

The Impact of COVID-19 on Students in the Medical Field

Anjali Patel

The outbreak of COVID-19 changed the “normal” for nearly everyone. As an undergraduate student on a premed track, I believe it has especially affected medical and premedical students—from education and clinical experiences to mental health.

EDUCATION AND EXPERIENCE

Early in the pandemic, schools nationwide were forced to transition classes and clinical rotations to online or hybrid learning formats, and education among pre-med and medical students was greatly altered.

For example, due to “stay-at-home” orders and virtual office visits, many undergraduate students were unable to shadow physicians. Even after the stay-at-home orders were lifted, many physicians refrained from having undergraduate students in their offices. Though necessary for everyone’s safety, it may inadvertently have hindered students’ understanding of the medical field and particular specialties and limited their ability to reach the “recommended hours” needed to apply to certain medical schools. Additionally, both undergraduate and medical students,

• • •

Author Affiliations: University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin (Patel).

Corresponding Author: Anjali Patel, email anpatel5@wisc.edu; ORCID ID 0009-0008-3014-444X

who often learn best through hands-on experience, were frequently denied of in-person training. Moreover, those who struggled faced additional barriers, as they could not easily meet with their professors or participate in study groups.

A survey conducted in the US among medical students found that 43.3% felt unpre-

A survey conducted in the US among medical students found that 43.3% felt unprepared for their clinical rotations, and 56.7% felt unprepared for their board exams due to the pandemic.

pared for their clinical rotations, and 56.7% felt unprepared for their board exams due to the pandemic.¹ Another cross-sectional survey of 741 medical students from 6 US medical schools showed that 74.9% had their clinical rotations either cut short or canceled, and 93.7% reported not being involved in any clinical rotations that had in-person patient contact.²

MENTAL HEALTH

For many students, success hinges on having mentors for guidance and support. I have been fortunate to have had multiple opportunities to connect and work with the wonderful doctors at UW Health. My mentors have played a pivotal role in my journey, guiding me through significant career decisions, obstacles, and personal hurdles. Yet with the shift to virtual

classes and the loss of one-on-one student-teacher interactions, many of my peers have struggled to find and connect with mentors during this period. Furthermore, when students enter college, it is a time to make new connections, learn what the college has to offer, and explore their interests, but the pandemic limited our ability to do this.

Working with people in-person allows students to create their sense of belonging, security, and safety. But for some deprived of this opportunity, lack of support increases the risk of burnout and mental health challenges. Three of my peers discontinued their medical studies due to pandemic-related stress. One recounted the difficulty of balancing academic and work responsibilities while isolated, leading to depression and loss of direction. “As a premed student, I already had a lot on my plate—my classes, CNA (certified nursing assistant) job, research work—but then I had to stay confined in a small dorm room alone. I could not even go home since flights were closed and it got to a point where I was severely depressed. I had no motivation, no ability to focus and no goal in life. I eventually dropped the premed major, and I believe

the main reason behind that was I had no support.”

A survey done in Changzhi Medical College among undergraduates showed a correlation between the pandemic and academic delays and mental health.¹ Similarly, in Hong Kong, due to exam delays, students lost their appetites and developed sleep problems due to stress. In the same survey, out of 757 students, 20% reported stress levels of 10/10 on exam delays.¹ These findings suggest that setbacks and cancellations not only caused educational deficits, but also affected mental health. Further, in a survey of 248 medical students from 13 schools, 48% reported feeling depression and 52% felt lonelier.¹

In another study, 1139 allopathic medical students from Washington and New York were assessed for depression and anxiety symptoms and self-rated their mental health during versus before the pandemic. Seventy percent of respondents reported their mental health was worse than baseline following the initial months of pandemic; 61% reported experiencing some depressive symptoms (24% meeting criteria for major depression); and 58% reported some symptoms of anxiety (20% meeting criteria for an anxiety disorder).³ These findings suggest that over two-thirds of the medical students who completed the

survey believed that their mental health had deteriorated after the start of COVID-19.

There is no doubt that COVID-19 has had a negative effect on many medical and undergraduate students—myself included, and we have suffered in obtaining a well-rounded experience in the medical field. Fortunately, however, although it has been slow, the recovery to “normal” has begun.

Acknowledgements: The author extends gratitude to Tripti Singh, MD, for her guidance and mentorship throughout the development of this manuscript.

Funding/Support: None declared.

Financial Disclosures: None declared.

REFERENCES

1. Jhajj S, Kaur P, Jhajj P, et al. Impact of COVID-19 on medical students around the Globe. *J Community Hosp Intern Med Perspect*. 2022;12(4):1-6. doi:10.55729/2000-9666.1082
2. Harries AJ, Lee C, Jones L, et al. Effects of the COVID-19 pandemic on medical students: a multicenter quantitative study. *BMC Med Educ*. 2021;21(1):14. doi:10.1186/s12909-020-02462-1
3. Christophers B, Nieblas-Bedolla E, Gordon-Elliott JS, Kang Y, Holcomb K, Frey MK. Mental health of US medical students during the COVID-19 pandemic. *J Gen Intern Med*. 2021; 36(10):3295-3297. doi:10.1007/s11606-021-07059-y

The COVID-19 Stress Test: Results and Recommendations

References continued from page 311

9. Sule S, DaCosta MC, DeCou E, Gilson C, Wallace K, Goff SL. Communication of COVID-19 misinformation on social media by physicians in the US. *JAMA Netw Open*. 2023;6(8):e2328928. doi:10.1001/jamanetworkopen.2023.28928
10. Sun LH, Weber L, Godfrey H. Doctors who put lives at risk with covid misinformation rarely punished. *Washington Post*. July 26, 2023. Accessed September 30, 2023. <https://www.washingtonpost.com/health/2023/07/26/covid-misinformation-doctor-discipline/>
11. Parmet WE, Erwin PC. The challenges to public health law in the aftermath of COVID-19. *Am J Public Health*. 2023;113(3):267-268. doi: 10.2105/AJPH.2022.307208
12. Lawlor EF. COVID-19 as America's stress test. *Ann Am Acad Pol Soc Sci*. 2021;698(1):185-198. <https://doi.org/10.1177/00027162211069718>
13. CDC Moving Forward Summary Report. Centers for Disease Control and Prevention. Reviewed September 1, 2022. Accessed September 8, 2023. <https://www.cdc.gov/about/organization/cdc-moving-forward-summary-report.html#print>
14. Physician loses license over COVID-19 misinformation. Credentialing Resource Center Digest. September 21, 2021. Accessed September 30, 2023. <https://credentialingresourcecenter.com/articles/physician-loses-license-over-covid-19-misinformation>
15. What Works for Health. County Health Rankings and Roadmaps. Accessed October 19, 2023. <https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health>

advancing the art & science of medicine in the midwest

WMJ

WMJ (ISSN 1098-1861) is published through a collaboration between The Medical College of Wisconsin and The University of Wisconsin School of Medicine and Public Health. The mission of *WMJ* is to provide an opportunity to publish original research, case reports, review articles, and essays about current medical and public health issues.

© 2023 Board of Regents of the University of Wisconsin System and The Medical College of Wisconsin, Inc.

Visit www.wmjonline.org to learn more.