

Review Article

Simulation Based Experiences in Nursing

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Nursing education involves a practice-oriented curriculum during which emphasis is placed on both theoretical knowledge and practical skills. In skill-based education, where learning through practice occupies a central role, it is vital to form sure the mixture of theoretical knowledge into practice. During this context, simulations represent innovative pedagogy that stimulates sort of senses at the identical time among learners. The simulation might be a way that could be designed to reflects real-life conditions, and which provides the prospect to work. In contexts that are closer and more representative of real setting.^{1} Clinical education in nursing aims to integrate theoretical knowledge from books into practical knowledge in real-life situations and to help students develop their problem-solving skills. Due to rapid changes in clinical placements, patient questions of safety, and ethical concerns, student direct experience with patient care and opportunities to handle problem-based clinical situations are diminished.^{2} Simulation-based education is a tutorial or training method that's used to “replace or amplify the real experience with guided experiences.” It’s not defined by technology, but rather a tutorial approach grounded in learning theories. Simulation is meant to duplicate aspects of the important world in an interactive manner that permits learners to be immersed within the training environment. ^{3} Nursing students would practice on mannequins, like Mrs. Chase, or on each other by using various training devices to be told to administer injections, insert a nasogastric tube, and other basic nursing skills. Simulation-based clinical education in nursing refers to a variety of activities

using patient simulators, including devices, trained persons, lifelike virtual environments, and role-playing, not just handling mannequins. With realistic clinical scenarios, simulation-based educational interventions in nursing can train novice additionally as experienced nurses, helping them develop effective non-technical skills, practice rare emergency situations, and providing a variety of authentic life-threatening situations. ^{2} Simulation-based experiences most often occur in an extremely imitation laboratory setting within which the undergraduate students come for a defined period of time and interact in activities specifically designed around a set of learning objectives. These activities are developed into simulation scenarios. The scenario contains the tutorial objective, the patient information e.g. background, current condition, medications, and other relevant information), actor scripts, information for the high fidelity simulator, a timeline for the unfolding of the scenario, cue needed by the facilitator to help the action flow along, and other essential information to form sure that the simulation-based learning education experience is successful.^{4} Suggests that simulation could even be an efficient method of learning because it implicates four key facets of education in nursing: developing technical proficiency through the practice of psychomotor skills and repetition, assistance of experts that is ready-made to students’ needs, situated learning within context, and incorporation of the successful (emotional) component of education. ^{5} Various methods of simulation-based learning to exist one such method is the utilization of a daily patient (Standardized Patient), who is an actor emulating a patient with a

specific history, diagnosis, or clinical presentation. The use of standardized patients in an really simulation-based learning activity provides similar experiences to any or all students, and a practical simulation experience is more clinically relevant than real clinical settings when the experience is strategically focused on objectives. ^{6} Others Simulation techniques utilized in teaching vary from low fidelity to high fidelity depending on the degree that they match reality. Low fidelity replication includes replica anatomical models and peer-to-peer learning to use case studies or role-play two-dimensional video games on a monitor with interactive software is additionally used to solve problems during a very cardiac clinical situation. Full-scale or high fidelity computerized manikins attempt to replicate human anatomy and could be programmed to imitate vital signs for skill and decision-making enhancement. ^{5} Simulation laboratories are quite costly, high-fidelity simulator, synthetic body fluids, replacement skins, bandages, syringes, and other supplies are necessary to simulate the experience of treating real patients in an exceedingly real hospital. The pliability to practice without risk must be weighed against the worth of this new technology. Simulation has many advantages, for it results in highly trained medical graduates who are less likely to make life-threatening or costly medical errors.

References

1. Eyikara E, Baykara Z. The importance of simulation in nursing education. World Journal on Educational Technology: Current Issues. 2017; 9(1):02. <https://eric.ed.gov/?id=EJ1141174>.
2. Kim J, Park J, Shin S. Effectiveness of simulation-based nursing education depending on fidelity: a meta-analysis. BMC Medical Education. 2016; 16(1) <https://pubmed.ncbi.nlm.nih.gov/27215280>.
3. Aebersold, M, Tschannen D. Simulation in Nursing Practice: The Impact on Patient Care. The Online Journal of Issues in Nursing, No 2, 2013; Vol. 18(2): Manuscript 6. <http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-18-2013/No2-May-2013/Simulation-in-Nursing-Practice.html>.
4. Aebersold, M., "Simulation-Based Learning: No Longer a Novelty in Undergraduate Education" OJIN: The Online Journal of Issues in Nursing, 2018, Vol. 23, No. 2. ojin.nursingworld.org/.../Simulation-Based-Learning-Undergraduate-Education.html
5. Cant R, Cooper S. Simulation-based learning in nurse education: systematic review. Journal of Advanced Nursing. 2010; 66(1):3-15. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2648.2009.05240.x>
6. Dearmon V, Graves R, Hayden S, Mulekar M, Lawrence S, Jones L et al. Effectiveness of Simulation-Based Orientation of Baccalaureate Nursing Students Preparing for Their First Clinical Experience. Journal of Nursing Education. 2012; 52(1):29-38. <https://www.ncbi.nlm.nih.gov/pubmed/23230885>

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