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P446 -Renal intra-professional education: A novel approach to up-skilling our renal trainees

Dr Kathryn Watson[1], Mr Nicholas Gosling[1], Mr Christopher Broom[1], Dr Huon Snelgrove[1], Dr Joyce Popoola[2]
[1]St George's University Hospitals NHS Foundation Trust, London, United Kingdom, [2]St George's University of London, London, United Kingdom

Background: Nephrology training similar to other medical specialties is completed in a significantly shorter period than in preceding decades. Training programmes have adopted run through schemes taking on trainees with relatively little or at times no specialty experience. Additionally, the demands on trainees are becoming increasingly pressured due to shift working with limited team support, medical and multidisciplinary team (MDT) staff shortages, increasing patient demands and highly sophisticated management plans. All these compound to a potentially stressful learning environment with expectations of the new trainee beyond their capability to deliver. Here we present a learning technique with potential to rapidly up-skill and facilitate the learning of the less experienced renal trainee (SpRs) in a safe, practical way that mimics actual clinical encounters with involvement of relevant MDT members.

Methods: A full-day laboratory based renal complex case scenario and patient communication simulation course was designed, practically run through and critiqued by a MDT of nephrology experts and medical educationalists. SpRs in their first two years of training and renal nurse specialists were invited to attend. They received pre-course reading, with a pre-scenario team discussion and post-scenario guided debrief sandwiching each scenario. The "PARROTS" (Promote reflection, Align feedback, Retrieve peer input, Reveal standards, Outline gaps, Turn up strategies and Summarise) and "Diamond" debrief model (1) were used to maximise team learning . Peer to peer learning occurred in the scenario itself, through "round table" guided discussions and practical demonstrations of the haemodialysis and peritoneal dialysis machines by specialist nurses amongst the learning group. A high inter-professional faculty to learner ratio enabled provision of guided personal reflection and mentorship throughout the day. The course was evaluated with a pre and post-course questionnaire which included assessment of knowledge across different domains of renal medicine, confidence managing different scenarios and free text boxes to ascertain what about the course facilitated learning. A non-parametric paired t test, the Wilcoxon signed rank test, was used to test for statistical significance.

Results: Ten learners attended the course; 6 renal SpRs and 4 specialist renal nurses; with 5 MDT renal specialist faculty and 3 educationalists. Learners completed pre and post-matched questionnaires, 100% response rate. All learners reported thoroughly enjoying the course and that it would improve their clinical practice, communication and leadership skills. Quantitative analysis demonstrated increased knowledge across all domains, including acute kidney injury, transplantation, haemodialysis and peritoneal dialysis, with mean knowledge significantly increasing 58% to 73% ($p<0.05$). Improved confidence in managing each scenario was reported, with the mean confidence score increasing significantly from 58.75% to 76.25% ($p<0.001$). Qualitative analysis highlighted "intra-disciplinary interaction", "reflection" and "practical skills" as the greatest enablers of learning.

Conclusion: This intra-professional renal simulation course improved knowledge & confidence in managing complex renal scenarios and patient communication across the multidisciplinary team. Although arguably resource intense, we demonstrate innovative effective trainee up-skilling, enabling peer learning amongst the intra-professional renal team and potentially improving patient care in an ever-evolving health care system. Future assessment will involve reviewing training impact on our learners' care delivery.