

PHARMACIST-PATIENT RELATIONSHIP IN CLINICAL TRIALS

Simulation Based Medical Education: an opportunity to learn from errors

One of the most important steps in curriculum development is the introduction of simulation-based medical teaching and learning. Simulation has been defined as a situation in which a particular set of conditions is created artificially in order to study or experience something that is possible in real life to achieve educational goals through experiential learning. Simulation based medical education is defined as any educational activity that utilizes simulation aides to replicate clinical scenarios.

Although medical simulation is relatively new, simulation has been used for a long time in other high risk professions such as aviation and aerospace industries. Simulators are now widely used in education and training in a variety of high risk professions and disciplines, including the military, commercial airlines, nuclear power plants, business and medicine.

Medical simulation allows the acquisition of clinical skills through deliberate practice rather than an apprentice style of learning. It is a desirable approach because it affords learners a controlled environment in which they can engage in repetitive and deliberate practice, receive constructive feedback, explore different strategies, and make errors without jeopardizing patient safety.

Simulation tools serve as an alternative to real patients. A simulator is defined as a device that enables the operator to reproduce or represent under test conditions phenomena likely to occur in actual performance. There are different types and classification of simulators and their cost vary according to the degree of their resemblance to the reality, or 'fidelity'. Nonetheless, simulation can only imitate but not replicate reality. The recreation of "reality" or "fidelity" is important for the success of simulation and for the participant.

The practice of scenarios can be done individually, but it is mostly carried out by a team from the same or different specialties or professions in a simulated environment made to resemble the intended environment as closely as possible in order to immerse students in an experience closest to real life.



The practice of a scenario can be videotaped for immediate feedback to participants during the debriefing sessions.

Debriefing after a scenario is an important component of full-scale simulation. Video recording of the scenario is also used to initiate discussion and to make sure that all learning objectives were covered. Debriefing can focus both around the cognitive process involved in the recognition of the problem and the implementation of the management guidelines and the technical level at which the ability of the learner to apply rules and appropriate responses in a stressful situation is evaluated.

During the full scale scenario-based training, the learner can acquire such important skills as interpersonal communication, teamwork, leadership, decision-making, the ability to prioritize tasks under pressure, and stress management. However, training through simulation should be viewed as an adjuvant and not a replacement for learning with real patients. Simulation is not intended to replace the need for learning in the clinical environment, so it is important to integrate simulation training with the clinical practice during curriculum development.

Simulation-based learning is expensive. However, it is cost-effective if utilized properly. Medical simulation has been found to enhance clinical competence at the undergraduate and postgraduate levels. It has also been found to have many advantages that can improve patient safety and reduce health care costs through the improvement of the medical provider's competencies.

SO..LEARN FROM ERRORS TO NOT MAKE ERRORS!



See you at the workshop!

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References:

- Issenberg SB, Effectiveness of a Cardiology Review Course for Internal Medicine Using Simulation Technology and Deliberate Practice. Teach Learn Med.2002;
- Simulation-based medical teaching and learning, Abdulmohsen H, J Family Community Med, 2010