies of Nurse Educators* (NLN, 2005) helps nurse educators to address the barriers that exist to team training combined with perinatal simulations. The barriers that currently exist can be paralyzing to the progression of continuing education. The first step is for the nurse educator to identify each potential or actual barrier. The next step is to address each barrier related to the task statement for each competency. Completing this process will provide nurse educators specific rationale for addressing each barrier (see Appendix B).

Perinatal team training combined with simulation has been proven to promote effective communication within the interdisciplinary team. As a continuing education strategy this model provides a significant learning experience for participants. However, significant barriers currently exist that inhibit perinatal team training combined with simulation as a continuing education strategy in nursing education. The responsibility of the nurse educator is to respond to each barrier in order to improve the quality of simulation and continuing education. In response to the previously identified barriers to team training combined with simulations, the author concludes with the following recommendations:

1. Design a continuing education curriculum that reflects health care trends and prepares students to practice in dynamic, complex healthcare environments.
2.   Function as change agents to develop innovative, creative teaching strategies that integrate simulation and advocate for financial support of their healthcare organizations and higher learning institutions.

3. Form collaborative partnerships between hospitals and higher learning institutions to

   spread the cost of purchasing equipment between partners, thus reducing the financial

   burden for each partner.

4. Form collaborations between hospitals and higher learning institutions, to provide

   opportunities to facilities that wouldn't normally be able to afford the cost of purchasing

   simulation equipment.

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Appendix A

Components of the Educational Practices in Simulation Scale

Table A

Components of the Educational Practices in Simulation Scale

Components of the EPPS	Description of Components	Examples
Active leaning	Through simulation, learners are directly engaged in the activity and obtain immediate feedback and reinforcement of learning.	A case scenario in which an intubated patient is restless, agitated, and coughing, affecting his oxygenation status. Students can be asked to select the most appropriate intervention.
Diverse styles of learning	Simulations should be designed to accommodate diverse learning styles and teaching methods and allow healthcare providers with varying cultural backgrounds to benefit from the experience.	Design a scenario that has visual, auditory, and kinesthetic components.
High expectations	High teacher expectations are important for student learning experience because expecting the students to do well becomes a self-fulfilling prophecy.	Set up a scenario with multiple patient problems to challenge the learner and to advance learning and skill application to the next level.
Collaboration	Collaboration is paring health care providers in a simulation to work together. Roles are clarified so that groups jointly work on the problem-solving and decision making skills within the simulation together	Using the primary nurse and physician, place the healthcare providers in a situation where they will be confronted with a patient having post-operative complications that requires quick assessment and efficient decision-making skills to intervene appropriately with the patient. Evaluative communication during this process.

Note. Adapted from "Clinical Simulations: An Experiential Student-Centered Pedagogical Approach," by P. R. Jeffries and J. M. Clochesy, in D. M Billings, & J. A. Halstead (Eds.), *Teaching in Nursing: A Guide for Faculty* (4th ed., pp. 352-368), St. Louis, MO: Saunders Elsevier. Copyright 2012 by Saunders Elsevier.

Appendix B

Barriers to Simulation and the Role of the Nurse Educator based on the

Core Competencies of Nurse Educators

Table B

Core Competencies of Nurse Educators: *Addressing Barriers to Simulation*

Core Competencies	Potential/Actual Barriers	Role of Nurse Educator to address barrier (related to the task statements)
I. Facilitate learning	Current education model is content-content centered.	Paradigm shift from content-centered to learner-centered education. (Fink, 2003).
II. Facilitate learner development and socialization	Didactic education models routinely used in perinatal health care settings.	Use simulation to effectively integrate all three domains of learning: cognitive, affective, and psychomotor domains (Kolb, 1984).
III. Use assessment and evaluation strategies	The wide adoption of team training combined with simulation is commonly criticized and may be rejected by healthcare professionals.	Use evaluative measures such as the EPSS as a guide to evaluate the quality of simulations to promote learning. This information can be used to convince healthcare professionals of the importance of simulation (Jeffries, 2005).
IV. Participate in curriculum design and evaluation of program outcomes	Few opportunities for interdisciplinary collaboration in perinatal continuing education.	Use interdisciplinary integration as an education strategy. Educate nurse to coordinate care utilizing the collaborative perspectives of the perinatal healthcare team (Fink, 2003).
V. Function as a change agent and leader	Dissemination of evidence-based research to support simulations is poor**.**	Disseminate evidence-based simulation research to perinatal healthcare providers. Teach evidence-based learning strategies to improve perinatal outcomes (Riley et al., 2011).

VI. Pursue continuous quality improvement in the nurse educator role	Vague application of simulations when trying to generalize them to perinatal settings.	Design a continuing education curriculum that reflects perinatal health care trends and prepares students to practice in dynamic, complex environments (NLN, 2005).
VII. Engage in scholarship	team training combined with simulation is not widely supported by key stakeholders.	Bring research findings to key stakeholders such as hospital's chief nursing officer, chief executive officer, president, the American Congress of Obstetricians and Gynecologists (ACOG), the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN), and/or legislative bodies.
VIII. Function within the educational environment	Initial costs of simulation equipment and costs to continuously update equipment.	Form collaborative partnerships between hospitals and higher learning institutions to spread the cost of purchasing equipment between partners, thus reducing the financial burden for each partner.

Note. Core Competencies of Nurse Educators, by National League for Nursing (2005). Retrieved from http://www.nln.org/facultyprograms/pdf/corecompetencies.pdf Copyright 2005 by National League for Nursing