Letters

RESEARCH LETTER

Assessment of Accommodation Requests Reported by a National Sample of US MD Students by Category of Disability

Access to accommodations is critical for medical students with disabilities and may explain differences in performance,[1] program persistence,[1,2] and graduation.[2] Lack of accommodations has also been associated with greater risk of increased depressive symptoms and self-reported medical errors among training physicians.[3]

Supplemental content

Despite the potential consequences of nonaccommodations, and a growing number of medical students reporting disabilities,[4] to our knowledge, no study has investigated differences in the proportion of accommodation requests across disability categories. Variation in request by disability category may reveal barriers and vulnerabilities within subpopulations of students with disabilities. This study aimed to identify the proportion of accommodation requests across disability categories.

Methods | We analyzed data from 2 cohorts (2019 and 2020) of the Association of American Medical Colleges Year Two Questionnaires, a national online survey of second-year MD students. Data included demographic characteristics (sex, age group, sexual orientation, race and ethnicity; **Table**) and disability-related questions, including self-reported disability, disability type, whether the "medical school provided accommodations for your disability," and why no accommodations were made (eMethods in the Supplement). In keeping with previous studies,[1] we assigned self-reported disability into 3 categories: chronic health disabilities, cognitive disabilities, and motor/sensory disabilities. Because our goal was to assess differences in the proportion of accommodation requests by disability category, only students who provided responses to both the disability category and accommodation questions and who reported 1 or more disabilities belonging to a single disability category were included.

We calculated descriptive summary statistics for the overall sample, stratified by disability category. Differences in accommodation requests across different disability categories were assessed using χ^2 tests. A 2-sided $P < .05$ was considered statistically significant. Analyses were conducted using SPSS-21 (IBM Corp). The study was deemed exempt by the University of Colorado Medical School Institutional Review Board.

Results | Overall, 27 009 students (61.3%) replied to the survey and 2438 (9.0% [95% CI, 8.7%-9.4%]) self-reported a disability. Of those, 2353 (96.5%) provided responses about disability type and accommodations and 2140 (90.9%) reported disabilities within a single disability category (336 [15.7%] chronic health, 1655 [77.3%] cognitive, and 149 [7.0%] motor/sensory) and were included in our analysis (Table).

Of these 2140 students, 1108 (51.8% [95% CI, 49.6%-53.9%]) reported requesting accommodations (chronic health: 219/336 [65.2%]; cognitive: 795/1655 [48.0%]; motor/sensory: 94/149 [63.1%]), 772 (36.1% [95% CI, 34.0%-38.1%]) reported not needing accommodations (chronic health: 80/336 [23.8%]; cognitive: 646/1655 [39.0%]; motor/sensory: 46/149 [30.9%]), and 260 (12.1% [95% CI, 10.8%-13.6%]) reported not requesting accommodations for any reason other than not needing them (chronic health: 37/336 [11.0%]; cognitive: 214/1655 [12.9%];

Table. Demographic and Disability-Related Characteristics of Participants

Characteristic	Students with chronic health disabilities (n = 336)	Students with cognitive disabilities (n = 1655)	Students with motor/sensory disabilities (n = 149)	Total (n = 2140)
Demographic characteristics, No. (%)				
Sex				
Male	121 (36.0)	700 (42.3)	81 (51.4)	902 (42.2)
Female	215 (64.0)	954 (57.7)	48 (45.6)	1237 (57.8)
Age, y				
≤26	268 (79.8)	1212 (73.2)	123 (82.6)	1603 (54.9)
≥27	68 (20.2)	443 (26.8)	26 (17.4)	537 (25.1)
Sexual orientation				
Heterosexual or straight	278 (83.2)	1283 (79.6)	125 (86.8)	1686 (80.7)
Lesbian, gay, or bisexual	56 (16.8)	329 (20.4)	19 (13.2)	404 (19.3)
Race and ethnicity				
Underrepresented in medicine[a]	62 (18.8)	401 (24.6)	24 (16.2)	487 (23.1)
Nonunderrepresented in medicine	268 (81.2)	1232 (75.4)	124 (83.8)	1627 (73.9)

(continued)

Table. Demographic and Disability-Related Characteristics of Participants (continued)

Characteristic	Students with chronic health disabilities (n = 336)	Students with cognitive disabilities (n = 1655)	Students with motor/sensory disabilities (n = 149)	Total (n = 2140)
Disability-related characteristics, No. (%) [95% CI]				
Types of disability within categories[b]				
Chronic health category				
Chronic health disability	296 (88.1) [84.1-91.4]			296 (13.8) [12.4-15.4]
Other (open-text responses)[c]	40 (11.9) [8.6-15.9]			40 (1.9) [1.3-2.5]
Cognitive category				
ADHD		1247 (75.3) [73.2-77.4]		1247 (58.3) [56.2-60.4]
Learning disability		173 (10.5) [9.0-12.0]		173 (8.1) [7.0-9.3]
Psychological disability		435 (26.3) [24.2-28.5]		435 (20.3) [18.6-22.1]
Other (open-text responses)[c]		56 (3.4) [2.6-4.4]		56 (2.6) [2.0-3.4]
Motor/sensory category				
Deaf or hard of hearing			56 (37.6) [29.8-45.9]	56 (2.6) [2.0-3.4]
Mobility disability			31 (20.8) [14.6-28.2]	31 (1.4) [1.0-2.0]
Visual disability			61 (40.9) [33.0-49.3]	61 (2.9) [2.2-3.6]
Other (open-text responses)[c]			4 (2.7) [0.7-6.7]	4 (0.2) [0.1-0.5]
Need for accommodations: no[d] (n = 772)				
Did not request accommodation because does not need accommodation	80 (23.8) [19.4-28.7]	646 (39.0) [36.7-41.4]	46 (30.9) [23.6-38.9]	772 (36.1) [34.0-38.2]
Need for accommodation: yes (n = 1368)				
Did not request accommodations for any reason other than not needing accommodations	37 (11.0) [7.9-14.9]	214 (12.9) [11.4-14.6]	9 (6.0) [2.8-11.2]	260 (12.1) [10.8-13.6]
Requested accommodations: accommodation was provided by medical school	210 (62.5) [57.1-67.7]	772 (46.6) [44.2-49.1]	92 (61.7) [53.4-69.6]	1074 (50.2) [48.1-52.3]
Requested accommodations: request was denied by medical school	7 (2.1) [0.8-4.2]	14 (0.8) [0.5-1.4]	1 (0.7) [0.0-3.7]	22 (1.0) [0.7-1.6]
Requested accommodations: request is under review by medical school	2 (0.6) [0.1-2.1]	9 (0.5) [0.3-1.0]	1 (0.7) [0.0-3.7]	12 (0.6) [0.3-1.0]

[a] Race and ethnicity were categorized as "underrepresented in medicine" and "nonunderrepresented in medicine" in the raw data set received from the Association of American Medical Colleges (AAMC). The group underrepresented in medicine includes any US citizen or permanent resident who self-identified as 1 or more of the following: American Indian or Alaska Native; Black or African American; Hispanic, Latino, or of Spanish Origin; or Native Hawaiian or Other Pacific Islander.

[b] Percentages within categories may not sum to 100% because students with multiple types of disabilities were included if all reported disabilities belonged to the same category. Chronic health disabilities include cancer, diabetes, lupus, rheumatoid arthritis, etc. Cognitive disabilities include attention-deficit/hyperactivity disorder (ADHD), learning disabilities, psychological disabilities, and mental health/neuropsychiatric disorders. Motor/sensory disabilities include all mobility disabilities, deaf and hard of hearing disabilities, and visual disabilities.

[c] Open-text responses from students who replied "other" to the question on the type of disability were categorized into 1 of 3 groups (chronic health disabilities, cognitive disabilities, and motor/sensory disabilities). Examples of open-text responses categorized as chronic health disabilities include cancer, diabetes, epilepsy, HIV, lupus, rheumatoid arthritis, and ulcerative colitis. Examples of open-text responses categorized as cognitive disabilities include depressive disorder, generalized anxiety disorder, obsessive-compulsive disorder, posttraumatic stress disorder, and test anxiety. Examples of open-text responses categorized as motor/sensory disabilities include amputee, hand splint, and spinal cord injury.

[d] Includes students who replied "I did not request accommodations because I feel I do not need accommodations" to the question "Which of the following best describes why your medical school did not or has not provided accommodations."

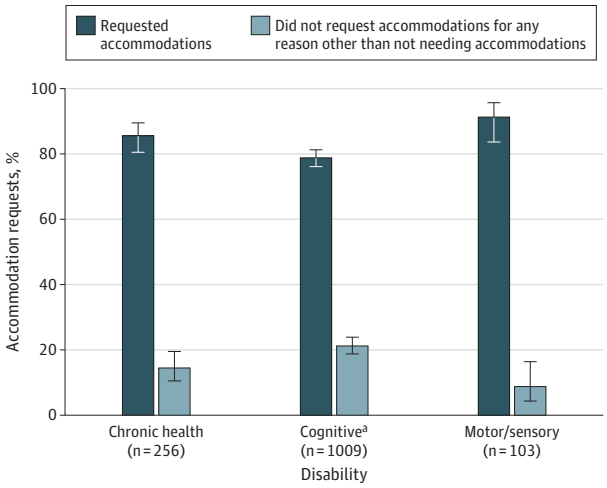
motor/sensory: 9/149 [6.0%]). Of 1108 accommodation requests, 22 (2.0%) were denied.

Among the 1368 students (63.9%) who reported needing accommodations, 260 (19.0% [95% CI, 17.0%-21.2%]) reported not requesting accommodation for reasons other than not needing them, with a significantly lower proportion of students with cognitive disabilities reporting requesting accommodations (795 [78.8%]) compared with students with chronic health (219 [85.5%]) or motor/sensory disabilities (94 [91.3%]), $P = .001$ (**Figure**).

Discussion | This study found that approximately half of second-year students who self-reported disability requested accommodations, which was lower among students with cognitive disabilities. Among those needing accommodations, nearly 1 in 5 did not request them; for those who did request accommodations, few were denied.

Previous studies suggest that students with cognitive disabilities, including those with attention-deficit/hyperactivity disorder, learning disabilities, and psychological disabilities, encounter stigma and misinformation about their ability to successfully navigate medical school.[5] Although not assessed by the present study, the nonapparent nature of many cognitive disabilities,[1] fear of stigma,[5] and the possible downstream consequences of disability disclosure[6] may contribute to the lower frequency of requests within this disability category.

Figure. Proportion of Accommodation Request by Disability Category Among Medical Students Who Reported Needing Accommodations (n = 1368)



Excludes participants who reported not needing accommodations (ie, those who replied "I did not request accommodations because I feel I do not need accommodations" to the survey question "Which of the following best describes why your medical school did not or has not provided accommodations?").

[a] Statistically significantly lower proportion of students who requested accommodations than the other groups ($\chi^2_2 = 13.7$; $P = .001$).

Limitations include the self-reported nature of the survey and lack of detailed information regarding type and quality of accommodation.

Given the risks associated with lack of disability accommodations when needed,[1-3] schools should highlight the availability of accommodations and increase efforts to encourage accommodation requests, especially among students with cognitive disabilities. Future studies should investigate possible factors serving as drivers of nonrequests.

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Accepted for Publication: June 30, 2022.

Published Online: August 11, 2022. doi:10.1001/jama.2022.12283

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Author Contributions: Drs Meeks and Pereira-Lima had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. Drs Meeks and Pereira-Lima contributed equally to the paper and are co–first authors.
Concept and design: Meeks, Pereira-Lima, Plegue
Acquisition, analysis, or interpretation of data: All authors.
Drafting of the manuscript: All authors.
Critical revision of the manuscript for important intellectual content: All authors.
Statistical analysis: Meeks, Pereira-Lima.
Obtained funding: Meeks.
Administrative, technical, or material support: Meeks, Moreland
Supervision: Meeks, Moreland

Conflict of Interest Disclosures: None reported.

Funding/Support: Data analysis for this paper was supported by a diversity grant from the University of Colorado Anschutz Medical Campus Office of Diversity Equity Inclusion and Community Engagement.

Role of the Funder/Sponsor: The funder had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

Disclaimer: The opinions, results, and conclusions reported in this article are those of the authors and are independent from the funding sources.

Additional Contributions: We would like to thank the Association of American Medical Colleges for its partnership in collecting and preparing the data and medical students nationally for completing the Y2Q survey, thus facilitating the study of this population. Additionally, we would like to thank Regina Richards, PhD, MSW, vice-chancellor of Diversity, Equity, Inclusion and Community Engagement, for her financial support of this project through a CU Anschutz Diversity Grant, and for her mentorship. No one received any financial compensation for this work.

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