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The Heroin Problem: Learning From Past Experiments In Narcotic Maintenance

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The Heroin Problem: Learning from Past Experiments in Narcotic Maintenance

By

Ashley Marie Phillips

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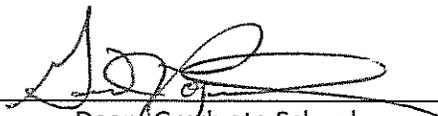
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THE HEROIN PROBLEM: LEARNING FROM PAST EXPERIMENTS IN
NARCOTIC MAINTENANCE

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in partial fulfillment of the requirements
for the degree of
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DEDICATION

This thesis is dedicated to my late father Sid Phillips who always instilled in me the value of education and taught me from a young age to think critically. I also want to thank my wonderful mother who has always supported and encouraged me to achieve the highest degree of learning possible. This thesis is also dedicated to my husband who has always been there with an open ear to listen to all my ideas and encourage me in my times of doubt.

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ABSTRACT

The following paper examines the ongoing political, legal and cultural debate regarding heroin maintenance in the U.S. that emerged after the passage of the Harrison Act. Moreover, it focuses on the United States very brief experimentation with narcotics maintenance clinics from 1914-1924 and why the clinic system was ultimately dismantled by the Treasury Department. This paper also highlights the U.S. public policy debate that emerged as early as the 1950s and continues today to develop heroin maintenance trials.

TABLE OF CONTENTS

CHAPTER	PAGE
I. Introduction.....	1
II. The Emergence of Heroin Addiction in the U.S. and Early User Trends.....	9
III. An Examination of Narcotic Maintenance and the Political-Legal Framework Used to Dismantle the Clinic System.....	26
IV. Re-Evaluating Narcotic Maintenance.....	43
V. Heroin Maintenance: Assessing the Likelihood of a U.S. Experiment.....	63
List of References.....	80

LIST OF TABLES

TABLE	PAGE
1. U.S. Narcotic Maintenance Clinics.....	34

CHAPTER I

INTRODUCTION

Every morning Dan wakes up with the same simple task; obtaining heroin. Before his feet hit the floor he is contemplating his hustle for the day and wonders who is holding. Dan is a heroin addict and has been for the past five years. He explains to me that the good days start with a hold over shot from the night before. Dan uses heroin anywhere from three to ten times a day depending on how much money he is able to scavenge thru odd jobs, recycling, and selling small amounts of the drug to other users. He makes a point to explain to me that he has tried to get clean through traditional rehab, methadone maintenance and even incarceration. Without knowing so Dan has also just inadvertently described in a nutshell the current U.S. responses to heroin addiction. Dan is 27 years old and is an exceptionally bright, funny and kind guy who in all sincerity wants to get clean but explains that he can't because treatment does not work for him and going to jail only makes him want to use more. As we discussed the perils of heroin addiction I explained to him that in certain European countries such as Switzerland and Holland heroin maintenance clinics were developed as an alternative for those whom abstinence based treatment programs were ineffective. I also informed Dan that similar programs were actually available in the U.S in the early 1920s as an immediate response to the Harrison Act, the 1914 federal legislation that criminalized drug use. Dan

explained to me that he had heard through the grapevine that programs like this existed but he thought they were an urban legend. Dan explains:

Can you imagine if this were allowed here; do you know what this would do for me? If I could go to a clinic and get clean stuff I could spend the rest of my time on living like a normal friggin person, I could get a job, an apartment of my own, help take care of my daughter, and maybe even get a decent girlfriend. But that shit will never happen here.....not a chance.

Dan is a pseudo name given to the interviewee. Personal Communication, 01 April 2012.

In all reality, Dan is perhaps right and the prospects of heroin assisted treatment in the U.S. are slim at best although that has not always been the case. There was in fact a brief period immediately following the passage of the Harrison Act when narcotics maintenance clinics were developed as a partial response to opiate addiction. The premise behind the clinics was if enough addicts were provided narcotics such as morphine and heroin at low cost then the black market supply would diminish and users would have more time to pursue legitimate activities such as employment and family. These clinics operated in cities such as New York, Philadelphia, Jacksonville, FL and Shreveport, LA from 1914 to 1924 until they were outlawed due to mounting pressure from the U.S Treasury Department. Brecher (1972) estimates that in 1921 as many as 44 clinics offered heroin and morphine maintenance to an estimated 12,000 addicts. Some historians note the effectiveness of the Shreveport and Jacksonville clinics while opponents of heroin maintenance used the New York City facility as documented proof that the clinics caused far greater harm than good. It is important to note that the New York City clinic's primary goal was to wean addicts off the drug rather than maintain them whereas most of the other facilities provided long-term maintenance for patients. Scholars note this important discrepancy along with bad organizational management was

largely responsible for the clinics failure (Musto, 2002; Courtwright, 1982). But, these reasons were largely omitted by opponents of maintenance and the failure of one clinic overshadowed the marked success of others.

Currently, the U.S. is especially resistant to the idea of heroin maintenance or heroin assisted treatment (HAT) yet the harm reductionist inspired program has been adopted in a handful of Western European countries as an alternative to traditional abstinence based treatment models. Europe and the U.S. frame opiate abuse based on fundamentally different ideologies which is evident when we compare their drug policies. For instance, punitive responses stemming from the “War on Drugs” have served as a major catalyst in further framing addiction as primarily a criminal justice issue in the U.S., however, in countries such as Switzerland and the Netherlands, addiction has been approached from a public health standpoint that is primarily concerned with minimizing the harmful effects of drug abuse. In a survey that examined Americans attitudes about the Drug War only 8% of respondents felt that providing legal access to heroin or cocaine for maintenance was acceptable (Connelly, 2010). Yet, the majority of Swiss citizens actually agree that heroin assisted treatment provides societal, health, and safety benefits for the individual addict as well as the entire community. After a decade of conducting HAT trials and making the program available to a small number of chronic addicts, the Swiss government decided to let their citizens decide the programs fate. In 2008, Swiss citizens passed a referendum to make HAT a permanent treatment option for addicts and as result the Swiss have witnessed a marked reduction in drug related crime, decreasing criminal justice and health care costs and improvements of life for the individual addict (Perneger, Giner, del Rio and Mino 1998; Rabasa 1998).

Regardless of the documented positive outcomes associated with HAT the U.S. is still largely dismissive of its effectiveness as a legitimate response to chronic heroin addiction. It may be exceptionally surprising to many that in fact the U.S. was once a proponent of heroin maintenance through the use of narcotics clinics however their existence has been largely omitted by today's policy makers. The small window in which narcotics clinics were utilized (1914-1924) is largely forgotten which is unfortunate because further examination of their effectiveness could prove beneficial in reopening the debate about the prospects of heroin maintenance in modern U.S. society. Furthermore, dismissing this element of public policy when addiction was approached with more tolerance only renders us less likely to develop effective, humane, and cost efficient alternatives to traditional abstinence based programs that overall have low success rates among chronic heroin users.

PURPOSE OF RESEARCH

The primary objective of this paper is to examine the ongoing political, legal, and cultural debate regarding heroin maintenance in the U.S. since the passage of the Harrison Act. It also highlights the historical emergence of heroin addiction in the U.S. and the factors that influenced early user trends. Moreover, it focuses on the United States' very brief experimentation with narcotics maintenance clinics from 1914-1924 and discusses the reasons they were ultimately banned by the Treasury Department. This paper also examines the public policy debate that emerged as early as the 1950s to develop heroin maintenance programs and it highlights current efforts to develop HAT trials in the U.S. It is also important to note that there are but a handful of studies and articles that specifically deal with the United States experimentation with narcotics

clinics and there are even fewer that examine the trajectory of implementing heroin maintenance into public policy. This paper also examines findings from heroin maintenance trials in Switzerland and more recently in Vancouver and assesses the likelihood of a U.S trial in the future.

METHOD

This paper uses a historical comparative analysis to examine the ongoing debate surrounding heroin maintenance in the U.S. that emerged after the passage of the Harrison Act. It also closely looks at the brief period in which narcotics maintenance clinics were utilized and why the Treasury Department who initially supported these efforts later took an aggressive anti-maintenance stance. Data used in this paper were gathered using primary sources including: annual reports from the Narcotics Division of the Department of Internal Revenue, Narcotic Clinics records, Supreme Court Rulings, and the Treasury Departments studies regarding the prevalence of opiate addiction. Also, personal accounts are presented from early addicts and physicians including Willis Butler who ran the Shreveport Narcotics Clinic. This paper draws from the previous work of historians and drug policy experts such as Dr. David Courtwright and Dr. David Musto who have examined in detail the United States' brief experimentation with narcotics clinics and why the clinic system was eventually dismantled. Additionally, it examines the accuracy of several pivotal studies such as Andrew DuMez's (1918) *Some Facts Concerning Drug Addiction*, and Hamilton Wright's (1910) Report on the *International Opium Commission*, both of which presented a statistical illusion that grossly misrepresented the prevalence of opiate addiction. Nonetheless, these studies were instrumental in the passage of the Harrison Act which ultimately transformed the

dominant attitudes toward addiction from tolerance to criminalization. These studies also had a significant impact in the ruling of two monumental Supreme Court decisions, *United States v. Doremus* and *Webb v. United States*. The first upheld the constitutionality of the Harrison Act and redefined the physician patient relationship while the latter provided legal precedent that was used by the Treasury Department to dismantle the narcotics clinics and ultimately maintenance.

In addition to examining the discourse and politics of heroin maintenance this paper also engages with more recent policy debates to implement heroin maintenance trials that emerged as early as the 1950s and continued until the late 1970s when heroin addiction resurfaced as a serious social issue. For example, I examine transcripts from the American Bar Association and American Medical Association's 1956 Joint Committee on Narcotic Drugs, and the 1962 White House Ad Hoc Panel on Narcotic Drug Abuse, both of which advocated policymakers to consider implementing maintenance trials. The debate regarding heroin maintenance once again laid dormant through much of the 1980s and 1990s as a result of the shifting conservative discourse that promoted "Get Tough" policies stemming from the War on Drugs (Trebach, 1982). Today, the prospects of heroin maintenance are once again being re-accessed due to the documented positive findings by the Swiss, Dutch and Canadian trials that substantiate the program's effectiveness in reducing drug related harms among high risk chronic users. This paper also discusses the more recent attempts to implement heroin maintenance trials in cities such as Baltimore and New York City and why those efforts ultimately failed. When discussing heroin maintenance or heroin assisted treatment (HAT) it is almost implausible to do so without examining the Swiss approach. This

paper also presents findings from Swiss HAT trials which provides compelling evidence that it is feasible to maintain large numbers of addicts on heroin in a way that is acceptable and safe for both the individual addict and the community.

DEFINING HEROIN ASSISTED TREATMENT

This paper uses the terms heroin maintenance and heroin assisted treatment (HAT) interchangeably, however, the term HAT was not used until the early 1990s whereas heroin maintenance is used largely to refer to the early U.S. clinics that operated from 1914-1924. Heroin assisted treatment (HAT) or heroin maintenance is a form of medical care that involves tightly regulated and controlled prescriptions of heroin that is offered to a target group of users in which opioid substitution (i.e. methadone and suboxone) and traditional treatment approaches have been unsuccessful (Canadian HIV/AIDS Legal Network, 2006). HAT evolved based on the theory of “harm reduction” or “harm minimization,” which attempts to reduce the negative consequences associated with potentially harmful human behavior. HAT is but one of many programs based on the theory of harm reduction. Others include: safe injection sites, needle exchange programs, heroin assisted therapy, naloxone distribution, methadone maintenance, safe sex programs, and low-threshold health care services. However, this paper focuses predominately on heroin assisted treatment. The movement of harm minimization or harm reduction has emerged largely from Western Europe and it is built on the view that drug policy can have goals other than reducing prevalence and that it may be appropriate to sacrifice some reductions in use in order to lower the adverse consequences of harmful behavior such as drug use (MacCoun and Reuter, 2001). Program evaluations from the Swiss, Dutch, and even Vancouver’s HAT trials found the treatment to be effective in

reducing drug related harms such as: improving mental and physical health (reducing exposure to HIV and Hepatitis B&C and improving psychological well-being), decreasing involvement in criminal activity (committing crimes as a means to obtain illicit drugs), improving social functioning (securing housing, employment, making drug free contacts and increasing leisure activities), and decreasing the use of illicit drug use such as street heroin and cocaine (Perneger, Giner, del Rio and Mino 1998; Farrell and Hall, 1998). In spite of the compelling evidence from recent HAT evaluations indicating that the program is effective in reducing the societal harms that are a direct consequence of drug use, the U.S. remains largely unreceptive and even hostile to the idea. But a closer examination of our own history reveals this was not always the case. Judging by todays ultra-punitive policies regarding drug use it is difficult to imagine a time when the U.S. had a more humanistic and progressive approach toward drug treatment that allowed for the maintenance of addicts through narcotics clinics. Though that time was short lived and maintenance efforts were abandoned due to mounting political pressure from the federal government, they nonetheless mark a watershed moment in the transition from tolerance and acceptance of drug use to ultimately stigmatization and criminalization.

CHAPTER II

THE EMERGENCE OF HEROIN ADDICTION IN THE U.S. AND EARLY USER TRENDS

In the late 19th century opiates such as morphine were particularly favored by a cohort of middle-class housewives who used the drug for a range of symptoms from menstrual cramps to fatigue. Opium, morphine, heroin, and cocaine could be found in practically every imaginable form from the traditional nostrum to coca spiked wine. Yet, for the most part opiate addiction was not considered a serious social problem until it made its debut among the ranks of the poor working class and the Chinese (Courtwright, 1982). Although the bulk of this chapter is centered upon the origins of heroin addiction and the factors that influenced it in the U.S, it would be historically misleading to omit the role opium smoking played in the narcotic prohibitionist movement of the early 20th century. It is also important to briefly address morphine addiction and why this drug was seen as less of a threat than heroin and opium smoking. Was it possibly due to the fact morphine addicts were predominately older and sicker and more often middle-class women and Civil War veterans, whereas, early heroin addicts were mostly white poor working class young men and boys? Moreover, within the span of a century the pattern of opiate abuse in America has been dramatically transformed to the extent it has reconstructed how we feel about the problem of addiction (Courtwright, 1982). The

following chapter highlights this transformation by examining the emergence of heroin addiction in the U.S. as well as early user trends and the factors that influenced it.

THE ADVENT OF HEROIN

Heroin was first synthesized by C.R Alder Wright in 1874 and was later marketed by Bayer Pharmaceuticals in 1898 as an amazing new drug due to its ability to weaken the cough reflex (JAMA, 1906). Heroin or diamorphine is an opioid analgesic that was developed by adding two acetyl groups to the molecule morphine. In the medical community it is referred to a diamorphine, but the name heroin has become synonymous with its illegal use. Physicians prescribed heroin due to its effectiveness in relieving symptoms related to respiratory diseases such as pneumonia, tuberculosis, and whooping cough which were extremely prevalent during the early 1900s (JAMA, 1906). Heinrich Dreser, a German chemist for Bayer pharmaceutical company was chiefly responsible for launching the drug in the United States and it was initially well received by the medical community due to its effectiveness in relieving the cough reflex. It is worth noting that Dreser was also responsible for developing aspirin which gave physicians an alternative to prescribe in lieu of opiates and its derivatives.

Heroin was first introduced as a non-habit forming drug and was used as a substitute for morphine and codeine and in its early years it was even touted as a ‘cure’ for the morphine habit. However, physicians quickly noted the addictive nature of the drug and by 1910 became less enthusiastic about prescribing it. It is also important to note that the advent of aspirin in 1899 gave physicians an alternative to prescribe in place of strong opiates such as morphine, codeine and heroin. Terry and Pellens (1928) note it

was not until 1910 that physicians fully awoke to the danger of the drug and by that time a great many heroin addicts had been created inadvertently. Yet, some historians note the prevalence of medical heroin addicts was not as widespread as early accounts indicate. Pearce Baily (1916) explains that physicians were rarely responsible for introducing the drug to addicts. Instead, the first dose of heroin was neither pill nor hypodermic injection taken to alleviate some physician distress, but was a small quantity of powder ‘sniffed’ up the nose of a young man under the direction of his peers.

Bailey’s account is more reflective of available data that indicates heroin addiction was less likely a product of physician’s liberal use, but instead a result of curiosity, dissipation or a substitute for smoking opium. A 1918 study of medical or intragenic heroin use reveals that only 2 of 50 users became addicted, yet abuse among non-medical users began to rise significantly as early as 1910 (Sheffel, 1918). A second study conducted by Stokes (1917) found of the 18 addicts he treated 17 listed “companions” as the source of their addiction. Unlike morphine which was prescribed as a panacea for medical conditions from depression to fatigue, heroin was almost always prescribed for respiratory related illnesses which limited the number of medical users.

A handful of scholars argue that heroin was introduced to the underworld through less complex channels (Kane, 1917). Some early accounts claim that heroin was given to prisoners in a New York state penitentiary as a remedy for cough and respiratory related illnesses. The word quickly spread among prisoners and then to the street that the heroin pills were “good dope” (Kane, 1917). Although this story was probably true to an extent it was doubtful that there was a single point of entry for heroin’s induction into the black-market or as the narcotic of choice for the underworld. Instead, it was a combination of

factors: the importation bans on opium, the restrictive policies on cocaine, companion recruitment, and curiosity that led many to the heroin habit.

EARLY USER CHARACTERISTICS

In 1910, non-medical heroin use was mainly concentrated to New York City and most of its users were young, poor, white and the children of immigrants whose easy sociability had been developed in the gangs (Bailey, 1916). Geographically, by 1920, nine out of ten heroin addicts were clustered within a 180 mile radius of Manhattan. This raises the question of why was New York City so vulnerable to heroin abuse at this time? Heroin's availability in New York and surrounding areas is largely attributed to the simple fact of geographical convenience. According to Courtwright (1982) by 1915, many of the major heroin manufactures such as Merck, Bayer, and Schieffelin were centered in New York City. As a result addicts and their recruits could easily divert large amounts of the drug into the illicit market.

According to Leahy (1915) the composite heroin addict was a young white male who lived in a New York slum or a neighboring eastern city. He was also likely to be poorly educated and if he worked he likely held a blue collar job of an unskilled or semiskilled variety. For example, many held employment as drivers, painters, news dealers, longshoremen, bell boys, and soda jerks. But, addicts were not exclusively young poor white males; heroin was also popular among female prostitutes, gamblers, hustlers and upper class professionals who had switched from opium after the importation ban. Many female addicts of the time listed their profession as actress but the large majority of users were prostitutes who lived with addicted lovers and often shared their earnings and

drugs together (Courtwright, 1982). Some scholars note that heroin sniffing was a popular pastime among soldiers prior to WWI and opium smoking was common place for soldiers stationed in the Philippines (Musto, 1973). Generally, heroin and opiate abuse was relatively an insignificant problem for the armed forces especially when compared to the number of civilian addicts. Courtwright (1982) notes, that heroin abuse was not exclusively limited to one group characterized by class, race or gender, but the average composite of an addict during the first few decades of the 20th century was likely first generation American, poor, male and white. Acker (2002) explains, to many upper middle class Anglo American Protestants this pattern of drug use reflected an alarming increase in vice which added to their anxieties about the profound social transformations resulting from industrialization, urbanization and new patterns of immigration. Perhaps it was not the drug itself that exacerbated the anxieties of the ruling class but what the drug represented: a changing cultural and social landscape that conflicted with American hegemonic control.

Early heroin users were also more socially visible than other opiate addicts of the time such as morphine users who enjoyed their drugs privately. Leahy (1915) explains morphine addicts were more of the intellectual type and secretive as to their habit and usually temperate in their dose and on the whole came from more diverse and better social backgrounds while heroin addicts represented the lumpenproletariat. Pearce Bailey (1916) explains hygiene and grooming were frequently neglected by the heroin user and as a group they would have struck the public as worse than the “normal low” due to their often pale, emaciated and shabbily dressed appearance. It may be misleading to describe early heroin uses as exclusively criminals and their gang affiliation was not

always pursuant to illegal activities. Riis (1903) explains that a boy's affiliation with his gang and its activities was often casual something he did after school and the same group that might organize a baseball game or dance might also be found pilfering boxcars or smashing windows. The gangs basic structure rewarded its most daring and pugilistic members making the boys all too eager to experiment and indulge in drugs such as heroin sniffing. Pearce Bailey (1916) explains a common story of experimentation with heroin starts as:

A group of boys being together at a group or show or some type of social gathering and one of the boys produces a package or 'deck' of heroin and tells the other boys taking it is wonderfully enjoyable and recommends the other boys try it. They of course want to follow the majority and go along and try the drug although the first taking is generally not agreeable, but they try it again and about twenty-five percent become victims of the habit within a few months (Bailey, 1916 p.314).

Many of these young men were labeled "junkies" and an examination of the etymology of the word reveals that in the 1920s it was used to describe how many addicts supported themselves and their habit. Courtwright (1982) notes the word in the literal sense meant "junkman" because early addicts picked through industrial dumps scavenging for copper, lead, and iron which they collected in a wagon and later sold to a scrap dealer. Today, however, the word inspires some of the most negative connotations imaginable in which many conceptualize emaciated, ragged heroin addicts mainlining in a dark alleyway. The transformation of the word "junkie" over the past century and its shift in meaning is largely the result of drug criminalization (Post Harrison Act) and the transgression of intragenic medical users to non-medical addicts that began to transpire in the early 1900s (Courtwright, 1982).

The negative connotation attached to the word also represents the transition of early heroin sniffers to intravenous users and by the 1940s the heroin mainliner emerged as the dominant underworld addict type. However, the switch to the needle can also be seen as a byproduct of the Harrison Act and other restrictive legislation that limited the legal supply of heroin forcing addicts to secure their drugs through the black-market. As a means to increase profits peddlers would cut the drug with additives such as baking soda or laxatives, diminishing its potency and leaving users seeking a new method of ingestion that would increase the drug's euphoric effects (Courtwright, 1982). By 1938, heroin on average was 27.5 percent pure; although that ratio is very potent compared to today's street heroin which is about 3-5% pure, it was considered highly adulterated by early users who were accustomed to purer drugs. O'Donnell and Jones (1970) explain the intravenous technique likely began accidentally when the addict hit a vein and after his initial fright wore off discovered that this method was even more euphoric than intramuscular injection.

What is also interesting about early heroin users is they were more likely to be institutionalized as a result of their drug use more so than other addicts of the time. Data from the U.S. Treasury Department's report "Traffic in Narcotic Drugs" (1919) reveals that early heroin addicts were more likely to be incarcerated or sent to public institutions while morphine addicts were more numerous in private hospitals and sanatoriums. Even one hundred years ago we can see dramatic distinctions in how heroin addiction was approached when compared to other drug users. The U.S. Treasury Department estimated that between 1915 and 1916, there were at least 10,000 heroin addicts institutionalized in either jails or prisons. However, at that same time there were less

than 1,300 heroin addicts in private or public hospitals while there were over 4,000 morphine addicts seeking treatment in hospitals and almshouses. Also, in 1928 of the 623 convicted addicts found suitable for custodial treatment at New York City's Correctional Hospital, 588 (98%) used heroin alone or in combination with other drugs. Courtwright (1982) notes that heroin addicts were (and still are) behind bars more so than other opiate addicts due to several reasons: many resort to stealing or dealing drugs to fund their habit, or because they are reared in the slums and most addicts are single males in their teens and twenties the prime time for crime with or without drugs. However, Acker (2002) explains that drug criminalization efforts stemming from the Progressive Era sought to manage poor and working class urban populations.

CRIMINALIZATION AND THE ORIGINS OF NON-MEDICAL HEROIN ADDICTION

The early origins of non-medical heroin use in the U.S. can be attributed to several factors. One of the most significant contributions was the Opium Exclusion Act of 1882 and later the federal ban on smoking opium in 1905. Pearce Baily (1916) notes veteran smokers and recruits deterred by the ban abandoned the pipe and exchanged it for more powerful and then legal drugs such as heroin. Opium smoking in the U.S. began roughly around 1850 and was transplanted to the west coast by Chinese immigrants, but by the 1880s the trend was popular among whites alike (Courtwright, 1982). The drug was preferred among prostitutes, gamblers, and other criminals of the underworld but not exclusively. The white upper class routinely smoked opium at parties and social gatherings and it became established as the opiate par excellence. Unlike most other drugs, which were largely done privately or within small groups, opium smoking was a

social act due in part to the complexity of the pipe. As a result opium dens became an integral part of the user subculture. Kane (1891) noted that an individual's status was determined by his adherence to such groups and by his skills in performing the opium smoking ritual.

By the 1870s, the public's fear of opium smoking was heightened because the practice had spread beyond the Chinese on the West Coast and had become a favored opiate among white society folks many of which were women. Frederic Poole, a Philadelphia missionary, notes that white women were being seduced in the dens where shameless smokers persuaded "innocent girls" to smoke in order to excite their passion and sexual desire (Courtwright, 1982). The Chinese received the wrath of responsibility for the opium smoking trade and although they controlled a considerable share of the U.S. market they were not alone in this endeavor. Unfortunately, the entire Chinese community was held accountable for the opium trade and the public's fear of a Chinese dominated labor market served as a catalyst that prompted policy makers to act.

By 1875, public outrage directed toward the practice of smoking opium was translated into drug criminalization first in the form of municipal and state governments and later at the federal level. These fears were further sensationalized by the press and the San Francisco chronicle reported that in 1886 15,000 of the 30,000 Chinese living in the city were addicted to smoking opium (Courtwright, 1982). A San Francisco police officer even testified at a local hearing that ninety-nine out of one-hundred Chinese in the city were habituates of the pipe. These numbers were considered exaggerations by some historians who claim that only one out of twenty Chinese living in the city smoked opium (Courtwright, 1982). Accuracy aside, these misleading statistics were influential in the

first efforts aimed at drug criminalization in the U.S. San Francisco and Virginia were among the first cities to pass ordinances that penalized those caught possessing or smoking opium and these efforts were largely targeted at disassembling the public opium dens.

By 1915, 26 states had some type of anti-opium laws that sought to close public dens or ban the practice outright. Courtwright (1982) notes, that the state and local criminalization efforts were largely ineffective due to the laws' inconsistencies and selective police enforcement efforts. For example, the Chinese dens were targeted more aggressively while white opium smokers took the practice underground. Ultimately, there were two significant forces responsible for the decline of opium smoking in the U.S: demographics and federal legislation such as the Chinese Exclusion Act of 1882 which sought to prohibit the immigration of Chinese into the United States. Courtwright (1982) explains that immigration restrictions and racial antagonisms took their toll, rapidly decreasing the number of Chinese in America from 103,620 in 1890 to 53,891 in 1920.

The Chinese Exclusion Act of 1882 remains one the most racially restrictive immigration laws in U.S. history and was a result of deep seated prejudices and the fear of a Chinese dominated labor market (Lee, 2002). It is also important to note the significant impact this piece of legislation inadvertently played on opiate user trends because the Chinese controlled a considerable share of the opium trade in the United States, and as their population dwindled so did the access to smoking opium. As the supply of smoking opium diminished users were left with but a few choices: either stop using opiates completely or switch to a more legal and readily available substitute. There were a very small handful of users that continued smoking opium regardless of its

growing scarcity and expensive price tag but many lacked the privilege of wealth needed to facilitate their habit. Eventually, even this class of user faced the stark reality that the stock of smoking opium had practically evaporated. This incited many users to simply switch to legal opiates that were readily available and significantly cheaper. Some switched to morphine, but many sought out heroin as a substitute and as a result the number of addicts consistently grew until the outbreak of WWII. Although the opium importation ban and the Chinese Exclusion Act both contributed to the growing influx of heroin users there were other factors at play especially the growing scarcity of cocaine which also left its users looking for a suitable alternative.

Much like opium, cocaine was an early target of drug criminalization efforts and as a result its availability decreased leaving many users seeking out opiates such as heroin in exchange. The alkaloid cocaine was isolated in the 1850s and it was used as a therapeutic and pain relief agent beginning in the 1880s. Cocaine much like morphine received early glowing recommendations from the medical community and was prescribed for a variety of mild to moderate illnesses (JAMA,1900). Patent medical vendors peddled cocaine-laced tonics and self-treatment was partially to blame for the spread of addiction. Public outrage toward the drug began to fester as sensationalized stories of cocaine-intoxicated African Americans filled local newspapers. Charles Terry (1920) notes that in Jacksonville, FL Blacks were overrepresented among regular cocaine users as many began to use the drug as a stimulant to increase work productivity. But when we consider the working and social conditions of Black individuals living in the Jim Crow South it is not surprising that they sought a stimulant such as cocaine as an escape to the harsh realities of life. Especially when we consider that at this point the

drug was legal and peddled in tonics, elixirs and nostrums that were widely available to all.

According to Courtwright (1982) racially charged fears of Black men erratic and violent on cocaine fueled the public's fears promoting policy makers to impose criminal legislation on the drug. A South Carolina paper reported that the cocaine habit among Blacks has grown to be a great evil in many southern cities and the African American who takes cocaine becomes temporarily crazed and there is no crime which he will not commit (*The Herald and News*, 1909). The story also proclaimed that policemen fear the manic strength and fury of the cocaine intoxicated African American. *The Herald and News* (1909) also reported that in Charlotte there are houses where cocaine fiends hold orgies and these places are filled with crazed demons. Even the New York Times reported on the false hysteria reporting that most of the attacks upon white women in the South were a result of the "cocaine crazed Negro brain" (Williams, 1914). These stories even prompted police officers to adopt the .38 caliber revolver because Black men high on cocaine could not be stopped by the standard .32 caliber (African American News, 2007). These sensationalized racial fears would be a reoccurring theme in efforts to criminalize drugs continuing throughout the 20th and 21st century. The so called inner city crack epidemic is a modern example of these efforts of social control targeting marginalized groups.

Cocaine use was by no means exclusive to Blacks, the drug was also a popular stimulant among the white underworld in both southern and northern cities. Much like the Chinese opium smokers in California, Blacks in the south were singled out as the most problematic users as a result of racial prejudices making restrictive legislation easier

to achieve (Courtwright, 1982). Perhaps the South's reliance on slave labor and later the sharecrop system bares some responsibility for cocaine usage among African Americans during this period. By 1915, most states had passed laws designed to restrict the use of cocaine to therapeutic purposes and users were required to obtain legitimate prescriptions through physicians (Musto, 2002). Also, the advent of tropacocaine, novocaine and stovaine retained the anesthetic properties of cocaine but lacked its euphoric effects giving physicians and dentists an alternative to prescribe in place of cocaine (JAMA, 1906). Restrictive legislation diminished the supply and inflated the prices of cocaine by 1915 inciting many users to switch to a more accessible and then legal alternative such as heroin.

DRUG CRIMINALIZATION: THE EARLY YEARS

Acker (2002) explains that drug criminalization efforts stemming from the Progressive Era sought to manage the poor and working class urban populations. Heroin and cocaine addicts were among the most targeted user type because they represented a symbol of irredeemable deviance (Acker, 2002). Public sentiments for the heroin addict were profoundly different than compared to morphine addicts who were typically seen as the "object of pity" because they were usually middle class white women or civil war veterans. Acker (2002) explains that this sympathetic attitude was not extended to the heroin addict who chose to reject mainstream societies expectations of him. The female morphine addict obtained inexpensive opiates at little social cost; yet the urban laborer heroin addict was forced to secure opiates that were increasingly costly in both financial and social terms. Moreover, at the macro level the early public policy efforts aimed at drug criminalization shaped the urban social milieu in which the heroin trade was

concentrated and how heroin addiction would be culturally defined throughout the rest of the 20th century (Acker, 2002). The progressive era policies that criminalized heroin were easy to sale to the mainstream public largely because the dominant user type was portrayed as a deviant urban male.

The press was also complicit in promoting the agendas of prohibitionist reformers by sensationalizing reports of heroin and cocaine fueled crime committed by the lower classes. Police also exaggerated the heroin problem and one New York City officer told reporters that the drug was a "courage builder" for the deviant (New York Sun, 1919). The article also reported that police statistics demonstrate that to every murder committed by an alcoholic, there have been four perpetrated by a dope fiend. According to Courtwright (1982) much of what we think about opiate addiction in the United States is dependent upon who is addicted. Early newspaper accounts of heroin addiction support this assertion and illustrate the responses of law enforcement often times varied largely based on the socioeconomic characteristics of users. The addicted poor were demonized as violent uncontrollable dope fiends who would stop at nothing until they got their drugs. However, archival newspaper accounts reflect a different narrative was presented when the middle and upper classes fell victim to the plight of heroin addiction.

The New York Tribune (1921) featured a piece about a debutante who became addicted to heroin after a friend gave it to her for a headache. The debutante who stole her father's car and ran away from home was placed into police custody and confided in the officer she was a slave to the drug and it controlled her life. Although the officer found heroin in her possession she was not arrested. Compassionate to her plight, likely a result of her skin color and social standing, the officer even refused to tell her name to the

reporter of the cited article. He also said that he made sure she was taken to a place where she could get the proper treatment for her heroin habit (*New York Tribune*, 1921). *The Evening Public Ledger* (1915) reported a story about an 18 year old girl who was found unconscious from an overdose of cocaine or heroin during a police raid of known dope fiend's residence. Unlike the earlier story of the heroin addicted debutante whose name the officer would not reveal, nor would he arrest, the officer in this case had no reservations about either. Although the woman had been a victim of a drug overdose and almost died, the police had little sympathy as to her situation. After her recovery she was sentenced to three months to the women's house of corrections in Philadelphia (*Evening Public Ledger*, 1915). The juxtaposition of these accounts illustrates the skewed responses of police based on the socioeconomic characteristics of the user.

PREVALENCE OF OPIATE ADDICTION PRIOR TO WWII

It is hard to provide an exact number of non-medical heroin addicts in the U.S. for several reasons. Records on addiction at the time were not thoroughly kept and in many instances early statistics were fabricated to influence public policy on narcotics use. Historians such as Musto, (1973) and Terry and Pellens (1928) argue that by 1924 there were around 100,000 to 200,000 opiate addicts (morphine, opium, and heroin) but they explain even that number must be taken with caution due to the questionable methodology many early studies used to gather data. One example is Andrew DuMez's (1918) "Some Facts Concerning Drug Addiction" that concluded 750,000 as a conservative number of opiate addicts in the U.S. Also, the Bureau of Internal Revenue estimated that there were 1, 500,000 opiate addicts as of 1919.

Many scholars have rejected these estimates and argue that the prevalence of addiction was grossly misrepresented to influence prohibitionist narcotic policy (Terry, 1920). Courtwright (1982) also rejects the official estimates cited by both the Treasury Department and DuMez explaining much of the data gathered in both studies was fabricated. His analysis of U.S. opium import statistics reveal that the Pre-WWII addict population reached its climax from 1900-1914 with 313,000 addicts and afterwards it began to steadily decline until the late 1940s. Hamilton Wright, a Physician and scientist in addition to a U.S. Senator and the first Opium Commissioner was disingenuous with his estimates of opiate abuse and did so through manipulating the per capita opium imports to create an artificially constructed number to use as scare tactic to prompt narcotic reform policy (Courtwright, 1982). Moreover, some historians suggest that the peak opiate usage in the U.S. climaxed in 1890 with an estimated 4.59 addicts out of every 1,000 individuals but afterward that number began a sustained decline. In fact, opiate and cocaine consumption and related problems had already begun to decline on its own prior to the Harrison Act and the law merely signified already ongoing changes in social attitudes regarding drug use. Politicians of the time used racial fears, fabricated statistics and disingenuous arguments to support criminalization efforts.

The methodological flaws of these studies will be addressed in subsequent sections, however, accuracy aside both DuMez and Wrights official estimates on opiate addiction had a tremendous impact on the trajectory of narcotics criminalization because they were cited as evidence by reformers advocating for the Harrison Act and later presented as facts in the Webb and Doremus Supreme Court decisions. This presents a very important question; if our nation's most influential early narcotics policies were

based upon exaggerated and distorted evidence then might it be surprising that those reform efforts have been largely ineffective? Courtwright (1982) explains that, overall narcotic use was steadily declining on its own prior to the Harrison Act but that soon changed and within a few decades of its enactment usage rates for heroin addiction far exceeded that of when the drug maintained a legal status.

CHAPTER III

AN EXAMINATION OF NARCOTIC MAINTENANCE AND THE POLITICAL- LEGAL FRAMEWORK USED TO DISMANTLE THE CLINIC SYSTEM

In some regards the Harrison Act was a classic piece of progressive legislation that attempted to regulate and restrict the sale of narcotic substances and reduce the number of addicts in America. Initially, the law was no more than a regulation that taxed the production, importation, and distribution of narcotics such as morphine, heroin, and cocaine. Many mark the law as the first efforts to criminalize drug users but in its infancy it was merely a tax regulation. Brecher (1972) explains how the law specifically provided that manufacturers, pharmacists, importers, and physicians prescribing narcotics maintain a license and pay a moderate fee. Also, initially patent manufactures were exempted from these provisions and were not required to pay a tax on products containing opiate and cocaine derivatives. Section II of the Harrison Act (1914) explains, it is unlawful for any persons to sell, barter, exchange or give away the aforesaid drugs (heroin, opium, morphine, and cocaine) except in pursuance of a written order. The law also required physicians, dentist, and pharmacist to keep records on the dispensation and distribution of narcotic drugs including patient name and address. Yet, from 1919-1935 more than 25,000 physicians were arrested under the Harrison Act 2,500 of which were sentenced to prison (White, 2002).

In all actuality, the Harrison Act simply required physicians, pharmacists, manufactures, and distributors to provide a tax stamp for narcotics and keep comprehensive records of the amounts of drugs they prescribed. Ideally, if a physician was registered, presented his tax stamp and kept carefully patient records then he was inside the bounds of the law (Musto, 1973). In its infancy, the Harrison Act did not appear to be a “prohibition law” but the right of a physician to prescribe narcotics proved indeed problematic because it was spelled out in such ambiguous language. What the law did not clarify was if physicians could provide maintenance to addicts although many law enforcement officials interpreted it to mean they could not. Even in the initial months following the law’s enactment revenue agents began harassing and arresting physicians and druggists who provided narcotics to addicts although many provided the appropriate tax stamp required by the law (Musto, 1973). The legality of a physician’s right to provide maintenance as a type of medical treatment under the Harrison Act was brought forth in two Supreme Court cases, *Webb v. United States* and *United States v. Doremus*. Consequently, a law that was initially created to ensure the market regulation of narcotics was transformed into a law that redefined a physician’s autonomy to provide maintenance to addicts.

UNITED STATES V. WEBB

The Webb decision was handed down on March 3, 1919 and held that a practicing physician could not issue morphine or heroin to a habitual user in the course of professional treatment for the purpose of keeping him or her comfortable by maintaining their customary use. Webb, a practicing physician, and Goldbaum a retail pharmacist in the Memphis area, were accused of customarily prescribing patient’s morphine and

heroin for the sole purpose of maintaining their addiction. According to Section I of the Harrison Act (1914) Webb and Goldbaum were not in violation of the law and had registered and paid the tax required of them. But it was the question of maintenance that was brought before the court. Justice Day delivered the opinion and concluded physicians could not provide users opiates with the sole purpose of keeping them comfortable by maintaining their customary use (Webb et al. v. U.S., 249 U.S. 96). It is important to note that the courts cited Hamilton Wright's "Report on the International Opium Commission" and Andrew DuMez's "Some Facts Concerning Drugs" both of which grossly overrepresented the prevalence of drug abuse and cited that there were at least 750,000 if not 1,500,000 addicts in the U.S. The margin in this case was one vote, which presents an important question; if the Court could have seen a more statistically accurate picture of addiction and not a fabricated account inspired by political agendas, would it have affected their decision in favor of maintenance?

The Treasury Department wasted no time in enforcing the decision that provided them legal precedent to arrest and prosecute physicians and druggist providing users with maintenance care. According to Musto (1973) by April 1919, less than a month after the Webb decision was handed down Narcotics Agents arrested several prominent New York City druggists and physicians who had been supplying hundreds of users with morphine and heroin as a show of their commitment to enforcement efforts. Musto (1973) notes that these medical providers had been under the careful eye of the Treasury Department for months but both the Webb and Doremus decisions gave them a legal basis to successfully prosecute physicians who provided maintenance to addicts. The Doremus case is of special importance here for several reasons. First, it upheld the constitutionality

of the Harrison Act and extended its scope beyond a simple tax measure. Secondly, it redefined the physician and patient relationship.

UNITED STATES V. DOREMUS

The indictment against Dr. Doremus accused him of unlawfully and fraudulently prescribing heroin to a patient for the sole purpose of gratifying his appetite for the drugs. Doremus maintained the proper registration and tax stamp required by the law but the question brought forth by the court was if maintenance fell within the bounds of the “professional treatment of an illness or medical condition” (United States v. Doremus, 249 U.S., 86). The lower court held the restrictions on Dr. Doremus's practice were irrelevant to the collection of revenue powers of the Harrison Act and it overreached the constitutional powers of the federal government. However, the Supreme Court did not agree and reversed the lower Courts ruling by a one vote margin.

The first two counts of the indictment against Dr. Doremus claimed that he distributed a large quantity of heroin to Mr. Ameris (his patient) that was not in pursuance of a written order form issued by the Commissioner of the Internal Revenue. The indictment also claimed that Doremus did unlawfully and knowingly prescribe five hundred one-sixth grain tablets of heroin not in the course of the regular professional treatment of any disease from which the patient was suffering (United States v. Doremus, 249 U.S., 86). Instead, the court held that Dr. Doremus knew the patient was popularly known as a 'dope fiend' and prescribed the drug for the sole purpose of gratifying his appetite as an habitual user. It also concluded the excessive amounts of heroin prescribed to the patient may have been sold to other users without paying the imposed tax required

by the Harrison Act (*United States v. Doremus*, 249 U.S., 86). The Supreme Court explained in its decision that the Harrison Act was not unconstitutional and it may be assumed that the statute has a “moral end” as well as a revenue purpose if the legislation is within the taxing authority of congress and the majority of Justices agreed it was. The ruling was a triumph for reformers and it confirmed the constitutionality of the Harrison Act tax while limiting the manner in which drugs could be prescribed by physicians. The Doremus decision ultimately redefined the patient-physician relationship by stipulating narcotics could only be prescribed in the course of professional practice of an illness or medical condition (excluding addiction) and only and through valid prescriptions (*United States v. Doremus*, 249 U.S., 86).

Once again DeMez’s “Some Facts Concerning Drugs” and the Treasury Departments “Traffic in Narcotic Drugs” were cited in the Doremus decision although both studies provided a sensationalized portrait of opiate addiction. With a five to four vote in favor of upholding the constitutionality of Harrison this presents a very important question. Had the court received a more reflective account of the prevalence of opiate abuse would the Justices have ruled differently? Especially when the court explained that it may be assumed that the statute has a moral end as well as a revenue purpose if the legislation is within the taxing authority of congress. This same moral inclination may have proved less imperative if the addict population was more accurately stated. Instead, the court cited DuMez’s “Some Facts Concerning Drugs” which reported there were at least 750,000 and perhaps 1,500,000 opiate addicts in the United States, however, Courtwright (1982) explains that there were never more than 313,000 opiate addicts in America prior to 1914.

A closer look at DuMez's study reveals he may have used fabricated and inaccurate data gathered from physician and pharmacist surveys to arrive at his conclusions regarding the addict population (Courtwright, 1982). DuMez relied on self-reporting surveys that attempted to tabulate per-store averages of opiate sales that were then used to estimate the overall addict population. This type of methodology is extremely problematic because the study makes no effort to differentiate between medical and non-medical users. When later pressed by skeptics to present his original surveys DuMez postponed the matter until his death. Nonetheless, DuMez's study dramatically impacted the trajectory of narcotics reform and scholars later document how statistically inaccurate they were. Musto (1973) and Courtwright (1982) compared DuMez's original estimates from his self-report surveys of physicians and druggist to opium import statistics from the 1890s to the 1920s. DuMez confidently proclaimed there could be as many as 1.5 million opiate addicts, however, Musto (1973) claimed that number was more like 313,000.

The Treasury Department even estimated that there were over 1,000,000 addicts (though this estimate once again was based on the questionable conclusions of DuMez's and Wright's studies) and the abrupt drug restrictions resulting from the Webb and Doremus decision would likely lead to an increase of crime and possibly even the death of many addicts (Courtwright, 1982). The Treasury Department reasoned that as 'dope doctors' and druggist were arrested and closed their operations some attempt on behalf of the government was needed to provide addicts with a temporary supply of drugs until they were cured of the habit (Musto, 1973). The almost idealist reference to "the cure" is indicative of the naiveté and lack of medical understanding regarding the psychological

and physiological components of addiction. Drug treatment was in its infancy at this point and the majority of both the medical and government establishments felt there was a “cure” to addiction, however, almost a century later it remains undiscovered. Musto (1973) notes that the state recognized its responsibility for the addicts plight insomuch that they felt it was necessary to provide temporary relief in the form of narcotics clinics though they never intended to make them a permanent public health initiative.

The small window in which narcotics clinics existed is unknown to many. Nonetheless, their existence represents a brief period in U.S. history in which addiction was approached with tolerance although this tolerance was short lived and eventually replaced with moral condemnation and criminalization. Ironically, the clinics were formed at the behest of federal government although they were quickly dismantled by many of the same policy makers who only a few years prior supported a coordinated maintenance effort. Specifically, the Commissioner of the Internal Revenue explained in his annual report of June 1919 that provisions must be made for the treatment and cure of addicts who are unable to obtain supplies of drugs necessary to prevent physical and mental suffering as this condition may become a menace of life and property (Annual Report of the Commissioner of Internal Revenue, 1919). However, attitudes of tolerance and compassion expressed toward the addict by federal government were quickly reverted and we can find evidence of this shift by the following year. In 1920, the Annual Report submitted by the same Commissioner of the Internal Revenue Department marks a changing discourse toward the individual addict and it cited the newly formed Narcotics Bureau’s pamphlet claiming the clinics perpetuated an evil habit in persons who could be readily cured of their addiction (Musto, 1973). An attitude of moral condemnation

replaced the matter of fact sympathetic statement cited by the Commissioner only a year prior largely as a result of the very public failure of the Worth Street Clinic. But, a close examination of the narcotics clinics reveals that in fact many provided effective maintenance care for addicts although the failure of one clinic specifically, the Worth Street clinic in New York City overshadow the marked success of others such as the Shreveport, Atlanta and Jacksonville facilities.

NARCOTICS CLINICS

As early as 1914, narcotics clinics were being organized as a response to opiate addiction although the majority of the some 44 facilities were created in 1919 after the Webb and Doremous decisions redefined a private physicians right to prescribe narcotics for the sole purpose of maintenance(Courtwright, 1982). The clinics sought to diminish the black-market supply and steer addicts away from private physicians and apothecaries who commercialized their vice. The basic philosophy behind the clinics was if enough addicts were supplied legally and at low cost then the individual would be relived from depending on black market peddlers and would thus have more time to devote to legitimate pursuits such as securing employment, marriage, and family (Musto, 1973). It was also agreed that some addicts were “curable” and not suited for maintenance care. Abstinence based rehabilitation programs were offered to many users through either the narcotics clinics or at local hospitals. It was presumed that if enough addicts were supplied legally then the black market would diminish thus reducing the crime and harm that flowed from the illicit drug trade. The clinics also sought to reduce the overall number of users because if chronic addicts were supplied legitimately then they would be less likely to recruits new users into the habit.

The poor and working class were the chief clients of the clinics as those who preferred not to publicize their addiction and were more financially well to do could obtain their drugs from private physicians. Morphine addicts were more successful in securing their supply from private physician's especially middle class women and older more sympathetic patients. According to Musto (1973) many of the narcotics clinics were an extension of health department clinics used to treat tuberculosis, mental illness, and syphilis, while others focused solely on treating addicts. The majority of facilities served small numbers of addicts, but New York City's Worth Street Clinic was by far the largest serving approximately 7,500 users (New York State Department of Health, 1920). The Table 1 below displays some of the more notable operations although there were 44 documented clinics in the U.S. as of 1924.

Table 1. Narcotic Clinics in the U.S. Between 1915-1924

Clinic Location	Overall Population	Number of Patients
Los Angeles, CA	576,673	481
Hartford, CT	138,036	105
Atlanta, GA	200,616	515
Paducah, KY	24,735	35
New Orleans, LA	387,219	250
Albany, NY	113,344	120
Rochester, NY	295,750	160
Durham, NC	21,719	36

Table 1 (Continued)

Youngstown, OH	132,358	65
Providence, RI	237,595	175
Memphis, TN	161,351	325
Houston, TX	138,276	122
Clarksburg, WV	27,869	49

Source: Knob, L. and Dumez, A.G. (1924). The Prevalence and Trend of Drug Addiction in the United States and Factors Influencing It. *Public Health Reports*, 39, 1182.

WORTH STREET CLINIC

Historians such as Terry and Pellens (1928) explains that, on the whole the clinics did a remarkably good job containing the spread of opiate addiction except for the New York City clinic which was a woeful failure. But, it is important to note that the New York City clinic operated under a different premise than the others because it required patients to detox off either morphine or heroin completely and often times abruptly. Also, the Treasury Department was extremely hands on in the day to day operations of the Worth Street facility and was largely responsible for establishing it as a detox program. It was also the largest of all the clinics serving around 7,500 addicts whereas most facilities had an average of 50-75 patients (Musto,1973). The Worth Street Clinic operated under the New York States Department of Narcotic Drug Control and was plagued by political and partisan patronage as it was the bone of connection between the addict population and state, city and federal officials. Dr. Dana Hubbard (1920) who worked at the Worth Street Clinic explains, some patients sold their excess narcotics to

other addicts, others recruited friends to register at the clinic to obtain additional drugs and as a whole the facility was poorly organized and ineffective.

Terry (1920) concluded that the New York City clinic's failure was due to its basic philosophy that regarded the individual addict as a criminal rather than a patient. Moreover, the clinic was plagued by long waiting times, its inability to deliver medical care, and lack of confidentiality that allowed addicts to be identified and harassed by law enforcement officials. Because of the clinic's inefficiency and poor record keeping many patients received excess narcotics that were in turn sold on the black market to other addicts (Musto, 1973). Opponents of the clinic system used the Worth Street Clinic as substantiated "proof" that maintenance was ineffective in curbing the illicit drug traffic or reducing the harms that resulted from the black-market trade. Musto (1973) explains the New York City clinic was not a maintenance clinic, and its primary function was to give declining doses of opiates until the patient was completely detoxed, thus because it served as a detoxification program its failure cannot be used as an argument against maintenance or to discredit all the early narcotic clinics. The Worth Street clinic officially closed its doors in 1920 due to mounting pressure from the New York Department of Health and the Treasury Department's newly formed Federal Narcotics Bureau, nonetheless, its failure was used as documented proof that maintenance was not practical and even dangerous (Musto, 1973). Rather than examining more effective operations such as the Shreveport and Jacksonville facilities and restructuring the Worth Street Clinic to provide long term maintenance services and improving the organizations efficiency, it was easier to condemn maintenance as a public health initiative in exchange for abstinence based treatment models.

THE SHREVEPORT CLINIC

The Worth Street clinic indeed proved problematic for the maintenance argument and its failure overshadowed more efficient and effective operations such as the Shreveport, Jacksonville, and Memphis clinics. Dr. Butler's Shreveport clinic is of particular interest because it was noted by historians as being by far one of the most efficient operations and it survived until 1923 after the majority of other facilities had closed their doors (Terry and Pellens, 1928; Courtwright 1982; Musto, 1973). The Shreveport clinic was one of two facilities that operated in Louisiana and were created at the behest of the state legislator who saw them as a legitimate and necessary response to opiate addiction. The Louisiana clinics initially operated with the support of the State Board of Health which concluded that a permanent cure of those afflicted with drug addiction disease is impossible in the great majority of cases making maintenance a more plausible approach (Musto, 1973). The Shreveport clinic maintained the most important of the Louisiana operations and the overall success and longevity of the program should be attributed to Dr. Willis Butler.

Dr. Willis Butler ran the narcotics dispensary from 1918-1923 and initially maintained the support of the Treasury Department who commended his successful operation although their position reversed by 1923 due to mounting political pressure from the newly formed Federal Narcotics Bureau of the Prohibition Department. As of 1920, the Shreveport clinic provided narcotics to 542 patients although Treasury officials were quick to accuse Dr. Butler of overprescribing morphine and heroin to habitués to secure a lucrative practice for himself. However, Butler (1922) notes that only 211 of the clinics patients resided in Caddo Parish (where Shreveport is located) and the remaining

331 patients traveled from nearby localities in search of maintenance care as surrounding clinics closed their doors. It is also worth mentioning Dr. Butler believed not all addicts were candidates for maintenance and felt it should be reserved as a last resort for the “incurables.” Butler explains he carefully evaluated each patient’s medical background and user history prior to admittance to the clinic and in many cases recommended addicts be admitted to an inpatient detoxification program he operated at a nearby hospital (Butler, 1922).

The Shreveport clinic and Dr. Butler survived multiple investigations led by Levi Nutt, then chief of the Narcotics Bureau of the Treasury Department who was an ardent opponent of the narcotics clinics and maintenance. However, the investigations into Dr. Butler’s clinic revealed a highly efficient operation where every grain of heroin and morphine was accounted for and his records were without error. After visiting local pharmacist’s narcotics investigators found that there was a dramatic reduction in narcotic prescriptions in the city of Shreveport and local arrest records showed a reduction in drug related crimes such as theft and property damage (Musto,1973).

The Shreveport clinic continued after many other maintenance facilities were forced to close their doors in large part due to a local city ordinance that provided a legal basis for its continued operation in spite of mounting pressure from the Federal government and Levi Nutt. Moreover, the clinic outlived others as a result of the local political environment that included the cohesive support of law enforcement, city officials, and judges all of which felt maintenance was a necessary response to opiate addiction (Musto,1973). For example, a Shreveport Federal Court Judge concluded he would vigorously oppose any steps taken toward discontinuance of the clinic because

from his experiences it had lessened crime in the city (Butler, 1922). The Shreveport Police Chief cited that crime such as petty thievery and burglary had decreased since the inauguration of the clinic and he strongly recommended that it not be discontinued.

By early 1923, the Shreveport clinic finally closed its doors as the result of a third investigation launched by Levi Nutt that claimed the true reason for the clinic's existence was to maintain a large payroll of clinic employees and Dr. Butler was purposely overprescribing narcotics to patients and was aware many were selling their excess on the black-market. Although the evidence used to substantiate such claims did not come in the form of clinic records or corroboration from local law enforcement in fact the local political establishment commended Dr. Butler's clinic and animatedly opposed it closing. Instead, the clinic was discredited by a single anonymous letter sent to Levi Nutt that accused Dr. Butler with overprescribing morphine and heroin and fueling the local illicit market. Dr. Butler concludes in a 1979 interview that the anonymous letter likely came from a small group of black-market peddlers who saw his clinic as competition (Courtwright, 1982). Yet, there is an over-preponderance of proof in the form of the Treasury Department's own previous investigations, local law enforcement arrest rates of addicts, and pharmacy and physicians records all of which substantiate Dr. Butler's clinic had a significant impact in reducing the harms of opiate addiction in the Shreveport area (Courtwright, 1982).

THE DISMANTLING OF NARCOTICS CLINICS

Terry and Pellens (1928) conclude the Shreveport clinic remains the rallying point for those who believe a clinic system should have been established across the nation after

1919. And had it not been for the adamant opposition of the newly formed Narcotics Bureau of the Treasury Department, headed by Levi Nutt, and John F. Kramer commissioner of the Prohibition Unit, the Shreveport, Jacksonville, and other well established operations could have become the nucleus of a national maintenance program (Musto,1973). Mr. Nutt was especially opposed to the idea of maintenance and avowed to dismantle the clinic system and did so successfully by threatening participating physicians with prosecution under the Webb and Doremus rulings which upheld the constitutionality of the Harrison Act. Nutt also used the failure of the Worth Street Clinic and other poorly organized facilities to sensationalize the fear of maintenance and the societal harms it could impose.

By 1921, the federal government had officially changed its position on the narcotics clinics from tolerance to criminalization by using threats, intimidation and in many cases the prosecution of participating physicians and druggist (Musto,1973). As a result, physicians who operated maintenance clinics became reluctant and uncomfortable with prescribing opiates to addicts due to harassment from Revenue agents, the fear of a time consuming and costly trial, and moreover the very real threat of losing their licenses and being sent to prison. Musto (1973) explains the successful campaign to close the clinics is largely attributed to the establishment of a semiautonomous federal agency, the Narcotics Bureau, which mounted a coordinated attack using 170 agents to dismantle the clinics. The press was also quick to condemn the narcotic clinics and often praised the efforts of the Narcotic Bureau for closing them. A Washington Times (1921) article categorized the narcotics clinics as a failure because the clinics encouraged rather than curbing the addiction of habitués. The article also applauded the efforts of narcotics

inspectors and agents who were successfully dismantling the clinics that were perpetuating addiction (Washington Times, 1921). The failure of the Worth Street clinic was also cited as proof the clinic system should be abandoned. Ultimately, the Narcotics Bureau's relentless tactics of using threats and intimidation was successful and the all the clinics had closed by 1923.

Just as hastily as the clinics were developed they were also dismantled with little thought to the consequences for the addict population. Rather than going back to the drawing board and reassessing the maintenance approach and striving to make the clinics more regulated and effective by focusing on more successful facilities such as the Shreveport and Jacksonville clinics, it was easier to condemn the entire system and exchange it for strictly abstinence based approaches. In 1924, efforts to provide heroin maintenance were abandoned altogether due to the passage of the Heroin Act led by Pittsburg Republican Congressman Stephen Porter. The bill prohibited the manufacture, importation, and possession of heroin, although very small quantities were reserved for the advancement of scientific research (Musto, 1973). The rationale behind the legislation was if lawmakers could act domestically in limiting the supply of heroin the international community would soon follow by also banning the manufacture of the drug thus diminishing its black-market availability and solving the countries heroin problem entirely. However, in complex societies such simplistic approaches seldom work, and the 1924 law offered no magic remedy to the nation's growing appetite for heroin and instead a thriving black-market replaced a once legal and regulated supply. Although small numbers of physicians continued to privately prescribe morphine to addicts, the practice

had largely disappeared by the 1940s as older physicians who sympathized with the addict died off and were replaced by less empathetic practitioners (Brecher, 1972).

The relentless efforts of reformers, policy makers, along with both federal and state law enforcement officials had little impact on diminishing the black market availability of heroin and instead the number of users consistently increased until the 1940s and then again in the 1960s and consistently thereafter (Courtwright, 1982). User trends also changed and the drug that was mainly sniffed or orally ingested was primarily being used intravenously by the mid- 1920s. As policy makers and the medical community alike realized that the prohibition and criminalization of opiates, especially heroin, had little impact on diminishing black-market availability or reducing the addict population, the debate regarding maintenance reemerged as early as the 1950s.

CHAPTER IV

RE-EVALUATING NARCOTIC MAINTENANCE

After the clinic system was dismantled there were few resources or effective treatment options for addicts until the 1960s. For those who could afford they opted for detoxification treatment in private hospitals but for the majority of addicts this was simply not an option and most either suffered quietly from a jail cell or privately in their homes. The debate surrounding heroin maintenance lay dormant throughout much of the 1930s and 1940s largely in part because the overall addict population was relatively small and at the time the nation was preoccupied with its newly acquired economic prosperity that stemmed from the war effort. Penalties for those caught possessing heroin and cocaine were nonetheless punitive and in some cases those convicted of multiple offenses were given life sentences in prison. Historian David Courtwright (1982) explains heroin addiction hit a record low during World War II and throughout the 1940s likely because trade routes for smugglers were disrupted and most Americans were enjoying the economic stability of the Post-War economy.

As the war came to a close, smuggling routes resumed and by the early 1950s the heroin problem reemerged. According to Jones (1996) the second wave of heroin addiction became a staple of the hipster identity emerging first through the Harlem jazz

scene and then the Beatnik subculture. Supply routes were also changing and as a result of the French Connection an increased flow of heroin was smuggled into the U.S. most of which was controlled by organized crime families. Jones (1996) suggests that beginning in the 1920s Black northern jazz musicians developed a distinct “hipster” culture that embraced creativity, spontaneity, freedom and excitement. This also included casual use of marijuana and heroin. This group of individuals who were largely excluded from the traditional American dream created their own distinct subculture that thrived in cities such as Harlem and Chicago (Jones, 1996). It is also important to note that heroin use in this context did not maintain the negative connotation that is synonymous with its use today. Jones (1996) further explains for the first time heroin possessed a powerful articulated cultural meaning along with marijuana as an essential element of the hipster life. The Federal Bureau of Narcotics however did not agree and those caught possessing or sailing narcotics were subject to stiff penalties often in the form of long prison sentences.

Musto (2002) explains that the second wave of heroin use had a significantly strong impact on African-American and other ethnic minorities such as Puerto Ricans who had migrated to Chicago, New York, and D.C. during the Post-War years. The changing user trends that included more and more young men of color produced a so called “less desirable addict type” and therefore sanctions and measures for control became increasingly punitive and aimed at incarceration. According to Courtwright (1982) it would be inaccurate to simply attribute these changes in narcotic policy as simply a function of the changing addict population. However, the hardline approach that began Post-Harrison Act would have been difficult to sale to the American public if

the dominant user type had still been ailing old ladies and crippled Civil War veterans as was the case in the early 1900s (Courtwright, 1982).

Anti-drug laws increased in severity beginning in the 1930s and continued well into the 1950s. Musto (1973) explains the peak of drug intoleration reached a climax in 1956 when the death penalty was applied in a case where narcotics had been sold to minors. These draconian and inhumane responses to drug use were legitimized through the Boggs Act of 1952, and the Narcotic Control Act of 1956. These measures enacted mandatory sentencing for the possession and sale of narcotics and allowed life sentences to be imposed for those convicted of multiple violations (Musto, 1973). The Narcotics Control Act, supported by the FBN, prompted the most stringent drug penalties to date by introducing the death penalty for certain drug offenses (Cameron and Dillinger, 2011). However, even before the Post-War heroin problem resurfaced addicts were already being disproportionately incarcerated. By 1928, less than a decade after the passage of the Harrison Act and merely five years after the narcotic clinics closed their doors, more than two-thirds of federal inmates were identified as addicts prompting the congressional passage of the Porter Act in 1929 (White, 2002). Rather than reassessing the punitiveness of narcotics laws or providing drug treatment in a community setting as an alternative to incarceration, the Porter Act mandated the creation of two Federal Narcotics Farms which were operated under the U.S. Public Health Service.

The first Narcotics Farm was created in 1935 in Lexington, KY and the second in Fort Worth Texas in 1938, both of which sought to provide drug treatment for addicted prisoners and volunteers. The Farm in Lexington was an anomaly because it was the first Federal correctional facility that operated as both a hospital and prison. According to

Campbell, Olsen and Walden (2008) the Farm at Lexington became the country's epicenter for addiction treatment and research. It was also a gathering place for the country's growing drug subculture and for many a rite of passage that initiated famous heroin hipsters from the Jazz scene, street hustlers, and drug store cowboys into the emerging fraternal order of the American Junkie (Campbell, Olsen and Walden, 2008). In 1974, the Narcotics Farm in Lexington operated as a psychiatric hospital until 1998 when it was established as a Federal Medical Center for offenders with medical and mental health illnesses.

Considering that drug treatment at this point was in its infancy, the Farms offered addicts one of the more effective treatment options available at the time. There were indeed other treatment facilities such as psychiatric institutions, hospitals, and community care facilities although they practiced a range of experimental and barbaric treatment methods that inflicted substantially more harm than good. For example, electric shock therapy, insulin shock therapy, hibernation therapy, morphine aversion (induced nausea) and the experimental use of lobotomy continued to be practiced on the addict populations well into the 1950s (Musto, 1973). These treatment methods which were draconian in nature and like something out of an Alford Hitchcock movie ultimately prompted the Joint Committee of the American Bar Association and the American Medical Association to implore more effective and humane alternatives for the treatment of substance abuse.

The American Bar Association and American Medical Association Committees expressed outright opposition to the ultra-punitive Boggs Act and the Narcotic Control Act that imposed lengthy mandatory sentencing for first time drug offenders. Under the Boggs Act, a first time offense involving the possession of cocaine, opiates, or even

marijuana would result in a two to five year mandatory prison sentence (Musto, 1973). For those convicted of a second offense, a five to ten year sentenced was handed down and those with a third offense were given ten to twenty years and in some cases life in prison. Also, the law mandated that after the second offense parole was not offered. The ABA and AMA Committees recommended increasing both federal and state expenditures for treating substance abuse as an alternative to incarceration and the committee even entertained reexamining the feasibility of implementing narcotic maintenance trials (Breecher, 1972). The ABA and AMA Committee Report marks a very interesting turn of discourse regarding addiction from the medical community and although it was short lived it does in fact mark a watershed moment in the policy debate regarding heroin maintenance in the U.S.

THE ABA AND AMA JOINT COMMITTEE ON NARCOTIC DRUGS

The Joint Committee on Narcotic Drugs headed by the American Bar Association and the American Medical Association (1959) in its report expressed dissatisfaction with the existing narcotic laws and called for the medical rather than the punitive approach toward addiction. The committee also indicated a positive yet cautious attitude toward the possibility of adopting British practices that allowed physicians the autonomy to prescribe heroin in cases of chronic addiction. The British System, as it is commonly referred to, defined heroin and morphine addiction as a manifestation of a morbid state and considered it an illness in which physicians could treat by providing addicts with legal supplies of narcotics (Breecher, 1972). The British system was noted as a success in diminishing the black market supply of heroin by reducing the overall number of

addicts to 700 by 1935, and by 1951 it was reported there were only 301 heroin addicts in the United Kingdom (Breecher, 1972).

After the passage of the Harrison Act and the dismantling of the narcotics clinics physicians and policy makers visiting the UK were impressed with overall effectiveness of the British system and upon returning to the U.S. suggested a similar model be tried in the states (Breecher, 1972). Moreover, many of the proposals recommended by the ABA and AMA joint committee derived from visits to Britain and observations of how they addressed addiction by allowing physicians the autonomy to decide when maintenance was appropriate. According to Breecher (1972) the 1960s, the British System fell under stiff criticism as a small handful of physicians began prescribing the drug quite liberally leaving the government seriously reevaluating its approach regarding heroin maintenance and the autonomy it placed in the hands of doctors.

In 1955, the ABA and AMA joint committee launched a comprehensive study of narcotic addiction and the laws that prohibited its use. The committee's primary objectives were to create a more sociological and psychiatric-orientated analysis of addiction and it also sought to reduce the mandatory sentencing of narcotic addicts in exchange for treatment (Musto, 1973). The Committee suggested, albeit subtly, revisiting the idea of dispensing narcotics in an outpatient clinic environment. The Committee's Interim Report released in 1958 included two appendixes each of which maintained its somewhat distinct tone regarding its policy recommendations. The first appendix written by the Committee's chair expressed praise for the British System and also suggested that crime could be curtailed if addicts were provided their drugs. According to Musto (1973) the Committees report was notably progressive in its

recommendations but the Federal Bureau of Narcotics wasted no time in refuting its legitimacy by claiming the report was authored by a bunch of “crackpot” doctors and sociologists. The Bureau’s official response came in the form of its own ad hoc advisory committee, entitled “Comments on Narcotic Drugs: Interim Report of the Joint Committee of the ABA and AMA” (1959) and it focused on the so called failures of the old narcotics clinics, most notable the Worth Street Clinic (Musto, 1973). The FBN’s response illustrated Anslingers personal opposition for the old clinic system. The report focused solely on the negative aspects of the New York clinics omitting the more effective operations such as the Shreveport and Jacksonville facilities (Musto,1973).

The FBN maintained the position that the best “cure” for addiction remained drying up the supply of narcotics through law enforcement efforts. Although the Committee had not directly recommended creating a narcotic dispensing clinic system, it did advocate for an experimental clinic which never materialized. Had the FBN engaged in a meaningful dialogue with the AMA and ABA aimed at a more medical understanding toward addiction the outcome may have been different. However, for the first time since the old clinics were dismantled the most prestigious institutions of law and medicine were seriously questioning the countries hardline drug policies.

According to Musto (1973) drug use in the 1950s began to symbolize the conflicting ideologies between two groups; a new emerging counterculture and the rest of society, therefore allowing drug toleration might disrupt social harmony and thus question the old order. There was also the belief that drug use threatened to disrupt the delicate American social structures (i.e. capital accumulation, wage labor and the class system) and this line of thinking consequently limited the move toward drug toleration

such as permitting physicians to prescribe narcotics for maintenance purposes. There would be other inquiries into the feasibility of narcotic maintenance and the 1962 White House Conference on Drug Use and Abuse marks another milestone in this policy debate.

PRESIDENT KENNEDY'S WHITE HOUSE CONFERENCE ON NARCOTIC DRUG ABUSE

In his speech during the White House Conference on Narcotic Drug Abuse (1962) President Kennedy explained that for half of a century the nation has faced persistent vexatious problems arising from the abuse of narcotic drugs. The president explained it was a terrible loss to society in the form of human suffering, misery and lost productivity in the form of wage labor and tax revenue that flowed directly from drug abuse. President Kennedy (1962) also noted that the current treatments available for addiction produced discouragingly high relapse rates which were cause for great concern (Office of the White House Press Secretary, 1962). He also demanded that more effort needed to be directed toward the social causes of addiction rather than focusing solely on the symptoms. He also urged that the problem of drug addiction be systematically explored by both sociologists and the medical community so that more humane and effective treatment modalities could be developed (Office of the White House Press Secretary, 1962).

The Presidents Ad Hoc Panel of eight M.D.'s and Ph.D.'s rejected the accepted practice of long prison sentences for drug addicts and recommended parole and mandating community-based drug treatment instead. According to Breecher (1972) President Kennedy's White House Conference on Drug Use and Abuse stated that it

would welcome careful, rigorous and well monitored research that would identify if certain addicts who could not be permanently weaned from drugs could be maintained in a socially acceptable manner. The Panel was hesitant to publically support adopting the British Practices toward heroin maintenance or even an experimental clinic. Providing heroin addicts their drug of choice was not socially accepted but perhaps methadone, a powerful opiate synthetic, was not precluded from the conversation.

Methadone had been used at the Narcotics Farms since the late 1940s as a withdrawal aid and in the early 1960s medical trials revealed it could be used safely in an outpatient community setting (Dole and Nyswander, 1965). The opposition of Harry Anslinger against any type of maintenance therapy regardless if it was practiced in a socially acceptable manner curtailed momentum for the methadone argument temporarily. Courtwright (1982) explains that since prohibition minded policy had proved counterproductive it seemed logical to revert back to supplying addicts cheap legal drugs just as long as they were not the addict's drug of choice. The idea was further legitimized by President Kennedy's welcome of research into the feasibility of providing ambulatory care for addicts. Also, the Supreme Court decision *Robinson v. California* provided additional momentum for the idea of maintenance treatment because it established that narcotic addiction was a disease and that addicts were the proper subjects for medical treatment (Musto, 1973). Anslinger would soon be resigning and in August of 1962 after 32 years he left the FBN leaving the political climate for change ripe.

The Ad Hoc Panel was not as welcoming toward heroin maintenance as the ABA and AMA Committee. But, it did signify a changing discourse and openness to new ideas that would later facilitate the establishment of methadone as an acceptable treatment

approach. Although it is not exactly clear why Anslinger resigned Trebach (1982) explains it may have been a result of conflicting political agendas between the FBN and the progressive Kennedys administration. Anslinger's approach consisted of campaigns aimed at negative drug imagery, stiff mandatory sentences, and the consensus of the nation's institutions of law and medicine against drug tolerance (Musto, 1973). No single official in the drug abuse field would ever match the fearsome power that Anslinger maintained for over three decades.

Consequently, after Anslinger left the FBN a trend toward developing humane approaches to addiction including methadone began to take form (Trebach, 1982). The Kennedy Administration blatantly threatened these old forms of control by publically welcoming a more humane and medical approach toward addiction. Anslingers grand exit combined with a new progressive thinking presidential administration meant the political climate was changing and the old ways of punishing addicts using mandatory sentences and stints at the Narcotic Farms was no longer socially acceptable (Trebach, 1982). Although the 1962 Ad Hoc Panel did not openly express support for heroin maintenance it did call for additional research to identify more effective methods of drug treatment. The President would revisit the issue once again in 1963 when he appointed a second Advisory Commission on Narcotic Drug Abuse.

On November 1, 1963 only weeks before the president's assassination the new Advisory Commission recommended that Federal regulations be amended to reflect the general principle that the medical treatment of a narcotic addict is to be determined by the medical profession (Trebach, 1982). The president's recommendation if successfully enacted could have in fact reversed the old interpretation of the Harrison Act upheld by

the Webb and Doremus decisions, which redefined physician autonomy and banned narcotic maintenance. The second Advisory Commission also recommended a network of small community-based hospitals specializing in addiction treatment to reduce the number of individuals under restraint in state mental hospitals (Trebach, 1982). The recommendations of the 1963 Commission could have been a game changer because the president planned to restore the autonomy back to the medical community so that addiction could be treated as a legitimate disease instead of a stigmatized social condition. This of course did not happen and his successor President Johnson ignored the Committee's and Kennedy's recommendations. The assassination of President Kennedy was not only a national tragedy but it also meant his progressive agenda that was uprooting old institutions of control such as the FBI, CIA, and FBN would be largely abandoned (Trebach, 1982).

In his tenure as President, Lyndon Johnson did fulfill one recommendation of Kennedy's 1963 Advisory Commission on Narcotic Drugs although it was three years later. The Narcotic Rehabilitation Act (NARA) of 1966 was the first concrete sign that a powerful political consensus had developed regarding the need for non-punitive approaches to addiction (Trebach, 1982). Ideally, the law would create an alternative to incarceration for some first time federal drug offenders as long as there were non-violent offenders. However, repeat offenders were excluded from the option for treatment and the program never served more than 1,723 individuals between 1968 and 1979. The debate regarding heroin maintenance during the Johnson administration was practically non-existent and would not resurface again until the mid-1970s. This was largely in part because methadone was seen as being a more practical and socially acceptable alternative

to heroin due to its promising ability to stabilize addicts while reducing their illicit drug use (Trebach, 1982). Throughout much of the 1960s, the problem of drug addiction including heroin use was on the rise in all strata of society. However, the problem disproportionately affected poor marginalized groups as well as inner city Black and Latino populations. Musto (1973) explains that the 1960s broke through the brittle shell of defense that rejected old perceptions of drug use that was laughable to the new emerging counterculture. There was also a growing prison system that would be overwhelmed by a small fraction of those who continued to break drug laws. But there was a great hope that methadone would provide a partial solution to reducing crime and increasing productivity among heroin dependent persons who were thought to be responsible for a significant level of property crime. Methadone may have failed to live up to its early hype but it did establish for the first time since the old narcotics clinics were dismantled that maintenance using legal opiates was once again socially acceptable.

THE COUNTERCULTURE AND THE SOCIAL UPEHAVAL OF THE 1960s

The 1960s was indeed an explosive time full of controversial wars, civil protests, and vibrant creativity of a generation who were encouraged to tune in turn on and drop out. According to Wesson (2011) the Vietnam War, institutionalized racism, and conflicting gender roles fueled social upheaval and political activism. Herwitt (2006) explains that the counterculture represented a major digression in mainstream American society as young people began to question the American way of life. This departure from traditional normative values also facilitated increased drug use. Moynihan (2002) explains drug use among young people was a great cause for concern in the 1960s and it has increased to epidemic levels mutating as epidemics do. Heroin addiction was

ravaging the slums, LSD plagued prep schools, and cocaine the drug of choice for the 1970s was transgressing to crack (Moynihan, 2002). Although heroin addiction was steadily increasing throughout the 1960s socially constructed crime myths created in nonscientific forums were used to sensationalize drug use (Kappeler and Potter, 2005).

According to Musto (1973) in 1971 over 24 million Americans reported using marijuana, and in 1975 five percent of all Americans reported using LSD. Heroin use had also witnessed significant growth although it is never easy to estimate this cohort of drug users. From 1960 the number of heroin users rose from about 50,000 to roughly half a million by 1970. Intravenous heroin use was the dominate method of delivery resulting in an increased number of Hepatitis cases from 4,000 in 1966 to 36,000 in 1971 (Musto, 1973). The heroin sniffers of the old days were replaced by a group of largely poor marginalized users who demanded a more powerful method of delivery. Consequently, the spread of intravenous drug use was also the product of diluted street heroin that was relatively low in potency as it was adulterated by traffickers and pushers who controlled the black-market supply (Courtwright, 1982). Cheap heroin flooded the streets of D.C, New York, Chicago, and Detroit as a result of increased smuggling activity through the French Connection and some even claim heroin was brought in through the U.S. military's very own cargo plans and freighters (McCoy, 1972).

The French Connection controlled by the Corsican Crime family, Paul Carbone and Francois Spirito, manufactured heroin from opium that was grown in Turkey and Indochina. The opium was transported to France where it was refined into heroin and was then transported to Canada where it was smuggled to its final destination: the thriving black-market of the United States (McCoy, 1972). Stories also surfaced that heroin was

being smuggled by U.S. soldiers on cargo planes coming back from Vietnam. And some even suggest that the CIA contributed to the trafficking of heroin into the U.S. throughout the Vietnam War. This theme was explored by Alford McCoy's (1972) book *the Politics of Heroin* which implicated that the CIA was complicit in aiding the Southeast Asian heroin trade. McCoy even testified in front of a congressional hearing that heroin was being transported and smuggled from Laos and Burma using Air America which was covertly owned and operated by the CIA. There were also widespread incidences of heroin abuse within the U.S. armed forces and in 1971 Army medical personnel estimated that approximately 10 to 15 percent of low ranking enlisted men in Vietnam used heroin (Breecher, 1972). The U.S. heroin trade was indeed fruitful during this period and the surge of users from 50,000 in 1966 to over half a million in 1971 is indicative that the drug had found an effective entry point into the country (Kuzmarov, 2009). Whether it be through the French Connection, or CIA controlled air carriers is up for interpretation. What is evident is that there was a growing heroin epidemic in Americans urban centers and President Nixon promised to balance law enforcement efforts with access to effective drug treatment which matriculated to the War on Drugs along with a growing reliance on methadone clinics.

NIXON AND THE DRUG WAR

It was not until 1964 that methadone was used for maintenance therapy by Dr. Vincent Dole and Marie Nyswander from Rockefeller University. According to Dole and Nyswander (1965) when studying the effects of methadone the physicians witnessed dramatic improvements in their patients as they began to move about making their beds and asking when they could go back to work. By the late 1960s the use of methadone

began to spread far beyond the experimental stages and a number of outpatient clinics were being developed in New York City, Chicago and D.C. According to Trebach (1982) an executive briefing was provided to President Nixon about methadone's effectiveness in reducing heroin use, and drug related crime. But, the memo also warned that the drug could be morally and socially controversial because it allowed users to continue taking the drugs as long as they needed. Musto (1973) explains methadone not only provided a more humane solution to dangerous drug use but it was also a big step toward sanctioning the most extreme anti-enforcement style, the provision of providing heroin itself to heroin addicts.

President Nixon was less concerned with the therapeutic effectiveness of methadone but saw it as a useful tool in combating the "War on Drugs" and a way to gain political capital for potentially reducing the crime rate (Trebach, 1982). Although Nixon accepted the use of methadone as a suitable treatment alternative for heroin addiction other elements of his administrations drug policies were not as progressive. His infamous declaration of the War on Drugs in 1971 called for an increase presence of state control control agents, an acceptance of no knock warrants, and the revival of mandatory sentencing in hopes of squashing the nation's growing drug problem (Trebach, 1982). Nixon was also responsible for re-categorizing marijuana as a scheduled one drug which implicated its abuse potential was the equivalent of heroin. Trebach (1982) explains that the laws and regulations created during Nixon's presidency on the one hand increased the scope and power of criminal sanctions involving drug use, but at the same time it also increased funding expenditures for treatment.

Much of this was achieved through the comprehensive Drug Abuse Prevention and Control Act of 1970. This was in fact the most far reaching single piece of drug legislation since the Harrison Act as it sought to codify the numerous federal narcotics laws and amendments that had been passed since the Opium Ban of 1887 (Treabach, 1982). The criminal provisions of the encompassing law covering drug possession, sales, and trafficking was infinitively complex because it possessed both repressive and liberal features (Treabach, 1982). For example, mandatory minimums for first time drug offenders had been largely abandoned in exchange for probation and court ordered treatment. However, the Drug Abuse Prevention and Control Act maintained vague and ambiguously worded provisions regarding asset forfeitures, fines, and long sentences. In fact, the law allowed life sentences to be imposed for those convicted of multiple offenses or if one was determined by the courts to be a “dangerous special drug offender.” However, there was a softer albeit less publicized side to the Nixon administration’s drug policy that maintained a distinct progressive and even liberal tone (Treabach, 1982). Behind Nixon’s public declarations to fearlessly combat drug use and crime he appointed a group of liberal, predominately Democratic drug abuse experts, to consider the utility of a medical model of drug policy (Treabach, 1982).

METHADONE MAINTENANCE

Ironically, the same day President Nixon declared the War on Drugs he also created the Special Action Office for Drug Abuse Prevention, commonly known as SAODAP. According to Treabach (1982) SAODAP was in many ways a promising public policy that was headed by some of the nation’s foremost experts in the field of addiction treatment. Jerome Jaffe, a psychiatrist and the first director of SAODAP along

with Robert DuPont and others were given the task to pioneer more humane treatment options for addicted persons. SAODAP's main objectives were: coordinating all the drug abuse activities of the entire Federal bureaucracy to reduce overlap; expand treatment for heroin addicts, oversee and coordinate the intervention of addicts coming back from Vietnam; create science based research that would gain a better understand of the disease of addiction to name a few (Treabach, 1982). SAODAP was also a strong proponent of methadone maintenance and was instrumental in establishing a network of clinics in urban cities across the United States.

Prior to being named the head of the SAODAP, Jerome Jaffe actually piloted a methadone program in Chicago and argued the best solution to the heroin problem was increasing access to methadone clinics (Kleber, 2002). By 1973, there were an estimated 400 methadone clinics throughout the United State and historian Herbert Kleber (2002) coined the 1970s the Golden era of methadone. Surprisingly, a country who only fifty years ago rejected the idea of maintenance under the pretext that maintaining an addict simply for the sake of satisfying his appetite for narcotics and keeping him comfortable was now embracing the idea of narcotic maintenance as long as it was methadone. Musto (1973) explains that methadone maintenance during the Nixon Administration illustrates a great compromise between simple toleration of drug use and the public's demand that heroin related crime be curbed. Addicts received something to assuage their drug craving just not their drug of choice. Nonetheless, hopes were high during the late 1960s and early 1970s that methadone could offer a solution to the countries highly sensationalized heroin problem.

Overall, methadone is an effective withdrawal aid and maintenance tool and about 34% of patients who leave treatment on their own terms remain sober (Joseph, Stancliff and Langrod, 2000). Compared to strictly abstinence based programs that have more or less a 10% success rate, methadone is the more effective choice especially among intravenous heroin users. Early clinical trials involving methadone conducted by Dole and Nyswander (1965) revealed that the drug is effective in relieving narcotic hunger, opiate withdrawal symptoms, and it blocks the euphoric effect of heroin. The same study also found with a comprehensive program of rehabilitation patients saw marked improvements in their social life such as reconciling family relationships, gaining employment, and going back to school (Dole and Nyswander, 1965). Compared to heroin, the toxicity of methadone is relatively low and adverse physical effects are mild.

Although methadone maintenance has a higher success rate than strictly abstinence-based drug treatment, the program has several practical concerns and limitations worth noting (Joseph, Stancliff and Langrod, 2000). For example, increased rates of cocaine use have been noted among methadone maintenance patients. Also, risk of overdose is increased when methadone is mixed with benzodiazepines (Inciardi and Harrison, 2002). In some cases methadone has been linked to causing long term lung and respiratory problems (Inciardi and Harrison, 2002). Also, because of methadone's long half life the withdrawal process has been noted as being as severe as heroin which could contribute for patient's reluctance to detox from the drug. There was also conflicting evidence regarding methadone's true effect on reducing crime. Questions began to emerge as to the validity of Dole and Nyswander's early claims that methadone produced statistically significant effects on reducing criminal activity among participants.

Vorenberg and Lukoff (1973) in their study found that while 94% of addicts were not arrested during their first year of treatment, 80% of the same sample had not been arrested during the year prior to beginning methadone treatment. As doubts began to emerge as to methadone's ability to deliver on the Nixon's administration's promise to reduce drug related crime the debate regarding heroin maintenance resurfaced once again.

THE VERA INSTITUTE PROPOSES HEROIN TRIAL

The conversation involving heroin maintenance received little public attention since the ABA and AMA Committee of 1956 subtly suggested developing an experimental trial. MacCoun and Ruter (2001) explain that in the early 1970s serious consideration was given to developing a heroin maintenance trial in New York City. The Vera Institute (1975) in its proposal recommended an experimental trial involving 300 male heroin addicts that had been deemed treatment resistant. The study proposed providing injectable heroin in a clinic setting for approximately six months where the participants would then be transferred to either methadone maintenance or a traditional abstinence program. The rationale behind the proposal was to bring recalcitrant addicts into treatment where they could then be prepared for more conventional programs.

The Vera Institute had been impressed with the British System of reducing heroin addiction to manageable numbers and felt a similar model should be tried in a highly controlled clinical setting in the U.S. (MacCoun and Reuter, 2001). The proposal recommended trying the model first with 30 or so patients and later expanding it to treat 300 addicts. Although the proposal had the backing of prominent addiction specialists and even some law enforcement officials it was met with stiff criticisms from the medical

community and policy makers. There was also intense opposition from conservative political groups and traditional anti-drug forces (MacCoun and Reuter, 2001). Also, African Americans were suspicious of the proposal citing it was a means to reduce Black anger following the urban riots of the late 1960s. MacCoun and Reuter (2001) explain the proposal received considerably harsh press and even the liberal New York Times published negative stories citing a Swiss Psychiatrist who claimed that you could easily get up to three or four million heroin addicts within five years of the program. Ironically, in the 1990s the Swiss would pioneer a heroin maintenance program that would further legitimize it's standing as a feasible treatment option.

Proponents of the program stood behind the premise that providing heroin in a strict clinical setting would significantly reduce the Country's heroin problem. Opponents of the proposal wasted no time in forming a Congressional Ad Hoc Committee that resulted in legislation blocking the FDA from approving the trial. MacCoun and Reuter (2001) explain with so many enemies and few notable supporters the proposal was rejected and quietly disappeared. Consequently, the hostility of the proposals' critics squashed efforts that could have better informed both sides of the debate by providing scientifically substantiated evidence (MacCoun and Reuter, 2001). Although the Vera Institutes' recommendation was unsuccessful it does illustrate the continuity of the debate regarding heroin maintenance. The issue would be revisited in years to come and the Swiss and Dutch trials of the 1990s would provide compelling evidence as to the program's effectiveness in maintaining heroin addicts in a safe and ethical manner while also reducing drug related harms.

CHAPTER V

HEROIN MAINTENANCE: ASSESSING THE LIKELIHOOD OF A U.S. EXPERIMENT

Beginning in the late 1960s and continuing through the 1990s methadone remained the dominant treatment approach to heroin addiction and there was a great hope among public health organizations that the drug would significantly reduce the addict population. Although studies have consistently upheld its effectiveness compared to abstinence based programs, methadone maintenance has received criticism for its inability to decrease illicit drug use among participants (MacCoun and Reuter, 2001). In addition, less than half of entrants stay in methadone maintenance for more than a year and studies have found many participants remain involved in high risk health and crime behaviors while in the program. Another increasing concern for methadone maintenance treatment or MMT is that they are slowly becoming privatized by for-profit organizations.

In 1973, over 400 methadone clinics received funding from the federal government (Trebach, 1982). Today that number is considerably lower and currently less than half of MMTs in the U.S. are publically funded. According to SAMHSA (2010), in 2008 half of all patients attending a MMT program were self-pay clients paying fees

ranging from \$13-25 dollars a day making it a billion dollar a year industry. Musto (2002) explains, that the rise in privately owned methadone programs has resulted in a curtailment of effective services that has become more profit oriented and less about patients' well-being. My position is not to dismiss methadone's role in managing the addict population but it should illuminate that as a stand-alone approach it has fallen short. Forty plus years of MMT reveals that there is not enough compliance among heroin addicts to reap substantial societal and public health benefits from the program. The following chapter discusses Switzerland's experimentation with heroin maintenance and examines the growing trend across Western Europe to implement clinical trials of heroin assisted treatment. Moreover, it touches upon the drug related harms and public health concerns that are a result of heroin addiction and how access heroin assisted treatment could reduce such harms. It also examines more recent attempts to implement heroin maintenance trials in the U.S. and assesses the likelihood of HAT in this country.

THE SHOOTING GALLERY

The overall number of heroin users declined briefly in the late 1970s as young people were seeking out less socially stigmatizing drugs such as powder cocaine. The large cohort of users that fueled the first heroin injection wave from 1965-1974 were dying out and there was a brief downward trend of new recruits to replace the old users (Musto, 2002). There were still over 250,000 heroin users in New York City alone and throughout the 1980s and 1990s the overall number of heroin addicts in the U.S. would stay consistent with approximately 500,000 to 750,000 users (Musto, 2002).

In the 1970s a trend emerged known as the “shooting gallery” where addicts could gather and either buy or rent used syringes and other works to inject heroin or cocaine. Galleries usually operated out of abandoned houses where users gathered together to inject heroin, enjoy the high, and socialize. For a group of individuals who lived outside of the norms of conventional society the shooting gallery was simply more than just a place to get high. It also functioned as an integral part of the subculture. Consequently, the shooting gallery would also facilitate the widespread transmission of blood borne diseases and by the mid-1980s anywhere from a third to half of New York city’s intravenous drug users were infected with HIV (Des Jarlais, 1989). Even today in light of what we know about HIV and its prevalence among intravenous drug users needle sharing is still a common practice largely because of the federal governments thirty year ban on funding for needle exchange programs.

When faced with the AIDS crisis England reacted quite differently and embraced a more harm reductionist approach. Musto (2002) explains the British made a conscious decision in the mid-1980s that preventing the spread of AIDS was far more important than eliminating drug use and their main priority was to curtail the spread of HIV rather than focus solely on abstinence. This approach conflicted with American idealism that proposed simply lowering expatiations of drug users would produce dismal societal consequences (Musto, 2002). Other countries would follow suit and adopt harm reductionist policies that attempted to reduce the severity of negative outcomes associated with heroin addiction. The Swiss experimentation with heroin maintenance is of special importance because it was the first country since England that proposed providing pharmaceutical heroin to chronic users in a clinical setting. Today the British

have largely abandoned the practice and by 1975 only 4% of maintained opiate addicts were receiving a prescription for heroin (MacCoun and Reuter, 2001). The Swiss government became intrigued with the British's use of heroin maintenance and even the U.S.'s early experimentation with narcotics clinics leading them to develop a similar model as a response to its growing heroin problem.

THE SWISS APPROACH

In recent years, the debate regarding heroin maintenance has become synonymous with the Swiss trials that began in the mid-1990s. In the early 1980s cities such as Zurich and Geneva witnessed a dramatic influx of heroin addiction and as an initial response the Swiss government allowed the operation of an open-air drug market called the Platzpitz (MacCoun and Reuter, 2001). The rationale behind the Platzpitz or "needle park" as it was also called was to minimize the intrusiveness of the drug markets, and increase the delivery of low threshold services to users such as needle exchange and access to methadone treatment. Consequently, addicts from all over Switzerland began to migrate to Zurich and the Platzpitz became the hub of the heroin black-market. City officials and most of the local citizens categorize the Platzpitz experiment as a woeful failure. According to MacCoun and Reuter (2001) crime doubled in the downtown area close to the Platzpitz and rival gang wars resulted in an upsurge of homicides prompting the city to close "needle park" in 1992.

After closing the open air drug scene the Swiss government proposed implementing a heroin maintenance trial involving addicts who had failed in conventional treatment programs. The trials sparked harsh international controversy

largely from the U.S. and the International Narcotics Control Board (a UN agency) who warned that the experimental program would send a disastrous signal to countries in which opium was cultivated to increase production flooding the black-market with heroin (MacCoun and Reuter, 2001). The INCB director general also claimed that heroin maintenance would equivocate to playing with fire and urged the Swiss government to reconsider its proposal. Even in the face of such criticism and pressure from the international community the Swiss proceeded with the trials and surprisingly the majority of Swiss citizens supported the government's proposal. In 1992, the Swiss Federal Office of public health authorized HAT trials in Zurich, Bern, Basel, and Geneva involving 1,000 heroin addicts who had failed in conventional treatment programs. In 1994, the first heroin maintenance clinics were opened as part of a three year national trial that provided pharmaceutical heroin as a supplement to the Country's methadone maintenance program. MacCoun and Reuter (2001) explain outcomes of the early trials were positive prompting the Swiss Federal government to approve a large scale expansion of the program that sought to accommodate 15% of the countries some 30,000 heroin addicts.

The motivation for the trials was complex and some Swiss officials explain it was an effort to stall a growing legalization movement. Unlike U.S. policy makers the Swiss government was more hesitant to be "tough" on enforcement efforts that included the incarceration of drug users, but they were also offended by the unsightliness of the open air drug scene. The implementation of the trials was also an important step in reducing the prevalence of HIV among heroin addicts because participants would be given clean syringes and taught safe injection practices. MacCoun and Reuter (2001) explain that an

elaborate governance structure was developed to protect public health from any adverse consequences stemming from the program. For example, participants in the trial were ordered to render their drivers licenses to reduce incidence of driving while intoxicated. The Swiss government also agreed it had an ethical obligation to continue to provide heroin to participants after the trials were over.

SWISS FINDINGS

The first randomized clinical trial of the program concluded overall heroin maintenance is a feasible and clinically effective treatment for heroin addicts who fail at conventional drug treatment (Perneger, Giner, del Rio and Mino, 1998). The initial trial involved three groups of patients receiving different types of injectable opiates: 250 received diamorphine (heroin), 250 received morphine, and 200 received methadone. In the early months of the trial patients receiving injectable morphine experienced such discomfort the researchers removed it from the trial. There were also problems with injectable methadone and patients were reluctant to accept it so the final evaluation focused only on the experimental group receiving injectable heroin. Participants were required to be at least 20 years old, have two years of history injecting heroin, and failed two previous attempts at conventional treatment (Perneger et. al., 1998). The average patient was 33 years old with 12 years' experience injecting and had eight unsuccessful attempts at treatment. An important stipulation of the trial allowed patients to choose the dose they felt they needed and this autonomy was believed to reduce incentive to supplement their dose with illicit heroin. Patients could receive heroin three times daily and injected under the supervision of a nurse who could monitor their health status. Patients were not permitted under any circumstance to take the heroin outside of the

clinic setting which ensured the drug would not be leaked into the black-market. There was no incidence of overdose reported during the trial and compliance was also high and most patients met the requirements of daily attendance, and randomized drug testing (Perneger et. al. 1998).

Outcomes were generally very positive and retention in treatment was higher than those in methadone programs. Moreover, 69% of patients remained in the program after 18 months and about half of those who dropped out opted for either methadone maintenance or abstinence based modalities. Perneger et. al. (1998) suggests, that once patients discovered the limitations of having unrestricted access to the drug that had been the focal point of their lives for so long many were finally able to quit. This finding strengthens the argument for heroin maintenance because it legitimizes the premise when addicts are given no restrictions to the drug they are able to focus on the underlying psychosocial causes of their addiction. The study also revealed that synthetic heroin does not have a neurotoxic effect on patients any more than methadone or morphine. The trials proved that in most instances patients could be maintained safely on diamorphine and the most common side effect reported was constipation.

Participants in the heroin group were also given comprehensive psychosocial services that included individual and group counseling and access to low threshold health care services. Crime rates among participants also fell about 60% and this statistic was corroborated by local law enforcement arrest records (Perneger et. al., 1998). Employment outcomes also increased from 14% to 32% and many patients reported that participation in the trial increased their social functioning so they could pursue legitimate job opportunities. Mental and physical health status also improved and out of the entire

sample only 3 new incidences of HIV were reported which was linked to illicit cocaine use outside the clinic. Perneger et. al. (1998) concluded, that the patients on heroin maintenance no longer used street heroin and significantly reduced their use of other drugs such as benzodiazepines and cocaine. Social functioning also improved dramatically and many patients reported their housing situation improved and they developed more social ties outside the drug scene and improved relationships with family members. Dependency on street life also decreased sharply in the experimental group and the study found income from illegal activities such as dealing drugs, commercial sex, and theft decreased significantly. These results suggest that heroin maintenance seems to have a broader effect on the participant's entire life-style by stabilizing their daily routine through the commitment of attending the clinic daily, giving them the opportunity for psychosocial support, and by keeping them away from open drug scenes (Perneger, Giner, del Rio and Mino, 1998). The Swiss trials also proved that the program can exist in an urban area with no major disturbance to surrounding neighborhoods nor did it increase risk to public health.

Overall, the Swiss trial indicates that heroin maintenance is a socially acceptable, effective, and feasible form of treatment for those who do not fare well in traditional programs. However, it should be noted that the study did reveal several limitations regarding heroin maintenance. One major concern was recruitment into the trial was lower than expected and there was less demand for the program than was initially anticipated (MacCoun and Reuter, 2001). The low numbers of enrollment is likely a result of the demanding schedule of the clinic where patients were required to visit three times daily. A second concern is the high cost of obtaining pharmaceutical heroin and the

program proved to be far more expensive than methadone maintenance. MacCoun and Reuter (2001) explain that the daily cost per day for each patient is about 50 Francs or 35 dollars which is twice the cost of operating a methadone maintenance clinic. The cost benefit analysis of the trial revealed that the program was saving the Swiss tax payers an estimated 96 francs a day in jail stays, court cost, and health care costs for each patient attending the program. Moreover, the evaluation of the Swiss trials does not distinguish between the effects of heroin itself and the effects of other psychosocial and medical services offered to participants. It is indeed possible that the comprehensive services might have had an impact on positive outcomes over the administration of heroin alone. However, it is more probable that the psychosocial services enhanced the overall effectiveness of the daily administration of heroin (Perneger, Giner, del Rio and Mino, 1998). Also, because the initial groups of injectable morphine and methadone were removed from the study there were no other randomized control groups to compare outcomes from the experimental group. Instead, outcomes from the group receiving injectable heroin were compared to outcomes from nonequivalent groups of methadone and abstinence based programs.

Currently, there are 23 clinics across Switzerland that offer heroin maintenance serving about 7% of the country's overall addict population. Nordt and Stohler (2006) found that on average patients stay in the program about three years and afterwards less than 15% relapse back into daily heroin use. There have also been significant reductions in heroin use in Switzerland following the implementation of HAT. For example, in Zurich alone from 1990 to 2002 there was an 82% reduction of daily heroin use. Nordt and Stohler (2006) also explain that the decrease in heroin abuse is also a consequence of

fewer recruits being introduced to the drug through peer influences. Because older addicts were diverted into opiate substitution programs there was less incentive to introduce the drug to new recruits. Arrest rates also declined significantly in the decade following the implantation of HAT programs. Reuter and Schnoz (2009) found that heroin related arrest declined from 18,000 in 1997 to 6500 in 2006. Nordt and Stohler (2006) explain the Swiss approach goes far beyond providing heroin maintenance and the government developed a four pillar strategy that emphasized on treatment and other harm reduction measures. There was also a conscious effort by the Swiss government to change the image of heroin use from a nonconformist rebellious act to a chronic disease that needs therapy. The Swiss more so than any other country to date have embraced a continuum of harm reduction modalities and as a result they have witnessed marked improvements in public health as well as reductions in illicit drug use and related crime.

REACTIONS TO THE SWISS EXPERIMENTATION WITH HAT

Even in spite of its methodological flaws the early evaluations of the Swiss trials were encouraging and substantiate the premise that heroin maintenance can effectively reduce the social, legal, and public health harms that are a direct result of illicit heroin use. The Swiss trials also made a compelling argument that heroin maintenance combined with the exposure to psychosocial services could facilitate a patient's choice to seek out more traditional treatment programs. When the daily chase to obtain illicit heroin is eliminated and the user has the autonomy to choose their dose this allowed participants to focus their energy on addressing the underlying psychosocial issues that might facilitate their drug use. The position taken here is not to imply that heroin maintenance is an appropriate treatment for all addicts and there are indeed risks and

limitations associated with the implementation of a large scale HAT program. However, if we could examine heroin maintenance in terms of evidence based practices and omit the socially constructed ideas and fears that polarize our ability to embrace new treatment modalities perhaps we could engage in a constructive debate about HAT's potential role in American society.

In the U.S. opponents of HAT argue that giving addicts their drug of choice sets a dangerous precedent that would establish a slippery slope toward drug legalization. Trebach (1982) explains that in U.S. society it is seen as "sinful" for policymakers to take into account the tastes of drug users, however, those tastes must be recognized as the most important elements in the rational design of future policies. European countries such as Switzerland, the Netherlands, Denmark, Germany, Spain, Belgium, and Canada have been more accepting of this premise as each of these countries have implemented either HAT trials or mandated permanent maintenance programs (Fischer, Rehm, Kirst, Casas, Hall, Krausz, & Van Ree, 2002). It is also important to note neither of these countries have legalized heroin although U.S. critics of the program frame their argument against HAT around the hypothetical fear that it would lead to drug legalization.

Instead of reacting with enthusiasm to the Swiss findings the international community focused primarily on the methodological weaknesses of the evaluations and accused the Swiss of social irresponsibility. The U.S. was among one of the programs most ardent critics yet these criticisms come from a country that maintains the highest global drug incarceration rates and the highest incidence of drug related violence (MacCoun and Reuter, 2001). Yet little international condemnation has been directed toward the U.S. and its burgeoning prison population of drug offenders. Although most

Americans have come to the realization that the forty year “War on Drugs” has failed we still cling to the same policies that promote incarceration and enforcement efforts that are socially harmful and ultimately ineffective (Alexander, 2010).

The position of this thesis is not to imply that as a stand-alone program heroin maintenance could solve the U.S. drug problem or even eradicate illicit heroin use. But, conducting carefully regulated clinically controlled trials of HAT in the U.S. could ignite a national debate promoting a continuum of harm reductionist strategies that could ultimately reduce our reliance on incarceration and enforcement efforts. In the U.S. there remains an implied tolerance of ineffective socially harmful institutions and drug policies (MacCoun and Reuter, 2001). Even in spite of the positive findings from Swiss trials there is little tolerance for alternative programs such as HAT because American idealism clings to the notion that all addicts can live drug free lives if they are presented with enough punitive sanctions and treatment attempts. This type of circular reasoning implies that our country’s drug laws and policies are more aligned with political ideologies as opposed to the pragmatic evaluation of what works. However, if we look to our European counterparts we can see an emerging trend that promotes harm reduction policies which is reshaping how drug abuse is approached.

NAOMI TRIALS IN VANCOUVER AND MONTREAL

Currently in the U.S. there is a growing acceptance of harm reductionist policies such as needle exchange programs, naloxone distribution and increased access to methadone and suboxone substitution therapies. There are also a growing number of harm reduction alliance groups who advocate for the development of HAT trials although

the issue remains an inflammatory concept and the majority of the political and medical establishment still ardently oppose it largely on moral and ideological grounds. The U.S. debate regarding HAT has received renewed interest after the Canadian government proposed implementing trials in Vancouver and Montreal. The Canadian trials illustrate an important milestone in the trajectory of HAT because it was the first time such an approach was attempted in North America since the old U.S. narcotics clinics.

The motivation for the Vancouver trials stemmed largely from the city's burgeoning addicted population located in the East Hastings neighborhood in the downtown east side of the city. In 2008, it was estimated that over 40% of the 10,000 East Hastings residents were HIV positive largely as a result of IV drug use (Adilman and Kliewer, 2000). The Vancouver neighborhood also known as "Skid Row" maintains the highest incidence of HIV in the industrialized world. There are an estimated 5,000 IV drug users living in East Hasting costing the city millions in health care, law enforcement efforts and lost productivity. In light of the Swiss and Dutch experience with heroin assisted treatment the North American Opiate Medication Initiative (NAOMI) proposed a similar model be tried in Vancouver and Montreal.

The NAOMI trials although controversial and harshly criticized by U.S. officials revealed overall positive findings and marked reductions in illicit drug use and criminal activity among participants. The trials began in 2005 and concluded in 2008 and involved 251 participants with 115 receiving injectable diamorphine (heroin) and 111 receiving oral methadone. The study found a 67% reduction in illicit drug use or other illegal activities among the experimental group of injectable heroin compared to 47% receiving oral methadone (Oviedo-Joekes, Brissette, Marsh, Lauzon, Guh, Anis and

Schechter, 2009). The same study concluded that the diamorphine group had significant improvements over the oral methadone group with respect to medical and psychiatric status, economic stability, employment situation and family and social relations. These findings substantiate that diamorphine has a treatment effect beyond simply reducing illicit drug use and involvement in illegal activities.

The NAOMI trials received a hostile reaction from the Bush Administration and Drug Czar John Walters called the experiment "state sponsored suicide" (Gartry, Oviedo-Jokes, Laliberte, and Schechter, 2009). But, evidence from program evaluations reveal there was not a single fatality during the trial involving the experimental group receiving heroin. From the naive U.S. perspective it would be simpler if everyone could just say no to drugs. And it is this basic assumption that is driving the majority of our nation's drug policies with little regard to science, innovation or compassion. Ironically enough, many of the countries who utilize HAT were in fact inspired by the old U.S. narcotic clinics although the role of these clinics is largely omitted in the modern debate involving heroin maintenance. Providing HAT in the U.S. could help to reach heroin dependent persons who remain outside the current treatment system and who contribute disproportionately to health care and criminal justice cost (Gartry, Oviedo-Jokes, Laliberte, and Schechter, 2009). Access to HAT could also increase contact with vital mental and health care services while also providing a humane and cost effective treatment modality.

Another consideration is that although HAT has proven to be feasible and effective in well organized and wealthy European countries, it could prove difficult to implement in diverse cultural and political societies such as the U.S. Perhaps the recent findings of the NAOMI trials could provide a counter argument to this premise because

the U.S. and Canada are more comparable in terms of social context. MacCoun and Reuter (2001) touch upon another consideration and explain the argument for heroin maintenance presents a major ethical paradox. For instance, there is something strange about the notion that on one hand you prohibit a drug, but then an exception is made for those who cause sufficient damage to themselves and society as a consequence of their violation to prohibition. This paradox alone does not make maintenance a bad policy however it does raise some ethical concerns that could hamper efforts to implement it in the United States (MacCoun and Reuter, 2001).

IS AN EXPERIMENT LIKELY?

A compelling case for a HAT in the U.S. has not been made since the Vera Institute proposed a trial in New York City in the 1970s. But, in 1998 researchers at John Hopkins University, along with drug policy experts from around the world gathered at the New York Academy of Medicine to discuss the feasibility of a HAT trial in the U.S. Supporters of the program argued Baltimore would be an appropriate setting for such an experiment because the city has traditionally experienced high rates of heroin abuse and drug related crime. Baltimore's Health Commissioner Dr. Peter Beilenson publically supported the program and advocated that the study be attempted in light of the positive findings from the Swiss trials. The initiative was also supported by the Lindesmith Center who offered funding for the trial if it received approval from the Food and Drug Administration (Shane, 1998). The proposal was squashed before it had the chance to be considered for FDA approval due to the outcry of political opposition that argued giving addicts heroin would send a disastrous message that would undermine prohibition efforts. One supporter of the Baltimore initiative explains that the biggest prohibition in the

United States is not on drugs but instead the discussion of new solutions and the rejection of the proposal substantiates this claim (Shane, 1998). However, it would not be the last time the City of Baltimore would attempt such a proposal and the issue resurfaced again a decade later.

In 2009, drug policy expert Peter Reuter from the University of Maryland revisited the issue by conducting a feasibility study for the city of Baltimore. In coordination with the Abell Foundation, Reuter made a case for implementing an experimental trial and explained that heroin maintenance could remove 10% of Baltimore's most troubled heroin addicts leading to substantial reductions in crime and other issues that adversely affect the city. Reuter's proposal was dismissed by Baltimore officials as being a radical endeavor that lacked evidence (Smith, 2009). The rejection of Baltimore proposal illustrates the uphill battle advocates of the program face even in spite of the positive finding regarding HAT's effectiveness.

The recent fatal heroin overdose of famous actor Phillip Seymour Hoffman has facilitated a renewed interest on the subject. Although heroin addiction has been steadily increasing over the past ten years the issue has received little attention from the Obama administration or the media until Hoffman's death. Yet, the famous actor's overdose represents only one of the estimated 10,000 heroin related deaths annually. Between 2006 and 2010 heroin overdose deaths have increased 45% and heroin use has increased 79% overall between 2007 and 2012. And in cities such as Cleveland heroin related deaths are up 400 percent (Markon, 2014). Some experts explain the renewed interest in heroin is a consequence of the crackdown on prescription opiates. The lack of pharmaceutical opiates such as oxycodone has led many users to try a cheaper and more

powerful substitute, heroin (Markon, 2014). A similar trend occurred during the early 1900s when opium and cocaine were banned leaving users in search of an alternative such as heroin which would facilitated the first wave of heroin addiction in the United States (Courtwright, 1982). Attorney General Eric Holder addressed the issue in a recent Washington Post interview and explained that the heroin problem was of top priority for the DOJ although he only proposed increasing enforcement efforts and improving access to drug treatment and prevention (Markon, 2014). Holder gave no indication that alternative approaches such as HAT were being considered.

At present, prospects for heroin maintenance in the U.S. are unlikely but not outside of the realm of possibility. In the current political climate there seems to be little room for new innovative ideas regarding drug treatment and we continue to support policies that have repeatedly proven ineffective and socially harmful. In order for a HAT trial to matriculate there would need to be a considerable level of acceptance from the FDA, the National Institute of Drug Abuse in addition to local and federal political support. The growing implementation of HAT in European countries and more recently in Canada could strengthen the case for a U.S. experiment as the program continues to produce positive outcomes. It is however ironic that a country who once supported the use of narcotic maintenance and was the first to implement methadone maintenance is so resistant to a program that could considerably reduce the harms, human suffering and significant economic cost that are a direct result of illicit heroin abuse and its control. There is indeed something troubling about a country who spends more resources, and energy on a solution to heroin addiction that produces more harm and cost than the issue itself causes.

REFERENCES

- Acker, C. J. (2002). *Creating the American Junkie: Addiction Research in the Classic Era of Narcotic Control*. Baltimore, MD: JHU Press.
- Adilman, S., & Kliwer, G. (2000). Pain and Wasting on Main and Hastings: A Perspective from the Vancouver Native Health Society Medical Clinic. *BCMJ*, 42(9), 422-425.
- Alexander, M. (2010). *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*. New York: The New Press.
- African American News. (2007). *The Racist History of the War on Drugs*. Retrieved From http://www.dogonvillage.com/african_american_news/Articles/00000901.html
- ABA and AMA Joint Committee on Narcotic Drugs (1958). *Drug Addiction: Crime or Disease*. (Bloomington, IN.: Indiana University Press, 1961), Introduction by R.A Lindesmith, p.11.
- Annual Report of the Commissioner of Internal Revenue* (1919). Washington, D.C.: U.S. Government Printing Office, Retrieved From <http://druglibrary.net/schaffer/Library/studies/wick/wick1a.html>
- Bailey, P. (1916). The Heroin Habit. *The New Republic*, 6, 314-316.
- Bayer, R. (1975). Heroin Maintenance, The Vera Proposal and Narcotics Reform- An Analysis of the Debate 1971-1973. *Contemporary Drug Problems*, 4(3), 297-322.

- Billingshaley, W.H., Frater, J.J., & Pou, J.G. (1920) "Report on the Shreveport Narcotic Clinic." *Shreveport Medical Society*. Retrieved from <http://www.drugtext.org/The-Opium-Problem/chapter-xiii.html>.
- Brecher, Edward M. (1972). *Licit and Illicit Drugs*. Boston MA: Little, Brown and Co.
- Butler, W. (1922). How One American City is Meeting the Public Health Problems of Narcotic Drug Addiction." *American Medicine*, 28, 154-162.
- Cameron, J., & Dillinger, R. (2011). Narcotic Control Act. In M. Kleiman, & J. Hawdon (Eds.), *Encyclopedia of Drug Policy*. Thousand Oaks, CA: SAGE Publications.
- Canadian HIV/AIDS Legal Network. (2006). *Legislating on Health and Human Rights: Model Law on Drug Use and HIV/AIDS*. Retrieved From <http://www.aidslaw.ca/publications/interfaces/downloadFile.php?ref=875>
- Connelly, J. (2010). *Poll: War on Drugs' a Failure*. Retrieved From. <http://blog.seattlepi.com/seattlepolitics/2010/07/21/poll-war-on-drugs-a-failure/>
- Courtwright, David T. (1982). *Dark Paradise: Opiate Addiction in America Before 1940*. Cambridge, MA: Harvard University Press.
- Del Jarlais, D.C, Friedman, S.R., Sotheran, J.L. & Stoneburner, R. (1989). The Sharing of Drug Injection Equipment and the AIDS Epidemic in New York City: The First Decade. *NIDA Research Monograph 80*. Rockville, MD: NIDA.
- Dole, V. P., & Nyswander, M. (1965). A Medical Treatment for Diacetylmorphine (heroin) Addiction: a Clinical Trial with Methadone Hydrochloride. *JAMA*, 193(8), 646-650.

- Dumez, A.G., (1918). *Some Facts Concerning Drugs*. United States Public Health Service, Washington D.C: G.P.O.
- Evening Public Ledger*. (1915, Feb. 09). Eighteen Year-Old Heroin Victim Chronicling America: Historic American Newspapers. Library of Congress.
<http://chroniclingamerica.loc.gov/lccn/sn83045211/1915-02-09/ed-1/seq-1/>
- Farrell, M., & Hall, W. (1998). The Swiss Heroin Trials: Testing Alternative Approaches: Prescribed Heroin is Likely to Have a Limited Role. *BMJ*, 316(7132), 639.
- Fischer, B., Rehm, J., Kirst, M., Casas, M., Hall, W., Krausz, M., & Van Ree, J. M. (2002). Heroin-Assisted Treatment as a Response to the Public Health Problem of Opiate Dependence. *The European Journal of Public Health*, 12(3), 228-234.
- Gartry, C., Oviedo-Jokes, E., Laliberte, N., & Schechter, M. (2009). NAOMI: The Trials and Tribulations of Implementing a Heroin Assisted Treatment Study in North America. *Harm Reduction Journal*, 6(2), 1-14.
- Hakim, Peter, (2010). *Rethinking U.S. Drug Policy Inter-American Dialogue*. Washington, DC: The Beckley Foundation.
- Heroin Hydrochloride. (1906). *JAMA*, 47, 1303.
- Herwitt, J. (2006). *Traces of the 1960s Counter Culture in the 21st Century*. Retrieved From <http://voices.yahoo.com/traces-1960s-counter-culture-21st-century-114351.html>
- Hubbard, S. Dana (1920). Municipal Narcotics Dispensaries. *Public Health Reports*, 35, 771-773.

- Inciardi, J.A. and Harrison, L.D. (2000). *Harm Reduction: National and International Perspectives*. Sage Publications: Thousand Oaks, CA.
- Jones, J. (1996). *Hep-Cats, Narcs and Pipe Dreams: A History of Americas Romance with Illegal Drugs*. NY: Scribner.
- Joseph, H., Stancliff, S., & Langrod, J. (2000). Methadone Maintenance Treatment (MMT). *The Mount Sinai Journal of Medicine*, 67(5,6), 346-364.
- Kane, F. et al. (1917). Drugs and Crime: Reports of Committee 'G' of the Institute." *Journal of The American Institute of Criminal Law and Criminology*, 8, 502-517.
- Kappeler, V. E., Potter, G. W., & Blumberg, M. (2005). *Mythology of Crime and Criminal Justice*. Long Grove, IL: Waveland Press.
- Killias, M, & Rabasa J. (1998) Does Heroin Prescription Reduce Crime? Results from the Evaluation of the Swiss Heroin Prescription Projects." *Studies on Crime and Crime Prevention* 7(1),127-33.
- Kleber, H.D. (2002). Methadone: The Drug, the Treatment the Controversy. In. D. F. Musto (Eds.), *One Hundred Years of Heroin*. (pp. 149-158). Westport, CT: Auburn House.
- Kolb, L., & Dumez, A. (1924). The Prevalence and Trend of Drug Addiction in the United States and Factors Influencing It. *Public Health Reports*, 39, 1179-1204.
- Kuzmarov, J. (2009). *The Myth of the Addicted Army: Vietnam and the Modern War on Drugs*. University of Massachusetts Press.

- Leahy, S. (1915). Some Observations on Heroin Habitues. *Psychiatric Bulletin of the New York State Hospitals*, 8, 251-263.
- Lee, E. (2002). The Chinese Exclusion Example: Race, Immigration, and American Gatekeeping, 1882-1924. *Journal of American Ethnic History*, 36-62.
- Markon, J. (2014). *Holder Calls Death From Heroin Overdoses an Urgent and Growing Public Health Crisis*. In The Washington Post Retrieved From http://www.washingtonpost.com/politics/holder-calls-deaths-from-heroin-overdoses-an-urgent-and-growing-public-health-crisis/2014/03/10/1a99720a-a7cf-11e3-b61e-8051b8b52d06_story.html
- MacCoun, R. J., & Reuter, P. (2001). *Drug War Heresies*: Cambridge UK: Cambridge University Press.
- McCoy, A. W., Read, C. B., & Adams, L. P. (1972). *The Politics of Heroin in Southeast Asia*. New York: Harper & Row.
- Musto, D. F. (1973). *The American Disease: Origins of Narcotic Control* New York: Oxford University Press.
- Musto, D.F. (2002). *One Hundred Years of Heroin*. Westport, CT: AuburnHouse.
- New York Tribune*. (1921, Feb. 21). Society Girl Heroin Addict Asks Police Aid
Chronicling America: Historic American Newspapers. Library of Congress.
Retrieved From <http://chroniclingamerica.loc.gov/lccn/sn83030214/1921-02-21/ed-1/seq-16/>

- New York State. (1920). Narcotic Drug Control Commission. *Second Annual Report*. Albany: J. B. Lyon Co.
- Nordt, C., and Stohler, R. (2006). Incidence of heroin use in Zurich, Switzerland: A Treatment Case Register Analysis. *The Lancet*, 367: 1830-34.
- O'Donnell, John A., and Jones, Judith P. "Diffusion of the Intravenous Technique Among Narcotics Addicts." In. *Epidemiology of Opiate Addiction in the United States*, John C. Ball and Carl D. Chambers, eds. Springfield, ILL.: Charles C. Thomas, 1970.
- Office of the White House Press Secretary. (1962). *Remarks of the President To White House Conference on Narcotics*. Retrieved From <http://www.jfklibrary.org/Asset-Viewer/Archives/JFKPOF-040-022.aspx>
- Oviedo-Joekes, Brissette, S., Marsh, D., Lauzon, P., Guh, D., Anis, A., and Schechter, M. (2009). Diacetylmorphine Versus Methadone for the Treatment of Opioid Addiction. *New England Journal of Medicine* 361, 777-786.
- Perneger, Thomas V., Giner, Francisco, del Rio., and Annie Mino. "Randomized Trial of Heroin Maintenance Program for Addicts Who Fail in Conventional Drug Treatment. *BMJ*, 317, 13-18.
- Reuter, P. (2009). *Can Heroin Maintenance Help Baltimore?* The Abell Foundation, 111.
- Reuter, P & Schnoz, D. (2009). Assessing Drug Problems and Policies in Switzerland, 1998- 2007. *Swiss Federal Office of Public Health*. Retrieved from

<http://www.drugwarfacts.org/cms/Switzerland#sthash.SNJUHwEs.4Ap8nAG.dpuf>

Ribeaud, D. (2004). Long-Term Impacts of the Swiss Heroin Prescription Trials on Crime of Treated Heroin Users. *Journal of Drug Issues*, 34(1), 163-194.

Riis, J. (1903). *How the Other Half Lives: Studies Among the Tenements of New York*. New York: Charles Scribner's Sons.

Scott, S. (1998). *Test of Heroin Maintenance May be Launched in Baltimore*. In Baltimore Sun. Retrieved From http://articles.baltimoresun.com/1998-06-10/news/1998161017_1_heroin-hopkins-school-maintenance-study

Scheffel, C. E. (1918). The Etiology of Fifty Cases of Drug Addiction. *Medical Record*, 94, 853-854.

Smith, P. (2009). Heroin Maintenance: Study Suggest Baltimore Could Be Ripe for A Pilot Program. *Drug War Chronicle*, 574. Retrieved from <http://stopthedrugwar.org/chronicle/2009/feb/27/heroinmaintenancestudysuggest>

Stokes, C.F.(1918). The Problem of Narcotic Addiction of Today. *Medical Record*, 93,756-7.

Substance Abuse and Mental Health Services Administration. (2010). *Overview of Opioid Treatment Programs Within the United States: 2008*. National Survey of Substance Abuse Treatment Services. Retrieved From. <http://www.oas.samhsa.gov/2k10/222/222USOTP2k10.htm>

Terry, C., & Pellens, M. (1928). *The Opium Problem*. New York: Bureau of Social Hygiene. Retrieved From <http://www.druglibrary.eu/library/books/op.pdf>

Terry, C. et al. (1920). Report of Committee on Habit Forming Drugs. *American Journal of Public Health*,10, 83-87.

The Cocaine Habit. (1900). *JAMA*, 34, 1637.

The Herald and News. (1909 July, 09). Cocaine. *Chronicling America: Historic American Newspapers*. Library of Congress. Retrieved From <http://chroniclingamerica.loc.gov/lccn/sn86063758/1909-07-09/ed-1/seq-4/>

The New York Sun. (1919, July 27) The Drug Menace and What it Means to New York. *Chronicling America: Historic American Newspapers*. Retrieved From Library of Congress. <http://chroniclingamerica.loc.gov/lccn/sn83030431/1919-07-27/ed-1/seq-25/>

The Washington Times. (1921, Nov. 28). Blair's Annual Report Declares Illicit Traffic in Dope Continues Menace. Retrieved From *Chronicling America: Historic American Newspapers*. Lib. of Congress. <http://chroniclingamerica.loc.gov/lccn/sn84026749/1921-11-28/ed-1/seq-12/>

Trebach, A. S. (1982). *The Heroin Solution*. New Haven: Yale University Press.

U.S. Department of the Treasury. (1919). *Traffic in Narcotic Drugs: Report of the Special Committee of Investigation Appointed March 25, 1918, by the Secretary of the Treasury*. Washington D.C.: G.P.O.

U.S. Supreme Court. *United States v. Doremus*, 249 U.S. 86 (1919).

U.S. Supreme Court. *Webb v. United States*, 249 U.S. 96. (1919).

Wesson, D. R. (2011). Psychedelic Drugs, Hippie Counterculture, Speed and Phenobarbital Treatment of Sedative-Hypnotic Dependence. *Journal of Psychoactive Drugs*, 43(2),153.

White, W.L. (2002). Trick or Treat? A Century of American Responses to Heroin Addiction. In. D.F. Musto (Ed.), *One Hundred Years of Heroin*. (pp. 131-147). Westport, CT: Auburn House.

Williams, E. H. (1914). Negro Cocaine “Fiends” Are a New Southern Menace. *New York Times*, 8(1914), 12.

Vorenberg, J., & Lukoff, I. F. (1973). Addiction, Crime, and the Criminal Justice System. *Fed. Probation*, 37, 3.