Current Parental Leave Policies for Medical Students at U.S. Medical Schools: A Comparative Study
Molly B. Kraus, MD, Jennifer M.V. Talbott, Ryan Melikian, Sarah A. Merrill, Cynthia M. Stonnington, MD, Sharonne N. Hayes, MD, Julia A. Files, MD, and Pelagia E. Koulouberis, MD

Abstract

Purpose
Parental leave for new parents is essential as they adjust to the physical and psychological changes that accompany childbirth and caring for a newborn. This study sought to determine the current state of parental leave policies for medical students at medical schools in the United States.

Method
From November to December 2019, 2 researchers independently reviewed the websites of 199 U.S. MD-granting and DO-granting medical schools (including in U.S. territories). Online student handbooks and school webpages were searched for the following keywords: “pregnant” OR “pregnancy” OR “maternity” OR “parent” OR “family” OR “child” OR “birth.” Data were analyzed using descriptive statistics. Fisher's exact tests evaluated differences in proportion by group.

Results
Of 199 schools, 65 (32.66%) had parental leave policies available online or in the handbook: 39 of 155 (25.16%) MD-granting and 26 of 44 (59.09%) DO-granting schools. Of those policies, 59 (90.77%) were included in the student handbook. Most policies (28, 43.08%) were included as an option within the school's general leave of absence policy. Both parents were included in 38 (58.46%) policies; 23 (35.38%) policies mentioned only mothers; and 4 (6.15%) were unknown. An option to maintain original graduation date was offered in 21 (32.1%) schools' policies. Three schools (4.62%) included adoption as qualifying for parental leave. When comparing MD and DO programs, DO programs were statistically more likely to have a parental leave policy: 39 (25.16%) vs 26 (59.09%); P < .001.

Conclusions
Balancing medical school with pregnancy and childbirth necessitates administrative support to address the inherent scheduling challenges. Currently, many schools lack parental leave policies for medical students that are easily accessible, are separate from formal leaves of absence, allow for at least 12 weeks, and are tailored to the student academic year to ensure on-time completion of medical education.

It is well known that medical training often spans the prime reproductive years for medical students.1-2 For students wishing to become parents during undergraduate medical education, the time granted by a training program for maternal or paternal family leave is an important consideration. As such, prospective medical students may be interested in a medical school's parental leave policy. These policies could potentially affect a student's decision about which medical school to attend, especially since women medical students now outnumber men.3 Students planning for families during medical school need timely and comprehensive information tailored to their academic year. With this study, we sought to determine the current state of parental leave policies for medical students at DO-granting and MD-granting medical schools in the United States to determine both the accessibility of published policies and policy characteristics.

Method
We began by identifying medical schools in the United States (including U.S. territories) using the Association of American Medical Colleges (AAMC) website, specifically AAMC medical school members information.4 All MD- and DO-granting schools listed on the website in November 2019 were AAMC member schools and were included in analysis. From November to December 2019, we reviewed the websites of 199 MD-granting and DO-granting schools. We used the search function on each website to identify either “medical student handbook” or a “medical student policies” webpage. We searched handbooks and webpages for the following key words: “pregnant” OR “pregnancy” OR “maternity” OR “parent” OR “family” OR “child” OR “birth.” If a search function was not available on the webpage, we manually searched through relevant policy pages. The following information was collected from each medical school: presence of a maternity, paternity, or parental policy; policy availability on website or in student handbook; details of the policy, such as dependence on academic year of the student; and requirements for extension of training time. We also noted whether the policy was categorized as a medical or personal leave of absence. This method of data collection was structured to reflect the strategy of and information available to a current or prospective medical student. We conducted data analysis using Microsoft Excel 2019, version 2102 (Microsoft Corporation, Redmond, Washington) in January 2020. Data were also analyzed by U.S. region.

We calculated descriptive statistics by program type (MD-granting vs DO-granting) and region (U.S.)
Census region) as well as described characteristics of parental leave policies among the subset of programs that had leave policies. Responses of “unknown” were considered missing for the purposes of analysis. We use Fisher’s exact tests to test differences in proportion by group. All hypothesis tests were 2-sided, with \( P < .05 \) used as the threshold for statistical significance. We used SAS statistical software version 9.4 (SAS Institute, Inc., Cary, North Carolina) for analysis. Ethical/human subjects study approval was not indicated for this type of review.

### Results

Of the 199 medical schools in the United States for which we collected data, 65 (32.66%) mentioned availability of a parental leave policy for medical students; specifically, 39 out of 155 (25.16%) MD-granting and 26 out of 44 (59.09%) DO-granting schools listed policies \( (P < .01) \) (Table 1). Of those policies, 59 (90.77%) were included in the online student handbook; the remaining were listed in school webpage content. A minority of these policies (28/65, 43.08%) were listed not as a standalone policy, but as an option within the school’s general medical leave of absence policy.

Among programs with a parental leave policy for medical students, DO and MD programs differed significantly in the proportion of policies that included both parents; 8 (30.77%) DO programs and 30 (76.92%) MD programs specifically included both parents, usually by using language such as “parents” or “mother and father” \( (P < .01) \). The remaining policies were applicable to mothers alone, without specifying whether this intended birth mother, adopted mother, or nonbinary mother (Table 1). All DO program policies and 47 (72.31%) MD program policies did not vary by the academic year of the student \( (P < .01) \). Overall, 3 schools (4.62%) included adoption as qualifying for parental leave. There were no significant differences in program type \( (P = .22) \) or proportion with parental leave policy \( (P = .28) \) by region (see Supplemental Digital Appendix 1, at http://links.lww.com/ACADMED/B85).

### Discussion

The health benefits of parental leave for both parents and baby are well documented. Maternal leave is associated with decreased infant mortality, improved maternal and infant physical and mental health, increased maternal labor force participation, and enhanced parent morale.\(^4\) Paternal leave has even been associated with improved health outcomes for father, partner, and infant, as well as promoting gender equity by encouraging fathers to take active roles in child-rearing and supporting mothers’ return to work.\(^5\)\(^7\) Multiple studies have shown family leave should last at least 12 weeks.\(^8\)\(^-\)\(^10\) The American College of Obstetricians and Gynecologists (ACOG) recommends all workers receive paid parental leave with 100% pay and full benefits. Furthermore, ACOG recommends medical schools incorporate formal parental leave policies into their program.\(^6\) Prior research has demonstrated many residency programs and institutions fail to provide comprehensive family leave to trainees or faculty.\(^11\) However, to our knowledge, this is the first major review of current family leave policies for medical students studying in the United States and its territories.

Per this website review, the majority of U.S. medical schools do not have easily accessible family leave policies for medical students. Although there were limited data for U.S. schools, our findings are consistent with other international studies. For example, a survey of all medical students at a U.K. institution found 23% of respondents delayed becoming a parent and 7.5% chose not to have children.\(^12\) At a public institution in Brazil, medical students were more likely than law students to delay pregnancy for financial and professional career reasons.\(^13\) A survey of 77 academic teaching hospitals in Germany found only 5.2% were considered family friendly.\(^14\)

Within our study of U.S. schools, parental leave policy characteristics differed greatly between schools and across MD

### Table 1

**Characteristics of Parental Leave Policies for Medical Students Among Schools With a Policy, by Program Type, From a Study of Current U.S. MD-Granting and DO-Granting Medical School Parental Leave Policies, 2019**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Program type</th>
<th>P value*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. (%) DO (n = 26)</td>
<td>No. (%) MD (n = 39)</td>
</tr>
<tr>
<td>In online student handbook, or through general website search</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handbook</td>
<td>23 (88.46)</td>
<td>36 (92.31)</td>
</tr>
<tr>
<td>Website</td>
<td>3 (11.54)</td>
<td>3 (7.77)</td>
</tr>
<tr>
<td>If yes: policy includes mothers, fathers, or both</td>
<td></td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Both</td>
<td>8 (30.77)</td>
<td>30 (76.92)</td>
</tr>
<tr>
<td>Mothers only</td>
<td>18 (69.23)</td>
<td>5 (12.82)</td>
</tr>
<tr>
<td>Policy depends on academic year of student</td>
<td></td>
<td>.005</td>
</tr>
<tr>
<td>No</td>
<td>26 (100.0)</td>
<td>21 (53.85)</td>
</tr>
<tr>
<td>Yes</td>
<td>0 (0.0)</td>
<td>8 (20.51)</td>
</tr>
<tr>
<td>Policy has options to allow students to keep same graduation date</td>
<td></td>
<td>.07</td>
</tr>
<tr>
<td>No</td>
<td>7 (26.92)</td>
<td>4 (10.26)</td>
</tr>
<tr>
<td>Yes</td>
<td>6 (23.07)</td>
<td>15 (38.46)</td>
</tr>
<tr>
<td>Policy is included under medical or personal LOA</td>
<td></td>
<td>&gt; .99</td>
</tr>
<tr>
<td>No</td>
<td>15 (57.69)</td>
<td>21 (53.85)</td>
</tr>
<tr>
<td>Yes</td>
<td>11 (42.31)</td>
<td>17 (46.15)</td>
</tr>
</tbody>
</table>

Abbreviations: MD, MD-granting degree program; DO, DO-granting degree program; LOA, leave of absence.\(^a\)Fisher’s exact \( P \) value.\(^b\)Websites with missing information were excluded from this analysis.
and DO program types. Historically, DO programs promote curricula based on the mind–body–spirit connection, and more DO than MD graduates head to primary care specialties. Such programs may be more supportive of family leave for student parents. Future studies could explore how differences in underlying tenets of MD and DO programs contribute to such differences in policies.

The majority of schools that published a policy require interested students to search student handbooks and online databases with specific keywords to find relevant information. This may pose challenges for current medical students attempting to create reproductive life plans, or prospective students interested in attending schools with family-friendly policies. According to the American Medical Association, the average age of the matriculating medical student is 24 years old. Within the general population in 2014, the average age at which women bear their first child was 26.3 years old. For many students, therefore, undergraduate medical education spans optimal childbearing years. Medical schools have an opportunity to support students through this important time and prevent barriers to developing a productive life plan and improving work–life integration. The majority of medical schools that published parental leave policies for medical students tended to incorporate parental leave with personal or medical leaves of absence. Many of these leave of absence policies require students to withdraw from medical school courses, thus preventing a student from maintaining their graduation date. This may result in increased tuition and program costs for time missed, increased cost of living expenses, and impact to career productivity and trajectory especially as it relates to residency applications.

Additionally, students who are required to take a leave of absence may also forfeit their right to funds they have received as financial aid during the time of their leave. Unlike other leaves of absence, a student on parental leave is not in a position to seek unemployment insurance to address ongoing expenses that are typically covered by financial aid while in school. Students may also lose their medical insurance during leaves of absence, which particularly affects expectant mothers. Nonfinancial benefits a student may lose by withdrawing from school include forfeiting any leadership positions in student organizations or student government. Parental leave could enhance the perception that these positions would be temporarily paused rather than lost.

These multiple personal, financial, and professional stressors have been shown to contribute to antepartum anxiety and postpartum depression. Considering that as many as 27% of medical students experience some form of depression, medical schools would do well to support this high-risk and vulnerable population. Furthermore, depression is a major contributing factor to physician burnout and may disproportionately affect female students compared with their male counterparts. Women in medicine already experience higher rates of burnout due to factors such as inequity in pay and leadership promotions, workplace discrimination, and bias from patients and leadership. Additionally, women physicians spend disproportionately more time on household duties than their male counterparts, another factor that has been shown to contribute to burnout. Without adequate family leave policies for fathers, however, there can be no expectation for men to contribute equally to these familial responsibilities.

Creating family leave policies for both parents may help decrease the burden of stress on students and be protective against professional burnout experienced by medical students.

In this review of U.S. school policies, we found that schools that have comprehensive leave policies for both parents allow students to maintain their current registration status. These policies specifically use language such as “[We are] committed to supporting students who have children during medical school” and “open and timely communication, cooperation, and good-faith efforts” to underscore how the school administration is willing to support students through this process. The most comprehensive family leave policies were also flexible to the academic year of the student, allowing students to better coordinate their family planning while enrolled in school. These policies also were purposefully inclusive of their language by using terms such as “parent” instead of mother, and not defining parents as heteronormative couples but rather leaving language intentionally open.

We advocate that formal leave of absence policies for medical students must be established by medical school programs, as current laws and regulations do not protect pregnant or expecting students. For example, although the U.S. federal government provides mothers-only with 12 weeks of protected leave, this applies to employees, not students, and does not include pay or benefits. The Title IX federal regulation, an educational amendment enacted in 1972, protects students from discrimination due to pregnancy or related conditions, but this law is limited in scope. For example, Title IX does not mandate parental leave policies for expecting students. Additionally, adoptive parents and partners of pregnant women are not covered under this law, illustrating its limitations in a medical school setting.

Limitations of this study include limiting our review to publicly accessible policies, but is also a strength in that our methods reflect the actual availability of this information to the average medical student searching for these policies. Institutions may have leave policies available to their students on the intranet or upon request. However, this limits prospective students from easily gathering information and making informed decisions about which school they will attend. We may also have missed policies or information. This study was done before the COVID-19 pandemic; thus, we do not discuss the impact of the pandemic on family leave policies. Finally, we did take a heteronormative view of parenting by primarily focusing on policies that included mothers, fathers, or both. However, this language was mirrored in the majority of policies usually by referring to parents as a heterosexual couple and not acknowledging nontraditional or non-nuclear families, transgender parents, and nonbinary students. While not the focus of this study, future research should explore the inclusivity of family leave policies for such students. Strengths of this study include our comprehensive review of the websites and online handbooks of every medical degree program in the United States from the perspective of an inquiring student. Search terms were broad and encompassing of the language used in
many parental leave policies. Future research should determine other sources of family leave policies, explore differences between MD and DO programs which might promote parental leave, and survey students to discover what aspects of a leave policy are most important to them.

There has been a growing call for greater work–life balance and integration. There has also been a cultural shift toward placing greater responsibility on institutions to create supportive environments for student personal and emotional growth.18 These systemic changes must continue to create a more inclusive and family-friendly medical school campus to ensure the well-being of its students. This study highlights the need for medical schools to publish readily accessible parental leave policies for medical students if they hope to recruit, retain, and support the best aspiring physicians. Furthermore, prospective medical students should understand the parental leave policies of institutions in which they are interested in order to select a program that works best for their future childbearing plans.

Funding/Support: None reported.

Other disclosures: None reported.

Ethical approval: Reported as not applicable.

Previous presentations: This research was presented at the American Medical Women's Association Annual Convention Virtual Exposition, March 26–29, 2020.

M.B. Kraus is assistant professor, Department of Anesthesiology, Mayo Clinic, Phoenix, Arizona.

J.M.V. Talbott is a fourth-year medical student, Mayo Clinic Alix School of Medicine, Phoenix, Arizona.

R. Melikian is a second-year medical student, Wayne State University School of Medicine, Detroit, Michigan.

S.A. Merrill is a third-year medical student, Mayo Clinic Alix School of Medicine, Phoenix, Arizona.

C.M. Stonnington is associate professor, Department of Psychiatry and Psychology, Mayo Clinic, Scottsdale, Arizona.

S.N. Hayes is professor, Department of Cardiovascular Diseases, Mayo Clinic, Rochester, Minnesota.

J.A. Files is professor, Department of Women’s Health, Mayo Clinic, Phoenix, Arizona.

P.E. Kouloumbis is assistant professor, Department of Neurosurgery, Mayo Clinic, Phoenix, Arizona.

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