

Opium Eating in Vermont: "A Crying Evil of the Day"

In 1900 Dr. A.P. Grinnell surveyed druggists, general store owners, physicians, wholesalers, and manufacturers of opiates in Vermont on their sales of opium and opium products, then made his grim assessment that Vermonters consumed an incredible 3,300,000 doses of opium each and every month. The numbers were simply staggering.

By GARY G. SHATTUCK

In every corner of our state, heroin and opiate drug addiction threatens us. It threatens the safety that has always blessed our state. It is a crisis.

Governor Peter Shumlin, 2014¹

[T]here is more morphine, chloral, opium and kindred drugs consumed in our state per capita than in any other state in the Union.

Percival W. Clement, 1902² Gubernatorial candidate

Vermont expect[s] her Senators and Representatives to be at their posts, with clear heads, and steady nerves, and strong hearts, to do their duty.

Governor William Slade Jr., 1846³ Opium eater

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f opiate addiction in Vermont in the twenty-first century is of particular moment, it is not at all a new problem. At the end of the nineteenth century the use and abuse of opiates in the state was nothing short of remarkable. A reliable but conservative estimate revealed that Vermonters in 1900 were ingesting 3,300,000 doses a month, enough to provide one and one-half doses of the drug to every adult man and woman every day of the year.⁴ With no sign of the problem abating any time soon, it is clear that a deep addiction to one of the strongest narcotics known existed well over a century ago in the Green Mountains.⁵

Dr. Ashbel Parmlee Grinnell, professor and dean of the University of Vermont Medical Department and consulting physician to the Mary Fletcher Hospital, bore the grim news in 1900 when he introduced to the public his appropriately titled report, "Use and Abuse of Drugs in Vermont." He based his findings on a comprehensive and wide-ranging survey of a substantial number of the state's druggists, general stores, physicians, and manufacturers in the waning months of 1899, seeking information on the extent of their sales of various drugs, including opium, morphine, laudanum, and cocaine. Because many were suspicious of Grinnell's motives, not all of them cooperated, leading him to suspect that even the 3,300,000 dose figure was low and that a more accurate result could be obtained by multiplying that number by a factor of five. The results were simply incredible.

Grinnell was not alone in sounding warnings at the time. Two years earlier, at their 1898 annual meeting in Montpelier, members of the Vermont State Pharmaceutical Association listened to Dr. J. C. F. With present on opium as he put a startling face on the state's addiction problem:

We have all of us had our experiences with the opium and morphine user. They enter our stores, and under one pretext or another call for the article.... I have seen a man get from a druggist an eight-ounce bottle of laudanum, tear the wrapper off and deliberately drink half the contents. I looked on in amazement, thinking surely it was a deliberate attempt at suicide; but it proved not so, for it simply quickly restored the man to a normal condition, whereas he was fearfully nervous and agitated when he entered.⁷

With noted further that "country localities" consumed the bulk of these drugs, finding it strange that a druggist in New York or Boston required only five ounces of morphine for an entire year when so much more was needed in a rural setting. It all seemed so incongruous in the context of what Vermont had to offer. "One would think the human mind more equally balanced," he said, "where God's free nature, green and fresh, surrounds us, and where life is not rushed out of the body and the candle burned at both ends, as in our city life. Country villages and farmhouses seem to furnish the greater number of users, and why this is so let anyone tell."

The efforts of people such as Grinnell and With were not without results, for the times were ripe for legal reforms to curtail rising addiction rates. Testimony before Congress showing that opium consumption increased 351 percent between 1869 and 1909 underscored widespread recognition of a growing national crisis.⁸ Inherent conflicts rooted in a federal style of government giving states the responsibility to police their own internal affairs, which resulted in a laissez-faire attitude toward virtually anything related to health care, lay at the heart of the opiate problem allowing it to develop to the devastating proportions witnessed in Vermont.

Other states certainly shared a similar situation, but, as described herein, the environment in which the drug gained a foothold that was then exploited to such a pervasive presence made Vermont's experience significantly different from the others. Widespread, unrestricted access to opium and morphine was the norm for much of the nation at the time. In Vermont, however, a struggling state medical establishment, constantly at war with itself throughout the first half of the nineteenth century, set the stage for allowing addiction to take hold and grow. The problem advanced to even higher levels following Vermont's prohibition of the manufacture and sale of alcohol in 1852. Then, persistent and egregious failures by the legislature to take responsibility in ensuring the competencies of the medical and pharmaceutical professions allowed others to exploit that vacuum to hawk their many bogus opium-infused patent treatments on an unsuspecting population. Collectively, their neglect only exacerbated Vermonters' dependence on the drug as they sought to administer their various folk remedies and feed their silent addictions, many caused in the first place by irresponsible, over-prescribing doctors. Virtually none of this information has found a place in the state's vast historiography, and in order to understand now the critical situation at the time of Grinnell's explosive report, one must look back over the preceding one hundred years.

OPIUM'S ALLURE

Opium (Homer's "nepenthe") stands out unquestionably as the most important weapon in the *materia medica* of its day. Its analgesic ability to remove pain and calm a patient in a state of distress, thereby allowing needed rest (albeit, following a period of exhilaration) to per-

mit healing to begin, made it an attractive remedy for many ailments. In the hands of a competent medical practitioner it was administered in measured amounts at various stages of illness in order to alleviate particular symptoms. Huge doses of the drug were also fed to individuals (which too often also included doctors) suffering from the fits, spasms, and hallucinations experienced while in the throes of delirium tremens. The reliable results that opium, and its derivative morphine, delivered allowed it to gain easy access into mainstream American culture, where it also became known derisively as "the quack's sheet anchor" for its unquestioned presence in so many of the unregulated concoctions made available by those with more interest in their customers' money than in their health. Unfortunately, the opium they all pedaled was also attended by the serious health hazards that the accompanying euphoria, addiction, and tolerance produced through its use.

The refined product of the plant *Papaver somniferum*, or poppy, virtually all of the opium used in America in the early nineteenth century originated in Asia Minor and the subcontinent. Known commonly as Turkey or Smyrna (reddish brown in color), and East India opium (almost black), the compressed cakes of the odorous, nauseating, bittertasting drug, covered with leaves and poppy petals, entered into the nation's stream of commerce eventually arriving in remote Vermont towns, where they were sold to physicians and common folk alike. Notwithstanding the several Latin names the medical community attached to it (*Opium purificatum*, *Extractum opii*, *Pilulæ oppi*, *Tinctura opii*, *Confectio opii*), the public came to know it simply as "laudanum [opium mixed in wine], the black drop, or acetate of opium; the Dover's Powder, and Paregoric Elixir [camphorated opium]," made available in the form of pills, tinctures, confections, electuaries, and anodynes.¹¹

In his comprehensive, 419-page *Sketches of Epidemic Diseases in the State of Vermont, from Its First Settlement to the Year 1815*, the highly esteemed Dr. Joseph A. Gallup (1769-1849) conducted an exhaustive review of virtually all outbreaks of disease in the state up to that time, describing in detail the various peculiarities of each and their treatment. On October 10, 1822, upon his election as president of the Vermont Medical Society (VMS), Gallup provided additional insights into the treatment of disease and then proudly watched as society members voted his book "made requisite for students to read in order to admit them to an examination" before being allowed to practice medicine. In each of these works, Gallup made several references to the use of opium; but he did so cautiously, in full recognition of its extreme potency, anxious that it be closely monitored whenever it was used.

In spite of Gallup's concerns, it is clear that opium retained a prized role in Vermont society outside of the medical arena, a fact made clear by fellow professor and a co-founder of the Castleton Medical Academy, Dr. Selah Gridley. In 1816, Gridley had occasion to speak before the VMS at its annual meeting in Montpelier on "The Importance and Associability of the Human Stomach," revealing yet another aspect of the drug's benefits:

Does any one ask, what constitutes the pleasure of existence? I answer, it consists of a pleasant and easy action of the stomach, and other organs immediately associated with it. Do any doubt the truth of the position? I reply, when the stomach is duly excited by food, by wine, by opium, and by tea, the highest degree of corporeal, moral and mental happiness is enjoyed. It is in this state only, that the person feels social pleasure, or exercises, in perfection, the faculties of taste, judgment and reason. In this state only, man delights in action and business, or reclines himself into rest and sleep. ¹⁴

In acknowledging that opium held equal sway with other stimulants affording "social pleasure," Gridley's important admission suggests that many in Vermont were willing to tread the fine line the powerful drug demanded as they sought the euphoria it provided. Certainly a two-edged sword, opium was a tiger demanding great respect, responsible for turning upwards of 16 percent of the nation's physicians, a disproportionate number of them working arduously in the countryside, into addicts by century's end. ¹⁵ Unfortunately, at this much earlier moment many frontier physicians had already set off on that path, possessing a reputation for intemperance exceeding that of any other profession. ¹⁶

The wide-ranging effects of opium were only then becoming more commonly known, but principally within the nascent medical community that Gallup and Gridley occupied. There, debates raged among the well-intentioned, though frequently woefully uneducated, members of Vermont's second generation of doctors attempting to understand whether, because of the drug's conflicting results on a patient, it served as stimulant or sedative. At the same moment Thomas De Quincey's explicit Confessions of an English Opium-Eater describing his various pleasant debaucheries under its influence (mainly laudanum) was released in London in 1822.17 There, such questions as the Vermonters sought to answer were simply irrelevant to the common folk who knew full well the pleasures opium delivered. By then, the drug had become so entrenched in London's environs that local druggists supplying De Quincey told him the number of "amateur" opium eaters (compared to his voracious appetite) was "immense." It was so large that "on a Saturday afternoon the counters of the druggists were

strewed with pills of one, two, or three grains, in preparation for the known demand of the evening" when factory workers appeared at the end of their work day.¹⁸

Vermonters' own opium dependency never attained the degree of openness that Londoners witnessed, but it did become every bit as voracious. Unless they traveled to a large far off city to obtain life's necessities, inhabitants on the frontier in early nineteenth-century Vermont depended wholly on the local general store. There, they could fulfill most of their needs and speak with an untrained clerk selling them the drugs they desired while dispensing similarly untrained advice in their use. Period newspapers are replete with advertisements for drugs: in Middlebury, "Pomeroy & Williams, have just received . . . an extensive assortment of Drugs & Medicines," including various patent medicines (Hooper's Pills, Anderson's Pills, Lee's Bilious Pills, Bateman's Drops), together with "Opium Turkey";19 in Peacham, Elisha Phelps sold crockery, dyes, paints, and a vast number of drugs including opium;²⁰ in Brattleboro, Arms, Clark & Co. offered another huge selection of drugs, including opium, together with groceries, paint, and dye, while further directing the attention of "Physicians and heads of families in particular" to the fact that they took particular care in providing drugs of "superior quality."21 If people wanted these products for any reason for themselves, their families, or even to treat their sick or injured animals, nothing prevented them from buying them.

Walking into one of these stores could be an eye-opening experience. First, they acted as the only local point of sale directly to physicians purchasing the raw products, frequently of inferior quality, for their practice. The doctor then returned to his home or office, where he maintained a "miniature apothecary" and "supplied his spacious saddlebags each morning, or answered calls for Epsom Salts, Senna, Essences or Paregoric from the families around him."22 That practice persisted for decades into the 1870s, when the Vermont Pharmaceutical Association (VPA) sought to implement a written prescription system, only to run into resistance from doctors uninterested in change, clinging to their old ways and finding still "many of our physicians who prefer to carry their score or two of drugs, and dispense them in a manner repulsive to delicacy and refinement." 23 And when those many drugs were called upon, only a few actually served their purpose, as "Calomel, Opium, Tartar Emetic, and the Lancet formed the four corner-pillars" of medical practice.

If a customer chose to make his purchase personally rather than from a doctor, he went to the store's "drug department" for the transaction, described by the VPA's president Dr. C. L. Case, as:

a curiosity; it was the *dirtiest* part of the whole establishment; its smell overpowered that of the tobacco, codfish and bad whiskey. It was a heterogeneous array of paper bundles, densely covered with dirt, mingled with bottles of all forms and sizes, well coated with a mixture of the contents and dirt, having labels with mis-spelled English and worse Latin, and no labels at all. From these were dispensed picra, oil of spike, laudanum, paregoric, and sundry other villainous compounds.

The tinctures were never filtered, and never of any definite strength. A coating from half an inch to an inch thick ornamented the counter on which every drug in the establishment was represented. Mortars, graduates, and other implements, if there *were* any, were rarely, if ever, washed, and a general air of filth and slovenliness pervaded the whole concern. . . . The compounds dealt out to their patients were prepared in the most crude manner, and often so nauseous and disgusting that the remedy was indeed "worse than the disease." . . . I have seen a pill mass dispensed on an old bit of a written sheet of paper, which had served a child as a writing book at school, and the patient directed to *pill* it out for himself.²⁴

Given the off-handed, careless manner in which medicines were handled early on, allowing for extraordinarily free access to drugs in general, and opium specifically, it is hardly surprising that stimulant-seeking Vermonters' obsession with them developed in the first place, and then only increased with the passing years.

BIRTH OF ADDICTION

The dangers presented by the possibility of opium addiction, or "habit" as it was called, were certainly well known in America before De Quincey's 1822 revelations. One 1803 writer described "its effects on those who are habituated to its use, being, in many respects, analogous to the operation of wine. It produces pleasing sensations, exhilaration of the spirits, and makes them gesticulate in a variety of ludicrous forms, and in a word to act like men intoxicated with vinous liquors." After noting similar effects (a feeling "as though they were in heaven"), two Philadelphia medical students admitted in 1792 that it could easily be used to escape life's difficulties, because "opium may bring pleasure by suspending these many little uneasinesses." However, in 1806 the first edition of the important *American Dispensatory* cautioned that "the habitual use of opium produces the same effects with habitual dram drinking, tremors, paralysis, and stupidity, and like it can scarcely ever be relinquished."

Opium enveloped all ages of Vermont's population. In 1817 a Bennington newspaper published the impressions of one individual assuming an early temperance stance, bemoaning the way children became

indoctrinated to the use of ardent (distilled) spirits, wine, bitters, and sling (water and spirits), resulting in their habitual use in the same way as snuff, opium, or chewing tobacco.²⁸ Eventually, as children took up the habit alongside their parents, the use of narcotics became an accepted fact of everyday life simply because it was "a very common and agreeable stimulus."²⁹

Opium's acceptance within the community continued and managed to withstand the firestorm that erupted in 1828 with the formation of the Vermont Temperance Society, which focused its efforts on alcohol. Pride of place allowed it to escape close scrutiny because it had occupied a privileged, recognized role in the treatment of illness for a much longer time than ardent spirits, whose more recently sanctioned production resulted from zealous Washington, D.C. advocacy perpetuating its use and allowing substantial taxes to flow into the national treasury. As a result, opium, tobacco, and other addictive substances escaped limitation throughout the temperance years, remaining very much a part of everyday life and affecting the state's health well past the imposition of alcohol prohibition in 1852.

Another important factor contributing to the lenient atmosphere that allowed the use of opiates to accelerate was the lack of regulation of the medical profession itself. Joseph Gallup made this point in Sketches of Epidemic Diseases when he wrote that he wanted to "harmonize the vague and adverse practices, discoverable throughout the country, originating from a too successful promulgation of absurd and visionary theories, not conducive to practical utility."30 The need to address the "vague and adverse practices" of a rising generation of Vermont doctors resulted in the 1820 law, "An Act, regulating the practice of Physic and Surgery," which allowed the Supreme Court, with the advice of two or more "regular Physicians," to grant licenses to those seeking to practice medicine.³¹ Despite those good intentions, in 1825 the VMS was forced to admit that the problem remained, as the "scanty requirements" placed on applicants "tend[ed] to depreciate the reputation of the profession and to injure the community."32 The legislature's feeble attempts to monitor doctors were subsequently abandoned in 1838 when the licensing law was repealed, thereby allowing doctors to escape oversight until reforms were instituted in 1878.³³

The potential for opium abuse increased after 1838 not only because it escaped the attention of temperance advocates or legislative control of the medical profession, but also because the latter persistently failed to harmonize its own means and methods. First, in the years immediately following the divisive anti-Masonry movement that swept the state, medical practitioners' attempts to even associate with one an-

other raised significant suspicion. Many people believed that doctors wanted to exclude those not graduating from a medical college from their ranks, thereby invoking the dreaded presence of a monopoly of the rich over the poor: "They hate the *name*, but love the *thing*," one legislator said in support of abolishing the 1820 licensing law. But more importantly, physicians' own internal disagreements, such as their inability to reconcile conflicting empirical versus rationalist viewpoints in diagnosing ailments, was irksome to all. "The Faculty, as we all know, are at variance in regard to the origin and nature of diseases and their modes of treatment. Nor is there any certainty in their prescriptions or predictions," the legislator continued. Then, in ringing condemnation of the profession, he said:

Indeed, Sir, you may at any time put it to the learned Doctors themselves, and you will be satisfied of the extreme uncertainty of all their knowledge, by the disagreement and disputes among them in respect to the most common cases in practice. They are all licensed to practice, but a great majority of them must necessarily be unsound in their notions. With what propriety, then, do you give a monopoly of practice to a class of men, who, for aught you know, are all wrong, and of whom eight in ten, as you certainly know, are guided by erroneous opinions?³⁴

Agreeing that the population needed to be freed from the tyranny that that medical profession posed, another legislator expressed his belief that the people themselves knew what was best and that repeal would result in "leaving true knowledge to flourish, as it always best did, without restraints."³⁵

This was not the first time that the Assembly missed an opportunity to improve the quality of health care in Vermont. In 1798, Brattleboro's Dr. Samuel Stearns understood the medical community's dire need for a treatise covering treatment of the sick and approached it seeking authority to conduct a statewide lottery to facilitate publication of a first-of-its-kind medical compendium, "a Regular System of Pharmacy, Physic, and Surgery." Believing that such an effort would substantially improve the quality of care, Stearns explained it would be of great interest and use to physicians, surgeons, and apothecaries "in all the difficult and dangerous Cases, Operations, and Processes they May have to Encounter."36 Many other esteemed individuals throughout New England enthusiastically endorsed the project by providing testimonials of its worth. One Rhode Island doctor was emphatic that it should be allowed, stating "it is much better to have the Minds of Physicians illuminated, than to keep them groping in the dark for want of Information, wandering about with the Engines of Destruction, and Ignorantly Committing Slaughter and Depredation amongst their Patients."³⁷ Alas, Stearns's noble effort was denied.

Even though the legislature had abandoned its oversight of physicians, Gallup persisted in his attempts to convince his colleagues to unite. Unfortunately, in 1845 he was still railing at their continued disputes, now becoming even more disruptive as the proliferation of alternative methods of treatment offering offensive patent medicines, or nostrums, made inroads on an unsuspecting public. "Who shall we consider as of the profession, or what constitutes the profession?" he asked, lamenting that "the votaries of medicine are divided into as many sects as religion or politics." He went on to identify several offenders contributing to the problem, those practitioners of "refined quackery," including the homeopaths, hydropaths, steamers, and Thomsonians. ³⁹

Gallup also sought to try and assign appropriate blame for this seemingly never-ending discord, telling the profession to look first to itself for an answer and questioning whether "there is not a rottenness in Denmark?" And what effect was this "almost constant clashing" of ideas taking place within and without the medical community having on a bewildered public watching on the sidelines? His answer: "It is notorious that the most ignorant gossip will undertake to decide for them." He was right, for, in a state where some 80 percent of the population engaged in agriculture, many living in remote, hard-to-reach enclaves, and with limited educational opportunities, they naturally turned within themselves, to their comfortable, familiar traditions and folk remedies to satisfy their health needs.

What Gallup did not mention, but certainly could have, was an additional problem in the form of doctors' proclivities, themselves addicted to their own concoctions and also distributing them to their friends. While a student at Castleton's medical school, young Asa Fitch had no shortage of opportunities to experiment with fellow students on a variety of substances, purportedly in the name of advancing science, including the use of copious amounts of nitrous oxide, ether (available "as free as water"), and opium. Yet despite a rather bad experience the opium inflicted on him ("turns of nausea, retching, and eructation of air"), Fitch and his peers persevered and he documented additional instances of use.⁴⁰

For students at Dartmouth's medical school, including many coming from Vermont, matters of conscience arose in 1833, and again in 1835, over their own use of opium and providing it to others. Recognizing such actions as inconsistent with pledges of abstinence in their newly formed temperance society, they resolved to stop doing it.⁴¹ Early exposure to substances they might not otherwise have been drawn to, and

their unfortunate ready availability, afforded these young men with their own personal trials as they later plied their trade, with many falling victim to addiction.

Evidence of Vermonters' openness to the use of stimulants is present early on. In 1786, surveyor and self-professed doctor Eben Judd told of treating others with opium, and also described a visit with a doctor in Guildhall. "He told me a method of making Opium by Cuting of the tops of Popies and drying them and then boiling them [?] away."42 When a visiting New York physician attempted to administer a conservative course of treatment to an individual who had fallen victim in the disease period between 1810 and 1816, he met with strong opposition from local residents accustomed to remedies requiring the use of stimulants. As the doctor explained, "On inquiry what was to be done, the reply was, give opium, brandy, ardent spirits, wine, sweating These opinions generally prevailed among the people and the physicians. It was considered malpractice to neglect these remedies, or to use bleeding or other [methods]."43 It certainly required a strong will to refuse to do otherwise, but the stranger was successful in pursuing his chosen treatment on this occasion.

Pervasive self-diagnosing and medicating, or "dosing," by Vermonters without conferring with a doctor was widely practiced. As one Bennington paper reported in 1827:

One way in which the people become sick, is by doctoring themselves when well. Medicines were never designed for persons in health; and to them nothing on earth is more useless than a physician, or more detrimental than an apothecary's shop. And yet some will be continually dosing themselves with drugs and specifics, for fancied ailments, which a little more exercise and attention to diet would soon make them forget.⁴⁴

Dartmouth medical professor Dr. Reuben Mussey recalled these times when self-dosing, or "pill-drugging," was in strong evidence, and told of a young Vermont man consulting him for an ailment. "He said that he had taken *six hundred of Brandeth's pills* [a purgative] *within a few weeks* [emphasis in original]. I asked him if he thought he had derived benefit from them. He replied that he thought not, on the whole, but suspected he had been injured, as he had lost much strength." When asked why he continued to take them, the young man answered, "Because my way is to give everything a fair trial." In Middlebury, the respected local couple Charity Bryant and Sylvia Drake made free use of opium, morphine, and laudanum on many occasions, for not only themselves, but also in administering to the needs of family members, neigh-

bors, and friends. When their stores of drugs ran low, they readily replenished their stock from local doctors and apothecaries.⁴⁶

Additional problems occurred as well-intentioned mothers dosed their infant children without consulting a doctor "with paregoric, or Godfrey's cordial [containing morphine] or laudanum, to make them sleep and be quiet," only to have to then medicate them with "counter medicines" to offset any untoward condition brought on by the first administration.⁴⁷ In a telling condemnation of the practice, Addison County's widely respected Dr. Jonathan Allen told of children in 1829 refusing to drink their daily allotment of alcohol and being coaxed to do so through "the inviting influence of sugar." Then, he explained "[t]he same requisites are essential to induce children to take opium, tobacco, or most other medicines," with the result that the substances became "desirable as articles of living and even seem to constitute one of the necessaries of life." Fellow physician William Sweetser agreed that children were receiving harmful treatment from their parents and nurses and that "all the injurious consequences of the spirit and opium must result from its abuse."49

For one discerning local layman seeking to counter this harm it was enough to propose that the state's school districts create their own temperance societies to instruct children to ward them off the opium, tobacco, and alcohol habit: "Train up a child in the way he should go and when he is old he will not depart therefrom."50 But the odds of doing so were decidedly unfavorable when families living in the Vermont countryside, frequently destitute of sufficient means to afford the services of scarce doctors in the first place, continued with their own remedies. There was no shortage of information, both learned and unlearned, telling them what and how to do it. In nearby Washington County, New York, John Williams, identifying himself as a "doctor" who gained his knowledge "in the wilds of America, from the natives of the forest," penned his Last Legacy, and Useful Family Guide. Predictably, his wellintended suggestions simply repeated the treatments familiar to all, such as that for toothache, "take gum opium, gum camphor, and spirits of turpentine and rub them into a paste and apply it."51 More sophisticated instruction was also available, as shown by a Bellows Falls newspaper describing the arrival in 1830 of one of the more comprehensive authorities of the times, The Book of Health: A Compendium of Domestic Medicine, a London publication "with directions how to act when medical aid is not at hand." Various revisions were made by Boston physicians to adapt it to North American needs, thereby allowing anyone, whether living in an urban or rural setting, to ponder its 179 pages containing more than fifty references to opium.⁵²

Also stepping in to aid the medicine-imbibing community were the unregulated pharmacists themselves, frequently doing so in an open and aggressive manner far outstripping the efforts of physicians. In 1839, Portsmouth, New Hampshire, druggist and apothecary William R. Preston authored *Medicine Chests for Ships and Families*, which provides additional insights into the nature and quality of medical advice available to the public. According to Preston, the well-equipped home should possess no less than forty-five different drug preparations, including the ever-present opium-based Dover's Powders ("particularly recommended in rheumatism, dropsy, and other complaints where a free and copious perspiration is required") and laudanum ("be very careful in its use, as too large a dose might be attended with fatal consequences").⁵³

EXPLOITING QUACK MEDICINES

When Vermonters actually allowed a doctor into their home to attend to a loved one, they could expect to see a variety of competencies. Not all were as attentive or intellectually engaged in the measured application of drugs as Gallup, Sweetser, and Allen. Rather, the more common practice was that of the country doctor, someone such as Dover's Dr. Jedidiah Estabrooke, who took full advantage of opium's ready ability to turn a writhing, anguished patient into a docile, sleeping creature. Over the course of 219 pages of his journal kept between 1827 and 1853, Estabrooke reveals in cursory manner his normal routine as he entered, on literally hundreds of occasions, the names of patients, dates of attendance, and the type of drug(s) administered for their particular problem. Estabrooke made repeated references in one way or another to opium itself or some opiate-laced creation such as Dover's Powder, pills, or cough drops. Other remedies included paregorics, calomel (a mercury compound used as a laxative), and morphine.⁵⁴

Similarly, one of the Castleton Medical Academy founders, Dr. Timothy Woodward, also kept a journal between 1832 and 1835, revealing, once again, that opium and morphine were freely distributed to patients.⁵⁵ As Estabrooke had done, Woodward's entries show that he closely engaged with his patients, attended them on many successive days, and routinely delivered the same drug (most prominently opium on dozens of occasions) during the course of their particular ailment, perhaps a developing addiction. Many times he provided the drug to patients' family members when they came calling, presumably reporting they were doing so on their relative's behalf.

By the 1840s, the temperance movement's campaign to suppress the consumption of alcohol attained such success that those seeking alter-

native stimulants, simply turned to opium. While the western states had yet to experience the drug's dire effects (waiting only for the arrival of the railroad and Chinese workers setting up smoking dens), in the East it was another matter. There, as one observer wrote of those times, "It is scarcely extravagant to affirm, that not a physician with opportunities for judging, not a druggist can be found, but will tell you the demand for opium is growing extensively and alarmingly, now that liquors are so fiercely decried."⁵⁶

Evidence of opium's increasing prominence came from both Vermonters and those in other states. One physician-druggist in an unidentified New England city explained that beginning in the 1840s, his sales of opium went from fifty to 300 pounds a year and sales of laudanum increased four-fold. "About 50 regular purchasers come to my shop," he said, "and as many more, perhaps, are divided among the other three apothecaries in the place.... Small country dealers also have their quotas of dependents." Similarly, another noted "the opium-mania, far from being restricted within the purlieus of our cities and rural areas, is fast pervading the country-populations. Scarcely a village or a hamlet is to be excepted as unrepresented by its two classes of inebriates, the devotees to alcoholics and the more miserable slaves to opium." Indeed, Weybridge storekeeper Julia Thomson's 1846 account book confirms that fact when she recorded numerous sales of brandy, wine, and opium to Samuel Balon on several occasions. 58

Even more telling are the records of a single Middlebury storekeeper, and local physician, Dr. William Russel, who sold opium in various forms to more than four dozen people in the 1840s, several of them on numerous occasions.⁵⁹ Most notably, Amos Nichols, clearly an addict, purchased raw opium no less than an eye-popping 100 times. Also notable was a "Mrs. Brewster," who bought tea and brandy to accompany her opium elixir and paregoric. Shockingly, William Slade, past vice president of the Vermont Temperance Society and congressman (and member of the Congressional Temperance Society), was also one of Russel's opium customers. Between 1845, while serving as governor, and 1847, Slade purchased the drug on several occasions, in its raw state and also in the form of pills, black drops, and Dover's Powder, all accompanied by surprising entries for gin and bitters. It is not known if she had an addiction problem or used the drug solely to treat an ailment, but in 1856 Addison County doctors thought it noteworthy enough to point out that over the course of the preceding twenty-one years, or her entire adulthood, thirty-eight-year-old Sophronia Croix had spent a respectable \$22 every year on morphine, equating to the consumption of a staggering four pounds annually.60

Writing of the phenomenon in general, another writer noted that "opium is continually resorted to by many of both sexes, but particularly by females, and these of the higher circles, as a substitute for the stimulus ordinarily afforded by gin or brandy." 61 Their use was obvious, he said, for their very countenance changed as demonstrated by their "emaciation, and... dyspeptic symptoms, and gastric derangement." When the Temperance Society of the University of Vermont met in June 1841, they heard a similar reference in the preferences of the sexes, "the gentlemen to wine, and the ladies to opium."62 Others found that "All classes, in a greater or less degree, resort to it, as a solace in grief, a remedy for pain; to cheer the spirits, to brighten the intellect, to blunt morbid sensibility, to drown reflection, in short, to change and pervert our nature, and dim the reflection of God's image within us."63 Vermont children unable to escape the drug's ready presence in their lives simply had to acknowledge that reality. Indeed, they were expected to know how to spell "laudanum," that it was a noun, and that it was derived from opium.64

It is not surprising to see such accounts, considering the rapid increase in opium importation following its arrival in New England ports in sizable quantities in 1840. Beginning with 24,000 pounds, the quantities increased three and one-half times by decade's end to 87,000 pounds, then to 105,000 pounds in 1860 and 146,000 in 1867. By 1898 those numbers paled in comparison to the 565,317 pounds arriving in the preceding twelve months. In the last half of the century, opium imports increased three times faster than the growth in the nation's population, accelerating rapidly from 1,425,196 pounds in 1860s to 6,435,623 pounds arriving between 1900 and 1909.

While it is not possible to specify the numbers of deaths in Vermont attributable to the use of opium, the evidence of addiction and numerous suicides and accidental poisonings because of it is without question. While the state did not institute formal recordkeeping of its morbidity rates until 1857, statistics gathered after that date did not address drug usage *per se*.⁶⁸ Even had that information been sought specifically, it is highly doubtful the medical community would have cooperated in the effort, for it had a long history of concealing the true cause of death attributable to intemperate means. As William Sweetser sheepishly admitted in 1830, "Turn over the records of our hospitals and see how many of their inhabitants they owe to intemperance! But shall I proceed? Shall I withdraw the veil concealing from the public view the secret victims to this vice? Shall I tell how many deaths are continually occurring from intemperance, which are never referred to their true cause?" Not giving any indication of their numbers, he explained that

these secrets remained forever hidden. "The physician is a mournful witness of too many such cases, but they must lie deep buried in his own bosom." 69

For those dying because of opium, the form in which they ingested it made little difference. Vermont doctor J. D. Wood is representative of what physicians and druggists experienced in this regard. Upon relocating to the village of Brandon in 1838, he took out an advertisement announcing his arrival and noting that he had "Medicines of all kinds on hand (Quack Nostrums Excepted) which will be carefully compounded and prepared for the accommodation of those that may want."70 While newspapers continued to advertise opium's ready availability, a move was underway to make it accessible by other names in the form of patent, nostrum, or the "quack" medicines that Wood decried. As newspapers in Montpelier and Middlebury hawked "Dr. Mc-Munn's Elixir of Opium. Superior to Parigoric or Laudanum, or any of the preparations of opium" and the availability of twenty-five cases of Turkey Opium at New York City's H. H. Schieffelin & Co., others told of other seemingly innocuous compounds and mixtures offering relief from a variety of ailments.71

In Newbury, the entrepreneurial Dr. W. Henry Carter began offering his pulmonary balsam in the 1840s, proudly proclaiming it "A superior article for coughs, colds, asthma, and all pulmonary complaints" and that it was "Prepared from Vegetables Only." Omitting the fact that his concoction also contained morphine, he later confessed its presence in 1849. Disingenuously backtracking, seeking to save face and his reputation, Carter explained that he "never designed it to be a secret remedy or nostrum," pleading to his fellow doctors that "I deprecate secrecy in medical practice, and nostrum-making in any form, and with such I have nothing to do." 73

Efforts by the many profit-seeking opportunists like Carter, together with the effects of the temperance movement, are responsible for fostering the development of a vibrant quack medicine experience in Vermont. Whereas the medical community previously relied on the ills and injuries that inebriates brought their way for treatment, things changed so radically when the consumption of alcohol became unacceptable, publicly at least, that their practices fell off precipitously. When the Addison County Medical Society met in 1846, one of its members spoke and "animadverted very seriously upon the profession's countenancing or in any way promoting the use of nostrums, patent medicines, &c. which are calculated to deceive the people and often prove of most serious injury."⁷⁴ Others joined him in condemning the practice, but surely some paused to consider otherwise when an

other member seems to have recognized a tantalizing opportunity opening up before them. It was ironic, the account of their meeting relates, but "the true meaning of [his statement] was too plain to be misunderstood":

He remarked that he had been much gratified with the evening's discussion, that he believed that all of us had made a mistake on this subject. That only a short time since intoxicating drinks were sold promiscuously to every body in every village, public house and nook. Then, diseases were manufactured in abundance and we had business in plenty. That the temperance reform had nearly destroyed our business. He plainly saw, that by the use of nostrums, &c. we could again restore our business to its former abundance. All that we had to do was to encourage their use today and tomorrow the Doctor would be needed to remove the disease produced by the nostrum.⁷⁵

While it seems unlikely that a group of learned physicians would advocate the use of harmful nostrums, the "true meaning" of precisely that, an inference which "was too plain to be misunderstood," indicates they knew some would indeed do so. As those from within their ranks pushing the nostrum trade clearly demonstrated, there was money to be made and if the temperance movement had caused the degree of financial harm that the speaker described, then who among even themselves could resist the temptation to engage in that activity if the opportunity arose? Such a possibility is not unfathomable when one considers the several reprimands, suspensions, and dismissals taking place in various of the state's medical societies throughout the nineteenth century.

Certainly not all doctors were so inclined to misbehavior and in 1849, Brownington, Vermont, physician J. F. Skinner provided a succinct overview of the problem posed by incompetent practitioners selling their suspicious concoctions:

The facts are, that the influence of the press, and the influence and interest of the men of trade, are all enlisted in favor of quackery. Now the question is, shall the physicians of the country stand silently by, and see the game of deception played off, and quietly surrender the whole field to the occupancy of quackery; or shall they themselves engage in that most difficult and laborious part of professional labor, and prepare and furnish to the public good and efficient medicines, honestly and faithfully recommended, with plain directions for their proper use?⁷⁶

Skinner may as well have been whistling in the wind, for the patent medicine trade, riding high on opium's disguised presence, only accelerated as anyone with imagination, including doctors hawking their own concoctions or those aiding in their efforts, needed only to call a drug by some other name to dupe the public.

Bogus mixtures notwithstanding, even the product sold as authentic opium could not escape suspicion. In 1846, one investigator concluded that "There is no article in which frauds have been more extensively practiced than in opium [including] Turkey opium, the best kind in the market."⁷⁷ He explained that "one-fourth part generally consists of impurities" made up of "extracts of the poppy, lettuce, and liquorice, gum Arabic, gum tragacanth, aloes, the seeds of different plants, sand, ashes, small stones and pieces of lead." Even though Vermont passed a law in 1839 punishing the adulteration of any drug or medicine "as to render the same injurious to health," it appears to have had virtually no impact.⁷⁸ While other states had already taken similar action, they also recognized the increased dangers that poisons represented and placed restrictions on their sale. However, Vermont persisted in its inaction and failed to follow their example, eventually drawing the attention of the American Pharmaceutical Association in 1853, which noted that in "nearly all of the little stores in the villages throughout the state, arsenic, opium, and even strychnia are sold without being labeled."79 It is not known if such labeling would have saved the life of 42-year-old doctor and state representative from Bristol, William Cullen Warner, who suddenly died in Montpelier while attending the legislature in October 1846, but it could not have hurt. 80 Warner was alone in his Pavilion hotel room when he ingested a large dose of strychnine, apparently believing it to be morphine, in order to treat neuralgia pain, expiring in ten minutes time.

AWAKENING TO THE CRISIS

In this environment devoid of oversight of their activities, Vermont physicians and druggists remained largely unconcerned with the quality of the drugs they provided their clients. As the VPA noted, when doctors came to their members for supplies, they constantly placed more emphasis on the bottom line than the efficacy of their concoctions, "You can sell them their drugs, if you have a supply of cheap, worthless or adulterated goods; otherwise they will go where they can find them."81 When they actually did work together, untoward results could occur. In 1866, VMS Vice President Dr. J. Henry Jackson took the two professions to task, exposing an unseemly side to each. After slamming the medical profession's long-standing practice of "dispensing quack medicines, such as Heart Correctors, Shaker Anodyne, Diphtherine, Iodo Bromide Calcium Compound Elixer, Fellows' and Winchester's Hypophosphites," he told the story of a family that became addicted to Shaker Anodyne, a product containing opium and morphine. "During the next twenty years" after a Society member prescribed it, "more than three thousand bottles were used in the family, and to pay for it children were obliged to go without sufficient food and clothing."82 But what of the one who was supplying the doctor, the druggist who he said, "should be the physician's right hand man in all that is pure and useful"?

In explanation, Jackson then laid out exactly what was driving their respective actions: money. "What shall we think of him who while he dispenses our prescriptions at the same time carries on a patent cure establishment, and at his counter recommends for every complaint some bogus mixture, with a positive assurance of its value, because for sooth it leaves him a good margin[?]" He then added, "I am fully aware of the inducements offered by agents for the introduction of some double-distilled-disease-destroyer, or John Smith's unexcelled and inapproachable sneeze producer, forty or one hundred per cent profit, and no pay required for ninety days."

Four years later, the VMS took up the looming narcotic issue and on June 7, 1870, gathered to hear Dartmouth Medical College Professor Dr. Carlton Pennington Frost present on "Opium: Its Uses and Abuses." While he discussed many of the drug's positive and negative aspects in treating illness, he also addressed its deeper effect on patients themselves, their families, and society. Not surprisingly he turned to the habits that opium fostered, ones made all the worse because people were allowed to prescribe it for themselves. "There is great objection on this account, to allowing the patient to regulate for himself the dose or the time of continuance of this medicine." It could be avoided, he said, if doctors retained "entire management of the matter." And woe to him should he fail in that regard and allow the formation of a habit, for then "that physician is guilty of a grave crime."

From there, Frost made an observation that few seemed willing to acknowledge about the pervasive presence of opium in the state: "We can satisfy ourselves by very limited investigation that the amount of opium prescribed by medical practitioners for the cure of disease, large as its use for this purpose, constitutes but a small proportion of the amount consumed in the communities in our own State." Huge amounts of the drug were being used outside the scope of any valid physical complaint or upon the prescription of a doctor, and only those selling the drug, abetted by druggists and apothecaries acting independently, or in conjunction with the ubiquitous quack physician, could have fulfilled that need.

Frost then made reference to the sad fact that opium was largely consumed in secret, stating that it "is generally used without the knowledge of many persons outside the family of the user, unless the amount required becomes pretty large and the effect plainly marked." Continu-

ing as others had noted, he pointed out the effects the opium habit was having on those besides the addict. "We know there are those who will deprive themselves and their families of all but the absolute necessaries of life, and pinch on those, to obtain opium. Most take it in the form of morphine, and by the mouth."

Vermonters did indeed love their opium and in an effort to wean themselves off of foreign suppliers some took the next logical step by attempting to grow it at home. This was not a new concept, for Brattleboro's Jonathan Allen appears to have first suggested it in 1817 after learning that others met with success growing poppies in New York and Massachusetts. He had also observed the efforts of "a Mr. Greenfield in Stratton, Vt." and was impressed, calling them "equal in quality to any brought from Turkey." As a result, no doubt propelled by the rising interest in developing the state's agricultural practices, a wholly new product appeared that gained national attention called "Vermont," or "American," Opium, leading optimistic federal officials to declare it "an important industry" in the state.

Their enthusiasm stemmed from the work of Welcome C. Wilson, a Monkton farmer who reportedly began cultivating poppies on his land in 1862. Then, as he explained it, over the next several years he developed a "wonderfully profitable" enterprise selling his product directly to druggists and physicians. In doing so, he said he transitioned from obtaining two-and-a-half pounds of opium per square meter of earth (netting him \$10 a pound) to 640 pounds coming from six acres (earning him between \$8 and \$10 per pound).88

Wilson put together a prospectus in 1869—"Notice to Farmers in Vermont, and Other States. A New Discovery in the Money System" in an effort to convince customers to purchase seeds and processing equipment from him, officiously identifying himself as "Prof. W. C. Wilson of Weybridge, Vermont, as the inventor and producer of American Opium."89 He apparently succeeded in generating sufficient interest that his neighbors readily bought into the scheme, as one newspaper reported "quite a few farmers propose to cultivate the plant." However, Wilson's charade began to unravel shortly afterward when samples he sent to reputable scientists were exposed as fraudulent, most likely local poppy residue mixed with authentic Turkey opium, thereby yielding a morphine level substantially higher than any purported product coming from the northern climes could produce. 91 By 1870, a discredited Wilson moved westward, where he continued seeking to pass off his bogus claims of success, only one of many charlatans saturating the medical supply market at the time. What happened to C. M. Robbins, of Hancock, who also tried to hawk his samples of opium, initially testing as "pure and of extraordinary strength," as a Vermont product is not known, but he appears to have quietly dropped out of sight after similar questions were raised about his "so-called opium." 92

Meanwhile, in 1871 nearby Massachusetts attempted to grapple with its own addiction problem as the State Board of Health inquired into its extent in order to fashion a response. Experiencing less than enthusiastic assistance from physicians in gathering information, the board nonetheless concluded that an opium habit "is more or less prevalent in many parts of the state," finding further that "while it is impossible to estimate it, the number of users must be very considerable." In tracking down the sources of the drug, one of its investigators provided a telling assessment that directly implicated the state's immediate neighbors:

There are so many channels through which the drug may be brought into the State, that I suppose it would be almost impossible to determine how much foreign opium is used here; but it may easily be shown that the home production increases every year. Opium has been recently made from white poppies cultivated for the purpose, in Vermont, New Hampshire and Connecticut, the annual production being estimated by hundreds of pounds, and this has generally been absorbed in the communities where it is made.⁹⁴

While there is no indication in the literature of what Vermonters were doing with their excess opium, it had to go somewhere and appears a contributing factor to the ills experienced in Massachusetts.

Recognizing the narcotic problem the VMS had been decrying, the VPA was formed in 1870 and immediately took up the issue of accountability in dispensing drugs through the use of written prescriptions to replace the haphazard practices of the times. In 1871, members published their first Code of Ethics, which provides great insight into the unregulated drug world as they imposed a necessary obligation upon themselves: "And we hold that when there is good reason to believe that the purchaser is habitually using opiates or stimulants to excess, every druggist or apothecary should discourage such practice."95 At the urging of President C. L. Case, who explained his own problems in dispensing opium and other drugs, they further agreed to document their drug sales not only for their own benefit, but for "the people's protection" as well. The concern with drugs also became an issue for life insurance companies, who noted that the consumption of alcohol, opium, chloroform, ether, cannabis, and other narcotics had increased "enormously" in the past several years, forcing them to exclude those abusing them from obtaining coverage.96

By 1874 the potential for additional abuse exploded, because in the

previous two years the number of drug stores in Vermont doubled to 107 and they began edging out competing general stores. 97 Although an 1862 law required apothecaries to record the name of anyone purchasing poisons (arsenic, strychnine, etc.) and banned the use of anesthetic agents for the purpose of rendering another person unconscious in order to commit a crime, nothing was being done specifically to address the serious impact of opium abuse. 98

Feeding the frenzy was one of the country's largest wholesale drug suppliers, Burlington's Wells, Richardson & Co. Employing some 200 workers and utilizing a huge advertising budget, it offered for sale a substantial number of patent medicines, many infused with opium, listed in twenty-three pages of its 1878 catalogue.⁹⁹ The company also maintained a particularly comfortable relationship with members of the VPA, on whom it depended to sell its wares. In September 1873, the pharmacists, and accompanying wives, attending their annual meeting were graciously hosted by Wells, Richardson, who transported them from prohibition's restrictions in Burlington across Lake Champlain to Plattsburgh for a memorable dinner, including a half hour consuming "several toasts." Egregious collusion also existed with pharmacists providing monetary rewards, or kickbacks, to physicians sending patients to them for their drugs, and with doctors writing prescriptions in code so that only favored druggists could decipher them, thereby prohibiting the patient from transacting business with someone else. 101 The times were very good indeed for manufacturer, wholesaler, retailer, dispenser, and prescriber of patent medicines, who were reaping the substantial monetary benefits they provided, and few, if any, saw any need for reform. Meanwhile, in October 1874, the VPA met again to hear yet another discourse on society's ills when Chester's Dr. J. N. Moon presented on the "Use and Abuse of Opium," described as "a very able paper" with "many instances cited which showed the harm that the abuse of opium" caused.102

One organization that did confront the narcotics problem was the state Women's Christian Temperance Union, which in 1882 assumed a vanguard position in lobbying for legislation mandating temperance education for youth. The WCTU actually found a sympathetic ear in the legislature, and later that year Vermont became the first state to pass a law requiring training in physiology and hygiene, with added emphasis on "the effects of stimulants and narcotics upon the human system." Their success was noted elsewhere and by 1886, fourteen additional states adopted similar legislation. However, the condition of the state's medical profession lagged behind, as the legislature ignored repeated calls for a centralized licensing system to screen out the in-

competents. Certainly, overwhelming evidence of wrongdoing became evident when four bogus diploma mills were reportedly issuing fraudulent medical diplomas in Bennington, Newbury, Newfane, and Rutland.¹⁰⁴ When in 1890 the VMS sought the assistance of the state's 562 practicing physicians to get to the bottom of it and verify their credentials, of the 312 responding, 86 were determined to be unlicensed. However, resigned at its inability to get lawmakers' attention on this easily corrected problem, the Society simply noted that "politicians attach but trifling weight to medical opinions or wishes." ¹⁰⁵

At the same time, Vergennes doctor Elliot Wardsworth Shipman issued an urgent call for legislative action with his attention-getting "The Promiscuous Use of Opium in Vermont" announcing that the state's population "consume as much if not more *opium* and *morphine* than the same number of people any where in the United States." Lamenting that he was "particularly impressed by the loose method in which this drug is handled in the Green Mountain State," his allegations could not have come as a surprise to anyone.

The opium habit was so well established that Shipman called it "a crying evil of the day," and he told the VMS what he had witnessed: "I have seen five victims of this habit enter a drug shop in the town in which I live and purchase what opium and morphine they desired, within less than two hours time and no questions were asked." Calling on his peers for assistance, he told them, "It seems to me that it is our duty as guardians of the public health, and as members of this Society to do all in our power to influence the passage of a law to mitigate this evil." The situation required their attention because, while alcoholics were most able to reform themselves, those opportunities for opium addicts were "exceedingly rare" and the crisis necessitated outside action. ¹⁰⁷

Shipman then described several sad cases he was involved with to further convey the dire situation: the doctor who became addicted to injecting himself hypodermically; the gardener prescribed huge amounts of opium to treat neuralgia; a twenty-four-year-old girl told by a doctor tired of her complaints to purchase a hypodermic syringe to administer morphine to herself; a man "eating opium for no other reason than its stimulating effects were more lasting than whiskey"; and a woman, also taking morphine hypodermically, who first developed her habit because "she wanted something to give her rest, and used opium pills." ¹⁰⁸

Finally, there was the female suffering from menstrual problems who had consulted numerous doctors prescribing large amounts of opium, interspersed with "inhalations of chloroform," to no effect and which

allowed her to cultivate the insidious habit. Then Shipman revealed in telling fashion through his subsequent actions the struggles that the medical establishment was experiencing in identifying and understanding the extent that opium could be used without causing harm. Concluding that the woman had become so accustomed to the drug, he decided to load her system with so much morphine that it would overcome its resistance, but without success. While she survived the experiment, he described it as "the largest quantity of morphine taken by any one person within 24 hours which has come to my knowledge. I have searched extensively through several libraries but can find nothing on record to compare with it." Shipman then ended his talk to his fellow doctors with a call to arms. "As a duty to the public let us endeavor to reduce the enormous sale of this drug in Vermont, and confer a lasting benefit upon her people."

In 1893, doctors in Chittenden County formed the Burlington Clinical Society, meeting together periodically to hear presentations on local medical cases of interest and discuss various treatments. Unsurprisingly, opium became a topic and in 1894 one doctor described the extraordinary use of its strong derivative, morphine, by a woman with uterine cancer. Considering that 1/8 of a grain of morphine constituted a dose (one grain for opium), he reported that she was injecting herself hypodermically with four grains each hour for sixteen hours a day, followed by an additional four, totaling a huge sixty-eight grains each day. 110 Two months later, her consumption increased so much he felt compelled to relate that she was now up to ninety-six grains a day, or the equivalent of 768 doses. Her final outcome is not recorded, but, notably, as occurred with Shipman's experiment, at no point is there any indication of anyone's concern that the patient had become heavily addicted, or any acknowledgement that a doctor should possibly share some responsibility in allowing her condition to reach such dangerous levels of consumption.

In 1896, the Society's January meeting considered why numbers of local women reported so many more cases of uterine troubles. They identified syphilis as the underlying cause, one made evident by the "very prevalent" practice of "criminal abortions" taking place, resulting in the presence of an "abortion habit" within the community. While these seasoned practitioners discussed using opium to treat such complaints, on another occasion they bemoaned the fact that the younger doctors among them still failed to appreciate the harm that drugs posed. As one of the older physicians explained, "one of the greatest difficulties he had in teaching medical students was to impress on them the importance of knowing the physiological allur[e] of drugs." Echoing

that concern, one of the state's most experienced doctors also in attendance, Dr. Ashbel Grinnell referred to earlier, told the group that he would not recommend that heart patients use opium, for fear they "might contract the habit."

Unsurprisingly, the problems presented by physicians' lack of training and licensing, their continued failure to appreciate the addictive qualities of opium and morphine, and the relentless overprescribing of the drugs remained in place, and in 1896, Dr. F. W. Comings of Derby made yet another presentation to the VMS bearing the same title others had used, "Opium. Its Uses and Abuses." By now addiction to both alcohol and opium was so well known that creative entrepreneurs went about pushing their various "cures." In 1892, the Keeley Institute of Vermont was established in Montpelier, promising relief from "Drunkenness, Opium Habit, Neurasthenia and Tobacco Habit" utilizing the "Double Chloride of Gold, the Only Cure," where alcoholics received a three-week course of treatment and "four or more weeks for the morphine habit." 113

Comings was himself quite familiar with the addiction problem, telling his peers he had treated many such cases as he then turned to assign blame. "I speak from experience when I say that out of every ten cases of addiction I believe some doctor was responsible for nine of them." To his mind the situation was intolerable. "I can hardly find words strong enough with which to condemn the careless—nay criminal—prescribing of opium in chronic cases."¹¹⁴ The harm inflicted on the population required a remedy and he warned it was time for the medical profession to right its ways and be more truthful with its patients regarding the hazards of opium, for "by doing so we shall in some measure atone for the mistakes made by some of the more careless of the profession in too prolonged and injudicious administration of the drug."

Proof of Addiction

Four years later, the much needed bombshell finally exploded when Dr. Grinnell's report, the "Use and Abuse of Drugs in Vermont," was released. The results of his far-reaching effort left him dumbfounded at what he had uncovered, and he exclaimed "I have been so astonished, so amazed at the result of my investigation." Grinnell deemed the information he gathered so important that he wished it could be placed before the Vermont legislature, itself myopically focused on the state's five-decades-old prohibitory law, believing "it would open its eyes to the fact that there is something beside alcohol that can spoil moral development and mental capacity." To his mind, banning the use of alcohol failed to do anything to dissuade people from seeking out their

stimulants and had, instead, simply forced them to switch to the easily obtained narcotics. Propelled by the enthusiastic response the report generated, Grinnell went on to write "Stimulants in Forensic Medicine and a Review of Drug Consumption in Vermont" in 1901, and then, utilizing both works, a third effort in 1905, "A Review of Drug Consumption and Alcohol as Found in Proprietary Medicine."¹¹⁶

Based on a longtime interest in the drug problem, Grinnell sought to identify as carefully as possible just how pervasive it had become. First, he looked to the particular outlets where drugs were distributed and identified each of the state's 130 druggists, 172 general stores, 690 physicians, 5 wholesalers, and 3 manufacturing facilities turning out paregoric, laudanum, essence of peppermint, wintergreen, and valerian (and which relied on their own "pedestrian peddlers" for sales). Then he wrote a letter to each, assuring them of anonymity, explaining that he was preparing a paper for the VMS "upon the use of opium and other anodynes," and requested information on their average monthly sales of opium, morphine, Dover's Powder, paregoric, laudanum, cocaine, chloral, Indian hemp, and quinine.

Responses varied, with some refusing to participate at all and others suspicious and evasive. Nonetheless, Grinnell succeeded in obtaining enough information from 116 druggists (located in 69 of 244 towns), 160 stores, and 90 percent of the doctors to begin to understand the situation. The numbers that initially came in were so large that he thought the respondents had not understood his request and, instead, provided yearly amounts. Writing to them again to see if any corrections were needed, they advised that their responses were indeed correct. Because of those who chose not to participate and his habit of assigning zero sales in questionable situations, Grinnell believed his numbers were low and could easily be multiplied five times to achieve a more accurate assessment of sales.

Some of the reports are so startling they merit repeating. One store, located in "a place so small it hardly appears upon the map," sold every month three and one-half pounds of gum opium, six ounces of morphine, five pints of paregoric, five pints of laudanum, and three ounces of quinine. In another town with two drug stores (one refused to participate), one reported that it sold three pounds of opium, one gallon of paregoric, three-quarters of a gallon of laudanum, five ounces of quinine, and 1,000 quinine pills. In a third town, with a population of over 10,000 and eleven drug stores, a single one reported selling five ounces of opium, two ounces of morphine, eight quarts of laudanum, and six quarts of paregoric.

When added up, the numbers revealed statewide monthly sales of:

over forty-seven pounds of opium; nineteen pounds of morphine; 3,300 grains of morphine pills; twenty-five pounds of Dover's pills; thirty-two gallons *each* of laudanum and paregoric; twenty-seven ounces of cocaine; thirty-two pounds of chloral; thirty-seven ounces of hemp; fifteen pounds of quinine; and 74,200 grains of quinine pills. Importantly, none of the results reflected the large quantity of drugs sold by doctors or those hawked by roving peddlers, those contained in the many patent medicines, or the fact that residents living on the shores of Lake Champlain frequently made their purchases in New York, where prices were cheaper.

With these numbers, Grinnell made his grim assessment based on the population and average dose consumed by an individual, finding that Vermonters consumed an incredible 3,300,000 doses of opium each and every month. And if one of those month's distributions constituted a daily dosing of one and one-half grains for every adult man and woman in the state for an entire year as he calculated, then twelve months of the same would result in a similar increase (18 grains) each and every day. The numbers were simply staggering.

By the turn of the century, the national addiction problem had the attention of policymakers, and the necessary parts finally came together allowing for a more united effort to confront it than ever before. In 1905, Congress prohibited the importation of opium except for medicinal purposes; then the Pure Food and Drug Act of 1906 required accurate labeling on patent medicines. In 1910, Vermont Congressman David Foster introduced the nation's first anti-narcotics bill seeking to control dangerous substances through taxation, an effort that was never voted on. However, the House of Representatives' Committee on Ways and Means continued to pursue the matter with hearings and in 1911 received testimony describing Grinnell's findings in Vermont.¹¹⁸ Foster's bill was subsequently resurrected following his untimely death in 1912 as the Harrison Narcotics Tax Act (named after a New York representative) and, subsequent to the 1912 Hague International Opium Convention, the nation finally had its first law addressing domestic needs, taking effect in 1914.

Throughout this period, choosing to remain apart from actions taken in neighboring states, Vermont persisted in refusing to address the problem, and it was taking a toll on the population. "A morphine fiend nearly slugged the life out of a leading Waterbury citizen last week while suffering the cravings of the habit," one paper related in 1908. Singling out those responsible, it identified the culprits standing in the way of legislation: "The small country merchants, who deal in 'dope' without any knowledge of its dangerous effects; the regular druggists,

who don't like to have their business interfered with, and the physicians, who see no advantage, and some possible bother, to themselves." Yet inaction prevailed and by 1915 Vermont had attained a reputation for permissiveness and as a mecca allowing easy access to drugs by those seeking to avoid the consequences of their illegal pursuit in New York and Massachusetts: "The enforcement of these laws in neighboring States has driven a great many 'dope fiends' to this State, and every Vermont druggist can attest to a large demand upon the part of non-residents for these deadly drugs." Finally, the legislature took the most forceful action in its history, passing that year "An Act to Regulate the Sale of Opium, Morphine and other Narcotic Drugs" providing for comprehensive oversight of these dangerous substances. Additional legislation ensued, allowing for the committal of those suffering from alcohol and drug addiction, and imposing various recordkeeping requirements on pharmacies.

Identifying the scope of Vermont's problem in relation to other states, while a challenge, is not impossible. All shared similar experiences with the increasing use of opium and morphine in the years following the end of the Civil War and the introduction and prevalent use of the hypodermic needle that was accessible to medical practitioners, patients, and the general public. While isolating definitive causes for the rapid increase in opiate abuse remains elusive, one contemporary argument attributed it to rapid changes taking place in society causing people to become unnerved and then seeking solace in various stimulants, a condition called "neurasthenia."

Evidence of widespread abuse forced alarmed officials to consider the phenomenon as never before resulting in several studies: Michigan (1878), Chicago (1880), Iowa (1885), Massachusetts (1888), Vermont (1900), and the American Pharmaceutical Association (1902 and 1903). Others followed, including one by the "Special Committee of Investigation" appointed by the secretary of the treasury in 1918 pursuant to the Harrison Act. The committee's survey of responses from physicians around the country concluded there were 237,655 addicts under their care. Included in that number, 1,554 were attributed to Vermont, as well as many from nearby states: New York, 37,095; Massachusetts, 13,770; New Hampshire, 3,460; and Maine, 1,084. After obtaining data from additional sources, the committee concluded that there were more than a million addicts in the country. 123 In 1921, a distinguished group of medical and education practitioners reviewed these numerous studies, noting the wide range in estimates of addicts they provided nationally (from between a few thousand to over two million), and concluded it was impossible to obtain an accurate figure. 124

Over the following decades various investigators have examined the addiction issue even more closely, with one of them concluding that at the peak of the country's drug abuse at the turn of the twentieth century there were an estimated 250,000 addicts residing within a population of 76 million, "a rate so far never equaled or exceeded." The findings of another researcher, who determined that nationwide there were an average of 4.59 addicts per one thousand people, suggests that in Vermont, with a population of 343,641 in 1900, there were an estimated 1,577 individuals suffering from addiction. 126

Grinnell's study of the amount of narcotics distributed by Vermont's druggists in 1899 is also enlightening when one considers the national rate of consumption over the passage of time. In the 1840s, the average annual per capita consumption of crude opium was 12 grains (roughly two aspirin), rising to an estimated 52 grains by the 1890s. 127 Using Grinnell's calculation of six grains daily for each Vermonter, or 2,190 over the course of a year, the state's druggists sold amounts far in excess of the rest of the country. 128 In fact, one analyst at the time studying Grinnell's work concluded that Vermonters' consumption of such a large quantity of opium could not possibly be attributed to medicinal use, but, rather, to "a large number of habitual users." ¹²⁹ Certainly the state's population in general was not staggering about publicly under the wholesale influence of opium at that moment. But it is undeniable that many—doctor, patient, and common addict alike—ingested it in a private manner by one of the three ways then in vogue: By mouth, rectum, or vagina; via respiratory mucous membrane through smoking or smelling; or by hypodermic syringe. 130

As noted, by the end of the first decade of the twentieth century Vermont was attracting people from outside the state seeking easy access to drugs. Whether some arrived on vacation and seeking narcotic relaxation is not clear. By 1911 Maine had also attained an unenviable reputation for making drugs easily available. There, one investigator described to Congress, "The largest amount of morphine and cocaine . . . is used in the summer months; and there is no doubt that that has a great deal to do with the transient population that goes there perhaps to recover from too much of the use of the drug in winter." This may explain some of Vermont's experience, but the total absence of any reference to such a phenomenon by Grinnell or any of the other Vermont physicians and pharmacists long focusing on their respective professions' deficiencies, and those forcibly advocating for change within their respective communities, makes it doubtful. Further, Dr. J. C. F. With's observation in 1898 that Vermont's "country villages and farmhouses

seem to furnish the greater number of users" belies the possibility of placing the blame wholly on those coming from outside the state.

Questions abound: Was it merely a coincidence that prohibition Vermont experienced a notorious drug epidemic seemingly out of all proportion to that of other states? What, if any, were the lobbying effects of special interests, such as the pharmaceutical trade, on a legislature that focused so heavily on alcohol issues to the detriment of its inhabitants becoming addicted to drugs? Why did Grinnell receive noticeably less than enthusiastic support for his inquiries unless there was something to hide, such as addicted doctors or persons of repute, or to otherwise protect the lucrative, unregulated trade that the medical and pharmaceutical professions relied on? Why were remote Vermont towns, those not even on a map, reporting huge sales of narcotics unless it was for the use of the local population? And why were Vermonters living near Lake Champlain traveling to New York for cheaper drugs unless it was to feed their own addictions?

Vermont's travails with opium in the nineteenth century were both the same as and yet remarkably dissimilar from other states' experiences. Many in those other locations fell victim, allowing addiction to grow because politicians and policymakers chose not to become involved in policing health care issues, leaving it to the population and medical profession to sort out. Some states did take more aggressive action earlier than Vermont did, perhaps reflecting a higher degree of understanding of the problem. In its removed frontier location, the challenges for those in the Green Mountains were uniquely different. A sparse medical profession spread out over the state, with decades of discord in its past, and viewed by some with suspicion, forced many to turn to themselves to administer to their particular needs. While doctors and pharmacists grappled with modernizing their professions, the state legislature took a hands-off approach to oversight, remaining resolutely focused on alcohol prohibition. They did so for an extraordinary length of time which then allowed amateurs free rein to foist their many bogus opium-based concoctions on an uninformed population with little understanding of their dangers beyond the relief they offered from pain or for mental escape. Because the legislature ignored calls for reform coming from the VMS, the medical profession found itself unable to take effective action to address the continued presence of ill-educated and unlicensed doctors, diploma mills, and the widespread availability of death-dealing drugs in their midst.

As a slice of Vermont's nineteenth-century experience, the difficult and complex challenges posed by identifying, acknowledging, and

ameliorating drug abuse and addiction are worthy of notice today. These examples serve an important purpose in instructing later generations of the commonality we all share in dealing with many of the same issues that continue to plague society in general and Vermont specifically.

Notes

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¹Governor Peter Shumlin, 2014 State of the State Address, January 8, 2014,

http://governor.vermont.gov/newsroom-state-of-state-speech-2013.

² Percival W. Clement to W. E. Aldrich, undated, in Mason A. Green, *Nineteen-two in Vermont* (Rutland: Marble City Press, 1912), 12. Clement lost the 1902 election, but later served as Vermont governor between 1919 and 1921.

³ William Slade Jr., Gov. Slade's Reply to Senator Phelps' Appeal (Burlington: Chauncey Goodrich, 1846), 28. Temperance leader William Slade's comments on this occasion drip with hypocrisy. As noted herein, he was consuming opium during his term as governor and while engaged in a very public and highly contentious dispute with Vermont Senator Samuel S. Phelps after failing to attain that seat for himself. Slade alleged that Phelps was intoxicated at the time of an important Senate vote. Phelps (a former Vermont Supreme Court judge and who served in the Senate between 1839 and 1851) then fired back, dismissing the allegations as delusional: "Does he really imagine that the good people of Vermont can be so far deceived as to mistake the ravings of . . . a distempered mind for proof?" He also attacked Slade's repeated allegations of intemperance, writing that it was "a topic about which he has told lies enough to discredit him forever." Undated, "To the People of Vermont. Mr. Phelps' rejoinder to Mr. Slade's 'Reply," https://archive.org/details/topeopleofvermon00phel.

⁴ "By a dose I mean one grain of opium, one-eighth grain of morphine, one-half ounce of paregoric and twenty drops of laudanum." A. P. Grinnell, "Use and Abuse of Drugs in Vermont," *Transactions of the Vermont State Medical Society, 1900* (Burlington: Free Press Association, 1901), 66. Apothecary equivalents provide that one grain equals 60 to 65 mg. and one ounce liquid is 30 ml. The common aspirin tablet weighs five grains, or 325 mg.

⁵ Voluminous evidence reveals the presence of the drug in its raw or "crude" state and in gum opium, as well as in various concoctions, including: Allen's Lung Balsam; Bateman's Pectoral Drops; Dr. Bull's Cough Syrup; Dr. Carter's Compound; Dover's Powder; Godfrey's Cordial; Dr. Moore's Essence of Life; Dr. Munn's Elixer of Opium; Paregoric Elixer; Perry Davis' Pain Killer; Scott's Emulsion; and Mrs. Winslow's Soothing Syrup.

⁶ Grinnell, "Use and Abuse of Drugs in Vermont," 61; "A Review of Drug Consumption and Alcohol as Found in Proprietary Medicine," *The Medico-Legal Journal* 23 (June 1905): 426.

⁷ Proceedings of the Fifth Annual Meeting of the Vermont State Pharmaceutical Association, October 25 and 26, 1898 (St. Albans, Vt., 1898), 54-55.

8 Statement of Dr. Christopher Koch, "Importation and Use of Opium," Hearings before the Committee on Ways and Means of the House of Representatives, 61st Congress, 3d Session, December 14, 1910, and January 11, 1911 (Washington: Government Printing Office, 1911), 70. [Hereafter Hearings].

⁹ John Woodcock, "A Dissertation on Delirium Tremens," and Cyrus B. Hamilton, "On Ebriety," Medical Theses, 1815-1819, DA-3, 10925, Rauner Special Collections Library, Dartmouth College, Hanover, N. H. In 1811, Dartmouth Medical School's founder, Dr. Nathan Smith, asserted that much of the current alcohol abuse problem began, in fact, with doctors prescribing powdered drugs be taken in mixture with spirits at certain times of the day, a practice called "dram drinking." Henry Ingersoll, "Lectures on the Theory and Practice of Physic & Surgery. Delivered at Dartmouth Medical Theater, D. 1811 by Nathan Smith, M.D.," Rauner Library, MS. 811602.3.

¹⁰ First discovered in 1805 in Germany, morphine is the active ingredient in opium and constitutes approximately nine percent of its bulk. David F. Musto, *The American Disease: Origins of Narcotic Control* (New Haven, Ct.: Yale University Press, 1973), 2. Morphine became so wildly successful that by the time of its 200th anniversary in 2005, more than 230 tons of it were used yearly by the medical profession. http://www.uchospitals.edu/news/2005/20050519-morphine.html.

¹¹ Nathan Allen, *An Essay on the Opium Trade: Including a Sketch of Its History, Extent, Effects, Etc. as Carried on in India and China* (Boston: John P. Jewett & Co., 1850), 4; William G. Smith, "An Inaugural Dissertation on Opium, Embracing its History, Chemical Analysis, and Use and Abuse as

a Medicine," (University of the State of New York, April 2, 1832), 10-11, 16.

¹² Joseph A. Gallup, Sketches of Epidemic Diseases in the State of Vermont, from Its First Settlement to the Year 1815. With a consideration of their causes, phenomena, and treatment. To which is added Remarks on pulmonary consumption (Boston: T. B. Wait & Sons, 1815). Gallup also served as president and professor of Theory and Practice at the Vermont Academy of Medicine in Castleton (1820-1825) and was a founder of the Clinical School of Medicine in Woodstock in 1827.

¹³ Joseph A. Gallup, *Pathological Reflections on the Supertonic State of Disease* (Montpelier, Vt.: E. P. Walton, 1822); *Woodstock Observer*, 19 November 1822.

¹⁴ Selah Gridley, A Dissertation on the Importance and Associability of the Human Stomach, both in Health and Disease; delivered before the Vermont Medical Society, at their annual meeting in Montpelier, Oct. 17, 1816 (Montpelier, Vt.: Walton and Goss, 1816), 4.

¹⁵ David T. Courtwright, Dark Paradise: A History of Opiate Addiction in America (Cambridge,

Mass.: Harvard University Press, 2001), 41.

- ¹⁶ "Too often . . . the physician flies from the sickroom to the barroom." John P. Batchelder, On the Causes which Degrade the Profession of Physick; An Oration Delivered before the Western District of the N.H. Medical Society (Bellows Falls, Vt.: Bill Blake & Co., 1818), 5, 7. Batchelder's list of physicians' misbehavior also included: irreligion (Sabbath breaking); conducting abortions (describing one physician "who has been in the constant habit" of practicing it on his wife and causing her death); quackery; disagreements among physicians; want of humanity ("neglecting the poor"); indecency of behavior; want of firmness and decision of character; and dissipation.
- ¹⁷ De Quincey's book garnered substantial worldwide interest, earning him a less than positive response from a dismissive American intelligentsia, who initially, and quite wrongly, opined, "We believe that very few persons, if any, in this country, abandon themselves to the use of opium as a luxury; nor does there appear to be any great danger of the introduction of this species of intemperance." Jared Sparks, ed., *The North American Review* 18 (1824): 92.
- ¹⁸ Thomas De Quincey, Confessions of an English Opium-Eater: And Suspiria de Profundis (Boston: Ticknor, Reed, and Fields, 1850), xii-xiii.

19 Middlebury Mercury, 2 March 1803.

- ²⁰ Green Mountain Patriot (Peacham), 15 June 1803.
- ²¹ The Reporter (Brattleboro), 11 November 1809.
- ²² Proceedings of the Vermont Pharmaceutical Association, October 11, 1871 (Rutland, Vt.: Tuttle & Co., 1871), 7.

23 Ibid., 8-9.

- ²⁴ Ibid., 7-8. "In country villages, East as well as West, the principal dealers in drugs and medicines were country storekeepers who knew as much about bark, rhubarb and opium as they did about algebra and conic sections." Joseph W. England, ed., *The First Century of the Philadelphia College of Pharmacy, 1821-1921* (Philadelphia: Philadelphia College of Pharmacy and Science, 1922), 150.
- ²⁵ Franklin Scott, Experiments and Observations on the Means of Counteracting the Deleterious Effects of Opium, and on the Method of Cure of the Disease Resulting Therefrom (Philadelphia: H. Maxwell, 1803), 45.
- ²⁶ Valentine Seaman and Adam Kuhn, *An Inaugural Dissertation on Opium* (Philadelphia: Johnston and Justice, 1792), 20-21.
 - ²⁷ John R. Coxe, *The American Dispensatory* (Philadelphia: A. Bartram, 1806), 497.
 - ²⁸ Vermont Gazette, 2 December 1817.
 - ²⁹ Independent Inquirer (Brattleboro), 9 November 1833.
- ³⁰ Gallup, *Sketches of Epidemic Diseases in the State of Vermont*, 2. This was the age of heroic medicine, in which the appearance of a doctor's competency, as demonstrated by outlandish and outrageous conduct, was deemed of greater importance by an ignorant population than the actual result obtained on a patient.
- ³¹ "An Act, regulating the practice of Physic and Surgery within this State," November 14, 1820, *Laws Passed by the Legislature of the State of Vermont, 1817-1820* (Middlebury, Vt.: William Slade, 1820), 27.
- ³²Arthur F. Stone, *The Vermont of Today with Its Historic Background, Attractions and People*, vol. 1 (New York: Lewis Historical Publishing Company, 1929), 313.
- ³³ In the interim, in 1850 it was noted that lawsuits for malpractice "were becoming almost as common in some parts of Pennsylvania, as in Western N. York, Vermont, New Hampshire, and sections of Massachusetts. They are found to frequently terminate profitably for the patient, and hence their frequency." J. V. C. Smith, ed., *The Boston Medical and Surgical Journal* 42 (1850): 67.

³⁴ Vermont Patriot and State Gazette, 6 November 1837.

³⁵ Ibid., 30 October 1837. These sentiments were linked with the rise of President Andrew Jackson, who was enthralled with the concept of the "common man" possessed of common sense and who, therefore, did not require professional training. Martin Kaufman, *The University of Vermont*

³⁶ "For a Lottery to Publish a Medical Compendium," *State Papers of Vermont, General Petitions* 1797-1799, vol. 11, ed. Allen Soule (Lunenburg, Vt.: Stinehour Press, 1962): 321.

College of Medicine (Hanover, N.H.: University of Vermont College of Medicine, 1979), 43.

37 Ibid., 325.

³⁸ Joseph A. Gallup to Jonathan A. Allen, June 16, 1845, Allen Family of Middlebury and Rutland, Vermont Papers, MSC 187, Vermont Historical Society, Barre [hereafter VHS].

³⁹ Samuel Thomson (1769-1843), originally from Alstead, New Hampshire, and formally uneducated, traveled throughout Vermont and New England, constituting the greatest threat to the contemporary medical establishment as he promoted the use of herbal remedies and despised the use of opium. See his New Guide to Health; Or Botanic Family Physician (Boston: J. Q. Adams, 1835), passim; see also, Joanna Smith Weinstock, "Samuel Thomson's Botanic System: Alternative Medicine in Early-Nineteenth-Century Vermont," Vermont History 56 (Winter 1988): 5-22. Additional practices considered quackery by conventional doctors included those called electro-magnetic, mesmeric, and Indian.

The decades-old battle between the formally trained portion of Vermont's medical community and the quacks relying on empiricism as a basis for diagnosis and treatment lasted for decades. T. S. Brooks, "Relation of the Medical Profession to Quackery," *Transactions of the Vermont Medical Society for the Years 1871, 1872 and 1873* (Montpelier, Vt.: Argus and Patriot, 1874), 303.

⁴⁰ Samuel Rezneck, "The Study of Medicine at the Vermont Academy of Medicine (1827-1829) as Revealed in the *Journal of Asa Fitch*," *Journal of the History of Medicine* 24 (October 1969): 416-429

⁴¹ "PLEDGE," September 9, 1835, in Constitution and Records of the Temperance Society of the N.H. Medical Institution, Organized October the 19th, 1832, Rauner Library. They further pledged to abstain from "intoxicating drinks" and tobacco.

⁴² "Eben Judd's *Journal of Survey to the Upper Coos, 1786,*" transcribed by Reidun D. Nuquist, *Vermont History* 81 (Summer/Fall 2013): 202. I am indebted to former Vermont State Archivist Gregory Sanford for directing me to Judd's interesting life and his journals retained in the Vermont State Archives and Records Administration.

⁴³ Hunting Sherrill, On the Pathology of Epidemic Cholera (New York: Samuel Wood and Sons, 1835), 147.

44 Vermont Gazette, 13 March 1827.

⁴⁵ Reuben D. Mussey, *Health: Its Friends and Its Foes* (Boston: Gould and Lincoln, 1862), 309-310.

⁴⁶ Rachel Hope Cleves, Charity & Sylvia: A Same-Sex Marriage in Early America (Oxford: Oxford University Press, 2014), 175-189. I am grateful for the assistance of Eva Garcelon-Hart, archivist, Henry Sheldon Museum of Vermont History, Middlebury (hereafter, Sheldon Museum), where several of their letters are stored.

47 Vermont Gazette, 13 March 1827.

⁴⁸ Jonathan A. Allen, "An Address Delivered before the Addison County Temperance Society at Newhaven, Vt., Oct. 20, 1829," Allen Family of Middlebury and Rutland, Vermont Papers, 1804-1910, MSC 187, VHS.

⁴⁹ William Sweetser, A Dissertation on Intemperance (Boston: Hilliard, Gray, and Co., 1829), 91.

50 Vermont Gazette, 9 February 1830.

⁵¹ John Williams, *Dr. John Williams' Last Legacy, and Useful Family Guide* (New York, 1827), 5-6; decades later, one Vermonter recalled, "My grandmother raised poppies in her garden and scraped the pods for a small supply of opium for severe cases of toothache." William McGinnis, "A Vermont Sketchbook," *Vermont History* 37 (Summer 1969): 225.

⁵² Vermont Chronicle, 4 June 1830; The Book of Health: A Compendium of Domestic Medicine (Boston: Richardson, Lord and Holbrook, 1830), 170.

⁵³ William R. Preston, *Medicine Chests for Ships and Families, with New and Approved Directions* (Portsmouth, N.H.: C. W. Brewster, 1839), *passim*.

⁵⁴ Dr. Jedidiah Estabrooke Journal, 1827-1853, Martha Canfield Library, Arlington, Vt.

55 Dr. Timothy Woodward Daybook, Calvin Coolidge Library, Castleton State College, Castleton, Vt.

 56 Alonzo Calkins, $Opium\ and\ the\ Opium-appetite$ (Philadelphia: J. B. Lippincott & Co., 1871), 290.

⁵⁷ Ibid., 40-41.

⁵⁸ Julia Thomson account book, Weybridge Collection, Box 206, VHS.

⁵⁹ Dr. William P. Russel Papers, Large ledger vol. 1, 1833-1851, Sheldon Museum. Russel was also the local authorized dealer for spirits during these temperance years and, while also selling large

amounts of opium, morphine, laudanum, paregoric, Dover's Powder, morphine, and dysentery drops, he dispensed all manner of alcohol and tobacco, revealing the presence of a very robust stimulant-seeking community.

- ⁶⁰ Minutes, January 23, 1856, Records of the Addison County Medical Society, 1835-1920, Vol. 1, Sheldon Museum. Croix's consumption is calculated based upon Russel's sales of opium at 34 cents an ounce.
 - 61 Smith, "An Inaugural Dissertation on Opium," 21.
- ⁶² Leonard Marsh, *The Physiology of Intemperance, an Address before the Temperance Society of the University of Vermont, June 29, 1841* (Burlington, Vt.: Chauncey Goodrich, 1841), 15.
- ⁶³ Ralph B. Grindrod and Charles A. Lee, *Bacchus: an essay on the nature, causes, effects, and cure of intemperance* (New York: J. & H. G. Langley, 1840), 179.
- ⁶⁴ Robert McKinley Ormsby, *Vermont Speller; or, Progressive Lessons* (Bradford, Vt.: A. Low & Co., 1859), 95.
- ⁶⁵ Calkins, *Opium and the Opium-appetite*, 36-38; Thomas M. Santella, *Opium* (New York: Infobase Publishing, 2007), 14.
 - 66 Proceedings of the Fifth Annual Meeting of the Vermont State Pharmaceutical Association, 54.
- ⁶⁷ Basil M. Woolley, *The Opium Habit and Its Cure* (Atlanta: Atlanta Constitution Print, 1879), 45-46; Statement of Dr. Christopher Koch, *Hearings*, 70.
- 68 First Report to the Legislature of Vermont Relating to the Registry and Returns of Births, Marriages and Deaths (Burlington, Vt.: Daily Times, 1859). Just obtaining the legislation allowing the collection of these vital statistics in the first place was a battle, as many in the medical establishment fought against laws requiring them to go to town clerks' offices to record relevant information because they failed to describe how they were to receive compensation for their efforts.
 - ⁶⁹ Sweetser, An Address Delivered before the Chittenden County Temperance Society, 12.
 - Vermont Telegraph (Brandon), 30 May 1838.
 The Middlebury People's Press, 15 June 1841; Vermont Watchman and State Journal, 9 August
 - ⁷² Dr. Carter's Compound Pulmonary Balsam (1845), Newbury, Vt., Pamphlets, VHS.
 - ⁷³ Smith, ed., The Boston Medical and Surgical Journal 40 (1849): 207.
- ⁷⁴ Minutes, February 5, 1846, Records of the Addison County Medical Society, Sheldon Museum; *The Northern Galaxy* (Middlebury) 14 April 1846.
 - 75 Ibid.
 - ⁷⁶ J. F. Skinner, "Domestic Medicines," *The Boston Medical and Surgical Journal*, 40 (1849): 309.
- ⁷⁷ Lewis C. Beck, Adulterations of Various Substances Used in Medicine and the Arts, with the Means of Detecting Them (New York: Samuel S. and William Wood, 1846), 157.
- ⁷⁸ The Revised Statutes of the State of Vermont Passed November 19, 1839 (Burlington, Vt.: Chauncey Goodrich, 1840), 445.
- 79 Proceedings of the American Pharmaceutical Association (Philadelphia: Merrihew and Thompson, 1853), 11.
 - 80 Vermont Watchman and State Journal, 15 October 1846.
 - 81 Proceedings of the Vermont Pharmaceutical Association, October 11, 1871, 8.
- ⁸² Transactions of the Vermont Medical Society for the Year 1866 (Burlington, Vt.: R. S. Styles, 1866), 30.
- ⁸⁵ C. P. Frost, "Opium: Its Uses and Abuses," *Transactions of the Vermont Medical Society for the Years 1869 and 1870* (Burlington, Vt.: R. S. Styles, 1870), 131.
 - 84 Ibid., 145.
 - 85 Ibid.
- ⁸⁶ The Reporter (Brattleboro), 29 April 1817. In 1814, a Dartmouth medical student recorded Dr. Reuben Mussey's lecture on "Theory and Practice of Physic" describing the sleeping poppy, which yielded opium that came from gardens. Dr. Reuben Mussey lectures 1814, DA-3, Box 2177, Rauner Library.
- ⁸⁷ Twentieth Annual Report of the Vermont Agricultural Experiment Station (Burlington, Vt.: Free Press Printing Co., 1908), 378; Report of the Commissioner of Agriculture for the Year 1870, Executive Documents Printed by Order of the House of Representatives 1870-71 (Washington, D. C.: Government Printing Office, 1871), 210.
 - 88 Burlington Free Press, 14 May 1869.
- 89 Prospectus, American Opium Raised by Wilson & Chase at Monkton and Berlin, Vermont (Montpelier, Vt.: Argus and Patriot Job Printing House, 1869), 7. I am indebted to Paul Heller, author of *The Calais Calamity: and Other Tales of Wonder and Woe* (San Bernardino, Calif., 2014) for sharing information concerning Wilson's activities.
 - 90 Vermont Watchman and State Journal, 14 July 1869.

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- ⁹¹ William Proctor Jr. "Notes on American Opium from Vermont," *Buffalo Medical and Surgical Journal* 8 (1869): 151; "Additional Note on American Opium from Vermont," *The American Journal of Pharmacy* 41 (1869): 23.
- ⁹² William Proctor, Jr., "Assay of Pure American Opium from Poppies Grown at Hancock, Vermont, by Mr. C. M. Robbins," *The American Journal of Pharmacy* 42 (1870): 127.
- 93 Charles E. Terry and Mildred Pellens, The Opium Problem (Camden, N. J.: Haddon Craftsmen, 1928), 6-7.
 - ⁹⁴ Ibid., 7.
 - 95 Proceedings of the Vermont Pharmaceutical Association, October 11, 1871, 17, 31.
- ⁹⁶ J. Adams Allen, Medical Examinations for Life Insurance (New York: J. H. and C. M. Goodsell, 1870), 21-22.
- ⁹⁷ Proceedings of the Vermont Pharmaceutical Association, 1873 (Rutland, Vt.: Globe Paper Company, 1874), 27. Taking pharmacists to task at their annual meeting, one doctor boldly challenged their involvement in pushing questionable medicines: "How many of you have washed your hands from the sale of proprietary medicines that are made only to fill the pockets of the proprietors—and you are made the vendors of them because you can pocket a large share of the profits. . . . There is not a druggist in the country who would keep them 24 hours were it not for the profit. This morbid demand of the people degraded the dignity of the profession of scientific pharmacist, and in our State you will find it will never be eradicated until the people become educated to know what they need," 48.
 - 98 The General Statutes of the State of Vermont (Cambridge, Mass.: Riverside Press, 1870), 690.
- ⁹⁹ Catalogue and Handbook of Wells, Richardson & Co., Wholesale Druggists, Burlington, Vt., 35-57. Pamphlets, VHS.
- ¹⁰⁰ Proceedings of the Vermont Pharmaceutical Association at the Fourth Annual Meeting (Rutland, Vt.: Globe Paper Co., 1874), 15.
- ¹⁰¹ Edward H. Currier, "Relations existing between Physician and Apothecary," 1880, Medical Theses, 1878, DA-3, Box 10955, Rauner Library.
 - 102 Rutland Daily Globe, 23 October 1874.
- ¹⁰³ Acts and Resolves Passed by the General Assembly of the State of Vermont, 1882 (Rutland, Vt.: Tuttle & Co., 1883), 36; Mary Hunt, A History of the First Decade of the Department of Scientific Temperance Instruction in Schools and Colleges of the Women's Christian Temperance Union (Boston: Washington Press, 1892), 10.
- ¹⁰⁴ John M. Currier, "Medical Colleges of Vermont—Bogus and Genuine," *The Medical and Surgical Reporter* 64 (1891): 237.
- ¹⁰⁵ Transactions of the Vermont Medical Society for the Year 1890 (Burlington, Vt.: R. S. Styles, 1890), 46-47.
 - ¹⁰⁶ E. W. Shipman, "The Promiscuous Use of Opium in Vermont," Ibid., 72.
 - ¹⁰⁷ Ibid., 73-74.
- ¹⁰⁸ "The introduction of the hypodermatic syringe has placed in the hands of man a means of intoxication more seductive than any which has heretofore contributed to his craving for narcotic stimulation... For every remote village has its slave, and not infrequently several, to the hypodermatic syringe." Roberts Bartholow, A Manual of Hypodermic Medication: The Treatment of Diseases by the Hypodermatic Method (Philadelphia: J. B. Lippincott & Co., 1882), 120.
 - ¹⁰⁹ Shipman, "The Promiscuous Use of Opium in Vermont," 75-76.
- ¹¹⁰ Records of the Burlington Clinical Society, 1893, *passim*, Special Collections, Bailey/Howe Library, University of Vermont.
- ¹¹¹ Ibid. In fact, the VMS warned as early as 1870 of "professional abortionists in the regular profession, men who for no more palpable reason than their love of gain, make criminal abortion an every day affair." *Transactions of the Vermont Medical Society for the Years 1869 and 1870*, 107.
- ¹¹² F.W. Comings, "Opium. Its Uses and Abuses," *Transactions of the Vermont Medical Society for 1895 and 1896* (Burlington, Vt.: Free Press Association, 1897), 359.
- ¹¹³ The Vermont Watchman, 15 June 1892; Leslie E. Keeley, Keeley Institute, Montpelier, Vermont. Pamphlet, Sheldon Museum. Keeley described Montpelier as a place where recovering addicts "are not looked upon as criminals, but as invalids who are making manly efforts to be made whole, to be freed from the disease of Alcoholism or Morphine, as the case may be," 31.
 - 114 Comings, "Opium," 366-371.
 - ¹¹⁵ Grinnell, "Use and Abuse of Drugs in Vermont," 67-68.
- ¹¹⁶ Grinnell, "Stimulants in Forensic Medicine and a Review of Drug Consumption in Vermont," *Journal of Medicine and Science* 7 (October 1901): 396; Grinnell, "A Review of Drug Consumption and Alcohol as Found in Proprietary Medicine," 426.
 - ¹¹⁷ Grinnell, "Use and Abuse of Drugs in Vermont," 64-65.
 - 118 Statement of Dr. Alexander Lambert, Hearings, 144.

¹¹⁹ Orleans County Monitor, 9 December 1908.

120 Middlebury Register, 22 January 1915.

- ¹²¹ Acts and Resolves Passed by the General Assembly of the State of Vermont ... 1915 (Hanover, N. H.: J. Padock & A. Spooner, 1915), 336.
- ¹²² Timothy Hickman, "'Mania Americana': Narcotic Addiction and Modernity in the United States, 1870-1920," *Journal of American History* 90 (March 2004): 1281.
- 123 Terry, *The Opium Problem*, 9-32. Of note, Grinnell's Vermont study was the only effort that sought quantitative information from the state's doctors, pharmacists, and manufacturers. The remaining studies attempted to identify specific numbers of addicts through responses from various professionals as well as unprovable anecdotal accounts.
 - 124 Ibid 1
- ¹²⁵ Musto, *American Disease*, 5; David F. Musto, M.D., "The History of Legislative Control over Opium, Cocaine, and their Derivatives," http://www.druglibrary.org/schaffer/History/ophs.htm.
- ¹²⁶ Courtwright, *Dark Paradise*, 28. Courtwright further calculates with certainty that prior to 1842 the nation's opiate addiction rate was no more than .72 per thousand, meaning that Vermont's population of 291,948 in 1840 contained just over 200 addicts.

¹²⁷ Musto, American Disease, 5; Musto, "The History of Legislative Control over Opium."

- ¹²⁸ Grinnell, "Use and Abuse of Drugs in Vermont," 66. In an accompanying estimate of the scope of the problem, Grinnell determined that on a per capita basis there was enough opium being sold each month to provide one-half dose each day for every individual, or the equivalent of six doses when an entire year is included.
- ¹²⁹ Smith E. Jelliffe, "Some Notes on the Opium Habit and Its Treatment," *The American Journal of the Medical Sciences*, 125 (1903): 789. Jelliffe further notes that Grinnell's work constituted "one of the few systematic inquiries regarding the prevalence of any drug habit in a limited area," 788.

130 Ibid., 788.

¹³¹ Statement of Dr. Hamilton Wright, *Hearings*, 93. Wright further testified that doctors were largely responsible for the morphine habit: "I have an estimate from one of the largest dealers that the use of morphine in Massachusetts and the other New England states, excepting Maine, has increased 100 percent in the last ten years." Concerning Maine, he reported that the increase was closer to 150 percent, and that he had personally witnessed "six stage coaches drawn up in front [of a large wholesale drug store], each coming there to get its supply of morphine. That was then distributed out along stage routes radiating from Portland." In the state's lumber camps he also observed the heavy use of "alcohol tabloids" containing cocaine which, when dissolved in water, "give a highly stimulating effect," 92-93.