A Multivariable Assessment of Factors that Influence Residency Specialty Choice

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Background
Deciding on a residency specialty is a daunting task for many medical students, as it is a multifactorial process that shapes their ultimate decision. While the effect of clinical education on residency specialty selection has been studied in the past, there is a lack of research regarding preclinical education in this regard.

Methods
- An anonymous survey was administered via Research Electronic Data Capture (REDCap) to NYITCOM Classes of 2018 and 2019.
- The questionnaire included items on fields of interest at the following time points: upon completion of preclinical didactics and third year clinical rotations.
- Participants’ responses were then compared to their residency specialty choices via a one sample chi-square test.
- Students were also asked to rank preclinical didactics, third-year clinical rotations, and fourth-year clinical rotations in terms of influence on residency specialty choice.
- Perceived influence was measured using a ten-point scale and differences between variables were analyzed using a repeated-measure ANOVA with post-hoc analysis.
- The analyses were conducted using SPSS with α = 0.05.

Results
82 respondents completed the survey. 51.2% (n = 42) were female and 48.8% (n = 40) were male.

A significant association was found between the top three fields of interest prior to starting clinical rotations and ultimate residency specialty choice (p < 0.05). 76.8% (n = 63) of students selected a residency specialty that they were interested in prior to beginning clinical rotations.

On the ten-point scale of influence on residency selection, (with 1 being the lowest and 10 being the highest), preclinical didactics had a mean rank of 3.11 (SD = 2.16), third-year clinical rotations had a mean rank of 7.38 (SD = 2.93), and fourth-year clinical rotations had a mean rank of 7.24 (SD = 2.94).

Mean rank of preclinical didactics’ influence was significantly lower than that of third year clinical rotations (p < 0.05).

Discussion
A significant number of medical students preselected their residency specialty prior to beginning clinical rotations. Interestingly, students perceived third year clerkships as being most influential in the residency selection process, and the didactic years as least influential. This paradigm suggests that while medical students perceived residency selection to be most influenced by clinical rotations, our data suggests that it is actually predetermined. Based on these findings, we propose that third year medical students should be given the autonomy to further explore specific areas of interest outside the required rotations. The opportunity to experience subspecialty electives may not only assist in the making of an informed career decision, but it may also increase networking possibilities and ultimately lead to greater residency placement success. Finally, the implications of our proposal have the potential to increase future career satisfaction and therefore decrease physician burnout.

Conclusion
- While students perceived residency specialty selection to be most influenced by clinical rotations, our data suggests that it is actually predetermined.
- Curricular planning efforts should be aimed at designing a more student-centered, clinically driven curriculum, with career planning as a longitudinal focus from matriculation to graduation.

References
²Factors Motivating Medical Students in Selecting a Career Specialty: Relevance for a Robust Orthopaedic Pipeline. JAAOS. 2017;25(7):527-535.