Family Support Policy for Pharmacy, Medical, and Graduate Students

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Executive Summary: For many graduate and professional science, technology, engineering, and math (STEM) students, family support policies are inadequate or non-existent. This gap hinders students’ family planning ability, makes degree completion more challenging, and disproportionately impacts women. Suitable and accessible family support policies are necessary to progress STEM institutions toward equity, maintain themselves as competitive, and support changes in student demographics. With that goal in mind, the Council for Women’s Advocacy (CWA), a group of physicians, professors, administrators, and students at the Medical College of Wisconsin (MCW), developed policies addressing these critical needs. They were approved by leadership and included in the 2021-2022 All Student Handbook. This language can serve as a framework to build on for other STEM institutions. The policies include 1) course and program accommodations for parental leave, 2) childcare financial aid, and 3) lactation support.

I. Background

The United States remains one of the few countries that does not guarantee a national paid parental leave (WORLD Policy Analysis Center n.d.). Employees must refer to the Family and Medical Leave Act, as well as state- and employer-specific guidelines, to determine if they are eligible for parental leave, for what duration, and if they will receive pay and insurance coverage. The recent Build Back Better Act (H.R.5376, 117th Cong. (2021-22)) aimed to address this issue by proposing universal paid leave and provisions for assistance with childcare (Gunzenhauser Popper, Shur, and Gajda 2021). However, the Act did not put forward specific provisions for student parents and has not yet passed in the Senate (Congress.gov 2021). As students in graduate and professional programs are not often considered employees, many are left without guidance on family leave and other family resources. This gap leaves current and prospective student parents without adequate support to complete their training. Further, the rise in age of enrollment within graduate programs has led to an increased overlap in peak childbearing years and professional schooling.

A limitation of the statistics presented in this paper is their portrayal of gender as a binary. In addition to the need for greater inclusion of transgender and gender nonbinary people in research (Moseson et al. 2020; National Center for Transgender Equality n.d.), their inclusion in institutional conversations on family support is vital. The family support policies described herein are meant to benefit parents of all genders.

Finally, some consider health care occupations STEM-related (Martinez and Christnacht 2021) or non-STEM (Glass et al. 2013). In this paper, we discuss health sciences (including medical and pharmacy) students as part of the STEM category.
i. Student family support policies

To begin, there is a clear need for better support for STEM student parents. Nearly 7.3% of US medical school graduates have one or more children (American Association of Colleges of Pharmacy 2020). Moreover, 24-28% of doctoral students and 42% of women in master’s or professional programs have children (Springer, Parker, and Leviten-Reid 2009). However, being a student parent can be challenging. Among sociology PhDs, even four years after graduation, men and women who had children in graduate school were significantly less likely to be on a tenure track (Kennelly and Spalter-Roth 2006). Meanwhile, a survey of all medical students in the United Kingdom found 23% delayed becoming a parent and 7.5% chose not to have children as a result of academic stress and worries over the financial burden (Araujo, Bacelar, and Jesus 2020). Institutional support policies must be accessible to students to aid in their family decision-making.

Unfortunately, determining a gold standard is difficult due to the absence of such policies at many institutions and in the literature (Springer, Parker, and Leviten-Reid 2009). While established policies around paid family leave averaging 8.6 weeks exist for academic faculty at top medical institutions (Riano et al. 2018), these policies often do not extend to students where, again, policy is much less defined. For example, only one in four MD-granting medical schools have a parental leave policy listed on the school website or online student handbook (Kraus et al. 2021). Without official support, it is common for students to meet with leadership on a case-by-case basis to discuss their situation with no financial aid or leave of absence guarantees (Springer, Parker, and Leviten-Reid 2009). Even at universities with resources like daycare subsidies and paid leave, some student’s needs are met, while others could use more aid or accommodations (Lazar and Zhu 2021). For example, although graduating on time is an important factor for medical students, only about one-third of medical school parental leave policies have the option to maintain the original graduation date (Bye et al. 2017; Kraus et al. 2021). Clearly, at many institutions, family support policies are non-existent or inadequate.

Furthermore, this policy gap disproportionately impacts women. First, women have drastically increased their participation in health care occupations that require higher education (Cheeseman and Christnacht 2019). As such, the number of women in the United States pursuing advanced degrees in healthcare and science continues to increase. For example, the number of pharmacy degrees conferred to women increased from a mere 14% in 1965 to 63% in 2020 (Figure 1A) (American Association of Colleges of Pharmacy 2020). Additionally, the percentage of practicing female physicians was 28.3% in 2007 and has jumped to 36.3% in 2019 (Boyle 2021). Further, women make up over 50% of physicians in specialties like pediatrics, obstetrics and gynecology, and child and adolescent psychiatry (Association of American Medical Colleges 2020).

As of 2020, women account for more than 50% of the medical student population across the United States (Figure 1B) (Association of American Medical Colleges 2020). Similar trends can be observed among students in other STEM fields (Figure 1C) (Martinez and Christnacht 2021). With this demographic shift, it is important to consider the needs of a changing student population and how to best promote equity.

Second, postbaccalaureate years often overlap with childbearing ages. For example, the mean age at matriculation for medical students is 24 years old (Association of American Medical Colleges 2017), and the median age at which women typically have children is 27 years old (Martin et al. 2021). Thus, many female students and parents feel added pressure in addition to finishing their degree, which contributes to completion and retention issues (Araujo, Bacelar, and Jesus 2020).

Regrettably, graduate and professional program attrition rates have increased. For example, the national pharmacy school attrition rate increased from 10.2% in 2012 to 12.5% in 2020 (American Association of Colleges of Pharmacy 2020). Furthermore, the four-year graduation rate for MD-only students fell from 90% in the late 1970s to 80% in 2013 (Caulfield, Redden, and Sondheimer 2014). Additionally, students who had to take a leave of absence for any reason during school faced a one in three chance of not completing (Nguyen et al. 2021). With looming
fears of a physician shortage (Dill 2020), addressing the needs of a changing medical student and physician workforce is one way to increase the accessibility of medical school, bolster retention, and prevent decreases in physician numbers. Additionally, women in STEM (not including health professions) are five times more likely to leave their field compared to women in other professions (Glass et al. 2013), and new mothers are twice as likely to leave as new fathers (Cech and Blair-Loy 2019). A commonly cited issue by graduate students struggling with completion and retention is the lack of support for student parents during graduate school (Galton 2019). Finally, among parents, women spend much more time caregiving and on household tasks than men (Sallee, Ward, and Wolf-Wendel 2015; Nakhaie 2009). To address this leak in the pipeline, it is vital to have institutional policies that meet the needs of STEM student parents, especially women.

ii. Policy development strategy: A case study

The Medical College of Wisconsin (MCW) sought to address the need for family support policies. MCW is a private health-sciences university that offers pharmacy, medical, and graduate science programs. In 2020, the Council for Women's Advocacy (CWA), a group of faculty, staff, and student advocates for women, identified the lack of clear policies and resources to support student parents as a major area for improvement. At the time, MCW had robust policies and resources pertaining to parental leave, lactation, and childcare for faculty and staff. However, like many other health science colleges and universities, it did not have the same for students. They were cumbersome, poorly defined, or missing entirely.

Then, only full-time Ph.D.-seeking graduate students in their second year or beyond were offered parental leave (up to six weeks with full stipend and continued health insurance coverage) (Medical College of Wisconsin Graduate School 2020). Pharmacy, medical, and other graduate students, who do not qualify for Wisconsin’s Family Medical Leave, were not offered the same benefits. As previously mentioned, this can cause confusion among students, leading to increased stress and anxiety which can ultimately cause program dropout or significant dips in student performance (Hunter and Leahey 2010; Springer, Parker, and

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Figure 1. Data on the number of degrees conferred total (red shading) and conferred to males or females specifically from 1980-2020. An increase in degrees conferred to women can be observed across programs. (A) Data from Pharmacy Schools adapted from (American Association of Colleges of Pharmacy 2020, 2022). (B) Data from Medical Schools adapted from (Association of American Medical Colleges 2020, 2022). (C) Data from STEM degree programs adapted from (National Center for Education Statistics 2020; National Center for Science and Engineering Statistics, n.d.).
Leviten-Reid 2009; Theisen, McGeorge, and Walsdorf 2018). It was also clear from talking to graduate students that having a clear policy around leave made them much more likely to have conversations with leadership about family leave prior to using it, increasing transparency on all sides.

The MCW CWA convened listening sessions to hear student concerns and what they desire in future policies or resources. After reviewing the MCW student handbooks and intranet resources, the CWA explored literature and policies and resources from other health sciences universities to identify best practices in supporting student parents. Finally, after consultation with the CWA, MCW incorporated three key family support policies into the All Student Handbook taking effect for the 2021-2022 academic year: (1) Leaves of Absence, (2) Financial Aid, and (3) Lactation Support (Medical College of Wisconsin 2021). The MCW All Student Handbook can be located electronically here and within the Appendix.

This policy position paper will outline basic family support policies for inclusion in a school’s student handbook (Figure 2) along with an implementation strategy. This can serve as an example to assist with discussing and addressing student family support needs.

One policy option to support new student parents includes providing a specified period of time allowed for a leave of absence from coursework and/or clerkship rotations and specifying that student parents may request accommodations for a period of time before and after the arrival of a child. These accommodations may include but are not limited to deadline extensions for coursework, postponed exams, re-scheduled clinical rotations, excused absences from class, and the ability to attend class virtually. The policy should also provide a process for the student to follow and a point of contact to reach out to for information, questions, and logistics, including whether their leave of absence will result in an extension of their education or delay of graduation.

The American Academy of Pediatrics advocates for 12 weeks of paid parental leave for employees due to the known health benefits (Beers 2021). Despite this recommendation, paid family leave averaged only 8.6 weeks for academic faculty at top medical institutions in 2018 (Riano et al. 2018). A good precedent is set by the NIH for students with a Kirschstein-NRSA training grant or fellowship, which allows up to 8 weeks of paid parental leave per year (National Institutes of Health 2016). Other NIH institutes and graduate funding agencies should implement similar policies to support STEM student parents.

Considering the difficulties of managing long coursework and financial aid extensions, a six-week leave policy with coursework accommodations is recommended. Six weeks represents a good alternative between twelve weeks, which presents increased logistical hurdles, and zero weeks or undefined, which is often the case as many schools have no clear policy language. Again, for institutions without such a policy, this can serve as a starting point from which family leave could be expanded. For example, all students at MCW are now guaranteed at least two weeks of course accommodations for family leave, but expansion to a minimum of six weeks should be the next step.

In any case, it should be made clear in the policy if students will need to extend their graduation timeline. Additionally, with the increase in and feasibility of remote work, staying connected

**Figure 2:** Toward Balanced Family Support Policies: A summary of the contents of each policy recommendation.

**II. Policy options**

*i. Maternity and paternity leave of absence*
during leave is easier than ever. Ultimately, each institution should determine the length of leave based on their student needs, but defined policy is needed to begin these discussions.

ii. Financial aid for childcare expenses
A second proposed policy is to provide financial aid to student parents who need additional support for childcare. This support would be available to students who are single parents or whose net spousal income is under $100,000 a year and would need to be at least partially subsidized by the institution. Studies have shown that a majority of single parents are mothers and raising a child without a spouse reproduces class and racial disparities (Livingston 2018; McLanahan 2009).

Some institutions offer financial aid programs for student parents, but many students are not aware of them due to lack of clear language and do not enroll (Theisen, McGeorge, and Walsdorf 2018; Wladis, Hachey, and Conway 2018). This was the case at MCW. The recent addition of this policy to the student handbook is aimed at increasing awareness and accessibility.

In the broader context, academic outcomes are worse for student parents compared to students without children (Wladis, Hachey, and Conway 2018). Students with children have significantly decreased quality and quantity of time for school with the primary reason being time spent on childcare (Wladis, Hachey, and Conway 2018). These factors have a negative effect on degree retention and progress, even when controlling for other factors (Wladis, Hachey, and Conway 2018). Affordable on-campus childcare and financial aid are recommended to ameliorate the extra burden faced by student parents (Wladis, Hachey, and Conway 2018). For reference, it’s estimated that daycare costs for a child between the age of 1 and 3 years old exceed $11,180 per child per year (Kirkham 2021), while an average graduate school stipend is $35,000 a year (“PhD Stipends Survey “ 2022). Thus, even if the costs are split evenly between parents, over 10% of the student’s yearly income will be used to pay for childcare alone.

If an institution is already offering financial resources, adding them to the handbook is a simple, low-cost change to increase awareness. Of course, costs may arise from more students signing up or from establishing such a program, if it does not already exist. Financial aid for childcare can be funded in multiple ways depending on the resources available. In the event that the institution is not able to provide direct financial support to student parents, adding information in the handbook regarding local daycare centers is a start. This might lead to a partnership between the institution and a local daycare center that could be mutually beneficial.

iii. Lactation support
A third policy option is to include a statement of support for students who wish to continue chest/breastfeeding once returning to campus. The policy should specify that direct chest/breastfeeding will be permitted at any campus building or space where the lactating student and infant/child are otherwise permitted to be present; students will not be penalized for their absence when needing to express breast milk on campus; and students and instructors will work together to identify solutions for making up absences due to breastfeeding/pumping. Finally, the institution should provide adequate lactation spaces and storage facilities for breastmilk on campus, as well as lactation resources for students (map of lactation rooms, storage locations, etc.).

Access to these spaces is crucial because lactating individuals need to pump approximately every two hours to maintain milk supply (American College of Obstetricians and Gynecologists 2021). This would be impossible for many without spaces on campus. In addition, breast milk is easier to digest than formula, reduces the risk of Sudden Infant Death Syndrome, is beneficial to short- and long-term effects of preterm birth, and contains many additional nutrients not in formula (American College of Obstetricians and Gynecologists 2021). Further, incidences of infectious morbidity, diabetes, and childhood obesity drastically rise for babies with formula only diets (Stuebe 2009).

MCW’s Council for Women’s Advocacy cited many reports from faculty and students regarding the unclear institutional lactation policy prior to inclusion of this language in the All-Student Handbook. This anecdotal evidence is supported within the literature, where breastfeeding parents who return to school experience obstacles similar
to those reported by employed parents who return to work (Sturtevant, Huebner, and Waite 2021). These students require convenient access to appropriate spaces and sufficient privacy to express milk for their infants (Sturtevant, Huebner, and Waite 2021; Ryan, Whipp, and Bihuniak 2021). Some of these best practice requirements for lactation spaces were defined in a Washington University School of Medicine study (Lewis and Chrisman Robbins 2018). They include a place to sit comfortably while pumping, an ability to store bottled milk, a sink to wash bottles and pumps, and space to change clothes (Lewis and Chrisman Robbins 2018). It is also crucial that the room is in a safe, quiet location with a secure lock (Lewis and Chrisman Robbins 2018). Comprehensive lactation policies could improve on-campus breastfeeding experiences among students (Sturtevant, Huebner, and Waite 2021; Ryan, Whipp, and Bihuniak 2021). This is further evidenced by medical students without access to adequate lactation support who reported feelings of frustration and devastation (Dixit, Feldman-Winter, and Szucs 2015).

If the institution is already offering accommodations for breastfeeding/pumping, adding them to the handbook is a simple, low-cost change to increase awareness. One consideration is that added time may be required for instructors and students to coordinate making up missed work. However, if the institution does not have lactation spaces, adding these spaces may result in financial costs. Still, many facilities already have lactation rooms available to faculty, staff, and students, so increasing access and distributing a map of locations is a simple change. Currently, the CWA at MCW is working to develop a “best practices” list for lactation rooms after conducting an evaluation of current spaces on campus to recommend improvements.

III. Policy recommendation, implementation, and conclusions

To progress toward equity in STEM, these policies should be fully adopted and included within institutional student handbooks. Handbooks should be digitally accessible on the school’s website in an easy-to-read format and in multiple languages if necessary. To boost awareness of these policies, they should be discussed with students during orientation. Resources could also be shared during the yearly open enrollment period when students must re-apply for insurance and learn about updated benefits. Other communication strategies include promoting the policies at financial literacy seminars and student parent group meetings. Greater transparency of these policies will benefit current students and make a program more appealing to prospective students.

Not every institution will have the same need or availability of resources. However, there are low-cost options to at least provide guidance on current family leave options, local childcare resources, and lactation resources available to students. Improving the accessibility, utility, and clarity of this information for students is another inexpensive, but important change.

Stakeholders for the implementation of this policy are the institution’s Office of Student Affairs (or equivalent), CWA (or relevant advocacy group), institutional leadership, and student parents. At MCW, policy implementation was fairly simple as some of these resources were already offered, and only required clarification and inclusion in the All-Student Handbook. Thus, the cost of implementation was low. Adding this language into an existing student handbook or equivalent is effective, because it is something that students already refer to for existing school policies and is a living document meant to be updated.

A proactive approach is recommended to implement or improve institutional family support policies. For example, the institute could survey students on their family support needs and open a discussion between the stakeholders. From this united position, meetings could be held with institutional leadership to understand where gaps remain in policy language and what is the best strategy for implementation. This policy position paper can serve as a basic framework for these efforts.

While the past few years of the COVID-19 pandemic have presented many challenges, they have also been a time to reimagine our lives. As demographics shift and we reassess pharmacy, medical, and graduate programs, it is clear one area lacking policy and limiting students is family
support. The work done by MCW’s CWA to develop this three-pronged policy solution was crucial and provides a guide for initial policy acceptance and further policy expansion. This is one small, yet meaningful step toward increasing equity for student parents in STEM.

Appendix: Family Support Policy Language Template, based on the MCW All Student Handbook (Medical College of Wisconsin 2021). This is presented to serve as a starting point for institutions to expand upon and tailor to their context.

Maternity/Paternity Leave of Absence
(Insert Institution Name) is committed to supporting all student parents in meeting their program requirements. Pregnant and parenting students face unique challenges during graduate and professional education, and accommodations for these students may vary depending on timing within their curriculum and program.

Title IX accommodations require that medically necessary absences for pregnancy and related conditions be excused.

Students who become parents through birth or adoption/foster may be provided course accommodations for a period consistent with what is medically necessary. Any duration greater than two weeks (fourteen days) may require formal temporary withdrawal. Please note that withdrawals may impact your program completion timeline. Accommodation requests may include but are not limited to: deadline extensions for coursework, postponed exams, re-scheduled clinical rotations, excused absences from class, home study, or ability to attend class virtually.

Students who adopt or have a child while a student at (Insert Institution Name) may take a temporary withdrawal before and/or after the child arrives. Given the unique intersection between program requirements and the uncertainties of pregnancy and the timing of a child’s arrival, no one policy can address accommodations for every pregnant or parenting student.

Students should be in contact with their faculty, instructors, program directors, curriculum directors or school administration to discuss accommodations that will maximize student wellbeing while minimizing disruption of the student’s learning.

For accommodations needed beyond two weeks (fourteen days), students should contact their program for information on medical accommodations and whether their leave may result in an extension of their education.

Insert Appropriate Institutional Contact Information

Childcare Expenses
Financial aid for childcare expenses may be available to students who qualify. Information is available at (Insert Information Location, such as a web page). Please contact the financial aid office with questions: Insert Appropriate Institutional Contact Information or Links

Lactation Support
(Insert Institution Name) supports lactating students and encourages breastfeeding. We are committed to providing lactating students with the accommodations necessary to ensure they have access to equal educational opportunities while also meeting their health needs. Direct chest/breastfeeding is permitted at any campus building or space where the lactating student and infant/child are otherwise permitted to be present.
Students should make reasonable efforts to pump between classes or outside of instruction time. Lactating students who must pump during a portion of their class period should inform the instructor of the need and estimated time away from class in a timely manner. Students will not be penalized for their absence needed to express breast milk on campus. Students and instructors should work together to identify solutions for making up in-class work, participation credits, or other instruction missed.

*(Insert Institution Name)* prohibits harassment or other discrimination against students based on their lactation, as a condition related to sex. Harassment or discrimination related to breastfeeding or lactation should be referred to the Title IX office: *(Insert Contact Information)*.

Students who are breastfeeding or pumping will be provided adequate accommodations. Lactation rooms are available on all campuses. Please consult *(Relevant Institutional Link)* to find information on pumping spaces.

Students who need assistance managing their schedule and their pumping breaks should contact their school representative: *(Insert Appropriate Institutional Contact Information)*

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