

# Impact of the COVID-19 Pandemic on U.S. Medical Student Family Planning

Amanda Kadash, MS4, Taryn Boucher, MS4, Emily B. Rosenfeld, DO, Julia Keltz, MD  
New York Medical College, Department of Obstetrics & Gynecology



## BACKGROUND

The average age and number of female students matriculating into medical school has been increasing over recent years.<sup>1,2</sup> Some will spend a large portion of their reproductive years undergoing a grueling education process in pursuit of the opportunity to practice medicine. For many students, the decision as to whether to start a family during medical training, and when specifically, is not an easy one.

While flexibility during the fourth year of medical school may make it an ideal time for childbearing for those who wish, fear of discrimination during residency interviews may be a hindrance for some. In one study of potentially discriminatory questions asked during residency interviews, 30% of interviewees report being asked if they have children at least one time.<sup>3</sup> Additionally, 10% report being asked if they plan to have children during residency.<sup>3</sup> Due to concerns about bias, some medical students may not wish to be visibly pregnant during in-person interviews.

Unprecedented changes to the medical school fourth-year curriculum and the 2020-2021 residency application cycle, including limited away rotations and virtual residency interviews, have been implemented due to the COVID-19 pandemic. **We predict that due to these changes brought on by the COVID-19 pandemic, more medical students participating in the upcoming 2020-2021 residency application cycle will consider becoming pregnant before entering residency than in years prior to these changes.**

## OBJECTIVES

**Evaluate if changes to medical education brought on by the COVID-19 pandemic have influenced thoughts about family planning among medical students enrolled in US allopathic or osteopathic programs who are participating in the upcoming 2020-2021 residency application cycle.**

## METHODS

This is a cross-sectional study of medical students enrolled in a US allopathic or osteopathic program who are participating in the upcoming residency application cycle. A survey evaluating thoughts on family planning during medical school and impact of COVID-19 pandemic was sent to research, student affairs, and/or student contacts at 154 MD and 42 DO programs via email/social media.

## RESULTS

Of the 415 students who completed the survey as of August 3, 2020, the average age was 27 (Table 1). 327 (78.8%) indicated they do plan to have children at some point in their lives.

Table 1

	n (%) or n (SD, range)
<b>Mean age in years</b>	27 (2.9, 23-40)
<b>Sex</b>	
Female	272 (66.2)
Male	139 (33.8)
Non-binary	5 (1%)
<b>Race</b>	
White	269 (65.5)
Asian	91 (22.1)
Black or African American	24 (5.8)
Native Hawaiian or Pacific Islander	1 (0.2)
American Indian or Alaska Native	0 (0)
Other	26 (6.3)
<b>Ethnicity</b>	
Hispanic or Latinx	42 (10.4)
Not Hispanic or Latinx	363 (89.6)
<b>Region of medical school</b>	
Northeast	124 (30.2)
Midwest	87 (21.2)
South	147 (35.9)
West	52 (12.7)
<b>Residency Choice*</b>	
Non-surgical	303 (75.8)
Surgical	97 (24.1)
Undecided	3 (0.7)
<b>Method of childbearing</b>	
Will personally carry child	251 (63.5)
Someone else will carry child	144 (36.5)
<b>Timing of when to start or grow family</b>	
During medical school	7 (1.8)
During residency	199 (50.5)
After residency	112 (28.4)
Unsure	76 (19.3)

\*Specialties were categorized as surgical vs. non-surgical based on information obtained from the *American College of Surgeons*. **Surgical:** General Surgery, Ob/Gyn, Ophthalmology, Neurosurgery, Orthopaedic Surgery, Plastic Surgery, Otolaryngology, Urology, Interventional Radiology. **Non-surgical:** Neurology, Family Medicine, Internal Medicine, Pediatrics, Emergency Medicine, Radiology, Anesthesiology, Psychiatry, PM&R.

**71 students (17%)** indicated the recent changes have affected their thoughts on starting a family. Of these, **18 students (25.4%)** indicated they are thinking about starting a family **earlier**. Of the students who planned to start a family earlier, their reasons included:

- **Virtual residency interviews (71%)**
- **Limited away rotations (59%)**
- **Virtual medical school curriculum (47%)**
- **Significant other working from home (59%)**
- **Change in medical school workload (35%)**

## RESULTS (CONT.)

Differences were seen based on reported **age** ( $p=0.009$ ), **relationship status** ( $p<0.019$ ), **region** ( $p=0.031$ ), and **timing of starting a family** ( $p<0.001$ ) (Table 2).

Table 2

	Probably or Definitely Yes N (%)	Unsure, Probably Not, or Definitely Not N (%)	P-value
<b>Relationship status</b>			0.019*
Married or In a Relationship	58 (19.7)	237 (80.3)	
Single	12 (10.1)	107 (89.9)	
<b>Region of medical school</b>			0.031*
Northeast	18 (14.5)	106 (85.5)	
Midwest	9 (10.3)	78 (89.7)	
South	28 (19.0)	119 (81.0)	
West	15 (28.8)	37 (71.2)	
<b>Timing of starting family</b>			<0.001*
During medical school or residency	51 (24.8)	155 (75.2)	
After residency	7 (6.3)	105 (93.8)	
<b>Age</b>			0.009*
< 27	25 (12.4)	176 (87.6)	

## CONCLUSIONS

The changes to medical education during the COVID-19 pandemic may affect certain groups of students based on age, region, relationship status, and planned timing of starting a family. It is important for medical educators to recognize the challenges of starting a family during medical training and support students who may consider starting a family.

## REFERENCES

1. Association of American Medical Colleges. 2019 Fall Applicant, Matriculant, and Enrollment Data Tables. [https://www.aamc.org/data-reports/students-residents/report/facts accessed May 16, 2020].
2. Association of American Medical Colleges. Table A-6: Age of Applicants to U.S. Medical Schools at Anticipated Matriculation by Sex and Race/Ethnicity, 2014-2015 through 2017-2018. [https://www.aamc.org/system/files/d/1/321468-factstablea6.pdf accessed May 17, 2020].
3. Santen S.A., Davis K.R., Brady D.W., Hemphill R.R. Potentially Discriminatory Questions During Residency Interviews: Frequency and Effects on Residents' Ranking of Programs in the National Resident Matching Program. *Journal of Graduate Medical Education*. 2010 Sep;2(3):336-40.