Medical Students as Educators: Students' Experience, Interest, and Confidence in Teaching

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ABSTRACT

Background: Medical students represent the next generation of physician educators, yet may not be prepared to meet future teaching responsibilities.

Methods: An electronic survey was sent to medical students at a US allopathic institution to assess their experience, interest, and confidence in teaching.

Results: Most students indicated interest in teaching medical students (n = 91, 62%) or residents (n = 88, 60%) postresidency. Less than half expressed confidence in teaching clinical interviewing/physical exam skills (n = 71, 49%), lecture/didactic (n = 62, 42%), and procedural techniques (n = 41, 28%).

Discussion: Many medical students identified having only nascent medical teaching skills and expressed interest in elective opportunities. Formal teaching programs are necessary to cultivate medical students as effective physician educators.

BACKGROUND

Physicians are expected to engage in lifelong learning—to educate themselves and their patients, peers, and students. Their vital roles as clinical educators start as early as residency, which has shown to benefit both learners and educators.[1] Two-thirds of medical students in one survey felt that residents played a significant part in their learning.[2] Surveys of residents also found that they enjoyed teaching and thought it improved their clinical skills.[1]

While residents value their roles as educators, many do not feel equipped to teach.[1,3] The need to develop residents as better teachers has resulted in formal teaching-skills instruction across more residency programs.[4] Despite these efforts, some studies suggest that residents too often assume teaching responsibilities with insufficient formal preparation—partly attributed to patient care duties that conflict with teaching-skills programs.[1]

Given demands on resident time, a solution has been to introduce formal instruction in teaching skills prior to intern year.[1] A survey of 99 US medical schools found that only 44% offered formal, comprehensive programs to train their students to teach effectively.[4] Additionally, offered courses varied widely in terms of format, duration, and scope.[4] Increasing and strengthening existing efforts to offer teaching experiences to medical students may help prepare them to teach others and become better learners during and beyond medical school.[1,4]

Little is known about medical students' interest and confidence in learning teaching skills.[1,5,6] Many medical students express interest in and recognize the importance of developing teaching skills but may lack the confidence to take on teaching responsibilities without formal training.[1,5] Our survey-based study characterizes existing interests, motivations, and confidence in teaching skills among medical students at a US allopathic institution.

METHODS

A 12-item survey was created using Qualtrics XM survey software (Qualtrics XM; Utah, USA) to ascertain student interests, motivations, and confidence in teaching. Survey questions were adapted from a similar study on Canadian medical students.[5] Our survey was sent via email to medical students at the University

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Table 1. Students' Prior Experiences, Interest in Teaching, Plans for Residency/Future Practice, Plans to Work in an Academic Setting, and Interest in Teaching Electives (N= 146)

	Year in Medical School				
	1st Year (N = 52)	2nd Year (N = 38)	3rd Year (N = 39)	4th Year (N = 27)	All years (N = 146)
	Response, No. (%)				
Prior healthcare employment					
Yes	39 (75%)	18 (64.3%)	23 (59%)	15 (55.6%)	95 (65.1%)
No	12 (23.1%)	10 (35.7%)	15 (38.5%)	12 (44.4%)	49 (33.6%)
NA	1 (1.9%)	0 (0%)	1 (2.6%)	0 (0%)	2 (1.4%)
Prior teaching experience					
Yes	32 (61.5%)	15 (53.6%)	19 (48.7%)	17 (63%)	83 (56.8%)
No	20 (38.5%)	13 (46.4%)	20 (51.3%)	10 (37%)	63 (43.2%)
Interest in teaching medical students post-residency					
Yes	32 (61.5%)	15 (53.6%)	21 (53.8%)	23 (85.2%)	91 (62.3%)
No	2 (3.8%)	2 (7.1%)	1 (2.6%)	0 (0%)	5 (3.4%)
Maybe/Not Sure	16 (30.8%)	10 (35.7%)	15 (38.5%)	4 (14.8%)	45 (30.8%)
NA	2 (3.8%)	1 (3.6%)	2 (5.1%)	0 (0%)	5 (3.4%)
Interest in teaching residents post-residency					
Yes	31 (59.6%)	15 (53.6%)	20 (51.3%)	22 (81.5%)	88 (60.3%)
No	2 (3.8%)	1 (3.6%)	1 (2.6%)	0 (0%)	4 (2.7%)
Maybe/not sure	17 (32.7%)	11 (39.3%)	16 (41%)	5 (18.5%)	49 (33.6%)
NA	2 (3.8%)	1 (3.6%)	2 (5.1%)	0 (0%)	5 (3.4%)
Current plans for residency/future practice[a]					
Anesthesiology	0 (0%)	2 (7.1%)	2 (5.1%)	1 (3.7%)	5 (3.4%)
Cardiothoracic surgery	0 (0%)	1 (3.6%)	0 (0%)	0 (0%)	1 (0.7%)
Dermatology	0 (0%)	0 (0%)	2 (5.1%)	0 (0%)	2 (1.4%)
Emergency medicine	2 (3.8%)	1 (3.6%)	7 (17.9%)	6 (22.2%)	16 (11%)
Family medicine	2 (3.8%)	1 (3.6%)	4 (10.3%)	2 (7.4%)	9 (6.2%)
General surgery	0 (0%)	5 (17.9%)	2 (5.1%)	3 (11.1%)	10 (6.8%)
Internal medicine	8 (15.4%)	3 (10.7%)	6 (15.4%)	6 (22.2%)	23 (15.8%)
Neurology	0 (0%)	0 (0%)	1 (2.6%)	0 (0%)	1 (0.7%)
Neurosurgery	1 (1.9%)	0 (0%)	0 (0%)	0 (0%)	1 (0.7%)
Obstetrics and gynecology	2 (3.8%)	0 (0%)	0 (0%)	1 (3.7%)	3 (2.1%)
Ophthalmology	1 (1.9%)	0 (0%)	1 (2.6%)	0 (0%)	2 (1.4%)
Orthopedic surgery	1 (1.9%)	1 (3.6%)	2 (5.1%)	1 (3.7%)	5 (3.4%)
Otolaryngology (ENT)	0 (0%)	0 (0%)	1 (2.6%)	1 (3.7%)	2 (1.4%)
Pathology	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Pediatrics	2 (3.8%)	1 (3.6%)	4 (10.3%)	2 (7.4%)	9 (6.2%)
Physical medicine/rehabilitation	2 (3.8%)	0 (0%)	0 (0%)	0 (0%)	2 (1.4%)
Plastic surgery	1 (1.9%)	0 (0%)	0 (0%)	1 (3.7%)	2 (1.4%)
Psychiatry	3 (5.8%)	0 (0%)	2 (5.1%)	0 (0%)	5 (3.4%)
Radiology	1 (1.9%)	0 (0%)	0 (0%)	3 (11.1%)	4 (2.7%)
Radiation oncology	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Urology	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Vascular surgery	1 (1.9%)	0 (0%)	0 (0%)	0 (0%)	1 (0.7%)
Unsure/Undecided	24 (46.2%)	13 (46.4%)	5 (12.8%)	0 (0%)	42 (28.8%)
NA	1 (1.9%)	0 (0%)	0 (0%)	0 (0%)	1 (0.7%)
Plans to work in an academic setting					
Yes	22 (42.3%)	9 (32.1%)	12 (30.8%)	16 (59.3%)	59 (40.4%)
No	2 (3.8%)	3 (10.7%)	10 (25.6%)	1 (3.7%)	16 (11%)
Maybe/not sure	26 (50%)	15 (53.6%)	15 (38.5%)	10 (37%)	66 (45.2%)
NA	2 (3.8%)	1 (3.6%)	2 (5.1%)	0 (0%)	5 (3.4%)
Interest in teaching electives during medical school[b]					
Curriculum development	12 (23.1%)	8 (28.6%)	13 (33.3%)	16 (59.3%)	49 (33.6%)
Teaching in a clinic/hospital setting	38 (73.1%)	16 (57.1%)	30 (76.9%)	20 (74.1%)	104 (71.2%)
Small group clinical skills teaching	23 (44.2%)	15 (53.6%)	23 (59%)	15 (55.6%)	76 (52.1%)
Lecturing	28 (53.8%)	7 (25%)	9 (23.1%)	14 (51.9%)	58 (39.7%)
Other elective	0 (0%)	0 (0%)	0 (0%)	1 (3.7%)	1 (0.7%)

Abbreviations: NA, not available (represents missing responses); ENT, ear, nose, throat.

[a]Options for anticipated residency or future field of practice included 22 residency choices and 1 option for "Unsure/Undecided." Medical students were asked to choose only 1 response.

[b]Students were allowed to select multiple options to indicate interest in more than 1 elective course.

of Wisconsin School of Medicine and Public Health and was open for responses from February 14, 2020, through March 11, 2020. This study was exempt from review by the University of Wisconsin Institutional Review Board.

Data Analysis

Data were analyzed using R software (R Foundation; Vienna, Austria). We created descriptive statistics to examine student year (question 1 [Q1]), future residency plans (Q2), prior teaching experience (Q3-Q4), prior health care employment (Q5-Q6), plans to work in an academic setting (Q7), interest in teaching medical students or residents post-residency (Q8-Q9), motivations for teaching (Q10), confidence in teaching (Q11), and interest in teaching electives (Q12). Only students who indicated interest in teaching medical students (Q8) or interest in teaching residents (Q9) post-residency were asked to indicate motivation to teach (Q10). All other questions were asked of all students.

Responses for motivation (Q10) and confidence (Q11) were assessed on a 5-point Likert scale. Hypothesized predictors for motivation included Q1 and Q2. Predictors for confidence included Q1-Q3, Q5, and Q8-Q9. We used Kruskal-Wallis ANOVA to test for differences in mean ranked response between predictor groups. We present Hochberg-adjusted *P* values (P_{adj} value) to account for multiple tests. We considered a relationship statistically significant if the P_{adj} value was less than 0.05. We used Spearman inter-item correlation to examine associations between the 6 motivation items and 3 confidence items.

RESULTS

The survey was completed by 153 of 758 medical students (20%), comprising first (n = 52, 34%), second (n = 28, 18%), third (n = 39, 25%), and fourth-year students (n = 27, 18%); master of public health (MPH) students (n = 3, 2%), and medical scientist training program students (MSTP) (n = 4, 3%). MPH and MSTP

students were excluded given low response and unknown year in medical school. Analyses were performed on the remaining 146 first- through fourth-year students.

Prior Experience and Future Plans

More than half of the respondents had prior health care employment (n = 95, 65%) or teaching experience (n = 83, 57%) (Table 1). Twenty-nine percent were "unsure/undecided" about residency plans (n = 42, 29%). A plurality of respondents reported plans to work in an academic setting (n = 59, 40%) and expressed interest in teaching medical students (n = 91, 62%) or residents (n = 88, 60%) post-residency. More than half desired to engage in small-group clinical teaching electives (n = 76, 52%).

Motivations for Teaching

Of 100 students who indicated interest in teaching medical students or residents post-residency, nearly all expressed an intrinsic interest in medical education as a motivation to teach (n = 95, 95%), which was followed by a desire to "give back" (n = 87, 87%) (Table 2). Junior students reported higher motivation to teach due to prestige than senior students (P_{adj} value = 0.043). Future residency plans did not appear to influence motivations for teaching. Inter-item correlations ranged from 0.05 to 0.58, with agreement between motivation ratings highest for extrinsic items of academic advancement, requirement to work in an academic center, and prestige.

Confidence in Teaching

Less than half of the respondents expressed some confidence in teaching clinical interviewing/physical exam (n = 71, 49%), lecture/didactic (n = 62, 42%), and procedural techniques (n = 41, 28%) (Table 3). Student year was associated with confidence in teaching clinical interviewing/physical exam skills (P_{adj} value = 0.012), with greater confidence among fourth-year students. Those interested in pursuing specialty care were more confident in procedural technique (P_{adj} value = 0.005) than those interested in primary care or were undecided. Inter-item correlations ranged from 0.18 to 0.46, with agreement between confidence ratings highest for clinical interviewing/physical exam skills and procedural technique.

DISCUSSION

Our survey-based study offers a lens through which we can better understand what medical students desire out of a medical education program. Medical students expressed significant interest in teaching and a desire to participate in opportunities to learn how to teach in clinical settings, a finding consistent with other studies.[1,2,5,6] To meet this need, medical institutions must reframe how we introduce teaching to our students. This task is a complex skill that will be better served through longitudinal integration into a curriculum that may include, but is not limited to, facilitating small-group sessions, teaching clinical skills, learning educational theory, and mentoring.[7] Medical schools across the US have increasingly recognized the need to broaden formal training in education, and some have responded by integrating didactic and hands-on teaching experiences into their curricula.[4] However, there is room for growth, including a need to increase the number of formal training programs[4] and evaluate program effectiveness on preparing students for teaching in residency.[8]

Our study uniquely assessed the influence of various factors—including student year, future residency plans, prior experience, and interest in teaching—on motivations to teach and confidence in teaching. Confidence in teaching was higher among senior versus junior students in clinical interviewing and physical exam skills, likely driven by experience. Career interest also influenced confidence in teaching across certain clinical domains. Students pursuing specialty care reported greater confidence in procedural skills than those pursuing primary care or were undecided. Many students said they felt unprepared to teach procedural techniques, consistent with the Canadian study.[5] This transition indicates an awareness of the inherent risk in trying to teach what one has only recently learned. While the approach of "See one, do one, teach one," is still followed, it can conflict with the goal of providing excellent and safe patient care. These skills may be taught through formal coursework, such as in simulation centers, but may not necessarily substitute real clinical experience.[9] One study found that a junior doctor-delivered bedside supervision program provided during a clinical clerkship led to high satisfaction and increased confidence in procedural skills among medical students.[9]

Our study suggests that interactive methods that can be integrated into already established curricula, such as a bedside supervision program, may promote skills development and boost confidence among medical students regardless of career preference or prior experience. Providing students an opportunity to try and even fail, complemented by appropriate coaching and feedback, could allow them to suffer the growing pains of developing a new and vital skill and gain appropriate confidence before being asked to teach in a busy and sensitive clinical environment.

Limitations of this study include a low survey response rate—particularly from senior students. Low response in medical students has been attributed to survey fatigue and lack of time, especially in clinical clerkships.[5] Reasons for not returning the questionnaire were not collected, so it is unknown whether interest in medical education influenced nonresponse. This study was performed at a single allopathic medical school that uniquely integrates public health in the curriculum, limiting generalizability to other US medical students. However, our conclusion that medical students have strong interest in medical education is consistent with other work, suggesting that students acknowledge the importance of learning to teach in the modern physician.[1,5,6] Our study adds to current literature that medical stu-

Table 2. Factors That Motivate Medical Students Given Interest in Teaching Medical Students or Residents Post-Residency, by Year and Future Residency Plans (N=100)[a]

		Not Interested	Neutral	Interested	NA[c]	P_{adj} value
Motivation to Teach Due to[b]				**Response, No. (%)**		
Academic advancement, by:						
Student year:	First year	3 (8.3%)	9 (25%)	24 (66.7%)	0 (0%)	0.570
	Second year	4 (23.5%)	4 (23.5%)	8 (47.1%)	1 (5.9%)	
	Third year	5 (22.7%)	6 (27.3%)	11 (50%)	0 (0%)	
	Fourth year	8 (32%)	6 (24%)	8 (32%)	3 (12%)	
Plans for residency/future[d]	Primary care	7 (23.3%)	5 (16.7%)	18 (60%)	0 (0%)	0.996
	Specialty care	7 (17.1%)	13 (31.7%)	18 (43.9%)	3 (7.3%)	
	Unsure/undecided	6 (20.7%)	7 (24.1%)	15 (51.7%)	1 (3.4%)	
Intrinsic interest, by:						
Student year:	First year	0 (0%)	0 (0%)	36 (100%)	0 (0%)	0.996
	Second year	0 (0%)	0 (0%)	16 (94.1%)	1 (5.9%)	
	Third year	0 (0%)	0 (0%)	22 (100%)	0 (0%)	
	Fourth year	0 (0%)	1 (4%)	21 (84%)	3 (12%)	
Plans for residency/future[d]	Primary care	0 (0%)	1 (3.3%)	29 (96.7%)	0 (0%)	0.996
	Specialty care	0 (0%)	0 (0%)	38 (92.7%)	3 (7.3%)	
	Unsure/undecided	0 (0%)	0 (0%)	28 (96.6%)	1 (3.4%)	
Prestige, by:						
Student year:	First year	7 (19.4%)	18 (50%)	11 (30.6%)	0 (0%)	0.043
	Second year	8 (47.1%)	7 (41.2%)	1 (5.9%)	1 (5.9%)	
	Third year	13 (59.1%)	6 (27.3%)	3 (13.6%)	0 (0%)	
	Fourth year	11 (44%)	10 (40%)	1 (4%)	3 (12%)	
Plans for residency/future[d]	Primary care	15 (50%)	12 (40%)	3 (10%)	0 (0%)	0.996
	Specialty care	15 (36.6%)	16 (39%)	7 (17.1%)	3 (7.3%)	
	Unsure/undecided	9 (31%)	13 (44.8%)	6 (20.7%)	1 (3.4%)	
Requirement to work at an academic center, by:						
Student year:	First year	7 (19.4%)	12 (33.3%)	17 (47.2%)	0 (0%)	0.238
	Second year	7 (41.2%)	5 (29.4%)	4 (23.5%)	1 (5.9%)	
	Third year	11 (50%)	6 (27.3%)	5 (22.7%)	0 (0%)	
	Fourth year	7 (28%)	9 (36%)	6 (24%)	3 (12%)	
Plans for residency/future[d]	Primary care	9 (30%)	10 (33.3%)	11 (36.7%)	0 (0%)	0.996
	Specialty care	12 (29.3%)	14 (34.1%)	12 (29.3%)	3 (7.3%)	
	Unsure/undecided	11 (37.9%)	8 (27.6%)	9 (31%)	1 (3.4%)	
Desire to "give back," by:						
Student year:	First year	1 (2.8%)	2 (5.6%)	33 (91.7%)	0 (0%)	0.996
	Second year	0 (0%)	2 (11.8%)	14 (82.4%)	1 (5.9%)	
	Third year	1 (4.5%)	2 (9.1%)	19 (86.4%)	0 (0%)	
	Fourth year	0 (0%)	1 (4%)	21 (84%)	3 (12%)	
Plans for residency/future[d]	Primary Care	0 (0%)	2 (6.7%)	28 (93.3%)	0 (0%)	0.678
	Specialty Care	2 (4.9%)	2 (4.9%)	34 (82.9%)	3 (7.3%)	
	Unsure/Undecided	0 (0%)	3 (10.3%)	25 (86.2%)	1 (3.4%)	
Increase confidence in teaching, by:						
Student year:	First	0 (0%)	5 (13.9%)	31 (86.1%)	0 (0%)	0.996
	Second	2 (11.8%)	3 (17.6%)	11 (64.7%)	1 (5.9%)	
	Third	1 (4.5%)	4 (18.2%)	17 (77.3%)	0 (0%)	
	Fourth	1 (4%)	2 (8%)	19 (76%)	3 (12%)	
Plans for residency/future[d]	Primary Care	0 (0%)	6 (20%)	24 (80%)	0 (0%)	0.996
	Specialty Care	4 (9.8%)	3 (7.3%)	31 (75.6%)	3 (7.3%)	
	Unsure/Undecided	0 (0%)	5 (17.2%)	23 (79.3%)	1 (3.4%)	

[a]Only the 100 students who indicated interest in teaching medical students or residents post-residency were asked to indicate their motivations to teach across the 6 items.

[b]The influence of student year and plans for residency/future on motivations to teach were assessed using the Kruskal-Wallis ANOVA test. The 5-point Likert measure ("not at all interested," "not very interested," "neutral," "somewhat interested," and "very interested") was used for this analysis. For ease of visualization, cross-tabulations of predictors are shown against merged response categories. "Not at all interested" and "not very interested" were combined into "not interested." "Somewhat interested" and "very interested" were combined into "interested."

[c]"NA" stands for "not available" and represents missing responses.

[d]Options for anticipated residency or future field of practice included 22 residency choices and 1 option for "unsure/undecided." Internal medicine, family medicine, and pediatrics were categorized into "primary care." All other specialties except for "unsure/undecided" were categorized into "specialty care."

Table 3. Students' Perceived Confidence in Teaching Skills, by Student Year, Future Residency Plans, Prior Teaching Experience, Prior Health Care Employment, or Interest in Teaching (N=146)

		Not Confident	Neutral	Confident	NA[a]	P_{adj} value
Perceived confidence in teaching skills in[b]		**Response, No. (%)**				
Lecture/didactic, by:						
Student year:	First	16 (30.8%)	10 (19.2%)	21 (40.4%)	5 (9.6%)	0.686
	Second	9 (32.1%)	5 (17.9%)	10 (35.7%)	4 (14.3%)	
	Third	7 (17.9%)	15 (38.5%)	14 (35.9%)	3 (7.7%)	
	Fourth	2 (7.4%)	3 (11.1%)	17 (63%)	5 (18.5%)	
Plans for residency/future:[c]	Primary care	11 (26.8%)	11 (26.8%)	15 (36.6%)	4 (9.8%)	0.996
	Specialty care	10 (16.1%)	14 (22.6%)	31 (50%)	7 (11.3%)	
	Unsure/undecided	13 (31%)	8 (19%)	15 (35.7%)	6 (14.3%)	
	NA	0 (0%)	0 (0%)	1 (100%)	0 (0%)	
Prior teaching experience	Yes	15 (18.1%)	18 (21.7%)	40 (48.2%)	10 (12%)	0.618
	No	19 (30.2%)	15 (23.8%)	22 (34.9%)	7 (11.1%)	
Prior health care employment	Yes	27 (28.4%)	21 (22.1%)	38 (40%)	9 (9.5%)	0.523
	No	7 (14.3%)	12 (24.5%)	24 (49%)	6 (12.2%)	
	NA	0 (0%)	0 (0%)	0 (0%)	2 (100%)	
Interest in teaching[d]	Yes	24 (24%)	21 (21%)	48 (48%)	7 (7%)	0.996
	No/maybe	10 (24.4%)	12 (29.3%)	14 (34.1%)	5 (12.2%)	
	NA	0 (0%)	0 (0%)	0 (0%)	5 (100%)	
Clinical interviewing/physical exam skills, by:						
Student year:	First	18 (34.6%)	12 (23.1%)	18 (34.6%)	4 (7.7%)	0.012
	Second	3 (10.7%)	7 (25%)	14 (50%)	4 (14.3%)	
	Third	4 (10.3%)	10 (25.6%)	22 (56.4%)	3 (7.7%)	
	Fourth	2 (7.4%)	3 (11.1%)	17 (63%)	5 (18.5%)	
Plans for residency/future[c]	Primary care	9 (22%)	13 (31.7%)	15 (36.6%)	4 (9.8%)	0.088
	Specialty care	8 (12.9%)	8 (12.9%)	39 (62.9%)	7 (11.3%)	
	Unsure/undecided	9 (21.4%)	11 (26.2%)	17 (40.5%)	5 (11.9%)	
	NA	1 (100%)	0 (0%)	0 (0%)	0 (0%)	
Prior teaching experience	Yes	16 (19.3%)	18 (21.7%)	40 (48.2%)	9 (10.8%)	0.996
	No	11 (17.5%)	14 (22.2%)	31 (49.2%)	7 (11.1%)	
Prior health care employment	Yes	17 (17.9%)	20 (21.1%)	49 (51.6%)	9 (9.5%)	0.996
	No	10 (20.4%)	12 (24.5%)	22 (44.9%)	5 (10.2%)	
	NA	0 (0%)	0 (0%)	0 (0%)	2 (100%)	
Interest in teaching[d]	Yes	19 (19%)	22 (22%)	53 (53%)	6 (6%)	0.996
	No/maybe	8 (19.5%)	10 (24.4%)	18 (43.9%)	5 (12.2%)	
	NA	0 (0%)	0 (0%)	0 (0%)	5 (100%)	
Procedural technique (eg, suturing, flu shot administration), by:						
Student year	First	23 (44.2%)	15 (28.8%)	10 (19.2%)	4 (7.7%)	0.996
	Second	10 (35.7%)	8 (28.6%)	6 (21.4%)	4 (14.3%)	
	Third	17 (43.6%)	7 (17.9%)	12 (30.8%)	3 (7.7%)	
	Fourth	7 (25.9%)	2 (7.4%)	13 (48.1%)	5 (18.5%)	
Plans for residency/future[c]	Primary care	24 (58.5%)	10 (24.4%)	3 (7.3%)	4 (9.8%)	0.005
	Specialty care	17 (27.4%)	12 (19.4%)	26 (41.9%)	7 (11.3%)	
	Unsure/undecided	15 (35.7%)	10 (23.8%)	12 (28.6%)	5 (11.9%)	
	NA	1 (100%)	0 (0%)	0 (0%)	0 (0%)	
Prior teaching experience	Yes	29 (34.9%)	20 (24.1%)	25 (30.1%)	9 (10.8%)	0.996
	No	28 (44.4%)	12 (19%)	16 (25.4%)	7 (11.1%)	
Prior health care employment	Yes	34 (35.8%)	24 (25.3%)	28 (29.5%)	9 (9.5%)	0.996
	No	23 (46.9%)	8 (16.3%)	13 (26.5%)	5 (10.2%)	
	NA	0 (0%)	0 (0%)	0 (0%)	2 (100%)	
Interest in teaching[d]	Yes	40 (40%)	22 (22%)	32 (32%)	6 (6%)	0.996
	No/maybe	17 (41.5%)	10 (24.4%)	9 (22%)	5 (12.2%)	
	NA	0 (0%)	0 (0%)	0 (0%)	5 (100%)	

[a]"NA" stands for "not available" and represents missing responses.

[b]The influence of student year, plans for residency/future, prior teaching experience, prior health care employment, and interest in teaching medical students or residents post-residency on confidence in teaching were assessed using the Kruskal-Wallis ANOVA test. The 5-point Likert measure ("not at all confident," "not very confident," "neutral," "somewhat confident," and "very confident") was used for this analysis. For ease of visualization, cross-tabulations of predictors are shown against merged response categories. "Not at all confident" and "not very confident" were combined into "not confident." "Somewhat confident" and "very confident" were combined into "confident."

[c]Options for anticipated residency or future field of practice included 22 residency choices and 1 option for "unsure/undecided." Internal medicine, family medicine, and pediatrics were categorized into "primary care." All other specialties except for "unsure/undecided" were categorized into "specialty care."

[d]Interest in teaching medical students post-residency and interest in teaching residents post-residency were combined into "interest in teaching" for this analysis, as there was significant overlap in responses to both questions.

dents may not feel confident or prepared to teach, likely driven by prior experience or career interests. This unmet need is an opportunity for medical schools to develop formal longitudinal medical education programming and cultivate students as the next generation of effective physician educators.

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