Identifying content for simulation-based curricula in urology

A nationwide needs assessment

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Hybrid Training in Clinical Comprehensive Skills Training Courses for Senior Medical Students

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Background: To develop training courses based on hybrid training method which can help to improve the comprehensive competency of the senior medical students, to explore and implement the hybrid training method in the clinical comprehensive skills training courses for senior medical students.

Summary of Work: With 6 hybrid training courses in groups, to simulate the whole medical procedures by one case, including seeing patient, preliminary diagnosis, reporting to senior physician, communicating with the patient, patient safety management, crisis management of disease deterioration, BLS of the code team, advanced life support and case discussion.

Summary of Results: The hybrid training method was popular with the students, and was helpful to increase the subtends learning activities. All the participants in this program finished the homework with a good teamwork based on the learning group, and passed the hybrid examination by individual and by team.

Discussion: We established a simulation course pattern by simulating key procedures of dealing with a certain patient to train the students to improve clinical comprehensive skills. Hybrid teaching method and Team-based learning help students do more learning activity both in and out of class.

Conclusion: Hybrid training in the clinical comprehensive skills training courses was a student centered, results oriented method lead to active and effective learning, developed a new way for clinical competency training, this method can be applied in any other diseases, and valuable to be spread in clinical comprehensive skill training.

Take-home Message: We have established a simulation course pattern by simulating key procedures of dealing with a certain patient to train the students to improve clinical comprehensive skills with hybrid training methods, which can be applied in any other diseases, and valuable to be spread in clinical comprehensive skill training.

Identifying content for simulation-based curricula in urology: A nationwide needs assessment

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Background: Simulation continues to emerge as novel training methodology in response to the mounting pressure that the educational environment faces today. However, identification of included procedures is often based on coincidence or available simulation equipment. Curriculum development of simulation-based courses should follow a stepwise approach starting with a general needs assessment.

Summary of Work: We performed needs assessment using Delphi method among 56 participants in urology. Round 1 identified technical procedures that urologists should learn. Round 2 involved a survey to explore frequency of procedures, number of operators, discomfort when performed by inexperienced doctors, and feasibility. Round 3 involved elimination and ranking of procedures.

Summary of Results: The response rates for Round 1, 2 and 3 were 70%, 55% and 67%, respectively. The Delphi process resulted in a final prioritised list of 18 technical procedures in urology that are highly-suitable for simulation training starting with cystoscopy, transrectal ultrasound-guided biopsy of the prostate, and placement of ureteral stent.

Discussion: The development of simulation-based training programmes should be guided by deliberate selection of the most suitable procedures. Performing a needs assessment among the end-users of simulation-based training allows for planning of educational activities that are targeted to current training needs.

Conclusion: The needs assessment following a structured Delphi process identified a prioritised list of technical procedures in urology that are highly suitable for simulation. Medical educators and leaders of simulation centres can use this as an aid in the planning and development of simulation-based training programmes.

Take-home Message: A general needs assessment following a structured approach is required to identify the most suitable procedures to include in a simulation-based curriculum.