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Featured Article

Role Transition and Communication in Graduate Education: The Process

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Abstract: Transition from being a registered nurse to an advanced practice student is a complex process that can be aided by simulation. Advanced practice students must modify their thought process. Simulation within the advanced practice curriculum is beneficial for deciphering information provided by undergraduate student nurses while assisting the nurse in role transition, creating a provider mentality. Anecdotal responses from learners participating in simulation-based education related to communication were positive for both graduate and undergraduate students. Simulation can be an effective tool to improve communication between undergraduate and graduate students. Curriculum is enhanced with a mechanism in which intra-professional communication can be practiced.

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The Society for Simulation in Healthcare and the National League for Nursing have recommended that educators enhance curriculum to include interprofessional education, particularly among advanced practice nurses (APNs) (Wilhaus et al., 2013); advanced practice curricula should be no exception. Simulation, in graduate programs, remains limited due to constraints by accrediting bodies (Gore & Thomson, 2016). However, simulation is an effective mechanism to practice role transition and communication skills before entering in the health care setting (Green, Tariq, & Green, 2016).

Through simulation-based education (SBE), members of health care teams can develop and improve communication skills. Ineffective communication between providers may contribute to sentinel events, that is, preventable fatal medical errors that increase mortality and morbidity (The Joint Commission®, 2017). Education including intraprofessional communication among differing levels of nursing students (i.e., undergraduate-graduate student dyads) in simulation environments may help promote effective communication skills, team collaboration, and improved patient outcomes. APNs are expected to function as leading members of health care teams. Therefore, training APN students using SBE may help them develop communication skills that will benefit their future professional performance.

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Background

Interprofessional and Intraprofessional Simulation

It is suggested that interprofessional SBE be included during educational experiences (Wilhaus et al., 2013). However, there are many obstacles to interprofessional education (Palaganas, 2014).

Key Points

- The importance of participating in an intraprofessional simulation was evident by anecdotal participant responses during debriefing sessions.
- Simulation allows graduate students the opportunity to practice requesting and processing clinical information, make clinical decisions, and lead the team while interacting intraprofessionally.
- Simulation-based outcomes research needs to be integrated in graduate curriculum.

Because of these obstacles, graduate and undergraduate faculty and subject matter experts decided upon an intraprofessional approach to the SBE at the associated institution. This decision stemmed from the lack of proximity to a medical school (obstacle) for an interprofessional simulation and the desire to increase simulation within the college of nursing. The choice also reflected the desire of exploring the intraprofessional communication dimension among nursing students from different educational levels.

Simulation can readily support interprofessional education, as well as intraprofessional education (Kirkpatrick et al., 2018); however, intraprofessional simulation literature is sparse. Authors have discussed intraprofessional simulations among different levels of undergraduate nursing students (Leonard, Shuhaibar, & Chen, 2010). West, Holmes, Zidek, and Edwards (2013) presented an intraprofessional project among different levels of undergraduate nursing students and graduate nursing students, where an unfolding case was used. Evaluations from undergraduate nursing students were positive (West et al., 2013). Similarly, Kirkpatrick et al. (2018) reported on an intraprofessional simulation study (pre−post quasi-experimental) between over 200 undergraduate and 12 graduate nursing students that lasted eight hours. Results were mostly based on the undergraduate student which showed, among other things, development of communication and collaboration skills. Learning from peers is beneficial (Kirkpatrick et al., 2018), and the simulation discussed here provided the opportunity for participants to learn from peers.

In addition, the innovative intraprofessional clinical training for APNs, as suggested by Haney, Sharp, Nesbitt, and Poston (2017), was adapted and added the dimension of undergraduate nursing students into the intraprofessional communication simulated environment. The notion of pairing students in intraprofessional immersion experiences suggested by Haney et al. (2017) and augmented with a simulation scenario provided the opportunity to pilot a program that may be sustainable and enriching to nursing undergraduate and graduate students. In addition to increasing the awareness of students' roles, scope of practice, and intraprofessional collaboration, as documented by Haney et al. (2017), the simulation provided an opportunity to evaluate and reflect on the content of the communication and the appropriateness of the participant responses during the role transition.

Transition to Role and Practice

Transitioning from registered nurse to APN is difficult and stressful. Barnes (2015) explored nurse practitioners' role transition regarding previous nursing experience and whether they participated in a formal orientation. The author found that a formal orientation eased the transition period and suggested the need to identify additional factors that impact this transition (Barnes, 2015). Moreover, transition to practice may be difficult for the APN student; authors have discussed that current pedagogies alone may not fully address the students' needs to successfully transition into the role (Starkweather et al., 2017). Interprofessional relationships facilitate the role transition (Sullivan-Bentz et al., 2010). A simulation exercise that instead utilizes intraprofessional communication simulation may also facilitate that role transition (Wiseman, Hayne, & Hodge, 2013). Simulation, particularly for undergraduate students, has been described as helping students transition to practice (Palmer & Ham, 2017). Simulation for graduate nursing students may help their transition to practice.

The authors' purpose is to discuss the use of simulation in a graduate course with adult-gerontology acute care nurse practitioner students (AGACNPs) within an intraprofessional communication simulation. The primary objective was to correct previously identified gaps related to poor communication within the health care environment (Kalisch & Lee, 2010). This article will focus on the reasons for the simulation, simulation design, as well as, lessons learned for the graduate AGACNP student.

Simulation Design

The SBE was designed as nonmandatory for the graduate AGACNP students. Graduate AGACNP students agreed to participate in the simulation voluntarily. The simulation design was based on the criteria set forth by the International Nursing Association for Clinical Simulation and Learning (INACSL) Standards of Best Practice:

Simulation℠ Simulation Design (INACSL Standards Committee, 2016c).

Criterion 1

This initiative was based on an institutional wide-quality enhancement program or QEP. The simulations were developed based on a needs-assessment to improve nursing intraprofessional communication. Subject matter experts from undergraduate and graduate faculty contributed to the development of the SBE.

Criterion 2

The objectives were measurable and included (a) performance of physical assessment; (b) recognition of a change in health status from baseline; (c) communication between nurse and AGACNP student using SBAR (Situation-Background-Action-Recommendation communication) (Leonard, Graham, & Bonacum, 2004); and (d) development of an appropriate plan of care. The communication between the undergraduate nursing students at the bedside and the graduate AGACNP students were the intraprofessional communication outcomes of interest. SBAR handoff communication was an expectation (Leonard et al., 2004). The SBAR process is taught early in the first semester and is used consistently across the curriculum. The SBAR process has been supported by The Joint Commission® (2017), and it provides a framework for improved communication among health care team members (Institute for Healthcare Improvement, 2015).

The overarching objectives of the SBE were shared with the learners; however, the critical elements were not.

Criterion 3 and 4

The format of the simulation was a high-fidelity formative experience. The simulation was based on an unfolding case scenario based on an "if/then" logic. Included within the simulation were specific interventions appropriate for a senior-level AGACNP student to implement diagnostics (e.g., chest x-ray, electrocardiogram, echocardiogram, and doppler ultrasound), laboratory evaluation, and medication orders (e.g., nitroglycerin and morphine). The scenario was based on Basic Life Support and Advanced Cardiovascular Life Support guidelines (American Heart Association, 2015).

Within the scenario, one of the two patients deteriorated which required immediate recognition by the undergraduate nursing student. Further intervention was required, culminating with a call to the AGACNP student who was the health care provider for further orders and recommendations. AGACNP students, during the simulation, had to initially make a differential diagnosis based on the information (or lack thereof) provided by the undergraduate student at the bedside, thus needing to decipher information instantly. The AGACNP student was expected to provide orders and recommendations based on the information received. In addition, the AGACNP student, if physically present in the simulation laboratory, could elect to attend to the patient at the bedside.

A follow-up call to the AGACNP student and/or a request to see the patient in person proceeded if the initial response of the AGACNP student did not address or resolve the presenting clinical issues. This created a second opportunity for the AGACNP student to critically think about the progression of the patient and likewise for the undergraduate nursing student at the bedside to clinically reevaluate the patient and the nature of the orders received from the AGACNP student. In the scenario, the simulated patient progressed to clinical deterioration resulting in a cardiac arrest (Code Blue) scenario. The leader within the code was the AGACNP student if the student was on-site. This chain of events provided the major transition from team member to team leader for the AGACNP student. The end point of the simulation was placement of the defibrillator pads on the anterior chest wall of the manikin if the AGACNP was physically present or a start of a code if the AGACNP was on the phone.

Criteria 5 and 6

The simulation took place in a dedicated critical care suite. The simulation used two Gaumard™ high-fidelity simulators. The physical environment contributed to the fidelity with the use of critical care beds, ventilator, infusion pumps, code cart, and so on. In addition, embedded actors were used to portray family members, thereby increasing the realism of the SBE. Cues were identified before the onset of the simulation and shared with facilitators.

Criterion 7

Undergraduate students participated in the simulation in groups of four to six. This included two primary undergraduate nurses, one for each patient, and two to three undergraduate nursing students as participant observers. The undergraduate nursing students in the participant observer role were placed in a remote room with access to audio and video of the simulation room where the scenario took place. The AGACNP students were oriented beforehand to the objectives of the simulation and their role in the simulation. The AGACNP student was either physically present in the simulation laboratory (in-house) or at a distance ("on call"), accessible via telephone. The start of the simulation included a hand-off from the off-going nurse to the incoming nurse, with an opportunity to ask questions, followed by a group huddle.

Criterion 8

The debrief was conducted with both graduate and undergraduate faculty using a co-debrief model (Cheng et al., 2015). Each debrief had a minimum of one educator who

was a Certified Healthcare Simulation Educator-Advanced (Society for Simulation in Healthcare [SSH], n.d.). The faculty present also served as either (a) subject matter expert or (b) debriefing expert. A script was provided as a guide based on the Debriefing for Meaningful Learning© method (Dreifuerst, 2015). The debriefing focused on the objectives of the simulation (INACSL Standards Committee, 2016a).

Criterion 9

The standard tool for all simulations in the undergraduate program, the Simulation Effectiveness Tool-Modified (CAE Healthcare, 2015 original SET; Leighton, Ravert, Mudra, & Macintosh, 2015), was used to evaluate the student experience. Additional anecdotal feedback was obtained during the debriefing by graduate students.

Criterion 10

Presimulation activities consisted of dedicated readings and a short video on room setup, manikin capability, and use of a crash cart in the event of an emergency. The prebrief included additional orientation to the room and equipment.

Criterion 11

The SBE was pilot-tested during a previous semester to ensure fidelity, flow, and consistency. In addition, the faculty provided a run-through with each other and the embedded participants.

Theoretical Framework

The simulation design used Jeffries Simulation Theory (Jeffries, 2016). Consideration was taken to ensure that the facilitators, participants, and educational practices were individually discussed between the faculty team for scenario design (Jeffries, 2016).

Discussion and Lessons Learned

Through the process evaluation, lessons were learned. These included those related to availability, role transition, focus, debriefing, and miscellaneous.

Availability

AGACNP students were invited to participate in the SBE. A total of 25 simulations facilitated by seven faculty were conducted. The schedule was based on convenience, and the AGACNP students had the ability to participate in person or via telephone. Availability of the graduate students was an initial problem because participating in the simulation was not mandatory. Students were more likely to schedule participation via telephone as the provider answering an ''on call'' request compared to being physically in person during the SBE. Although helpful for graduate students, this created an issue with scheduling. For example, students were not always able to be reached by phone due to incorrect phone numbers, ''dead zones,'' and so on. Sometimes, faculty were not aware if a student was calling in or going to be present in person. The APN faculty had to fill the gaps during certain aspects of the schedule.

This issue may be avoided by making the simulation mandatory and/or designing the simulation to have all the nurse practitioner students either attend in person or via the phone. If ''on call,'' phone numbers need to be checked and verified before the simulation day. Tweaks to the objectives and end point of the simulation may need to be adjusted depending on whether the APN student is physically present or not. For example, if the APN student is on the phone, the simulation may need to stop when the code is called. Feedback from APN students suggested that it was more challenging for the APN student to lead a code remotely.

Role Transition

Transitioning from a bedside nurse to provider and team leader requires practice with appropriate feedback. This may or may not occur in the clinical setting during one's educational program. Simulation provided this opportunity for an emergent situation between two levels of nursing students (Kirkpatrick et al., 2018) through collaboration between undergraduate faculty and students, as well as simulation experts.

Some of the AGACNP students, when uncertain of how to progress with patient care, regressed back to the nurse role. This observation is not unique; work by MacLellan, Levett-Jones, and Higgins (2015) found that transitioning to the role of APN is a complex, and at times, a confusing period of adjustment. It is not uncommon for the APN to experience loss of confidence. The authors recommend ensuring a nurturing environment with opportunities for meaningful feedback from the health care team. In addition, role transition needs to be added as a specific objective for APN students.

Focus

In this combined undergraduate and graduate scenario, much of the focus was on the undergraduate student. This may have occurred for several reasons. There were more faculty participating from the undergraduate program, and there were greater numbers of undergraduate students. When on the phone, the AGACNP student did not participate in the joint debriefing, reducing discussion on AGACNP objectives and intraprofessional communication. In addition, faculty from each program wrote objectives and critical elements related to their specific student population. Although intraprofessional communication was a focus in both groups, there were not shared objectives.

To improve focus for the whole group, the authors suggest more discussion ahead of time between undergraduate and graduate faculty with an emphasis on programmatic infrastructure, prioritization, and shared goals. Overall combined objectives for an intraprofessional activity need to be written and agreed upon as it is a standard in interprofessional activities (INACSL Standards Committee, 2016b).

Debriefing

Students

Anecdotally, AGACNP students who attended in person valued having the Certified Healthcare Simulation Educator-Advanced faculty to lead the debrief. The students perceived a difference in the flow of the debrief when compared to the other facilitators based on their training. Some of the AGACNP students, who were educators in their place of employment, immediately wanted to debrief the students on ''how it is really done.'' This type of discourse was discouraged, as it was not consistent with the objectives of the SBE. It was evident they were comfortable in that role as opposed to being debriefed on their individual performance. It was also optimal to have the APN faculty present to individually debrief the algorithms and medical aspects related to care aside from communication and roles.

As discussed under ''Focus,'' AGACNP students who participated via telephone (''on call'') did not participate in the joint debriefing, which decreased discussion about intraprofessional communication. These students were later debriefed by their instructor on AGACNP objectives. In the future, if students cannot attend in person, it is suggested that they attend the combined debrief either via conference call or live video conference.

Faculty

In a mixed debrief with multiple co-debriefers, including undergraduate and graduate faculty, as well as both undergraduate and graduate students, steps need to be taken ahead of time to ensure the flow of the debrief (Cheng et al., 2015). Co-debriefing required a discussion before the SBE. This was adhered to; however, it was not anticipated that the AGACNP student would ''hijack'' the debrief (Cheng et al., 2015). In certain SBEs, it was noted that AGACNP students wanted to teach the undergraduate students based on their individual bedside practice rather than the objectives of the simulation. It was also not intended for the graduate student to be in the teacher role during the debrief but rather participate as a colearner (Sawyer, Eppich, Brett-Fleegler, Grant, & Cheng, 2016). Nevertheless, it is important for graduate students to be able to mentor undergraduate students (Kirkpatrick et al., 2018). In another study, the APN student could facilitate in the debrief, particularly regarding undergraduate nursing student performance (Kirkpatrick et al., 2018). Challenges, such as these, need to be discussed with debriefers before the event and strategies determined.

Not all the educators were comfortable with the intricacies of co-debriefing a multiple-level debrief. However, pairing experienced with less experienced co-debriefers together provided an opportunity to role-model how to structure and manage a debrief. Having a subject matter expert, as well as a practicing AGACNP faculty, was extremely valuable.

Faculty were able to debrief the entire event after all sessions. This was helpful in evaluating the entire process for future improvement.

Miscellaneous

Although most graduate students were willing to participate, they were cautiously optimistic. Initially, students volunteered for one SBE. After their initial participation, they requested further simulation times. Graduate students identified that the learning and practice that took place was valuable. They recognized that not knowing the undergraduate nursing students replicated a real scenario in the acute care setting. One can infer they felt the experience was valuable.

Another learning opportunity occurred when the AGACNP student did not receive the initial patient report. Having the AGACNP student, either physically present or on the phone (''on call''), who did not know the patient history or background, was realistic. This increased the need for the undergraduate student to focus on communication with the AGACNP student. This aspect of the simulation seems valuable and should be explored further.

Finally, determination of how the simulation will be counted (i.e., course, laboratory, or above clinical-hours' time) must be made ahead of time. Authors have suggested simulation for APN students as preparation for clinical rotations (Starkweather et al., 2017).

Conclusions

Intraprofessional simulation between graduate and undergraduate students offers many benefits, including self-reported self-efficacy (Kirkpatrick et al., 2018). Another benefit is flexibility in scheduling, particularly if the APN student can be on the phone. According to Kirkpatrick et al. (2018) and West et al. (2013), intraprofessional simulation also allows the undergraduate students to learn about the APN role. The value of role transition rehearsal and deliberate communication practice was evident with anecdotal feedback and evidence of APN students requesting an increase in SBE. If SBE is done with a conscious decision to adhere to standards and best practices, the best chance for optimal results is possible.

SBE creates the conditions to participate and practice in a safe environment (Decker, Caballero, & McClanahan,

2014) while replicating potential situations in the acute setting. Creating a psychologically safe environment for all learners is imperative (Roussin, Larraz, Maestre, & Jamieson, 2018), as graduate students do not get an opportunity to practice their new role consistently. The level of realism created by having both graduate and undergraduate students working together is essential for the health care environment. Robust and formalized research needs to be conducted to look at outcomes following graduate APN participation in simulation. Role transition for the APN student needs further study.

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