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Education Research

Poster Title

The Impact of Teaching Experiences by Medical Students During Medical School on Levels of Confidence and Interest in Teaching in Residency: Results of a Preliminary Survey

Authors

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**Purpose:** While learning how to teach is a critical component of residency training, it is not generally a part of core medical school curricula for medical students. Many medical schools offer teaching curricula and experiences but their impact remains unexamined. We conducted a survey to determine if teaching in medical school is correlated with higher level of confidence in teaching abilities in residency as well as increased interest in academic medicine and in clinical education. We hypothesized that the practicing of teaching skills in undergraduate medical curricula is related to improved teaching in residency, and ultimately, improved educational experiences for residents, medical students, and patients.

**Methods:** In 2014, students from all years at a north-eastern medical school were asked to participate in an online survey which asked about types of teaching experiences both before and during medical school, demographic questions on age, gender and academic year as well as questions regarding self-reported attitudes towards teaching. IRB approval was waived for this study. We analyzed the data using both non-adjusted and adjusted logistic regression models.

**Results:** The response rate was 47% with 203 completed surveys. Students who participated in teaching in medical school stated that medical school prepared them better for teaching in residency (OR= 2.03 , 95% CI: .1.12-3.68 ), and that educating others would have a more important role in their careers (OR= 2.73 , 95% CI: 1.46-5.09). Students who participated in teaching in medical school had a trend towards reporting higher interest in entering a career in academic medicine (OR= 1.55 , 95% CI: 0.85-2.82), although this finding was not statistically significant. Lastly, students who participated in teaching in medical school reported higher confidence in teaching (OR= 3.01 , 95% CI: 1.63-5.58), a finding that persisted in a model adjusting for self-reported competency in basic sciences, clinical knowledge and clinical skills (OR= 2.82 , 95% CI: 1.51-5.27).

**Conclusions:** This study found that engaging in teaching experiences in medical school, such as small group teaching, one-on-one tutoring, as well as near-peer teaching, has a relationship with students' perceived comfort in teaching in residency, and is associated with students' interest in having education be an important part of their careers. The limitation of this study is that it is a cross-sectional analysis, and thus the directionality of the relationship cannot be commented on. This research lends support to the idea that exposing students to teaching opportunities in undergraduate medical curricula could improve confidence in teaching in residency, and could, in turn, improve educational experiences for residents, medical students and patients. More research is needed to further assess the effects of various types of undergraduate medical teaching experiences on quality of resident teaching.