

### “Army Disease” and America’s Changing Attitudes toward Drug Addiction

While the Civil War ensured the rebirth of the American republic and the death of slavery, it also demonstrated both the shortcomings and achievements of the field of medicine. The Civil War era is often considered the end of Middle Age medicine, as the destruction of the war demanded a new level of innovation and medical knowledge. The nineteenth century introduced effective, if primitive, treatments and practices. The Sanitary Commission was created, and scores of nurses, including the famous Clara Barton, founder of the American Red Cross, followed the Union army to tend its wounded (“Founder Clara Barton”). A particular development was the implementation of anaesthetic and painkillers, often before surgery. Notable as a common battlefield medicine was morphine, an analgesic derived from opium and used as a painkiller and sedative. Its use and distribution, although undoubtedly widespread throughout army hospitals during the war, was never documented to any quantitative extent, casting doubt on its impact on veterans during and after the war.

The phenomenon known as “army disease”, or drug addiction in war veterans resulting from medications used during the war, is commonly believed to have originated during the Civil War, affecting hundred of thousands of Union and Confederate soldiers; however, as eagerly as the idea of addiction was embraced in literature and as a trigger for a new American attitude and drug policy, it remains questionable whether the rise in opiate addiction truly occurred as result of the Civil War. The debate over this point, split between the supporters and critics of the existence of an “army disease” linked to morphine, revolves around Civil War medical practices, differing historical interpretations, the emerging definition of “addiction,” and the reactions of both the public and physicians to this new condition.

The Civil War was the most deadly war in American history, not only because it was fought between Americans in an age when technology had far surpassed standard battlefield tactics, but also because these new weapons and machines dealt blows beyond the capacity of the Civil War surgeon to remedy. The unflattering nickname “Old Sawbones” reflected soldiers’ wariness for the surgeon’s treatments, namely, amputation (Frese 40). These procedures could be performed in about twelve minutes, often with no disinfectant. Union general Carl Schurz described the gruesome scene of surgeons working after Gettysburg:

There stood the surgeons, their sleeves rolled up to the elbows, their bare arms as well as their linen aprons smeared with blood, their knives not seldom held between their teeth, while they were helping a patient on I or off the table, or had their hands otherwise occupied; around them pools of blood and amputated arms or legs in I heaps, sometimes more than man-high... Some ether was administered and the body put in position in a moment. The surgeon snatched his knife from between his teeth, where it had been while his hands were busy, wiped it rapidly once or twice across his blood-stained apron, and the cutting began. The operation accomplished, the surgeon would look around with a deep sigh, and then-"Next!" (Gilder Lehrman Institute)

The germ theory of disease was not introduced until the mid-nineteenth century by Louis Pasteur and Robert Koch (Louis Pasteur: The Man Who Led the Fight against Germs). Up until then, people and physicians had adhered to the spontaneous generation theory of disease, and Civil War doctors paid little attention to cleanliness while attending patients. The death toll resulting from sickness and infection almost certainly exceeded the number of those actually killed in combat, as the battlefield proved an excellent breeding ground for diseases such as cholera (See Appendix I Figure 4: “Cholera ‘tramples the victor & vanquished both’”).

In a speech titled *Progress of Medicine in the South*, Dr. Hunter Holmes McGuire addressed the Southern Surgical and Gynaecological Association describing the “pliant bark of a tree made for him a good tourniquet; the juice of the green persimmon, a styptic; a knitting

needle, with its point sharply bent, a tenaculum, and a pen-knife in his hand, a scalpel and bistoury.” Anesthesia's first recorded use was in 1846 and was commonly in use during the Civil War. In fact, there are 800,000 recorded cases of its use. Chloroform was the most common anesthetic, used in 75% of operations (Maguire 1)(See Appendix I Figure I: “Choloroform Tin”). In the primitive environment of the Civil War battlefield, the long-term consequences of medication were hardly of importance to the surgeons and doctors who were scrambling to respond to injuries and illnesses far beyond their capacity to treat. Morphine and opiates were seen as miracles of medicine, and their steady supply made them the first line of defense for every condition, a practice that could have easily translated into widespread and unrestrained consumption and addiction.

Morphine was first manufactured for commercial distribution in 1827 in Germany; its predecessor opium had been in household medicine cabinets throughout the Victorian era, especially in the form laudanum, which contained opium dissolved (“History of Prescription Drugs”). Ironically, while morphine as well as its synthetic derivatives -heroin, for example- were manufactured to be less addictive and more effective than their antecedents, they were often the exact opposite. The “cure” for the previous opiate problem was simply another, more addictive, serum. Morphine had begun as a possible replacement for the popular drug opium, which was common in the tincture called laudanum. Thomas De Quincey, famous -or infamous, perhaps- for his *Confessions of an English Opium Eater*, was one example of many who had easy access to laudanum. Despite conflicting reports, it is reasonable to assume that the Civil War hospitals had a sufficient supply of opiates and morphine at hand for treatment.

The Federal Army consumed approximately 10 million opium pills and over 80 tons of opium powder and tinctures , including 30,000 ounces of morphine (Lewy 2, Schroeder-Lein

240). Opiates were used to treat virtually every discomfort, including diarrhea, dysentery, typhoid, malaria, syphilis-as cough suppressants for those with pneumonia, bronchitis, tuberculosis, and as a sedative for restlessness, depression, insanity (Schroeder-Lein 240). In addition to chloroform, brandy and morphine were among the most common medications used by Civil War doctors, who often had little other options (Lewy 1). *A Manual of Military Surgery*, written by surgeon J. Julian Chisholm in 1864, states “Of all the preparations of opium, morphine is, perhaps, the best article for wounded men, as it has lost in preparation some of those astringent properties...(222)”

The introduction of the hypodermic needle shortly before the war was instrumental to morphine and opiate administration. J. Julian Chisholm mentions that “the rapidity of action when morphine is used endermically is a very great advantage on the field, where every moment is of great value (224).” *The Hypodermic Injection of Morphia, Its History, Advantages, and Dangers* by H.H. Kane mentions in its preface that “A physician of the present day without a hypodermic needle in his pocket or close at hand, would be looked upon as would have been a physician fifty years ago, did he not own and use a lancet (Kane Preface).”

From the Case of Sergeant Tolman in the Campaign for Georgia:

“The insertion of the salts of morphia into wounds of the chest attended by pain and dyspnoea, has been of the utmost advantage. I made the insertion of morphia into all painful wounds a standing order in the medical department, and this practice has acted so admirably as to enlist every surgeon in favor of it. Its good effects are especially remarkable in painful wounds of the joints, abdomen, and chest. From one to three grains should be inserted on the point of the finger. I desire especially to call the attention of the profession to this practice, which is simply a generalization of the well recognized application of morphine hypodermically (Huntington, D. L. Vol 1 Part1).”

*Opiate Addiction as a Consequence of the Civil War*, the work of David T Courtwright, describes the system of one particular doctor: “Surgeon Major Nathan Mayer...with a bottle of morphine powder in one pocket, quinine in the other, and whiskey in his canteen, Mayer did most of his diagnosing on horseback. When he wished to dispense morphine, he would pour out an ‘exact quantity’ and then let the soldier lick it from his hand (107-108).” This portrayal of medical treatment suggests a liberal and somewhat careless administration of opiates, with little knowledge or forethought on any consequence relating to addiction.

In the light of these accounts, that the Civil War was a potential factor in the surge in drug addiction in America is indisputable; however, limited medical knowledge and insufficient record keeping during the war and immediately after contribute to the uncertainty of the Civil War’s actual impact on drug use. In his article *The Army Disease: Drug Addiction and the Civil War*, Jonathan Lewy cites evidence suggesting the label on the Civil War as the source of a national drug problem was an unsubstantiated assumption that grew popular due to misinterpretation by postwar historians. He mentions that the term “army disease” did not originate during the war or immediately after: in fact, any mentions of an “army disease” refer instead to malaria, dysentery, and typhoid (Lewy 8). He also cites information from sanitariums treating veterans with long-term physical injuries as well as mental illness: In a sample of 291 Civil War veterans who were committed to the Indiana Hospital for the Insane from 1861 to 1919, only 15 were found to be addicted to chloral hydrate, cocaine, morphine, or opium (Lewy 16).

However, any numbers regarding drug addiction in the nineteenth century cannot be taken with full certainty, as Lewy also mentions that the term “addiction” was rarely used in association with opium or morphine dependence (Lewy 5). Although several medical manuals

recommend careful use of drugs for fear of negative effects, it is unlikely that the majority of physicians had identified as a potential threat the possibility of addiction in the modern medical sense of the term. The contemporary definition of drug abuse suggested its origins in a patient's poor morals, and the attitudes derived from this definition treated addiction as more of an indication of weak character rather than of actual mental disease. As result, the number of reported incidences of addiction may not have reflected the reality of opiate abuse in an age in which "addiction" was a recent concept (Lewy 6)(See Appendix II Figure 1 & 2: "Addicted" & "Drugs"). Once popularized through press and various accounts, a growing awareness of drug addiction reversed the trend, and the Civil War seemed to mark the emergence of American drug problem in the eyes of historians and physicians alike. H.H Kane's *The Hypodermic Injection of Morphia, Its History, Advantages, and Dangers* devotes a chapter to the dangers of morphia. Even though the term "addiction" is not used and no association made with the Civil War, Kane emphasizes the shock of American and European medical communities upon the discovery of narcotic addiction, and the "introduction of a hypodermic needle" as a "means of intoxication (Kane 268)." Just as the ignorance of bacteria and germs as factors in disease transmission continued until the Civil War, the connection between mental illness and drug addiction was not made in mainstream medicine until well after their beginnings, nearly a decade and a half after the end of the Civil War. Edward Levinstein's *Die Morphiumsucht (Morbid Craving for Morphia)* was one of the earliest warnings against the dangers of opiate addiction, written in 1878:

"Here begins the history of the disease I am going to describe, and to which I have given the name of 'morbid craving for morphia.' Morbid craving for morphia means the uncontrollable desire of a person to use morphia as a stimulant and tonic, and the diseased state of the system caused by the injudicious use of said remedy." (Levinstein, 2-3)

The appearance and appeal of the morphine addiction myth is exemplified in several biographies of John Bell Hood, a prominent Confederate general during the war (See Appendix I Figure 3: “Photograph of John Bell Hood”). His fierceness and daring earned him praise after his support of General “Stonewall” Jackson in the Battle of Antietam, where he lost half of division in the fighting. At the Battle of Gettysburg and Chickamauga in 1863, Hood lost function in his left arm and had to have his right leg amputated after being shot (John B. Hood, History.com). His lengthy and arduous recuperation period was overseen by surgeon John Thompson Darby, whose journal mentions a period of time in which Hood needed a dose of morphine to sleep (Stephen Hood 22). Upon returning to service after a remarkable and unlikely recovery in 1864, Hood demonstrated the same recklessness and brash decisionmaking that had once been attributed to him as bravery. Suddenly, Hood became a symbol of irresponsibility linked with drug addiction; according to several historians’ interpretations -most notably that of journalist and professor Barbara G. Ellis, whose description in *The Moving Appeal* labels Hood as a member of the “rash-action school of frontal offensives”- the commander’s “judgment and attitudes were increasingly skewed by a growing dependence on opiates to kill the pain of past wounds (290).” Ellis criticizes Confederate president Jefferson Davis’s decision to replace General Johnston with Hood, suggesting that he “perhaps mistook an eye ablaze with the need for narcotics for battlefield ardor (311).” While Hood was admittedly not so qualified for leadership due to his injuries and questionable battlefield decisions, the implication that his ineptitude could be explained by a drug habit is a clear myth. Doctor John Thompson Darby’s 3,800-page journal solely dedicated to Hood’s injury and recovery gives little allowance for any possibility of addiction (See Appendix I Figure 2: “The Lost Papers”). Darby notes that Hood’s dependence for morphine for sleep eventually diminished as he recovered, and after a month his

treatments of morphine, quinine, and iron were noticeably decreased. It is difficult then to ascribe opiate addiction as the cause for the mistakes of General Hood.

\_\_\_\_\_Historians involved in the question of “army disease” are often in one of two parties: those who subscribe to the traditional view common in the late nineteenth and early twentieth century, and those who criticize the traditional view as suffering from anachronism. They claim that once informed of the nature of drug addiction, researchers tend to overlook other factors and immediately pinpoint the extensive Civil War opiate use as the culprit for the rise in opiate addiction.

David T Courtwright is a well-known advocate of the traditional view and a prolific writer on the topic of medical and drug history. Horace B. Day, author of *The Opium Habit*, presents similar views:

“The events of the last few years have unquestionably added greatly to their number. Maimed and shattered survivors from a hundred battle-fields, diseased and disabled soldiers released from hostile prisons, anguished and hopeless wives and mothers, made so by the slaughter of those who were dearest to them, have found, many of them, temporary relief from their sufferings in opium (7)”

The critics of the traditional view are most notably Mark A Quinones, John C Kramer and William H Swatos, Jr. Quinones claims in *Drug Abuse in the Civil War* that the war was only “ a convenient scapegoat for the growth of addiction in America (Logue, Barton 103).”

In terms of the the amount of morphine and other opiates administered throughout the war, it is possible that drug addiction could have followed veterans back into civil society. John C. Kramer points out other trends in drug use that suggest another, at least more significant, source of addicts: middle and upper class females; these statistics are contradictory to the idea that the drug habit originated from returning war veterans (Logue, Barton 109). This perspective implies the Civil War was a factor in promoting awareness of the already prevalent addiction



problem, rather than pinning the the origin of the national drug habit on the war itself. William Swatos Jr.'s opinion aligns with that of Quinones; according to the literature and journal records of the physicians' world, Civil War veterans in no way represented a significant group of addicts in the nineteenth century(Logue, Barton 104). Medical historian David T. Courtwright counters this argument by claiming that war veterans hid their addiction problems for fear of losing their pensions, citing T.D. Crothers, one of the leading investigators in the early twentieth century for narcotics use. However, in his more recent analysis, Jonathan Lewy challenges Courtwright's evidence; T.D. Crothers was not necessarily associating fear of losing pension with hiding morphinism. On the contrary, Crothers had adopted the opinion that addiction should be treated as a physical injury, and that the Pension Bureau should not withdraw pension on account of addiction (Crothers 76-77).

As previously mentioned, the hypodermic needle may have had a role in the surge in opiate addiction. The critics of the traditional view cite the introduction of the hypodermic needle into the medical world as too late for any meaningful impact in drug administration; there were 2,093 needles for the 11,000 Union doctors, and almost certainly less for the poorly supplied Confederate medics (Lewy 3-4). Courtwright's account of Surgeon Nathan Mayer easily counters this argument. Hypodermic needles, although much more efficient in drug administration, were not necessary for distributing the incredible amount (10 million opium pills and over 80 tons of opium powder and tinctures, including 30,000 ounces of morphine) of drug medication.

Courtwright also points out that while morphine may not have been a source of addiction for soldiers during the war, those with chronic conditions that would extend beyond the length of the war would likely continue their habit afterwards; in this case, the hypodermic needle would

have a much larger role in addiction in correspondence with its increasing availability. In this instance, observations made by drug expert T.D. Crothers supports Courtwright's position. He reports that veterans did not necessarily suffer from addiction because of prolonged treatment during the war. Instead he describes soldiers who had emerged in apparent health, only to later succumb to morphinism from some "profound impairment of the nerve centers (Crothers 77)." The stress of war seemed to be as likely an explanation for morphine reliance as any chronic condition or pain. Although the cases of several veterans are hardly enough to determine any definite trend, Crothers and Courtwright establish at least a limited role of the war in the surge of drug use, even though the original implications of "army disease" as a mass catalyst for a national drug problem have been indubitably disproven.

Drug addiction was not a new phenomenon in the nineteenth century, even if an effective definition had only just evolved after the Civil War. Published in 1821, *Confessions of an English Opium-Eater* marked the beginning of public awareness. The author, Thomas de Quincey, gained fame as a drug addict even while his habits were strongly criticized by his contemporaries. His described "moral medical disease" stirred new curiosity and perceptions of drug addiction as well as old traditional condemnation of the weak-willed virtue-lacking addict (Lewy 5). The temperance movement in America corresponded with one of the most prominent eras of reform: the Second Great Awakening of the early 1800s, and reform aimed at the growing drug problem would soon render it a subject of government intervention.

After the war and into the twentieth century, society's changing attitudes regarding drug addictions became apparent in the governmental policies instituted to regulate drug distribution. First was the Pure Food and Drug Act of 1906, which required products containing opioids to state so on their labels (Chapter 2. History of Medication-Assisted Treatment for Opioid

Addiction). The American public, having identified the drug addiction problem and engaged in widespread disapproval, now sought to root it out despite the ongoing treatment programs for addicts that required a gradual withdrawal from the drug. Products once common in every medicine cabinet and sold at a variety of shops were suddenly confined to distribution only with a prescription.

In 1919, the National Prohibition Act went into effect. John “Doc” Pemberton’s Coca-Cola, invented first as an alternative to opiate addiction, was again modified to comply with the times, emerging in its famous non-alcoholic form. The unfortunate invention of heroin in 1898 displaced morphine as a suppressant, only to be identified as an even more potent narcotic (Chapter 2. History of Medication-Assisted Treatment for Opioid Addiction). The twentieth century generation was clearly cracking down on its former vices; tolerance for drugs and alcohol had been replaced with negative impressions. As addiction became more associated with the immigrant and working class groups, support for restrictions on drugs increased, and in 1914 the Harrison Narcotics Act was passed. Some historians, including Jonathan Lewy, attribute older “army disease” attitudes to the passage of the bill. He claims that drug specialists advocating the traditional view were brought to Congress for testimonials in favor of the new bill in light of past consequences of unregulated drug use (Lewy 13). In 1975, Mark Quinones claimed, in contrast to David Courtwright’s opinion, that “army disease” was “political fiction” that had been fed to the media and the public in order to convince Congress to pass the drug prohibition laws in 1914. However, Courtwright’s statements remained the most accepted and popular (Lewy 13).

David T Courtwright eventually came to the conclusion that the traditional view of army’s disease lacked sufficient evidence, although the arguments presented by critics such as

Quinones and Musto overstep their reasoning and fail to recognize the Civil War as *a* factor in the rise of drug addiction, rather than *the* factor. To say that there was not one reported morphine or opiate addict in the course of the Civil War is to completely ignore the medical context of the time period. To claim that the Civil War was somehow the genesis of such a widespread and multifactorial phenomenon is also to exclude various other factors and circumstances. Even though later analysis of drug addiction and its contemporary interpretations presents unignorable faults in the original argument for drug restriction, the response of the government in enforcing drug regulation did help control the growing epidemic of addiction. The debate between the traditional “army disease” historians and those who dismiss the episode as a myth continued to shape society’s attitudes for the next century. Sanitariums and rehabilitation centers proceeded in treating the nation’s addicts, and more drugs were investigated for detrimental effects. The Harrison Narcotics Act was the precedent for the war on drugs of the twentieth century, and the investigation of drug addiction during the Civil War would be repeated for World War II and the Vietnam War. The legacy of the Civil War remains relevant not only as the prevailing element for the reunification of the United States and the transformation of civil rights, but also as the turning point in the perceptions toward drugs and the definition of “addiction” in the medical world.





Figure 3: Photograph of John Bell Hood



Figure 4: Cholera "Tramples the victors & the vanquished both."

## Appendix II

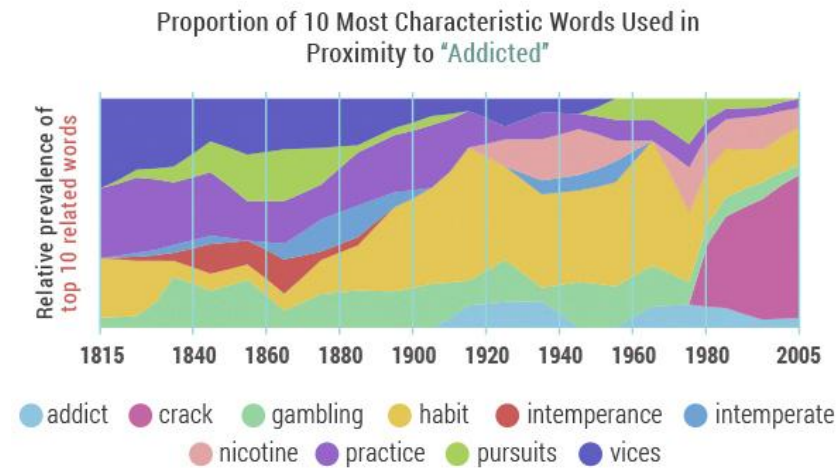


Figure 1: "Addicted"

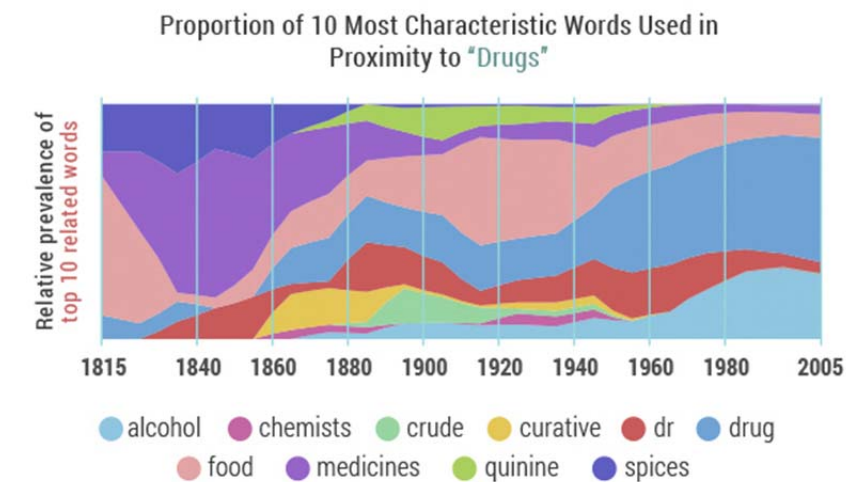
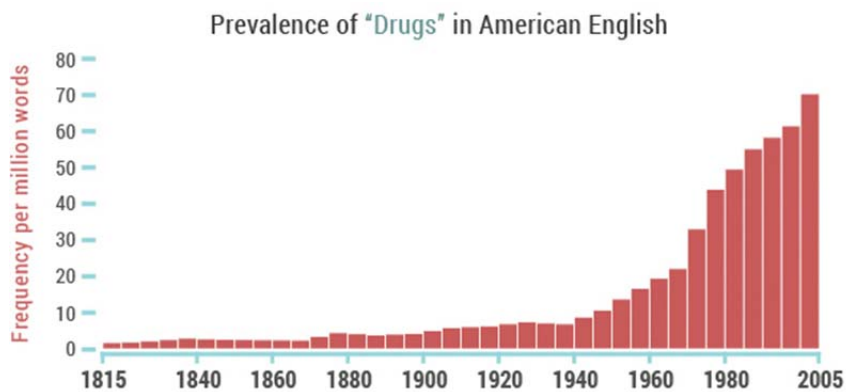


Figure 2: "Drugs"

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