Results for the Study: Does Video Feedback and Modeling Reduce Mean Time to Perform Peripheral Intravenous Cannulation? A Pilot Study.

Introduction
This study took place at the University of Saskatchewan between June 2014 and December 2016. If you participated in this study, we would again like to thank you, and share what we found.

Background
Feedback is an important component of engaging learners. This study was done to compare the average time required for medical students to insert an intravenous (IV) when assigned to either repeated Video Modeling + Video Feedback (VM + VF), or to Video Modeling (VM) alone.

Results
Twenty five participants completed the study. Our study demonstrated that the time required to insert an IV was significantly lower in the VM+VF group when comparing their final versus their initial encounter [126 sec (IQR=133) vs 465 sec (IQR=271), p<0.05]. This result was not reflected when in the VM group when comparing their final, and initial encounters [345 sec (IQR=406) vs 418 sec (IQR=233), p>0.05]. Our study also demonstrated that VM+VF group required less time than the VM group [126 sec (IQR=133) vs 345 sec (IQR=406), p<0.05]. Additionally, there were significantly fewer complications in the VM+VF group compared to their baselines [0, (IQR=1) vs. 3(IQR=4), p≤0.05]. Participants found that the audio recording of the instructor's feedback was helpful, and that the video recording allowed them to see their attempt from a different angle, and compare to the expert video.

Conclusion
VM+VF has the potential to improve the rate of skill acquisition, maximize learning opportunities in settings with limited preceptorship, enhance learner satisfaction and may decrease procedural complications associated with new learners. Further research should explore potential application of VM+VF for intermediate and expert learners, and in other procedural skills.

If you have any questions, please feel to contact me.

Sincerely,

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