

AFD Ep 410 Links and Notes - Late 19th Century Opiates in the US [Bill/Rachel] - Recording Jan 30, 2022

- This week we're talking about opiates in the 19th century United States during and after the American Civil War, a subject that remains in debate but lays the earliest groundwork for many of the drug policies and views adopted in the 20th century and more recently.
- [Rachel] Background on the technologies and research in the early 19th century...
 - *Morphine was discovered as the first active alkaloid extracted from the opium poppy plant in December 1804 in Paderborn by German pharmacist Friedrich Sertürner.^{[11][118]} In 1817, Sertürner reported experiments in which he administered morphine to himself, three young boys, three dogs, and a mouse; all four people almost died.^[119] Sertürner originally named the substance morphium after the Greek god of dreams, Morpheus, as it has a tendency to cause sleep.^{[12][120]} Sertürner's morphium was six times stronger than opium. He hypothesized that, because lower doses of the drug were needed, it would be less addictive. However Sertürner became addicted to the drug, warning that "I consider it my duty to attract attention to the terrible effects of this new substance I called morphium in order that calamity may be averted."^[121] <https://en.wikipedia.org/wiki/Morphine#History>*
 - Note: Heroin, a synthesized industrial version of morphine, was invented but never utilized in 1874 and then re-invented by researchers working for Bayer in the late 1890s. Bayer mass-produced & marketed heroin, but morphine and laudanum would have been the commercially available opiates in the first several decades of the Second Industrial Revolution period.
- The idea of injected medicine as a modern medical concept did not really start gaining ground until the 1840s, but it also required a mass produced delivery system for it to take off. Hypodermic glass syringes were invented in 1851 in Scotland and popularized around 1858.
https://en.wikipedia.org/wiki/Hypodermic_needle
- Also: Raw Opium context
 - A bit of somewhat more mid 20th century context on opium poppies: *there are a great many known varieties and subspecies of the opium poppy, Papaver somniferum L. Papaveraceae. History shows that it is one of the world's oldest cultivated plants. This is also obvious from the fact that the plant is no longer found in a wild state. Most of the world's utility plants are more or less confined to a definite climate and within relatively narrow geographical limits. This is not the case with the opium poppy, which can be successfully grown in relatively large areas of the world with a high yield of opium alkaloids ([11]). (cf. Fig. 1 and 2). It does not require any particular type of soil and reacts well to fertilizers. This is one of the main advantages in terms of agronomics, national economy and the available supply.*
https://www.unodc.org/unodc/en/data-and-analysis/bulletin/bulletin_1956-01-01_1_page005.html
 - Interestingly there was never really much US poppy production for either medicinal/recreational uses or just poppy seeds for baking, and it has instead historically been legally imported for permissible uses from places like Europe or India – or briefly the American-occupied Philippines after the Spanish war in 1898 – but the occupations of Poland and the Netherlands in WW2 rocketed the price so high that California farmers tried to rush into the

breach and planted poppies in huge volumes and Congress stepped in immediately and banned it by the end of 1942:

https://www.unodc.org/unodc/en/data-and-analysis/bulletin/bulletin_1950-01-01_3_page003.html#:~:text=In%20response%2C%20Congress%20passed%20the,for%20opium%20or%20opium%20products.

- <https://www.jstor.org/stable/4353878>
- Going back in time to our era of interest today: San Francisco Police Chief Jesse B. Cook recalling pre-earthquake era Chinatown opium activity policing after the 1875 local ban on public consumption: *The opium den was another thing that the Chinese resorted to because they had no other place to go. At that time nearly every store in Chinatown had an opium layout in the rear for their customers. All the Chinaman had to do was bring his opium. In those days the Chinese were allowed to smoke opium, provided they did not do so in the presence of a white man. If a white man was present it meant the arrest of all who were in the room at the time.* <http://www.sfmuseum.org/hist9/cook.html>

The Civil War

- Earlier we talked about the development of hypodermic needles and glass syringes in the 1840s and 1850s. Unlike chloroform, they didn't get much use in the various European wars of the 1850s. The American Civil War would be their first wide-scale military trial for use with painkillers, to the extent that needles and syringes were available. When they were unavailable, other delivery methods were used. Unfortunately this may have left a lot of veterans addicted to morphine after the war...https://en.wikipedia.org/wiki/War_on_drugs#19th_century
- "Opium and its alkaloids" by Paul L Schiff Jr in the American Journal of Pharmaceutical Education (Summer 2002)
 - *Morphine became generally used as an analgesic in the 1830s, but its use for rapid analgesia did not occur until the perfection of the hypodermic needle in 1853. The alkaloid was used extensively during [...] the American Civil War, but since hypodermic needles were not readily available in those years, opium tincture and opium pills were far more commonly encountered. Morphine was commonly placed directly on flesh wounds. The Union Army used 2.8 million ounces of opium tincture and powder and about 500,000 opium pills. [...] At the termination of the Civil War, many wounded veterans had become addicted to morphine and their continued dependence on the drug was dubbed the "soldiers' disease"(4, 6, 7).*
https://web.archive.org/web/20071021021327/http://findarticles.com/p/articles/mi_qa3833/is_200207/ai_n9107282/print
- <https://www.jstor.org/stable/26098368> "The Army Disease: Drug Addiction and the Civil War" by Jonathan Lewy in War in History, Vol. 21, No. 1 (January 2014), pp. 102-119 | *Although the hypodermic syringe had been available for a decade and its use was reported in medical journals, [at first] many American physicians were not familiar with Gross's suggestion, and continued to dust wounds with morphine. As the war progressed and medical practices became more professional, the syringe gained popularity among some military surgeons. By the end of the war the Union Army had issued 2,093 syringes to about 11,000 surgeons, though probably fewer actually used the instrument. After the war many Yankee physicians recalled that syringes had been unavailable to them in the field, but contradicting evidence suggests that physicians often used syringes, especially towards the end of the war.*

- <https://www.jstor.org/stable/26098368> "The Army Disease: Drug Addiction and the Civil War" by Jonathan Lewy in *War in History*, Vol. 21, No. 1 (January 2014), pp. 102-119 | *The Union, having access to world trade and poppies grown abroad, suffered from very little shortage in either opium or morphine. The Federal Army consumed approximately 10 million opium pills and over 80 tons of opium powder and tinctures. After the battle of Antietam Creek one Union field surgeon complained that the only medications in his possession were morphine and brandy. But in fact that was exactly what medical books recommended that doctors carry with them in their pockets during engagements. The Confederacy, in comparison, attempted to grow poppy fields to supply its armies, but the crops proved inferior, with very little morphine content. Consequently, the South relied on smugglers from the North and blockade-runners to replenish medical stores. Yet morphine, despite its scarcity, was used in field medicine. In a letter to his wife one Confederate doctor confided that the only way he could help wounded soldiers that came to his tent after the second battle of Manassas was to administer morphine.*
- <https://www.jstor.org/stable/26098368> "The Army Disease: Drug Addiction and the Civil War" by Jonathan Lewy in *War in History*, Vol. 21, No. 1 (January 2014), pp. 102-119 | *Since they were the most reliable drugs in their medicine cabinet, opium and morphine were used extensively by Civil War surgeons as pain relievers and for treating diarrhoea. Other uses for the drug ranged from the treatment of dysentery, stomach aches, gallstones, headaches, haemorrhoids, tetanus, typhus, syphilis, and neuralgia. Opium was usually administered in laudanum, the tincture of 10 per cent opium in alcohol, and sometimes in pills. Morphine was mostly administered in powder form, but in some hospitals injections were available. Because the needles were usually blunt, surgeons had to puncture the skin with a lancet and then inject the drug.*
- [Rachel] <https://www.binghamton.edu/news/story/2405/civil-war-on-drugs-doctoral-candidate-expl-ores-the-nations-first-opioid-epidemic> <https://www.chstm.org/news/%E2%80%9Cmind-prostrate%E2%80%9D-physicians-opiates-and-insanity-civil-war%E2%80%99s-aftermath> It's hard even for academic researchers to pinpoint a number of veterans that were addicted to morphine, but the numbers were large enough to alarm public-health officials and the federal government. Jonathan S. Jones's doctoral dissertation "'A Mind Prostrate': Opiate Addiction in the Civil War's Aftermath" explores how the Civil War, and the availability of morphine, led to an epidemic of addiction. As one first-hand account from 1878 put it, "The evil is like an epidemic. It is in the atmosphere." Further complicating efforts to help addicted veterans was the shame associated with addiction. *[Addiction] was stigmatized and gendered, seen by many Americans as a vice afflicting the insane, the effeminate, and those lacking self-control. Opiate addiction therefore left addicted veterans emasculated and stripped of entitlements like pensions, and for these outcomes veterans and their families blamed the medical profession. Veterans' opiate addiction—and in particular iatrogenic, or, physician caused addiction—therefore threatened the credibility of the American medical profession, compelling physicians to embark on a constellation of progressive reforms intended to end the addiction crisis while bolstering "regular" medicine's standing in the public eye. By 1861, the beginning of the Civil War, American doctors employed opiates for approximately 140 unique medical conditions. During the addiction crisis many doctors called for the profession to move away from the widespread prescribing of opiates, and this number plummeted. Other manuscripts, such as the William L. Du Bois Prescription Records, indicate that the opiate prescription rate declined from an antebellum high of over fifty percent to a mere sixteen percent by 1876, a decade after the opiate addiction epidemic began. These patterns suggest that at least some reforms proposed in medical*

journals to resolve the opiate addiction crisis were disseminated in practice to ordinary practitioners, confirming aspects of my preliminary dissertation research.

While physicians were trying to undo the damage they had caused by over-prescription of opiates, there were still many veterans suffering from the effects.

The stigma had serious repercussions for veterans, who risked losing their military pensions, which required them to meet certain behavioral expectations.

Nineteenth-century doctors also believed that addiction could cause insanity, so addicted veterans risked incarceration in mental asylums, where they languished for decades, as the laws of the day made it extremely difficult to leave.

[P]atent medicine proprietors were not simply selling medicinal “cures” to addicted veterans. Instead, advertisements were also selling veterans a way to redeem their masculinity from opiate addiction. Patent medicine proprietors intentionally marketed their wares in the language of masculinity because they understood that addicted men, including veterans, were emasculated by opiate addiction. To Civil War-era Americans, opiate addiction signaled femininity, physical weakness, and, most of all, unnatural dependence—all antithetical to Victorian manhood. Redeeming one’s masculinity by ending a man’s “slavery” to opiates, as doctors often described addiction, was thus a major selling point for patent opiate addiction cures. For example, Samuel B. Collins marketed his “Painless Opium Antidote” using testimonials from veterans who supposedly cured their opiate addictions by way of Collins’s wares. Byron McKeen, a Confederate veteran from Galveston, Texas testified in 1872 that Collins’s Painless Opium Antidote that “now, I feel myself no longer a slave, but a free man.”

- **Considering potential counterpoints:** <https://www.jstor.org/stable/26098368> "The Army Disease: Drug Addiction and the Civil War" by Jonathan Lewy in *War in History*, Vol. 21, No. 1 (January 2014), pp. 102-119 | (my summary) Contemporary accounts in the years following the American Civil War tended to only rarely mention the Civil War as a factor in growing opiate addiction, although it did come up, as in the examples we provided above. There was a much bigger push retrospectively to emphasize the Civil War a half century or so later, as part of the national push to start cracking down on dangerous drugs and drug-pushers (as well as the national revisionism in the 1910s and 1920s about what had happened in the Civil War and Reconstruction). Some public health advocates at the time also may have been searching for a category of addict that could be emphasized with public sympathy, so that policy could be changed to help them. So, some caution seems warranted in the question of the scale and war-related causes of addiction around the time of (or shortly after) the Civil War. During or just after the Vietnam War, historians began revisiting the matter and questioning whether the conventional wisdom developed long after the period itself had exaggerated the role of the Civil War in opiate addiction. Alcoholism in relation to traumatized war veterans obviously would have been huge too, but probably not as notable given the general level of alcoholism in the US in the late 19th century. And of course there were plenty of other popular drugs in the late 19th century that didn't involve opiates, to say nothing of other quack medicines. Another fairly brutal consideration is simply that morphine was often used in the Civil War for the mortally wounded, who did not survive the war to become addicts later. And finally, because addiction or chemical dependency and craving wasn't really understood for most of the 19th century – and only vaguely identified once it did start to enter medical literature discussions – it is hard to track and find the source of a phenomenon that people weren't really watching for at the time it was happening. Many of the late 19th century descriptions of people's relationship to opium, morphine, and laudanum used terminology that might – but also very much might not – resemble the

characteristics of addiction because there wasn't yet a uniform vocabulary or definition for these things. Words concerning issues of morality were more often mentioned.

[Rachel] Women & Medicine (legitimate treatment, patent medicine frauds, and somewhere in between)

(quoting now from "[Women and Addiction in the United States—1850 to 1920](#)" by Stephen R. Kandall, M.D., an article abstracting material from his 1996 book on the same topic)

- *Although epidemiologic data are sparse, the mid- to late 19th century apparently witnessed a rapid increase in the medicinal and recreational uses of opiates. During that same period, non-opiate drugs such as cocaine, chloral hydrate, chloroform, and cannabis came into vogue and were used in much the same way as opiates. In spite of increasing numbers of drug users during those years, quiet acceptance and tolerance of drug use was the order of the day. However, the changing social demographics of drug users, increasing knowledge about the dangerous effects of those drugs, regulation of the pharmaceutical industry, and emergence of the United States as a true international power during the latter part of the 19th century and early part of the 20th century acted synergistically to change the country's attitude toward drug use from tacit acceptance to intolerance. This "sea change" in national attitude was legislatively formalized with passage of the Harrison Anti-Narcotic Act of 1914 and two 1919 Supreme Court decisions, *Webb et al. v. U.S.* [249 U.S. 96] and *U.S. v. Doremus* [249 U.S. 86], which allowed the Federal Government to initiate a drug-fighting agenda characterized by strict national and international legislation and repression of both addicts and physicians.*
- *It wasn't all men addicts either in the post-Civil War period – in fact it was mostly women: Anecdotal reports of female opiate addiction were supported by the few available rudimentary epidemiologic studies of drug use in the United States. Accurate statistics, however, were hampered because women often concealed their drug use from friends and family. Earle (1880) wrote that female opium eaters (users) often indulged in the habit "for years without imparting their secret to their nearest friends." Mattison (1898, p. 202) felt that women often concealed their opiate habits to protect themselves from "unkind and unjust judgment." In part because of the temperance movement, some women used narcotics as a more acceptable alternative to alcohol "because of its greater secrecy [sic] and less degrading effects" (Hamlin 1882, p. 427). Despite many epidemiologic limitations, Marshall (1878) found that women made up 56 percent of 630 opium users and 66 percent of the morphine users identified in his Michigan survey and that women formed the majority of addicts in 88 of the 96 towns that reported addiction statistics. Earle (1880) found that 72 percent of the 235 opium users identified in Chicago were women. Hull (1885) estimated that 63 percent of opiate users in Iowa were women, and Nolan (1881) believed that 80 percent of opium users in Albany, NY, were women. Assuming that between 150,000 and 200,000 opiate addicts lived in the United States in the late 19th century and that between two-thirds and three-quarters of these addicts were women, probably more than 100,000 women used opiates chronically during that time. The most important reason for the increase in opiate consumption during the 19th century was the prescribing and dispensing of legal opiates by physicians and pharmacists. A limited therapeutic armamentarium available to medical personnel ensured that opiates would be used to treat an almost limitless list of ailments (Chase 1873; Faulkner and Carmichael 1892). Despite railing against the overprescription of medications by physicians, Oliver Wendell Holmes (1888) specifically exempted opium, "which the Creator himself seems to prescribe." Other physicians, however, were cautioning that physicians were prescribing opiates injudiciously, either inappropriately or for too long or by placing the remedies in the hands of patients who were willing to self-administer opiates without proper medical supervision. In this regard,*

Kane (1881, pp. 219-220), a 19th century expert on addiction, indicted physicians who were “culpably ignorant, and certainly deserving of punishment”; druggists “who, in many cases, sell the drug without a physician’s prescription”; and charlatans, “utterly without conscience,” who used deceitful advertising practices and lies to ensnare hapless victims. Even without the complicity of physicians, the general population had ready access to opiates in patent medicines and homeopathic compounds (Faulkner and Carmichael 1892, pp. 514-517, 537-538). An enormous industry supplying these products went unregulated until 1906 when the Pure Food and Drug Act was passed, representing an initial attempt to curb the overuse of patent and proprietary medicines (Young 1961, pp. 237-244). The predominance of women in the addict population rests squarely with the use of opiate-containing medications of the late 19th and early 20th centuries.

- The most common use of opiates by women to treat organic complaints was for “female problems.” Marshall’s 1878 survey revealed, “The most frequent cause of the opium habit in females is the taking of opiates to relieve painful menstruation and diseases of the female organs of generation.” Mattison (1879a, p. 332) remarked that among women “a large part of the deviations from health which induce the use of some form of opiate, are dependent on disorders peculiar to their sex.” Dr. T. Gaillard Thomas (1879, p. 316), president of the American Gynecological Society, wrote: “For the relief of pain, the treatment is all summed up in one word, and that is opium. This divine drug overshadows all other anodynes. . . . You can easily educate her to become an opium-eater, and nothing short of this should be aimed at by the medical attendant.”

[Rachel]

<https://www.smithsonianmag.com/history/inside-story-americas-19th-century-opiate-addiction-180967673/>

- Adding to the counterpoint “Doctors were really impressed by the speedy results they got,” says David T. Courtwright, author of [Dark Paradise: A History of Opiate Addiction in America](#). “It’s almost as if someone had handed them a magic wand.” By 1895, morphine and opium powders, like OxyContin and other prescription opioids today, had led to an addiction epidemic that affected roughly 1 in 200 Americans. Before 1900, the typical opiate addict in America was an upper-class or middle-class white woman.
- “Even if a disabled soldier survived the war without becoming addicted, there was a good chance he would later meet up with a hypodermic-wielding physician,” Courtwright wrote. The hypodermic syringe, introduced to the United States in 1856 and widely used to deliver morphine by the 1870s, played an even greater role, argued Courtwright in *Dark Paradise*. “Though it could cure little, it could relieve anything,” he wrote. “Doctors and patients alike were tempted to overuse.” Opiates made up 15 percent of all prescriptions dispensed in Boston in 1888, according to a survey of the city’s drug stores.
- Only around 1895, at the peak of the epidemic, did doctors begin to slow and reverse the overuse of opiates. Advances in medicine and public health played a role: acceptance of the germ theory of disease, vaccines, x-rays, and the debut of new pain relievers, such as aspirin in 1899. Better sanitation meant fewer patients contracting dysentery or other gastrointestinal diseases, then turning to opiates for their constipating and pain-relieving effects.