Teaching Practicing Surgeons What Not to Do: An Analysis of Instructor Coaching Fluidity During a Simulation Based CME Course

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Introduction

- There is a growing interest in simulation-based continuing medical education (CME) courses for practicing surgeons.
- Little research has explored types of instruction used during these types of courses.
- Thus study examines instructor coaching fluidity during an annual hands-on CME course.

Results

- As the session progressed, instructors increasingly (and significantly, p=0.037) coached the less experienced surgeon learners on what not to do during the hernia repair.
- No shift in coaching focus was observed for the more experienced surgeon learners during their simulation sessions (Figure 1).

Methods

- Data were collected over a two-year period (2015 and 2016) at an annual simulation-based laparoscopic hernia repair CME course.
- Participants
  - Surgeon instructors (n=12)
  - Surgeon learners (n=58)
- Surgeon learners were put in groups of 3 based on their self-reported laparoscopic and hernia repair experience.
- Each instructor taught two different groups of learners each year.
- Audio-video data of the hands-on course was collected.
- Instructors’ dialogue with the learner groups was transcribed and coded for five types of responses to questions: Anecdotes, Confirming, Correcting, Guidance, and What Not To Do.

Discussion

- Instructors significantly modified their coaching focus as the training sessions progressed when working with less experienced surgeons.
- Instructors increasingly focused on what not to do as a session progressed with less experienced surgeons.
- This trend raises the question of whether coaches need a warm up to effectively meet less experienced surgeon learners’ needs at the beginning of the course.
- Modifying coaching focus to match learners’ needs is an effective strategy, however further inquiry is needed to determine whether a shift in focus towards what not to do is more beneficial than other training topics.

Acknowledgements

- This work is supported by the American College of Surgeons and the University of Wisconsin Department of Surgery.

Figure 1. Instructor responses throughout simulation sessions for more and less experienced surgeons