**The Effectiveness of Clinical Simulation for Senior Nursing Students to Decrease Obstetric Emergencies**

**Description of Selected Advanced Nursing Practice Translation of Evidence Topic**

In simplistic terms, an obstetric emergency can be described as a threatening situation that ensues during prenatal period, labor and after delivery. Obstetric emergencies have, for quite some time now, proven to be an unrelenting concern with respect to maternal health (Green, Rider, Ratcliff & Woodring, 2015). In a study conducted in five different countries between 2009 and 2011, approximately 10% of the deliveries made experienced various forms of obstetric emergencies (Ameh et al., 2012). Despite efforts to prepare and alleviate the morbidity rates, obstetric emergencies still remain a constant challenge in most healthcare facilities across the world. In light of this, there is a need to adopt a different approach that will improve the readiness and capacity of doctors of nursing practice students and other health care providers to mitigate the occurrence of obstetric emergencies. According to Amatullah (2018), incorporating a clinical simulation training in healthcare facilities would be an effective tactic towards reducing cases presenting with obstetric emergencies. This translational project is thus, aimed at exemplifying how evidence from current literature can be translated into changing or optimizing the management of obstetric emergencies for improved outcomes.

Clinical simulation is modern day approach to healthcare that seeks to have an experimental representation of real life clinical processes and preocedures to attain specific objectives through learning and having a first-hand experience. Although written and oral exams are important in gauging a student’s mastery of content, clinical simulation is equally significant in bridging the gap between the lecture theater and the actual clinical setups (Kumar, Pathak, Singh & Rudra, 2016). Clinical simulation, in its entirety, is a critical approach towards grooming holistic doctors of nursing practice. Kumar, Pathak, Singh and Rudra (2016) posit that clinical simulation plays a major role in providing nursing students with a platform on which they can put the theoretical knowledge into practice. By so doing, students are equipped with hands-on nursing skills that would improve their readiness and capacity to manage obstetric emergency cases. Bearing in mind that advanced nursing practice is a skill-based profession, clinical simulation is instrumental in exposing the students to obstetric emergencies and inculcating the necessary skills to decrease the occurrence of these cases (Nelissen et al., 2017). As such, simulations provide students with an invaluable learning experience where they get to apply the knowledge learnt in class.

In addition to that, clinical simulations are also fundamental in instilling critical thinking, problem solving as well as calculated decision making skills relative to the findings of (van Lonkhuijzen, Dijkman, van Roosmalen, Zeeman & Scherpbier, 2010). Subjecting students to the actual experience of nursing practice exposes them to various challenges that would ideally require their intervention such as obstetric emergency cases. Although clinical simulations are primarily experimental, they are integral in developing professional practicing skills even in the face of challenges (van Lonkhuijzen, Dijkman, van Roosmalen, Zeeman & Scherpbier, 2010). The same sentiments are also shared by Merién, van de Ven, Mol, Houterman and Oei (2011) who argue that the clinical simulation experience is essential in developing the capacity to think critically, make cut decisions and solve problems related to obstetric emergencies in an real life case scenario.

Moreover, clinical simulations play a significant role in inculcating a culture of teamwork and effective communication among students even as they seek to be professional doctors of nursing practice. Students who are exposed to clinical simulation experiences cultivate the spirit of teamwork with fellow students as well as effective communication (Merién, van de Ven, Mol, Houterman & Oei, 2011). Essentially, clinical simulations provides room for students to work together as a group towards attaining a specific objective. By doing so, students learn to execute different assignments collectively through effective communication which in the long run fosters a culture of teamwork (Nelissen et al., 2017). In the long run, these students are able to integrate into any healthcare facility and work with other nurses as a team and communicate effectively. This therefore allows them to reduce and comprehensively manage obstetric emergency cases in a timely fashion.

Considering that clinical simulations seek to replicate the actual clinical setup, students of advanced nursing practice are able to appreciate the importance of preventive care. Obstetric emergencies are, in most cases, unforeseen (Green, Rider, Ratcliff & Woodring, 2015). However, developing a preventive care approach would go a long way in alleviating the occurrence of these emergency cases. In light of this, clinical simulations create a necessity for students to focus solely on preventive care when it comes to obstetric emergencies (Green, Rider, Ratcliff & Woodring, 2015). In a simulation setup, students are likely to make errors. Upon seeing the negative outcome of their blunders, they get to appreciate the need for preventive care to avert any unforeseen emergencies. Instead of dwelling primarily on the curative approach, students learn to focus on adopting a preventive approach of health care to mitigate the occurrence of such emergencies in a healthcare facility or in home nursing (Green, Rider, Ratcliff & Woodring, 2015). This underscores the significance of clinical simulation for students of advanced nursing practice in decreasing obstetric emergencies and related complications as well.

**Presentation of selected advanced practice translation of evidence analysis**

Preparing the current students of advanced nursing practice for the sophisticated environments of modern knowledge and technological advancements is imperative. As a result, exposing students to real life replications where information systems are is significant in management of obstetric emergencies among other health related disorders. Thus, there are a couple of proposed managements for the information systems change and the informatics role of the doctor of nursing practice in evaluation and sustainability. Ideally, nursing informatics incorporates both nursing science and computer informatics with an aim of managing knowledge and information pertinent to nursing to create relevant insights in patient treatment. Nursing is in itself an information intensive profession. For this reason, there is need to have an information system that is effective in its dynamics. According to Darvish, Bahramnezhad, Keyhanian and Navidhamidi (2014), the epicenter of nursing informatics is grounded on the need to provide quality health care to the patients in order to optimize on the treatment outcomes. In essence, nursing information systems should be designed in a manner that it enhances patient safety (Choi, Yang & Lee, 2014). Patient data should be safely stored and easily retrieved to enhance informed decision making by health care practitioners. Additionally, health care systems should be developed to enhance the efficient coordination of patient care (Choi, Yang & Lee, 2014). Since health care provision is a multi-disciplinary approach, the information system should be designed in that it is able to facilitate the harmonious coordination of patient care. Moreover, Choi, Yang and Lee (2014) postulate that the information systems should seek to optimize enhanced patient access to information such that the care is, itself, patient based for improved outcomes.

The role of the doctor of nursing practice in informatics is undoubtedly important. Based on the findings of Moghaddasi, Rabiei, Asadi and Ostvan (2017), key positions in nursing informatics are turning out to be instrumental roles in improving the quality of health care provision. The doctors of nursing practice thus, play a critical role in integrating the Information technology system across the healthcare facility (Moghaddasi, Rabiei, Asadi & Ostvan, 2017). The efficacy of nursing informatics is dependent on how well the IT system is integrated in the health care sector. In addition to integrating the system, the doctor of nursing practice also plays an instrumental role in ensuring that the information system is optimized to collect, record and analyze patient data for easier clinical decision making (Moghaddasi, Rabiei, Asadi & Ostvan, 2017). In light of this, the doctor of nursing practice has the capacity to evaluate the information system to warrant its sustainability and efficacy during its operations. The doctor of nursing practice would also be a pivotal entity by exposing students to informatics systems as a way of preparing and grooming them into future leaders in the field of nursing who can mitigate obstetric emergency cases.

**Conclusion**

As a student of advanced nursing practice, there is no doubt that clinical simulation provides an invaluable learning process that is important for all nurses. The exposure to the real life experiences as well as healthcare information systems is, to a great extent, important in optimizing the quality of care provided to the patient. Unavoidably, the nursing profession prospers on experience and information. Therefore, the significance of effectiveness of clinical simulation for senior students in decreasing obstetric emergencies should not, in the very least, be undervalued.

**Students’ PRE Questionnaire**

1. To help identify me to identify your key learning expectations, please complete the following statements.

I want to learn about............

I want to understand how to..............

I want to develop my...............

2.  From your own point of view, do you think clinical simulations are important?

3. What do you feel are your strengths and weaknesses in relation to the clinical simulation activity?

4. Is there anything else you would like me to know?

**Participants POST Questionnaire**

1. Please identify your 5 (maximum) most important learning points from the clinical simulation activity:

2. Has the clinical simulation addressed some of your difficulties or weaknesses in developing relevant nursing skills?

3. After this activity, what do you feel are your strengths and weaknesses in relation to being a student of advanced nursing practice and as a future DNP?

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