



Residents as Teachers: Integration of a Formal Certificate in Education Program into Residency Training

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Introduction

Residents play a critical role in the education of other residents and medical students. The duty-hour restrictions have also placed increased pressure on improving the "efficiency" of education. We hypothesized that the addition of formal training as educators would improve education of other residents and medical students in neurosurgery.

Methods

This was a prospective pilot study of the impact of a formalized teacher training program on neurosurgery residents. All current residents participated in a 10 hour certificate in education program originally designed by the Clinical Learning and Simulation Skills (CLASS) center at George Washington University Medical Center. The program was designed to introduce residents to adult learning theory, and impart teaching skills considered most useful in case based teaching in clinic and the operating room. These skills involved didactic methods for teaching knowledge, and methods for teaching a manual skill.

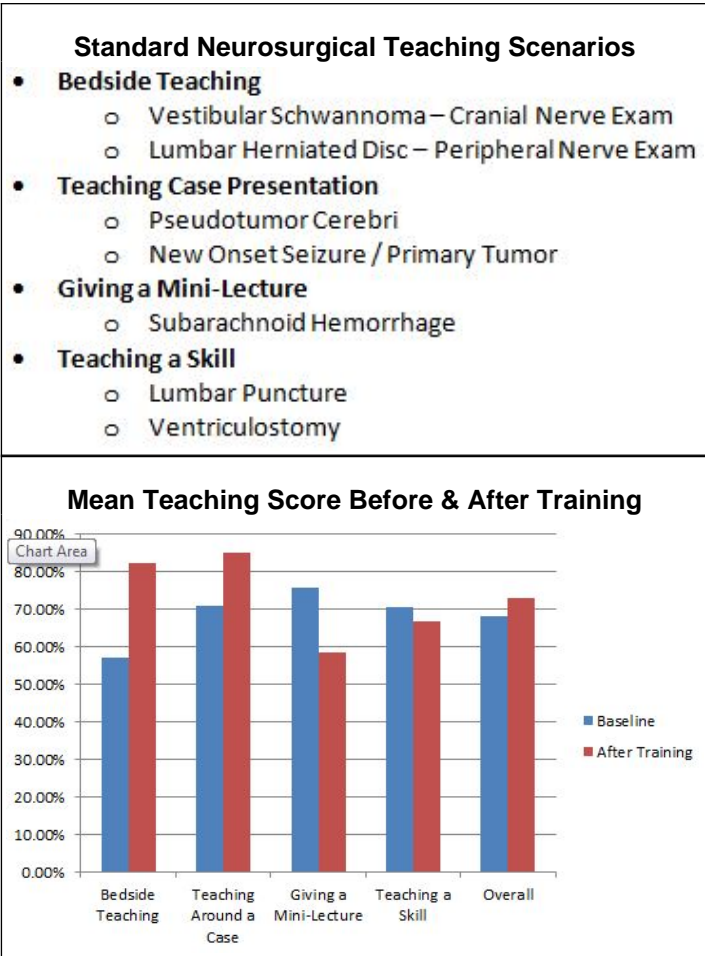
All teaching skills are built around a single model:

- Prepare
- Perform
- Process

Each participating resident underwent an Objective Structured Teaching Evaluation (OSTE) before and after participation in the program. These OSTEs are similar to structured clinical evaluations ("simulated patients) used in medical schools, and revolve around a simulated learner. Additionally, participants evaluated themselves as teachers before and after the program. Non-statistical evaluation methods were used.

Results

There was objective and subjective evidence of improvement in all six domains of teaching on which the program focused. Prior to the training, residents demonstrated the highest ability in teaching a manual skill compared to teaching knowledge. There were notable improvements in skills to impart knowledge to an individual learner after the training.



Conclusions

The addition of a 10 hour formalized program in teaching residents how to be better teachers resulted in improved objective scoring of residents ability to impart knowledge to an individual learner. Additionally, reseidents self-reported increased ability and confidence in teaching medical student and other residents. As residents play a critical role in teaching other (junior) residents and medical students, such programs may be beneficial if incorporated in residency training.

Learning Objectives

By the conclusion of this session, participants should be able to: 1) Describe the differences between adult learning and early schooling, 2) Understand the role of formalized educational programs in teaching residents as teachers, 3) Implement similar programs in their own institution.

References

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