

Medical Student-Mothers

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ABSTRACT

Medical training is challenging and parenting is a full-time responsibility. Balancing a family with the significant demands of medical school is a daunting endeavor. Yet there is little research available to guide students, faculty, or administrators. Using one U.S. medical school as a case study, this article provides a comprehensive overview of the common personal and professional challenges that medical students who are also mothers face during their undergraduate medical education, and practical strategies and resources useful in navigating such challenges. This article is also a resource guide for the faculty and administrators who teach, advise, and mentor medical-student parents. For leaders in medical education, the article concludes with suggestions to better support the health and educational experience of medical student-parents: 1) a systematic network of career advisors, 2) scheduling flexibility, 3) formal breastfeeding policies and workplace support, 4) institutionally supported childcare, and 5) how student-parents may foster the educational health mission of medical schools.

KEYWORDS: Undergraduate medical education, mentoring, maternal-child health, breastfeeding

INTRODUCTION

The proportion of women physicians in the United States continues to increase steadily. According to the Association of American Medical Colleges (AAMC), 47% of first-year medical students in the United States are women compared to 31% in 1983.¹ Medical training is challenging and parenting is a full-time responsibility. As the number of women in medical schools rises, questions about combining parenthood and medical school are increasingly important for both students and administrators alike.

Although several articles have focused on pregnancy and early parenting for female resident physicians,²⁻⁵ there are few studies that have specifically considered these issues for medical students, and none from the United States. In 2005, although many Japanese medical schools had pregnant medical students, none had an established maternity leave policy.⁶ A study from Canada compared the career and parenting satisfaction of physician-mothers across a spectrum of

stages of medical training and found job dissatisfaction to be greatest among medical student-mothers.⁷ Another study of medical student- and attending physician-mothers at a medical school in Germany found that each group differed in their perception of an 'ideal' time to have children, with student-mothers favoring the clinical years of medical school and attending-mothers favoring residency and beyond.⁸

At the Warren Alpert Medical School (AMS) of Brown University, there are typically several medical students in each graduating class who are parents. Here we present a case study of how AMS addresses the issue of parenthood for medical students.

DISCUSSION

Pregnancy During Medical School: Timing

For medical students who do not delay parenting until residency or beyond, for whatever reason, one of the first considerations is whether they can complete medical school in four years with their peers. Alternatively, they may want or need to extend their training by a year, either before or after graduation from medical school. The advantages of finishing school in four years include tuition considerations and avoiding the need to delay residency training by a year. The disadvantage of finishing in four years is the possibility of missing interesting clinical opportunities.

It is important for women who wish to become pregnant during medical school to know they can still finish in four years and proceed directly on to residency if the pregnancy is well-timed with respect to their other educational obligations and if they are planning a relatively short parental leave. To do so, the best timing of a pregnancy and parental leave would be to have a child either at the end of the first year of medical school, in the late spring or early summer, or else sometime during the fourth year, keeping in mind that residency interviewing season for most specialties runs from October until late January.

Pregnancy During Medical School: Other Considerations

For pregnant medical students, major issues to consider are choosing a personal medical provider, occupational exposures, and scheduling clinical rotations.

Although health insurance may impose limitations on choosing providers and hospitals, students usually want to see a provider who does not routinely work with medical

students, in order to maintain some privacy as a patient. Students should feel comfortable requesting that their medical student colleagues not participate in their obstetrical care, thus separating their roles as patient and learner.

All medical students should have up-to-date immunizations or documentation of immunity. As part of universal precautions, all female medical students who are sexually active with men should be mindful of potential pregnancy. When serving as student-clinicians, pregnant medical students should be attentive to potentially dangerous infectious exposures such as Parvovirus B-19. Other exposures medical student-mothers should minimize include inhalation of embalming fluids such as formaldehyde during anatomy class and exposure to radiation during clinical rotations. Potential exposures may affect a pregnant student's choice of her clinical rotation schedule during pregnancy. However, pregnancy itself should not preclude students from participating in any clinical rotation. Instead, students should discuss any concerns about possible exposures directly with their supervising resident or attending physician. Pregnant medical students may want to consider the intensity of their schedule, particularly during the third trimester.

Parenting During Medical School: A New Baby

Being home full-time with an infant is very different and may be isolating compared with the previous routine. At Brown, new medical student-mothers are typically encouraged to take a minimum of a six-week break after having a child. Some new parents may need or want additional time.

Key aspects of the positive medical student-parent experience at Brown include:

1) Flexibility in each year of the curriculum allows for time at home with a new baby. For example, because both the pre-clinical and clinical years at Brown are divided into two- to six-week blocks, it is possible to take at least a six-week long break in the middle of the semester. The student may then make up any missed material later.

Further, if students wish to extend their medical education to five years, they may take a 'Fellowship Year' after years two, three, or four. Students use this time to complete additional graduate degrees, conduct mentored research, or complete other projects they may have begun before or during medical school. For medical student-parents, this option allows students to create a more flexible schedule for one year before beginning the intensity of residency training.

2) Students at Brown rarely take a formal leave of absence to parent as an official leave results in termination of all university resources. Instead, using the flexibility of the curriculum or the Fellowship status, where students are engaged in scholarly work, some of which can be done at home, students remain eligible for health insurance and other university benefits, especially with respect to student loans. Outside of the specific medical school requirements, some students must also consider the financial and logistical impact of extending medical school on other service

commitments such as the National Health Service Corps (NHSC) or a military scholarship.

Parenting During Medical School: Breastfeeding

Despite the relatively high rates of breastfeeding initiation among physician-mothers compared to all U.S. mothers,⁹ they also have fairly high rates of early weaning.⁹⁻¹¹ An often intensive work schedule resulting in insufficient time to express milk can be exacerbated by the lack of a private space in which to pump breast milk.⁹ Indeed, once medical student-mothers have returned to school, they often need to work with sympathetic faculty and administrators to identify time and private space to pump a few times a day. At Brown, some of the stress of combining parenthood with school is alleviated by the systematic development and advertisement of a network of lactation rooms at the medical school and in each of the seven affiliated hospitals.¹²

Parenting During Medical School: Childcare

For any returning medical student in need of childcare, the four major options include family members, daycare centers, in-home providers, and private help at home such as a nanny or an au pair. At Brown University, there is one institutionally affiliated preschool program.

Parenting During Medical School: Managing Professional Obligations as a Medical Student-Parent

Typical professional challenges for medical student-parents include scheduling required and elective rotations, attending residency interviews, and taking national board examinations. Research projects specific to maternal and child health may be of particular interest to these students.

For students who are planning to go directly from medical school to residency, interviewing for a residency program position is a major component of the final year of school. For example, a medical student who has a child early in the fall of her last year of school may be mobile enough to interview in December and January. New breastfeeding mothers scheduling interviews should contact program administrators at least one week in advance to discuss the logistics of pumping during the interview day. This initial contact may serve as a litmus test for the family-friendliness of the training program, which could be an important factor in the matching process. Alternatively, some students will interview for residency when they are pregnant and then have a baby in the spring of their final year of school.

U.S. medical students must take three different day-long medical licensing examinations during medical school: Step 1 at the end of the second year and Step 2 Clinical Skills (CS) and Step 2 Clinical Knowledge (CK) during the final year (details at <http://www.usmle.org>). The National Board of Medical Examiners (NBME) provides students with information on expressing breast milk during the USMLE. Breastfeeding students must obtain a written "Personal Item Exemption" (PIE) to bring a breast pump into a testing center at least 30

days in advance of either the Step 2 CS or the Step 2 CK. Students with a PIE do not receive any extra break time or private space in which to express breast milk. In April of 2012, the Supreme Judicial Court in Massachusetts ruled in favor of Sophie C. Currier, a physician-mother who claimed that the NBME failed to accommodate her lactation in 2007.

Parenting During Medical School: Privacy, Self-disclosure, and Boundary Management

From the moment it can be observed, pregnancy is by definition an obligatory self-disclosure act for a student-mother, drawing attention, comments, and involvement from friends and strangers (and patients) alike. Thus, it is also a learning opportunity to practice boundary management for the student-mother-to-be and for her colleagues.¹³⁻¹⁵ Thus, the student-mother lends another dimension of enhancing the educational mission and professionalism training of the medical school.

Resources for Medical Student-Parents

For medical student-mothers at Brown, there is a network of physician-mothers that has been established under the auspices of the Brown Office of Women in Medicine. Primarily connected via a listserv, MomDocFamily (MDF) is a group that unites more than 200 physician-mothers from all stages of their medical training and careers, allowing students to come into contact with and learn from other women about both personal and professional issues.¹⁶

At the international level, MomMD is a career website that provides professional and personal support for women physicians, residents, medical and premedical students. Table 1 includes a variety of resources for medical student-parents, both mothers and fathers, ranging from international organizations to websites to books.

SUMMARY

We have used the experience of medical student-parents at one university as an example of some key issues and possible solutions raised by medical student-mothers. We finish with several recommendations for other medical schools.

1. A systematically identified network of advisors for medical student-parents

Each medical school should have at least one and ideally several faculty members who can work in conjunction with an Office of Women in Medicine or an Office of Student Affairs at a medical school to support, advise, and mentor medical student-parents, especially mothers. At AMS, medical students have access to a robust and personalized advising system through the three new student academies in the Office of Student Affairs.

2. Flexible scheduling to enable medical-student parents to complete their requirements without taking a formal leave of absence

Although medical student-parents may not be able to take as many electives as their non-parenting peers, each school

should facilitate completion of graduation requirements while also allowing a minimum of six weeks of family time around the birth of a child, ideally without compromising students' access to university resources.

3. Breastfeeding policies and systematic breastfeeding support

A medical school-wide policy for lactating medical student-mothers is a simple way for institutions to support their learners in a wide variety of clinical settings, as do an increasing number of breastfeeding laws at the state and national levels in the United States. This policy should include specifics about time and space allowed for breastfeeding or expressing breast milk.

4. Institutionally supported childcare with financial support for student-parents

In the United States, inadequate childcare is a national problem; there is a lack of high quality resources and costs are often prohibitive, especially for students. An on-site or local childcare facility for students, faculty, and staff has the added advantage of creating an informal parenting and advising network at the institution.

5. Systematic opportunities to showcase the positive impact of student-parents on an organization

Although there aren't yet any long-term outcome data available on the careers of medical student-parents who have graduated from AMS (or, that we are aware of, from any other medical school), the presence of student-parents in a medical school community provides numerous immediate learning and educational opportunities. These families can be celebrated as a health education enhancing feature for student colleagues as well as the university community. While medical student-mothers face daunting and simultaneous personal and professional challenges, this article is designed as a guide to maximize the maternal-child health of future doctors.

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Previous Presentations

Some components of this work were presented in a symposium at the Predoctoral Education Conference of the Society of Teachers of Family Medicine in Savannah, GA, on January 25th, 2009.

Table 1. Key Resources for Medical Student-Parents.*

National Medical Organizations

Association of American Medical Colleges (AAMC):
www.aamc.org

American Medical Women's Association (AMWA):
www.amwa-doc.org

National Health Service Corps Scholarship Program:
www.nhsc.hrsa.gov

Resources Specific to Working Mothers

MomMD: <http://www.mommd.com>

Working Mother Magazine: <http://www.workingmother.com>

"Working and Pregnancy" – 25 Tips from Working Moms-to-Be from Working Mother Magazine: http://www.marchofdimes.com/pnhec/159_11488.asp

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MomDocFamily at Brown University, a multi-disciplinary group of more than 200 women medical students and doctors representing all stages of careers and medical training: <http://biomed.brown.edu/owims/MomDocFamily>

Resources Regarding Parental Leave

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The American Academy of Family Physician's Guide for Parental Leave during Residency: <http://www.aafp.org/online/en/home/policy/policies/p/parentalleave.html>

An example of human resources information provided by many schools and employers: http://www.benefitshelp.com/employers/fsa_dependent_care_accounts.html

Resources Regarding Breastfeeding

Goldman AS, Hopkinson JM, Rassin DK. Benefits and risks of breastfeeding. *Adv Pediatr*. 2007;54:275-304.

The Academy of Breastfeeding Medicine (ABM), an international group of physicians dedicated to the promotion, protection and support of breastfeeding and human lactation: www.bfmed.org

La Leche League International (LLL), an international peer-support program for breastfeeding mothers: www.lalecheleague.org

How to choose a breast pump: <http://www.babycenter.com/refcap/429.html>

Breast milk storage guidelines: <http://www.health.ri.gov/family/breastfeeding/RIBCBFpocketguide.pdf>

The National Board of Medical Examiners: Expressing Breast Milk During the USMLE: <http://www.nbme.org/about/BF-USMLE.html>

*All websites on this list were accessed June 26, 2012.

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