

# "I Haven't Time to Write": Martha May Eliot and American Medical Education Reform

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"We are up to our eyes in work. I have about 32 children tonight all with some contagious disease, if not two, and several very sick!" wrote Dr. Martha May Eliot to her parents in 1920, adding, "The hospital is full almost to overflowing and still they come." Eliot, who would go on to become an influential American pediatrician and public health authority, as well as the head of the Federal Children's Bureau, wrote her parents frequently during the course of her education at Radcliffe College (Cambridge, Massachusetts), Bryn Mawr College (Bryn Mawr, Pennsylvania), Johns Hopkins Medical School (Baltimore, Maryland), Peter Bent Brigham Hospital (Boston, Massachusetts), St. Louis Children's Hospital (St. Louis, Missouri), and Yale University Medical School (New Haven, Connecticut). Through these letters, she detailed her experience as a woman professional at elite institutions during a key transformative period in U.S. medicine. This article uses

Eliot's collection of correspondence to shed light on physicians' experience of the increasingly rigorous training, testing, and licensing processes introduced in top medical schools and to offer insights into the history of women's medical education and experience in building careers as academic professionals during that time. Eliot's letters also illustrate how the newer, higher standards for medical graduates and postgraduates may have hastened—rather than hindered—the progress of some elite women in the medical profession. Today's physicians and medical educators, as well as those completing graduate training, will find much to draw on from the experience revealed by this rich epistolary archive.

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By any measure, Martha May Eliot (1891-1978) had an astoundingly successful medical career. By its end, she had worked as a pediatrician, research scientist, public health authority, and top-level official in a series of influential 20th-century governmental organizations. She served as president of the American Public Health Association in 1947 and was the assistant director general of the World Health Organization in Geneva, Switzerland, from 1949 to 1951. She also spent decades working for the Federal Children's Bureau, where she wrote and implemented several long-lasting health policies. Although Eliot was the first woman to hold many of these positions, practicing physicians of both sexes have recognized her career as one of tremendous accomplishment and leadership (1). In addition, she was a pioneer in academic medicine, balancing teaching and clinical practice with research and policy work, and subscribing to, perhaps even helping to create, newly emerging ideals for female professionalism and performance in the field (2, 3).

In February 1920, however, Eliot was just another exhausted pediatric resident, fretting over how to balance long hours with her patients while finding time to study for licensing examinations. She wrote frequent letters to her parents in which she complained about exhaustion, sick babies, and looming examinations. In one letter she wrote, "We are up to our eyes in work. I have about 32 children tonight all with some contagious disease, if not two, and several very sick!" She continued, "The hospital is full almost to overflowing and still they come . . . I haven't time to write to anyone and I suspect I am going to be too busy to take the national board exams" (4).

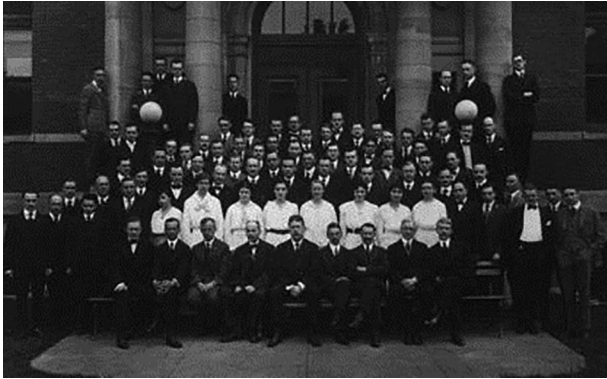
Eliot wrote more than 1000 pages of letters (more than 150 individual missives) to her parents during her formal education at Radcliffe College (Cambridge, Massachusetts), where she earned her undergraduate

degree, and Bryn Mawr College (Bryn Mawr, Pennsylvania), where she spent a visiting year studying laboratory science. She then continued her studies at Johns Hopkins University School of Medicine (Baltimore, Maryland), Peter Bent Brigham Hospital (Boston, Massachusetts), St. Louis Children's Hospital (St. Louis, Missouri), and Yale University School of Medicine (New Haven, Connecticut). Her letters, held by the Schlesinger Library of Harvard University (MC 229) provide a vivid account of one student's experience of American medical education during an important phase of educational reform—the decades immediately following the release of the Flexner Report (5).

In 1910, Abraham Flexner's "Medical Education in the United States and Canada" was published by the Carnegie Foundation (6). Flexner visited all 155 medical schools in the United States and Canada and excoriated many of them, calling for the closure of all but 31. Building on the work of earlier reformers and especially the American Medical Association's Council on Medical Education, founded in 1904 to standardize and professionalize American medical education, Flexner used Johns Hopkins as the example by which other institutions should be judged. The report argued that physicians in the United States should be required to complete undergraduate premedical education before medical school. Medical schools should then provide a rigorous, graded curriculum for students, including laboratory science, as well as practical clinical training. To practice medicine, one would have to complete the entire standardized curriculum and pass licensing examinations at both state and national levels. Elite physicians and reformers alike hoped this process would create a more respected, effective, and powerful medical profession (7).

Although Flexner was an influential figure, he alone should not be credited for the successes or be blamed

**Figure 1.** Graduating class of Johns Hopkins University School of Medicine, 1918.



Martha May Eliot is the third woman from the left. (From Schlesinger Library, Radcliffe Institute, Harvard University.)

for the shortcomings of modern American medical education. Many other individuals and organizations were instrumental in crafting and implementing the reforms. In part because of this groundswell of institutional and political support, changes were relatively swift. Many small institutions, known as proprietary schools because they were owned by groups of physicians who supported themselves through tuition payments, closed because they could not meet the new standards (8). Many sectarian medical schools—those that offered training based on an understanding of the body that differed from that of the “regular” elite institutions (for example, homeopathic or eclectic medicine)—also could not meet the new requirements and were forced to close (9). The same was true for many medical schools that admitted African Americans and women as students (10, 11). In the wake of the report's publication, 5 of the 7 historically black medical colleges closed, and by 1930, all but 1 of the women's medical schools (Women's Medical College of Pennsylvania in Philadelphia) had shut its doors (12, 13). Thus, reforms implemented during the first decades of the 20th century led to both the elevation of the American medical profession and a marked reduction in diversity among practitioners (14).

It was during those decades of reform and upheaval that Eliot began her professional journey. Historical and policy analysts' accounts of this important period in the history of medical education tend to focus on the architects of reform, especially Flexner and faculty members of elite academic institutions, rather than on the experience of the students themselves (15). Eliot's letters to her parents add an important student perspective to existing accounts of the tumult, success, and challenges of this era.

The letters also reveal the experience of an upper-class woman who was determined from a young age to craft a career in academic medicine, research, and policy at the highest levels. Toward this goal, Eliot leveraged the reforms and higher standards of American

medicine to her advantage. By meeting and exceeding the new standards, Eliot objectively proved that her sex was no impediment to her ability to be a physician (16). Her experience suggests that despite a problematic homogenizing force within medical education during this period, some women welcomed the changes and, in fact, consciously used the language of professionalism and the standardization of credentials to argue for their legitimacy within the American medical profession (17).

A member of a prominent Boston family, Eliot began her medical education in 1914 at Johns Hopkins University Medical School (Figure 1) (18). Johns Hopkins was one of the few regular medical schools that admitted small numbers of women, thanks to a sizable donation made in 1890 by a group of Baltimore women philanthropists, who stipulated that along with their \$100 000 gift, women must be admitted to the school on the same terms as men (19).

An enthusiastic student and supporter of efforts to raise the profile of the profession, Eliot was dedicated to furthering her education and establishing a career, as well as aiding in professional medical reforms. This dedication is shown by her approach to 3 aspects of her emerging career: standardized examinations; long hours spent on the wards during her internship and residency; and finally, her efforts to train interns.

## STANDARDIZED EXAMINATIONS

Eliot's letters detail 2 sets of standardized state and national examinations, one that she completed in Massachusetts shortly after graduating from medical school and the other partway through her residency in pediatrics at St. Louis Children's Hospital. In her letters, she recounted the stress of sitting for both tests, but also her confidence in their power to improve the status of medicine and help advance the profession.

Eliot sat for her Massachusetts licensing examinations in Boston in July 1918, a few months after graduating from medical school and before beginning an internship at Peter Bent Brigham Hospital, a major affiliate of Harvard Medical School. At the time, the hospital did not officially accept female interns, but she was able to secure a temporary position, likely because of family connections and staff shortages due to World War I (12). The examinations posed little challenge to Eliot and mostly offered her a chance to reflect, at times dismissively, on the diminishing role of sectarian physicians in the face of the new reforms. In one letter about the tests, she wrote:

This morning we had a ridiculous farce of an oral; I couldn't get much worked up over any of it. The joke would be on me if I flunked . . . the majority were osteopaths and . . . they were pretty sad looking docs most of them. Evidently the exams were the hardest they had come across. One elderly female couldn't understand what sterilization and pasteurization of milk had to do with practical medicine . . . No ideas on this subject had ever entered her head as far as I could make out. (20)

Here, Eliot gave voice to the presumptions of many young elite physicians of her era: Physicians who were older or were trained in sectarian schools were unfit to continue practicing in the new medical landscape, because their knowledge was lacking.

Eighteen months later, while working at St. Louis Children's Hospital (Figure 2), Eliot faced down a week-long series of National Board Examinations that were more challenging and wide-ranging in scope. Eliot wrote several letters to her parents regarding her decision to take these tests and asked them to send her chemistry and physiology notebooks to her St. Louis boarding house (21).

Eliot believed in the potential for standardized testing to elevate the profession. In January 1920, she wrote to her mother about the promise of instituting a National Board Examination system:

The national board exams are given by a voluntary board which is composed of good people from all the good medical schools and army and navy, and are a starting point for the development of the principle that all the states should conform to one standard in medicine. Already 17 states have accepted them and 15 others have resolutions pending in their legislatures—making 32 out of 49—ultimately all the states will accept them. [For now] there is no particular advantage in taking them except a little personal pride in case I should pass—and the possibility that some good may accrue in the future by so doing. The exams . . . last 7 days AM and PM—an awful thought. (22)

Her strategic sensibility about standardized tests perhaps reflects the aptitude that would later make her a natural for a career in policy, but according to her reports of discussions with fellow classmates, others shared this sense of purpose. Although Eliot casually claimed that she saw no advantage in taking the tests—“except a little personal pride”—one would imagine that she indeed recognized several professional benefits from being among the first to pass these strenuous national examinations. Securing a position in an academic medical institution was exceedingly difficult for women at that time, as very few institutions would even consider an application from a woman, so passing the tests would have supported her case that she was an exceptionally capable physician, worthy of any position (17).

The content of the examinations was, she wrote, “supposed to be based on modern teaching of medicine and everyday practical applications. Each exam has a written or a laboratory or practical part. In surgery I believe we have to operate on a dog! Alas for the dog that I get” (23).

Eliot's lament for the dog evokes several of Eliot's frustrations about her education. During many medical school summers and vacations, Eliot tried to secure training in surgery and a place in a surgical internship or residency program but could not find a program that

would train a female resident full time. Eliot's decision to focus on pediatrics may have been related to her inability to acquire surgical training, and she “wished that there were chances in the big hospitals for women to go into surgery. That is the big trouble now” (24).

Clinicians today will recognize one of Eliot's central stressors: adding more tasks to her already busy schedule. She frequently reflected on the problem of juggling time on the wards with the examinations, writing, “I am going to make a try of the exams that begin on Wednesday and last for seven weekdays. I haven't been able to study for them but I can't do worse than flunk . . .” (25). A week later, Eliot wrote home about the experience:

The exams were finished last night at 5 o'clock. If you can imagine compiling all the exams that I had in medical school into one long protracted one lasting 7 days, morning and afternoon and then add considerable [sic] because of being out a year or two you can begin to grasp the nightmare that we have been through . . . Everything went fairly well except skin diseases—I got an old boor from somewhere who sat me down in front of him . . . and finally made remarks that got my back up [until] he began to perceive that I was considerably peeved and cooled down a bit. (26)

Although we do not know what boorish remarks got her “back up,” we can imagine Eliot's frustration in being examined by a physician who never had to meet

**Figure 2.** Medical staff, St. Louis Children's Hospital, circa 1919.



Martha May Eliot is in the first row, farthest to the right. (Reproduced with permission from Bernard Becker Medical Library, Washington University School of Medicine.)

**Figure 3.** Martha May Eliot (*front row, second from right*) on the pediatrics faculty at Yale University Medical School, 1921.



(From Schlesinger Library, Radcliffe Institute, Harvard University.)

any of the standards himself and yet failed to take her seriously. Eliot's letters demonstrate that despite the increased demands, she agreed with reformers who saw the need for a standard set of examinations, in terms of both her career as a woman and the profession at large.

## TIME ON THE WARDS

Sitting for examinations was one way Eliot established herself as an accomplished and elite professional in her career. Long hours on the wards and advanced training positions in clinical programs were other ways. After graduation, Eliot applied for a residency position at Johns Hopkins; however, the school accepted only 1 woman in its postgraduate programs at a time, and her application was denied (19). Instead, she worked for a year on the general practice wards at the Peter Bent Brigham hospital, then moved on to a residency program at St. Louis Children's Hospital.

At St. Louis Children's Hospital, Eliot lived a resident's life similar to the one we know today: working long hours, expressing uncertainty about performing difficult procedures, getting little sleep, and having few social outlets. As only the second woman resident ever hired to train at the hospital, Eliot recounted being repeatedly mistaken for a nurse or a patient's mother, and even a case in which a taxicab driver refused to drop her at the physicians' entrance because he did not believe that she was a physician (27). In her letters, Eliot expressed pride in her energy, toughness, and developing expertise. As a resident, she negotiated a complicated network of physicians, nurses, and patients, carefully currying favor with those ahead of her in the hierarchy and showed impatience and sometimes disdain toward those beneath her, all while tending to patients.

In one letter, Eliot tells her mother:

I had a wild night last night, getting to bed at 12 and up again at 2. One of my babies that we had kept going for 9 weeks, decided it had gone long enough, and died despite of all effort. When they get to a certain point there doesn't seem to be anything more to do. (27)

Here, Eliot struggles to accept that many of the infants at the hospital would die. Although she continued to consider these deaths tragic, she soon understood that they were part of her work. Just a few months later, Eliot was imbued with much more confidence and a resignation when she wrote:

There is nothing particularly new at the hospital. I lost my second child to diphtheria last night—a cunning little girl of 5—who had only been sick 48 hours. It is fearful when you have to stand by and know there is nothing more you can do—I hope I shall get a number of diphtheria cases so as to have as much experience with them as possible. It is no easy trick to put the tubes up their larynxes when they get all filled up—and it is something one can only learn by trying and yet all the time you have the feeling that someone who knows how ought to be doing it so as to get it done quickly. (21)

Eliot expressed hope in learning from these deaths so she could better treat future patients. Here and in many of the letters home discussing her years in residency, Eliot has faith that time and experience will allow her to develop the skills she will need to be a capable, successful physician and to secure further positions within academic medicine. She was forthright about leveraging her experiences into future opportunities, an attitude that would become typical of students in the decades to come.

## TRAINING OTHERS

By the end of her residency, Eliot was casting about for career opportunities. She hoped to be offered a position on the faculty at St. Louis Children's Hospital but grew impatient with her supervisor's ambivalence over hiring a woman. Instead, she returned home to Boston to begin a private practice (18). She quickly decided that she was not suited to this, however, and later that year accepted an offer to join the pediatrics faculty at Yale (Figure 3). There, she began research on rickets with her mentor and collaborator, Dr. Edwards Park, resulting in their definitive papers on light and vitamin therapy and launching her reputation in the public health field (28). She also became a mentor to younger, usually male physicians, encouraging them to study and admonishing them when they exhibited less than total dedication. For example, in 1921, newly ensconced in the pediatrics department at Yale, Eliot

wrote of the difficulties of training new doctors, saying, "I have been tremendously busy these three days breaking in two new interns neither of whom know one thing about hospital work" (29). Her feeling of responsibility over managing her students mirrored that which she felt toward her patients. In November 1922, she was accustomed to working with interns. "We have one new intern who seems very nice and is quite willing. If he doesn't get under the influence of the other two obstreperous ones all will be well," she wrote (30).

A year later, Eliot discovered a talent for resolving problems on the staff. In an evocative account from 1922, she wrote, "The wards are very very light—too light for the pleasure of the interns. I soon perceived by some mental telepathy that there was an undercurrent of dissatisfaction originating in one of the new men and kept up by the other, and so deciding that it was better aired we had a Sunday airing and today the atmosphere is as clear as a September day should be" (31). Eliot's supervisors recognized her talent for management and soon charged her with keeping things running, of which she relayed another colorful story:

We have had a number of new patients and there is a lot to be done and seen to. I have to stick around pretty close in order to keep things moving smoothly. I went to a concert last Friday but had to leave after the first song to collect the wreckage after a scrap between one of our [pediatric] interns and a surgical intern, who were each trying to resuscitate a child with a post tonsillectomy hemorrhage but who wished to each have his own way! So it goes! (32)

Here, the once-daunted Dr. Martha May Eliot was confidently breaking up fights between students, managing her own team of interns, and regularly assuming the part of qualified medical authority over her hospital and staff. She had completed all of the major steps of medical education that reformers had laid out a decade earlier. After completing rigorous undergraduate and graduate studies, she followed up with licensing examinations, an internship, a residency, laboratory research, and a faculty position. She meticulously documented these events to her parents, providing a rare example of a female physician's experience of the medical profession. Eliot's extensive correspondence with her parents offers historians and clinicians alike a deep perspective of this era in the history of medical education.

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