

OBJECTIVES

Assess US medical students' awareness about PM&R, their career goals that may align with PM&R, their PM&R experience, and compare the demographics of those applying, interested or curious, and not interested in PM&R

INTRODUCTION

There is a lack of medical schools requiring physical medicine and rehabilitation (PM&R) rotation and there is an inadequate basic rehabilitation education in medical schools [1]. Despite growing interest in the field, there are limited studies on evaluating U.S. medical students' knowledge about PM&R. Medical student awareness of PM&R has only been investigated abroad with limited sample sizes [2].

There is also a lack of data assessing factors that influence the career and subspecialty decisions of aspiring physiatrists in the US [3]. One study with limited sample size assessed various factors that contribute to prospective PM&R residents' decision making in choosing a residency program [4]. It only analyzed data from respondents applying to PM&R and did not compare factors between those who are interested but did not apply versus those who are interested but applied to the specialty.

Ethnic diversity among physicians is associated with improved patient-report outcomes, patient satisfaction, and self-reported health status [5]. Previous research have characterized the gender and ethnic diversity in PM&R among academic faculty, but information on diversity including gender identity, sexual orientation, and disability status in PM&R residency applicants or medical students interested in the specialty is limited [6].

PM&R rotations may provide medical students with knowledge about the care of people with disabilities [7]. Many medical students applying for residency have never had any experiences within PM&R and many medical schools also do not have PM&R rotations as part of the core medical school curriculum [8].

METHODS

This is a descriptive cross-sectional study. An online survey was distributed to 76 medical schools and 2067 students responded. The survey included 21 questions regarding the respondents' awareness about PM&R, career goals that may align with PM&R, PM&R experience, and demographic data.

It examined knowledge of PM&R by assessing their interest in the specialty, previous rotation experiences and rotation availability. It evaluated whether they had rotated, shadowed, researched or attended a conference. It examined if respondents' career goals align with PM&R by asking if they had interests in different subspecialties within PM&R. It also asked participants' year of medical school, gender identity, sexual orientation, disability status, race, ethnicity, and whether they were the first member in their family to attend medical school.

Using SPSS, simple descriptive statistics, binary logistic regression, cross tabulation, and multinomial logistic regression were used to analyze data.

RESULTS

Medical students advanced in their training are more likely to know about PM&R. First generation and Hispanic or Latino students have significantly decreased knowledge about PM&R.

Hearing about PM&R before or during college and being a first-generation student to attend medical school also significantly increase interest in PM&R. Statistically significant factors that decrease interest include being female, Black or African American, and more advanced in medical training.

Interests in general rehabilitation, spinal cord injury, sports medicine, pain, and pediatric rehabilitation also increase likelihood of applying to PM&R residency. However, interests in palliative care decrease the likelihood of PM&R residency application. Hearing about PM&R before college or gap year, having a PM&R rotation offered at their home institution, and shadowing a PM&R physician also increase the likelihood of respondents applying to PM&R residency.

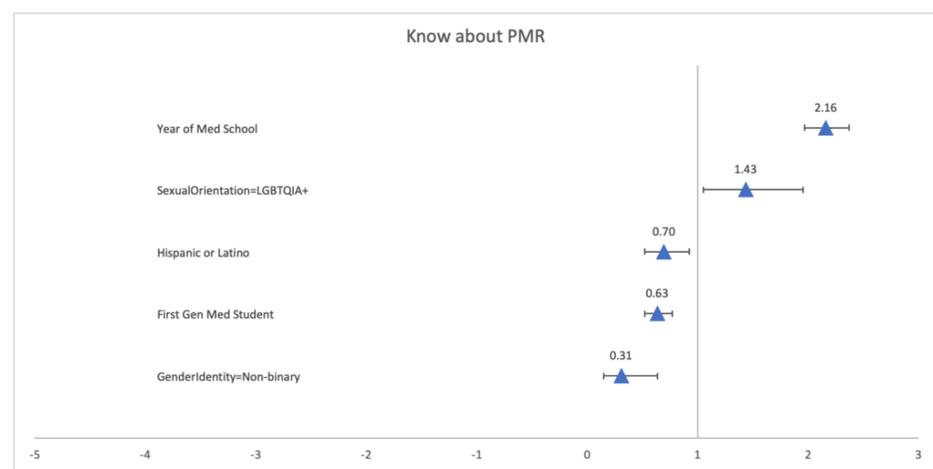


Figure 1. Odds ratio of respondents who know about PM&R as a specialty

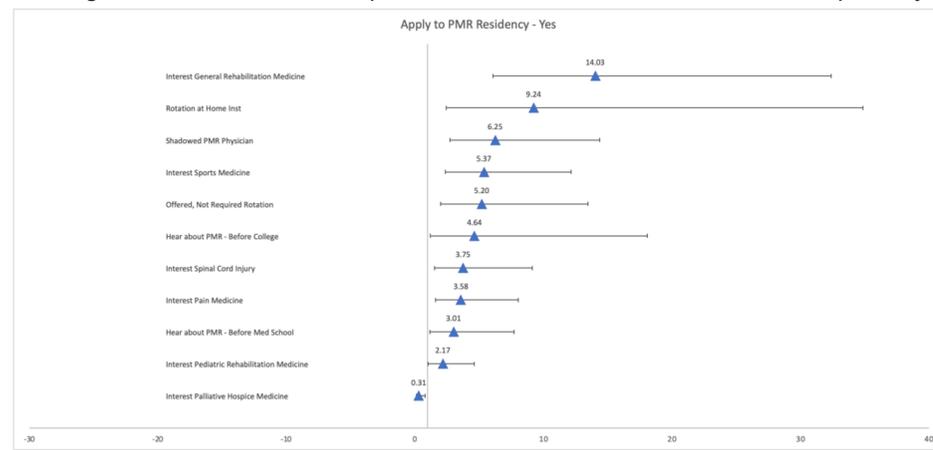


Figure 2. Likelihood of Applying to PM&R residency as an odds ratio

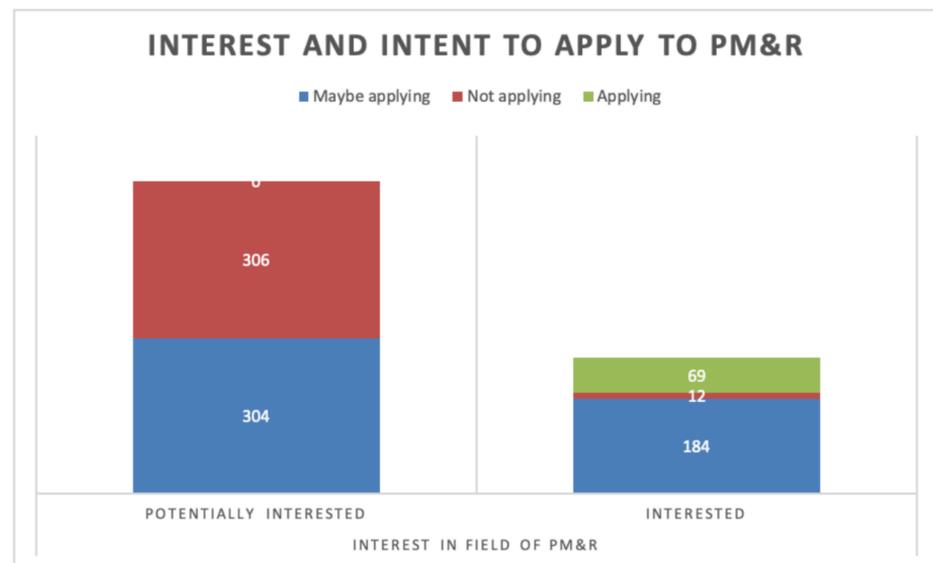


Figure 3. Interest and Intent to Apply to PM&R residency

Discussion and Conclusion

Limitations include uncertainty about how many medical schools participated due to anonymity of the survey. There may also be self-selection bias because respondents that know more about PM&R may be more likely to fill out a survey about PM&R. We did not perform a formal analysis of non-responders or non-response bias and sub-analysis of students who participated in PM&R clerkship each year as well as demographics seen in each of the different medical student classes due to lack of demographic information of all medical students at participating institutions. Hence, we may not be able to provide an adequate representation of medical student population of all participating institutions.

Emphasis should be placed on recruiting more diverse medical students into PM&R. Findings support need for the implementation of more robust initiatives and pipeline programs to improve exposure, recruitment, development, promotion, and retention of first-generation minorities and women. Increased awareness of the lack of diversity will initiate conversations and spark ideas of how to support ongoing efforts to diversify physician workforce which will positively impact the lives of both physicians and patients. Departments should consider advocating for mandatory PM&R rotations or increasing access to PM&R, as well as consider providing experiences to those medical students that do not have a PM&R department at their institutions.

Future studies should explore how participation in a form educational experience in PM&R alters students' perceptions and factors influencing considerations of PM&R as a potential career choice as well as to identify methods to increase medical student comfort and knowledge on PM&R topics. Research identifying the impact of medical student knowledge on non-PM&R practice is also of interest. Future research may also explore why minorities are underrepresented in PM&R academic leadership.

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