Using ‘think aloud’ as a strategy for learning clinical reasoning in high fidelity case-based simulation for undergraduate nursing students

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Aims: This paper reports on the implementation of a research project that trials an educational strategy implemented over six months of an undergraduate third year nursing curriculum. This project aims to explore the effectiveness of ‘think aloud’ as a strategy for learning clinical reasoning for students in simulated clinical settings.

Background: Nurses are required to apply and utilise critical thinking skills to enable clinical reasoning and problem solving in the clinical setting [1]. Nursing students are expected to develop and display clinical reasoning skills in practice, but may struggle articulating reasons behind decisions about patient care. For students learning to manage complex clinical situations, teaching approaches are required that make these instinctive cognitive processes explicit and clear [2-5]. In line with professional expectations, nursing students in third year at Queensland University of Technology (QUT) are expected to display clinical reasoning skills in practice. This can be a complex proposition for students in practice situations, particularly as the degree of uncertainty or decision complexity increases [6-7]. The ‘think aloud’ approach is an innovative learning/teaching method which can create an environment suitable for developing clinical reasoning skills in students [4, 8]. This project aims to use the ‘think aloud’ strategy within a simulation context to provide a safe learning environment in which third year students are assisted to uncover cognitive approaches that best assist them to make effective patient care decisions, and improve their confidence, clinical reasoning and active critical reflection on their practice.

Methods: In semester 2 2011 at QUT, third year nursing students will undertake high fidelity simulation, some for the first time commencing in September of 2011. There will be two cohorts for strategy implementation (group 1= use
think aloud as a strategy within the simulation, group 2= not given a specific strategy outside of nursing assessment frameworks) in relation to problem solving patient needs. Students will be briefed about the scenario, given a nursing handover, placed into a simulation group and an observer group, and the facilitator/teacher will run the simulation from a control room, and not have contact (as a ‘teacher’) with students during the simulation. Then debriefing will occur as a whole group outside of the simulation room where the session can be reviewed on screen. The think aloud strategy will be described to students in their pre-simulation briefing and allow for clarification of this strategy at this time. All other aspects of the simulations remain the same, (resources, suggested nursing assessment frameworks, simulation session duration, size of simulation teams, preparatory materials).

Results: Methodology of the project and the challenges of implementation will be the focus of this presentation. This will include ethical considerations in designing the project, recruitment of students and implementation of a voluntary research project within a busy educational curriculum which in third year targets 669 students over two campuses.

Conclusions: In an environment of increasingly constrained clinical placement opportunities, exploration of alternate strategies to improve critical thinking skills and develop clinical reasoning and problem solving for nursing students is imperative in preparing nurses to respond to changing patient needs.

References: