

Introduction

Attracting the best candidates to neurosurgery is limited by lack of early exposure for medical students. We sought to identify ways to improve medical student recruitment to neurosurgery.

Methods

Neurosurgery residency program directors were surveyed about type, quantity, and timing of neurosurgical exposure in their respective medical schools, and how medical students were integrated into departmental clinical/research activities.

Results

Complete responses were received from 29 institutions. 52% had neurosurgery didactic lectures for first and second year medical students (MS1/2), and 86% had didactics for MS3/4 (though in 43% this consisted of <3 hours). 76% had a neurosurgery interest group (NSIG). Other forms of outreach included formal mentorship programs (52%), lecture series (55%), and neurosurgery anatomy labs (38%). 76% of programs provided research opportunities to medical students, and 58% indicated that the schools had a formal research requirement. On average 3 medical students from the home institution did a rotation in neurosurgery and 1 matched in neurosurgery each year. There was, however, substantial variability. Over the 2010 to 2016 period, one institution matched a total of 34 medical students into neurosurgery, whereas others matched as few as 0 -1. We found that the 41% of departments that matched a greater number (>10 between 2010-2016) of medical students into neurosurgery had a significantly higher percentage of formal research requirements, mentorship programs, and established NSIG, compared to the other institutions.

Conclusions

In recent decades, the number of applicants to neurosurgery has decreased. A major deterrent is the delayed exposure of medical students to neurosurgery. Institutions with active NSIG, research opportunities, didactic programs, and strong mentorship recruit and match more of their students into neurosurgery. Implementing such initiatives on a national level may increase the number of highly qualified medical students pursuing neurosurgery.

Learning Objectives

By the conclusion of this session, participants should be able to: 1) identify the barriers to medical student recruitment to neurosurgery and 2) understand what are the successful initiatives that can be employed to improve recruitment