

10C2

Authentic Assessment for Active Learning in Simulation – a multidisciplinary reflection.

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Background: Assessment must reflect the combined technical, non-technical and procedural competencies expected in the profession in order to promote workforce readiness. The pharmacy and Exercise Physiology curriculum at James Cook University expose students to simulated and real patient scenarios specifically designed to improve workforce readiness. This pedagogy requires assessment tools that help students prioritise their learning, reflect upon accepted industry standards and promote critical reflection.

Summary of work: This project critically reflects on the assessment process in our simulated environments and unpacks the common themes for success across the two disciplines as well as the role of assessment in simulation.

Summary of results: The themes identified for discussion are: 1 Assessment tools that engage students, tutors and subject coordinators; 2 Authenticity and validity of assessment; and 3 Interplay between the assessment FOR and OF learning.

Conclusions/Take-home messages: Well developed assessment and feedback processes maximise the opportunities afforded by simulation-based pedagogies. Assessment methods need to be transferable into future practice, feel real and be responsive to the needs of the individual student. This cross-disciplinary approach has identified 3 critical aspects to consider when designing assessment in simulation, which are transferable to a broad cross section of health degrees.

10C3

Interrater agreement of specialist assessors and nurses embedded within simulation scenarios for high stakes assessment

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Background: Use of simulation for assessment is increasing with evidence of good reliability and validity, however the utility of using simulation as an assessment tool is affected by cost implications. The aim of our study was to compare ratings of specialists with those from nurses embedded in simulation scenarios as part of a process for recruitment to anaesthesia training posts.

Summary of work: Nurses in role play were incorporated into a medium fidelity simulation station testing situation awareness, teamwork and working under pressure, as part of a six-station selection centre in the Peninsula Deanery from 2009-2010. 125 applicants were assessed by pairs of nurses and pairs of consultant anaesthetists. Nurse assessor ratings were not included in the overall selection score for the purposes of recruitment.

Summary of results: Interrater agreement for nurses (kappa = 0.61 – 0.81) and consultants (kappa = 0.65 – 0.86) was high for all domains scored over two consecutive years. Agreement for all raters including both nurses and assessors was lower (kappa = 0.52 – 0.75). Rank ordering was analysed dependant on nurse or consultant ratings with a low effect on final rank order.

Conclusions/Take-home messages: Nurse ratings are just as reliable as consultant ratings but nurses may be observing different aspects of behaviour during the scenarios which account for slight differences in scoring.

10C4

Development and psychometrics testing of a Simulation-based Assessment Tool (SAT)

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Background: The clinical nursing skills assessment has been focused on isolated technical skills. The actual clinical encounters with patients, on the other hand, demands integration of knowledge, technical skills and attitudes. To be more reflective of the real clinical practice, the study aims to develop and test a simulation-based assessment (SAT) tool that provides holistic assessment of the student nurses' clinical performances in a simulated clinical setting across six core competencies: 1) critical thinking; 2) communication; 3) technical skills; 4) management of care; 5) professionalism; 6) safe practice.

Summary of work: The study is currently in work process and will be conducted in three phases. Phase 1, which has been completed, involved the development of items for the SAT from a panel of faculty experts of an institution. Phase 2 is currently underway for the establishment of content validity by a panel of experts from a variety of institutions and by undertaking a pilot test. Phase 3 will involve testing the psychometric properties of the SAT for inter-rater reliability.

Summary of results: The process of developmental phase has produced a 40-item SAT. The result of the content validity will be reported using content validity index. The inter-rater reliability will be calculated from the SAT scores rated by two raters.

Conclusion: The SAT will provides a valid and reliable tool to evaluate nurses' clinical performances across multiple domains and holistic approach.