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IN DEPTH ARTICLE: COMMENTARY

The Opioid Epidemic as a Watershed Moment for Physician Training in Addiction Medicine

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Since at least 1784, when the American physician, civic leader, and iconoclast Benjamin Rush first published *Inquiry into the Effects of Ardent Spirits on the Human Mind and Body*, individuals inside and outside of medicine have advocated for the recognition of addiction as a disease meriting medical treatment. In medical schools and residencies, Rush's plea fell largely on deaf ears. Medical schools have historically provided little in the way of training for the diagnosis and treatment of addiction. According to the 2012 National Center on Addiction and Substance Abuse report, most medical schools offer only a few hours of addiction training over 4 years [1]. The opioid epidemic, however, which now exceeds HIV/AIDS in its catastrophic effects, has rattled the medical establishment out of complacency, providing new opportunities to equip American physicians with the knowledge to respond to addiction as a legitimate and treatable medical disorder.

This paper reviews milestones in addiction medicine training over the last 15 years at the medical school and postgraduate training (residency/fellowship) levels. We also discuss ongoing obstacles to implementing addiction medicine training, including lack of time for new curricular content, the paucity of a trained workforce to teach students, and the need for incentives to encourage fellowship participation. These obstacles can be overcome by curricular innovation and by advocating for public policies that increase resources for addiction medicine training and care provision.

Milestones in Medical Schools

Medical schools have neglected addiction medicine training and medical students often graduate without the knowledge or skills to target substance use problems in their patients. Private addiction treatment organizations have endeavored to fill the gap. For example, the Hazelden Betty Ford Summer Institute for Medical Students (SIMS) has provided an immersive weeklong educational program for medical students for many years [2]. Independent professional bodies like the American Society of Addiction Medicine (ASAM) and the California Society of Addiction Medicine (CSAM) have also been providing educational opportunities in addiction medicine for practicing physicians for at least the last half century. ASAM and CSAM have developed curricular content in the form of annual review courses, textbooks (e.g., *The Principles of Addiction Medicine*), and most recently, online educational material.

Since 2015, there has been a surge in the number of published papers and reports focused on the need for addiction training at the medical school level, in large part in response to the opioid epidemic and in recognition that doctors have been complicit in the epidemic through opioid overprescribing [3]. For example, the Massachusetts Department of Public Health, in combination with Boston, Harvard, Tufts, and University of Massachusetts medical schools and the Massachusetts Medical Society, published a report in 2015 on "Medical Education Core Competencies for the Prevention and Management of Prescription Drug Misuse" [4].

The growing drumbeat for a model addiction medicine curriculum for medical students has motivated action at the highest levels. Representatives from leading addiction organizations around the country along with deans from major medical schools gathered in 2015, 2016, and 2017 at the White House to discuss the urgent need to train more physicians in addiction medicine. In 2016, President Obama's White House Office of National Drug Control Policy (ONDCP) asked medical schools across the country to publically pledge to teach safer opioid prescribing. Sixty medical schools signed this pledge. Those that did not cited their reluctance to have medical education dictated by federal mandates, but soon thereafter, many of the schools that declined the ONDCP pledge signed a similar

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pledge by the American Association of Medical Colleges (AAMC).

Although precise data on the actions medical schools have taken to fulfill these pledges are lacking, anecdotally many schools are working on implementing curricular changes to target safer opioid prescribing and improve addiction training more broadly. Of note, medical students themselves, as well as patient advocacy organizations such as *Facing Addiction*, are also pressuring medical schools to improve physician training in addiction medicine, a demonstration of unprecedented grass-roots advocacy in the face of a growing public health crisis.

Milestones in Fellowships

In 1991, the American Board of Psychiatry and Neurology and the American Board of Medical Specialties (ABMS) recognized "addiction psychiatry" as a legitimate area of subspecialty training, thereby justifying the first fellowships for physicians seeking to specialize in addiction. By 1997, there were 13 addiction psychiatry fellowships across the country; today there are 47 [5]. These fellowships provide an additional year of post-graduate training to psychiatrists who have completed medical school and an accredited residency training program in general psychiatry.

The creation of addiction psychiatry fellowships was a major advance in the history of addiction medicine education. However, these programs did not allow enrollment by trainees from specialty areas outside of psychiatry. By the end of the 1990s, educators began advocating for the creation of addiction *medicine* fellowships that would train physicians across many different medical specialties, including but not limited to psychiatry. The rationale for such training was compelling: substance use disorder patients present not only in mental health clinics but also in a range of other settings, including primary care offices, pediatric clinics, emergency rooms, trauma units, and maternity wards. To effectively care for this prevalent population throughout the health care system, physicians across medical specialties must know how to screen, recognize, prevent, and treat substance use disorders.

To that end, the Addiction Medicine Foundation (TAMF; formerly The American Board of Addiction Medicine Foundation) was founded in 2007, with a mission of establishing high-quality, sustainable addiction medicine fellowships for any physician who has completed an Accreditation Council for Graduate Medical Education (ACGME) or American Osteopathic Association (AOA) accredited residency in any specialty.

Today, 55 addiction medicine fellowships across the country are accredited by TAMF. The rapid expansion of addiction medicine fellowships is a testament to the advocacy and vision of TAMF, which understood the pressing public health need for substance use disorder care and the imperative for a trained work-force able to provide addiction treatment, train other physicians in addiction treatment, and push for policy changes to make this care possible.

Addiction medicine fellowships were still not recognized by the ABMS or by the ACGME when TAMF was created. Recognition from these bodies is the gold standard for fellowship education. Recognition paves the way to funding opportunities that are otherwise unavailable, makes fellowships more attractive to applicants who want the imprimatur of ACGME to legitimize their training, and creates the opportunity for ABMS Board certification at the end of the fellowship.

This all changed on October 23, 2015, when addiction medicine was recognized as a medical specialty by ABMS under the auspices of the American Board of Preventive Medicine. This recognition from ABMS made it possible for addiction medicine fellowships to become eligible for accreditation by the ACGME starting in 2018. The American Board of Preventive Medicine was prescient in their willingness to sponsor addiction medicine fellowships, as addiction is increasingly viewed as a developmental disorder, with primary and secondary prevention being powerful protectors against later development of the disease.

Ongoing Obstacles to Implementation of Physician Training in Addiction Medicine

There are three major obstacles to the implementation of improved education in addiction medicine for medical students and physician trainees, even with growing momentum advocating for this change. The first obstacle is the lack of time in medical schools and residencies for the addition of new content, as this cohort of learners is already oversubscribed. The second obstacle is the limited size of the trained workforce available to teach medical students and residents. There are not enough so-called "attendings" to provide the lectures and more importantly, the on-site clinical mentoring at the heart of medical education. The third obstacle is fellowship recruitment, incentivizing, and inspiring residents to spend the additional year or more in a fellowship. We now turn to how these obstacles can be overcome through clinical innovation and responsive public policy.

Acquiring curricular real estate is a major challenge when attempting to add new content to medical education. Departments throughout medical schools are territorial about the time they have to teach medical students. Even though every single specialty in medicine deals with addicted patients, departments may see the inclusion of addiction content as taking away their didactic and clinic teaching time. So-called "teaching blocks," a period of days to weeks set aside exclusively for teaching a single subject, are particularly hard to come by. Educators working to create a more robust

addiction medicine curriculum, or any addiction medicine curriculum at all, are encountering the simple obstacle of not being given enough time beyond an hour here and there within a larger teaching block belonging to another department.

Even with additional hours interspersed across different medical specialties, creating a continuous, recognizable, and memorable addiction medicine curriculum over a discontinuous time frame is challenging. Students often experience discontinuous curricula as less effective than block schedules. To overcome the problem of discontinuity and create a more effective and interactive curriculum, we are collaborating with our Educational Technology department to create a recognizable brand for the addiction medicine curriculum. The brand is founded on a single case that weaves its way in and out of every lecture, and a final exam taken online that targets learning objectives from each didactic.

Another approach is to embed addiction medicine curricular content into the pre-existing curriculum by presenting patient scenarios in which substance use is a complicating factor. For example, a cardiology instructor might be willing to include a case of treatment-resistant hypertension secondary to heavy drinking, a pain medicine instructor might be willing to include a case of chronic pain co-occurring with opioid misuse, and a pediatrics instructor might be willing to explore a case of childhood asthma exacerbated by parental cigarette smoking. The potential challenge here is that the instructing cardiologist, anesthesiologist, and pediatrician may not be well versed in treating addiction, and hence, the relevant curricular material may not be taught with the depth of understanding or inspirational calling (which is so vital to medical students choosing their future field of medicine) that a clinician who specializes in treating addiction could bring. Collaboration between specialties always makes for powerful teaching (e.g., the anesthesiologist and the addiction medicine specialist could teach the case together), but in today's overbusy world, the logistics of this kind of team teaching become challenging if not impossible.

The shortage of qualified physician attendings knowledgeable in addiction medicine recognition and treatment is another obstacle to improving education in addiction medicine. This lack of skilled practitioners at the attending level has become particularly concerning with the opioid epidemic, as residents are reduced to googling "opioid withdrawal" in an effort to acquire knowledge that they have been unable to obtain from their supervising doctors [6]. Over the coming decades, this skilled work force will be expanded through addiction fellowship training, but we cannot afford to wait for enough trainees to go through fellowship. In the interim, continuing medical education programs, together with the innovative use of technology, can help fill the gap. Project Echo offers tele-health education with addiction experts consulting in real time on challenging cases. Attendings, residents, and medical students can leverage their new-found knowledge with the next patient who presents in a similar way and can pass their knowledge on to others in their institution [7].

Recruitment for addiction psychiatry and addiction medicine fellowships is an enduring challenge across the country. Interest has picked up in recent years with the growing awareness of the opioid crisis and the strong sense of social justice among contemporary medical students and physician trainees. Nonetheless, residents are reluctant to spend an additional year training in a low-prestige specialty at a lower salary than they could make if they entered independent practice. A medical school loan reimbursement program offered in exchange for doing a fellowship in addiction medicine and then spending a year or two practicing addiction medicine in an underserved community would be a useful initiative to explore. We are aware of at least one member of Congress who is working on proposing legislation along these lines.

Lackluster fellow recruitment sometimes stems from poor coverage of substance use disorder care by insurance plans, which limits the number of attractive employment opportunities available to graduating fellows. The health insurance landscape for addiction is infinitely better than it was a decade ago due to federal legislation increases in addiction-related coverage in Medicare, Medicaid, employer-provided insurance, and on state-run health exchanges [8, 9]. However, the full range of substance use disorder services recommended by the American Society of Addiction Medicine is not covered by health plans in all states [10]. Attaining this should be an advocacy goal both for the benefit of patients and for the viability of the training of addiction medicine physicians.

In conclusion, were Benjamin Rush magically transported to 2018, he would be both demoralized and inspired by what he found. He would be demoralized that it took more than 200 years for medicine to recognize addiction as a disease, but heartened to know that at least some people struggling with substance use problems are getting the help they need. Most importantly, Dr. Rush would applaud the increasing incorporation of addiction medicine training into medical schools, residencies, and fellowships. If there is a silver lining in the terrifying storm cloud of the opioid epidemic, it is that medicine is finally taking Dr. Rush's vision seriously and launching a new age in training for physicians in addiction medicine.

Compliance with Ethical Standards

This commentary did not involve human subjects.

Disclosure On behalf of both authors, the corresponding author states that there is no conflict of interest.

References

1. CASAColumbia, ed. Addiction Medicine: Closing the Gap between Science and Practice. Published 2012. Available from:

https://www.centeronaddiction.org/addiction-research/reports/addiction-medicine-closing-gap-between-science-and-practice. Accessed 1/30/18.
2. The Hazelden Betty Ford Foundation. Summer Institute for Medical Students (SIMS). Available from: http://www.hazeldenbettyford.org/education/medical-professional-education/summer-institute-medical-students. Accessed 1/30/18.
3. Lembke A. Drug Dealer, MD: How doctors were duped, patients got hooked, and why it's so hard to stop. 1st ed. Johns Hopkins University Press; 2016.
4. Antman KH, Berman HA, Flotte TR, Flier J, Dimitri DM, Core Competencies BM. For the prevention and management of prescription drug misuse: a medical education collaboration in Massachusetts. Acad Med. 2016;91(10):1348–51. https://doi.org/10.1097/ACM.0000000000001347.
5. Accreditation Council for Graduate Medical Education. Addiction psychiatry programs: academic year 2017–2018. Available from: https://apps.acgme.org/ads/Public/Reports/ReportRun?ReportId=1&CurrentYear=2017&SpecialtyCode=401&IncludePreAccreditation=false. Accessed 1/30/18.
6. Chen J. The patient you least want to see. JAMA. 2016;315(16):1701–2. https://doi.org/10.1001/jama.2016.0221.
7. Komaromy M, Duhigg D, Metcalf A, Carlson C, Kalishman S, Hayes L, et al. Project ECHO (extension for community healthcare outcomes): a new model for educating primary care providers about treatment of substance use disorders. Subst Abus. 2016;37(1):20–4. https://doi.org/10.1080/08897077.2015.1129388.
8. Humphreys K, Frank RG. The Affordable Care Act will revolutionize the care of substance use disorders in the United States. Addiction. 2014;109(12):1957–8. https://doi.org/10.1111/add.12606.
9. Humphreys K. Growth in Drug Treatment Has led to more innovation. New York Times. 2016. Available from: https://www.nytimes.com/roomfordebate/2014/03/17/lowering-the-deadly-cost-of-drug-abuse/growth-in-drug-treatment-has-led-to-more-innovation. Accessed 1/30/18.
10. Grogan CM, Andrews C, Abraham A, Pollack H, Smith B, Humphreys K, et al. Survey highlights differences in Medicaid coverage for substance use disorder treatment and opioid use disorder medications. Health Aff. 2016;35(12):2289–96. https://doi.org/10.1377/hlthaff.2016.0623.