

Society for Education in Anaesthesia UK Greaves Award

Applicant: Dr Sarah Ciechanowicz

Project Title: Video Feedback Superior To Verbal Feedback Alone For Improving Non-Technical Skills In Preparation For Fellowship Examinations?

Project Description

Background:

Communication is part of the more broadly grouped 'non-technical' skills (NTS), and in anaesthesia are described as '*anaesthetists' attitudes and behaviours in the operating theatre environment not directly related to the use of medical expertise, drugs or equipment*'. They encompass those social and cognitive skills that underpin good effective clinical and technical practice important for patient safety, particularly in rapid response systems. We continue to recognise their significance in achieving excellence in clinical performance and consequently see non-technical skills training courses emerging for undergraduate medical students and doctors in postgraduate training. The Fellowship of the Royal College of Anaesthetists remains a difficult exam hurdle for the trainee anaesthetist and we suspect that NTS are important in oral exam performance as well as in clinical practice. The recent emergence and wide availability of mobile technologies such as tablet computers has great potential for education in medicine. Our study aims to investigate whether the use of video recording feedback is superior to verbal feedback alone in the teaching of oral exam focused non-technical skills. To our knowledge, this is the first attempt in the field of anaesthesia to assess feedback on NTS in FRCA exam preparation.

We hypothesize that good NTS have a direct correlation with positive FRCA exam outcome. By studying whether video feedback is superior to verbal feedback alone for enhancing NTS in the FRCA exam OSCE/SOE, we hope to also provide further insight into methods for NTS training in clinical practice.

Methods:

A randomised controlled trial was designed. Approval was obtained from Kent Research Ethics Committee. The study was conducted with core-trainee anaesthetists from a series of FRCA exam preparation courses. All candidates non-technical skills were assessed during oral examination using a standardised scoring system, devised with input from a psychologist and based on the Anaesthetists Non-technical Skills (ANTS) system, twice. This is a numerical scoring system 5-point likert scale, which we propose as a novel and robust assessment tool for NTS in SOE-style examinations. Between these assessments, the study group had received both verbal and visual feedback by watching their video recordings via the Apple iPad on Exam interview; the control group received only verbal feedback from the assessor. The blinded Assessor obtained exclusive training in NTS scoring by following the guidance of the psychologist.

Results: Blinded assessor ratings increased significantly for videotaped interviews at the second exam.

Conclusions: Feedback based on video review is superior to verbal feedback alone given based on the observation of assessors for teaching of non-technical skills. Early data supports this (16 candidates) but for a well-powered study and as advised by our statistician, we intend to gather data from 50 or more candidates, with the aim to present our data nationally.