

# Heroin

ITS HISTORY, PHARMACOLOGY, AND TREATMENT

HUMBERTO FERNANDEZ | and Therissa A. Libby, Ph.D.

SECOND EDITION REVISED AND UPDATED



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THE LIBRARY OF ADDICTIVE DRUGS

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Humberto Fernandez  
and  
Therissa A. Libby, Ph.D.

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***Editor's note***

All the stories in this book are based on actual experiences. The names and details have been changed to protect the privacy of the people involved.

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*For James, Carlos, Vanessa, and Julian*

# CONTENTS

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## FOREWORD TO THE 1998 EDITION

*by David E. Smith, M.D., Founder, President, and Medical Director, Haight Ashbury Free Clinics, Inc., and Richard B. Seymour, M.A., Managing Editor, Journal of Psychoactive Drugs and International Addictions Infoline*..... ix

## PART I: THE DRUG

1. The History of Heroin: The Discovery of Opium and the China Trade..... 1
2. The History of Heroin: Heroin in America and the World Trade ..... 17
3. The Pharmacology and Physiology of Heroin Use ..... 37

## PART II: THE ADDICT

4. The Psychology and Culture of the Heroin Addict ..... 55
5. Case History: Heroin Addiction ..... 69

## PART III: TREATMENT

6. Treatment for Heroin Addiction: The Behavioral Model ..... 89
7. The Politics of Methadone Maintenance ..... 105
8. Case Histories: Methadone Maintenance ..... 123
9. Pharmacological Approaches to Heroin Addiction Treatment ..... 137

## PART IV: SOCIETY

10. Heroin, the AIDS Epidemic, and Hepatitis B and C ..... 157
  11. America's War on Drugs ..... 169
  12. Heroin and the Criminal Justice System in America ..... 213
  13. Heroin, Popular Culture, and the Media ..... 235
  14. Heroin Addicts: Beyond Redemption? ..... 247
- Notes ..... 255
- Index ..... 271
- About the Authors ..... 287

## **The Drug That Never Went Away**

Celebrity drug overdose deaths involving heroin, such as the death of comedian Chris Farley from a heart attack induced by using a speedball (cocaine and heroin), have raised the visibility of heroin as though the current wave of addiction were something new. Actually, heroin addiction never went away. Until recently, however, it's been eclipsed in the media by the phenomena of runaway crack cocaine and methamphetamine abuse. In reality, even though America has experienced a period of intensified stimulant abuse, unfortunately with methamphetamine abuse still rising and yet to reach its peak, the need for treatment of heroin addiction has continued to be a prominent feature of the American drug scene. Every stimulant abuser is a potential heroin addict, because of the well-known upper-downer cycle, a drug pattern observed at the Haight Ashbury Free Clinics every decade for the past four decades. Viewed from a statistical, public health standpoint, the focus on specific drugs of abuse is a matter of degree, not totality.

An increase in heroin abuse has been expected and can be seen as one phase of an ongoing oscillation between stimulant and depressant drugs that has been identified and followed over the past thirty years by Dr. John Newmeyer, of the Haight Ashbury Free Clinics, and other epidemiologists working in the addiction field. Just as individuals may become entangled in an upper-downer cycle, our drug-using society has experienced approximately ten-year cycles of predominant upper or downer abuse throughout the century. This is how it works. Following each stimulant epidemic, whether it involves amphetamine or cocaine, significant numbers of addicts turn to heroin to calm the side effects of long-term stimulant abuse, such as anxiety, insomnia, or paranoia. Heroin, or diacetylmorphine, works through the opioid receptors in the brain and initially provides relief from these side effects, along with euphoria and relaxation. In its turn, however,

heroin can rapidly produce physical dependence with severe withdrawal when the user tries to stop using.

Even though the current rise in heroin use was predictable, this rise, like its predecessor in the late 1960s, has its idiosyncratically alarming aspects, primarily due to the appearance of heroin abuse in new populations, particularly in younger populations with no previous history of narcotic abuse or addiction.

The highly publicized death from a heroin overdose of a nineteen-year-old rock musician in San Francisco in the fall of 1997 brought the growing problem of heroin addiction among youth to general public attention. Behind the headlines, those of us in the drug treatment field have become increasingly aware of dramatically expanded heroin use by young people.

One aspect of the rise in heroin use among young people is the appearance of “heroin chic.” For some inexplicable reason, perhaps even a growing use of the drug by individuals within the fashion and entertainment industries, heroin use has come to be glamorized in films and in ads appearing in fashion magazines. Heroin abuse has become fashionable.

Tolerance (needing more and more of the drug to achieve the desired effect) builds rapidly to heroin, so that while the addict is actively using, he or she may progress to a dose that would be potentially lethal to a person who has not developed tolerance. It should be noted that tolerance decreases rapidly when a heroin user enters treatment and engages in abstinence and recovery. Fatal overdoses may occur when recovering heroin addicts slip and inject a dose comparable to the amount of the drug they were taking at the height of their active use. In addition, the purity of heroin varies greatly in the drug culture. Variations in tolerance to and purity of the drug contribute to the potentially fatal overdose.

Heroin overdoses need not be fatal. The toxic effects of heroin can be reversed with a short-acting opioid receptor antagonist known as Narcan. The antagonist literally kicks the heroin molecules out of their binding sites in the brain. Naltrexone, a longer-acting opioid receptor antagonist, is used for relapse prevention by recovering heroin addicts.

Longer-term treatment of heroin addiction ranges from drug-free recovery through Narcotics Anonymous (NA) to methadone maintenance. Although there are a variety of treatment approaches for heroin



addiction, the best is not to start using in the first place. As one young heroin addict said a number of years ago, “It’s so good, don’t even try it once.”

We have also seen a rise in young people experimenting with heroin by smoking it, with the mistaken belief that you can’t be an addict unless you stick a needle in your arm. Unfortunately, once they acquire a taste for heroin, the needle, disability, and death may soon follow.

In *Heroin*, Humberto Fernandez has provided a detailed historical background to the present situation, showing the why of heroin chic. If ever a comprehensive book on heroin were needed, it is now, and Fernandez has filled that need by providing a fully developed history, psychology, physiology, and pharmacology of heroin addiction. Moving on from those basics, *Heroin* explores the variety of treatment approaches, presents case histories of addicts, and places the drug within a detailed social context that includes public health, organized crime, the criminal justice system, popular culture, and the media.

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## Part I: The Drug

## CHAPTER 1

# The History of Heroin: The Discovery of Opium and the China Trade

**For the drunkard and the glutton shall come to poverty; and drowsiness shall clothe a man with rags.**

PROVERBS 23:21

**Her eyes closed in spite of herself, and she forgot where she was and fell among the poppies, fast asleep.**

**“What shall we do?” asked the Tin Woodman.**

**“If we leave her here she will die,” said the Lion. “The smell of the flowers is killing us all. I myself can scarcely keep my eyes open and the dog is asleep already.”**

L. FRANK BAUM, *THE WONDERFUL WIZARD OF OZ*

**T**he poppy is a flower of exquisite beauty. A blossom of delicate rounded petals of vibrant scarlet color encases a black heart perched atop a tall, wavy stalk. Golden-green seed bulbs stand or droop alongside the blooms, and disheveled, feathery leaf clusters are stationed randomly along the stem.

Not surprisingly, the poppy has long been a favorite subject of still-life and landscape painters, particularly the Impressionists. Claude Monet's *Les Coquelicots* depicts the flowers as tiny explosions of orange-red tumbling down a small hill, appearing to flow onto the feet of a small girl and young woman with an umbrella strolling in a field of yellow-green grasses. In his painting *Field of Poppies*, however, the brilliant, silky flowers are thickly bunched to form an oncoming scarlet wave that fills the bottom third of the picture and seems to be rushing directly toward the viewer, about to crest over the lower edge of the frame. It is a scene like this that must have inspired the oceanic poppy field in the 1939 MGM film *The Wizard of Oz*. In *The Wonderful Wizard of Oz*, the book on which the movie was based, L. Frank Baum described the scene as follows:

**They walked along listening to the singing of the bright-colored birds and looking at the lovely flowers which now became so thick that the ground was carpeted with them. There were big yellow and white and blue and purple blossoms, beside great clusters of scarlet poppies, which were so brilliant in color that they almost dazzled Dorothy's eyes.**

"Aren't they beautiful?" the girl asked, as she breathed in the spicy scent of the flowers.

"I suppose so," answered the Scarecrow. "When I have brains I shall probably like them better."

"If only I had a heart I should love them," added the Tin Woodman.

"I always did like flowers," said the Lion, "they seem so helpless and frail. But there are none in the forest so bright as these."

They now came upon more and more of the big scarlet poppies, and fewer and fewer of the other flowers; and soon they found themselves in the midst of a great meadow of poppies.

Even in Baum's fairy tale, however, there exists another aspect of this beautiful flower besides its vibrant color and delicious scent—an ominous side to its nature that is foreshadowed in the chapter titled "The Deadly Poppy Field." The narrative continues:

**Now it is well known that when there are many of these flowers together their odor is so powerful that anyone who breathes it falls asleep, and if the sleeper is not carried away from the scent of the flower he sleeps on and on forever. But Dorothy did not know this, nor could she get away from the bright red flowers that were everywhere about; so presently her eyes grew heavy and she felt she must sit down to rest and to sleep.**

This is, of course, allegory, and read as such we know it was not the beauty of that field of red flowers that put the Oz seekers to sleep, nor was it the power of the flowers' collective fragrance. Baum's reference in the story was to opium, the powerful analgesic that is derived from the seed bulbs of the poppy plant. And the opium found in the poppy has its own story, a larger human tale of euphoria and the individual's search for transcendence. It is a story that encompasses a vast historical landscape: addiction, war, the rending of the fabric of whole societies, death on a mass scale. It is a story that begins thousands of years ago.

Men and women have been using psychotropic substances throughout history for a number of reasons: to attain euphoric physical states, for recreational pleasure, to escape the travails of earthly suffering, and to seek spiritual transcendence and enlightenment through altered states of consciousness. The earliest written history of humanity's romance with the opium poppy is found in the writings of the Sumerians dating back to approximately 3300 B.C.

### **Opium as Medicine, Recreation, and Commodity**

The Sumerians, a dark-skinned, short-of-stature, heavy-boned tribe, are believed to have migrated from Persia (now Iran) by navigating the

estuaries of the Tigris and Euphrates rivers; they settled into the region of land between the southern ends of the two rivers, just north of the Persian Gulf. There they flourished and traded with their neighbors—Persia and Elam to the east, and Akkad and Assyria to the north. They built their homes, initially mud huts, along the marshes of the lower Euphrates, and through sheer determination and imagination survived the occasional floods of the twin rivers.<sup>1</sup>

Using sophisticated irrigation techniques to hydrate their crops with the ever-flowing waters of the rivers, they avoided reliance on rain, effectively eliminating one of early man's greatest fears: drought.

Farmers to the north, who prayed for rain, produced only 10% of what Sumerian farmers regularly harvested. The Sumerians' waterways strategically irrigated their crops and enabled them to harvest abundantly as often as three times a year.

Living within an agrarian society, the Sumerians grew barley, dates, and grain as their primary crops. They also grew the opium poppy, *Papaver somniferum*. The cereal crops came in the spring and were used to feed sheep and cattle during the hot summer months. The dates came in the



A poppy field  
in Southeast Asia

Photo courtesy of the  
Drug Enforcement Administration,  
U.S. Department of Justice



*Papaver somniferum*,  
the opium poppy

Photo courtesy of the  
Drug Enforcement Administration,  
U.S. Department of Justice

fall. They traded their surplus with the Persians, and it is in these exchanges that we can begin to trace the spread of the opium poppy.

The Sumerian civilization comprised twelve cities, each a territory unto itself, with infighting a common practice over such issues as irrigation rights. Each city had a monarch who ruled and served as a keeper of justice. From Sumerian writings we can trace the development of legal concepts, such as those concerning private property and civil liberties, which protected the rights of the less affluent. The Sumerians are known to have used sailboats, chariots, and plows drawn by animals. They are also credited with inventing the potter's wheel. They built a sophisticated society by early standards, as witnessed by recovered artifacts including many copper and bronze tools, and objects found in graves from the city of Ur, dating to about 2800 B.C.

The Sumerians' most significant contribution to the advancement of civilization was perhaps the invention of writing. Archaeologists have unearthed more than 400,000 clay tablets on which are recorded Sumerian times and achievements. The Sumerians used soft clay from the banks of the Tigris and Euphrates rivers to form the sun-dried tablets, on which they inscribed wedge-shaped markings with the ends of reeds, also abundant along the rivers.

Although the images the Sumerians inscribed were pictorial and told stories of daily life, the primary initial function of the recordings was financial; they were used as a means of recording transactions and documenting food supplies stored in the temples. This writing came to be known as cuneiform, from the Latin word *cuneus*, which means "wedge."<sup>2</sup>

It was in this form that the Sumerians recorded the earliest information about the cultivation of opium. How the opiate content of the poppy and its psychotropic qualities were discovered is not known. We do know that the Sumerians used it for both medicinal and recreational purposes. They referred to it as *hul gil*, or "plant of joy."

Opium was not the only crop they used for pleasure. Historians believe that as much as 40% of the Sumerians' barley crop went to the production of beer. So whether by chance or design, the Sumerians placed themselves

in a position to trade with their neighbors these substances that intoxicated and relaxed.

At some time between 700 B.C. and 140 B.C. the secret of opium poppy cultivation was shared with the Akkadians, Sumer's neighbors to the north. The Akkadians in turn passed it along to the Assyrians who, through trade with the Syrians and Egyptians, eventually spread the secret of the poppy to the west and north, as far away as Greece.

There is little historical documentation of the spread of the opium poppy to the west during this time, but there is mention of opium in Greek pharmacopoeia as early as the fifth century B.C. As was the case in later times, its spread has been attributed to Arab merchant traders who carried opium, recognized for its medicinal and recreational values, and other commodities.

Opium's healing powers are described in the writings of the Greek physician Hippocrates, who in about 400 B.C. prescribed it to patients suffering from insomnia. A Greek physician, Galen (A.D. 129–199), recorded the first opium overdose. Galen was the appointed physician to the Roman emperor Marcus Aurelius Antoninus. Galen acquired much of his knowledge about opium's healing properties from the Egyptians, and he became such an advocate of the practice of eating opium, and of other vegetable therapies, that for centuries these preparations were known as "Galenicals."<sup>3</sup> In the first century A.D., the Greek physician Dioscorides wrote what became the leading medical text of the day, *De Materia Medica*, in which he described opium and its medical value. He wrote that, mixed in liquid, opium was a powerful cure for insomnia, diarrhea, and nausea and that it had aphrodisiac qualities.<sup>4</sup> Dioscorides detailed how the pod of the poppy plant should be crushed and mixed with a liquid for maximum benefit.

The most common method of opium ingestion was as a liquid elixir. The sappy white milk, raw opium, that is found in the poppy seed bulb was usually mixed with wine or water and produced a dreamy, euphoric effect when ingested.

We even find an indirect mention of opium in the Bible. Matthew 27:34 reads, "They gave him vinegar to drink mingled with gall: and when he had tasted thereof, he would not drink."<sup>5</sup> Matthew was speaking of the



Crucifixion, when Jesus was offered a sponge soaked in bitter wine. Biblical scholars theorize that the “gall” mixture may have been opium and wine, offered to dull his pain. Opium, when mixed with wine, has a bitter taste, hence the meaning of the word *gall* as “something bitter.”<sup>6</sup>

What little recorded history survives traces the spread of the opium poppy from the Middle East westward to Greece and eastward to the Far East—India and China. Gradually making its way along overland trade routes, carried as one of many commodities by Arab merchants, the addictive fruit of the poppy reached China in approximately the seventh century A.D.<sup>7</sup> In 973 A.D., Chinese scholars recorded in the *Herbalist’s Treasury* that “the poppy’s seeds have healing powers.”<sup>8</sup> They recommended mixing the seeds of the poppy with bamboo juice boiled into gruel.

### The All-Sea Trade Route to the Far East

In 1271, the Venetian traveler Marco Polo set off for China with his father and uncle. They reached Shang-tu, China, four years later—the first Europeans to travel so far east. Polo and his father stayed in China until 1292 and arrived back in their hometown of Venice in 1295. Three years later, serving as the captain of a Venetian galley, Polo was captured in a battle between Genoa and Venice and imprisoned until 1299. It was during his imprisonment that he dictated to a fellow prisoner *The Travels of Marco Polo*.<sup>9</sup> It was perhaps one of the most important books in history because it gave medieval Europe its first detailed knowledge of China and other Asian countries. Polo wrote of Thailand, Japan, Java, Cochin China (now part of Vietnam), Sri Lanka, Tibet, India, and Burma (now called Myanmar). His book was used to record the first accurate maps of the Far East in Europe, and it helped inspire navigators like Christopher Columbus to sail due west from Europe in search of the all-sea route to India. This route was discovered not by Columbus sailing west, of course, but by the Portuguese navigator Vasco da Gama in 1497–98, when he journeyed south and east around the tip of Africa to reach India.

With the ability to sail around the world, Europe established a model for the global opium trade that exists to this day. Although their primary

objective was to obtain the silks, spices, and porcelain that were to be found in the Far East, the Portuguese soon discovered the value that opium had in the international trade market.

The Portuguese reached Canton, China, by 1513 and spent the next fifty years establishing control of seaports stretching from Calcutta, India, to the island of Macao and as far east as the Spice Islands of Indonesia. They faced competition from rival sea merchants and were known to pirate and plunder as they went, confiscating cargoes.

While the spices, silks, and goods the Portuguese carried back to Europe in their wooden galleys commanded a high price, there was little Europe produced that the Far East needed or would pay for. The Europeans suffered a trade imbalance but learned from the experience of Arab and Indian merchants who had been selling opium grown in India to the Chinese for hundreds of years. The Chinese were known to cultivate opium by this time, but it was a minimal crop, and Indian opium was of a higher quality and potency.

With the advent of the sailing ship, the Europeans were able to expand their distribution network and secure more and more ports, delivering high-quality opium at faster speeds than before. Prior to this, opium had been distributed along overland trading routes, a much slower delivery process. The introduction of the sailing ship gave rise to a quickly growing addict population in the Far East during the period between 1500 and 1700.

The Portuguese are credited with introducing the smoking pipe to the Chinese. Spanish sailors brought the practice of smoking tobacco in pipes to Europe after their explorations of the New World. Smoking a pipe filled with tobacco soon became fashionable in Europe. Portuguese sailors carried tobacco grown in Brazil, by now a Portuguese colony, to the Chinese, who smoked it with Indian opium in wooden pipes made in Spain. The technology of the pipe accelerated the use of opium in the Far East. Opium dens began to spring up everywhere, spreading from coastal ports to inland villages and towns. The stronger effect of smoking opium, rather than drinking it, resulted in more severe addiction, and the numbers of habitual users in China swelled.

The Dutch followed the Portuguese and began trading in opium by the

beginning of the seventeenth century. The French were also involved in the opium trade. It seemed virtually impossible for any of these countries to trade with China without dealing in opium. Britain, though one of the last sea powers to enter this market, became a dominant force in the politics of India and played a significant role in the rapid growth of the opium trade to China.

None of this would have been possible were it not for the formation of the East India companies, the most notable of which was the British East India Company, chartered on December 31, 1600, by Queen Elizabeth I. The agents of the company, merchant adventurers, were authorized to acquire territories wherever they could and to exercise in those territories the various functions of government, including legislation, the issuance of currency, the negotiation of treaties, the waging of war, and the administration of justice. It was, in effect, a charter for colonization. They were also free to move opium from India to the Far East. The company established a monopoly on trade to Asia, Africa, and the America colonies,<sup>10</sup> and controlled the Asian opium trade from the 1770s until 1833, when trade was opened to all foreign merchants, enabling American sailing captains to now compete openly in the increasingly profitable opium business. This socially debilitating trade went on despite the banning of all opium importation by the Chinese emperor in the 1790s.

An indication of how addiction in China was spreading can be measured by the steadily increasing weight of East India company opium cargoes. In 1660, the Dutch East India Company reported shipping approximately 1,350 pounds from India to China. By 1720, the British were shipping to China 15 metric tons a year, increasing the amount to 75 metric tons by 1773. Importation continued to grow, stabilizing at about 250 metric tons annually in 1800. By 1833, when the British East India Company gave up its monopoly on Asian trade, the numbers were on their way to new, dizzying heights. Chinese importation of Indian opium in 1820 was 270 metric tons per year. By 1840, the annual cargo reached a high of 2,555 metric tons. The human cost of this dramatic increase: three million Chinese opium addicts.<sup>11</sup>

China was faced with the problem of how to react to a hungry addict population being fed by greedy foreign merchants. The Chinese government

had banned opium smoking in 1796, making it a capital offense, but found that this did little to curb the spread of the drug throughout the country. By 1838, the issue was the most pressing concern to the imperial court and one that involved nothing less than China's economic and spiritual survival. Feeling that a crisis point had been reached, the emperor appointed a mandarin named Lin Tse-hsu as a special commissioner to Canton and charged him with a twofold task: Assess the problem and determine a solution, and then act decisively on that determination.

Lin Tse-hsu arrived in Canton and summarily demanded the surrender of all opium cargoes from the foreign ships in port. The British merchants delayed and, after what appeared to be a standoff, surrendered 95 metric tons of opium to the Chinese. It took the Chinese several days, working day and night, to burn the seized cargo.

Great Britain, in response to the seizure, dispatched 7,000 troops and a fleet of six warships to retaliate. This was the beginning of the first of two opium wars China fought with Britain. The British military forces captured Canton in May 1839 and spent the next two years marching north, seizing China's major coastal cities. Whether Chinese government officials underestimated Britain's response to the opium seizure is open to conjecture, but the result was a crushing military defeat, which the Chinese accepted in 1842, when they were forced to sign the Treaty of Nanking. The treaty forced China to cede Hong Kong to the British and open five new ports to foreign trade. The Chinese also agreed to pay the equivalent of \$21 million as reparations for the 95 metric tons of opium they had seized and destroyed. In addition, they ceded the right to try British citizens in Chinese courts.<sup>12</sup> In spite of this, China still refused to legalize opium.<sup>13</sup>

China's refusal to legalize opium, even under enormous diplomatic and military pressure from Britain, ultimately led to the second of the opium wars, known as the "Arrow War." This war pitted the Chinese against the combined forces of France and Great Britain.

As is the case in many wars throughout history, a single incident sparked a declaration of war. In October 1856, Cantonese police boarded the British ship *The Arrow*. They lowered the British flag and seized the ship and its cargo, charging its crew with smuggling opium. Historians believe the British were looking for an excuse to renew hostilities so as to expand their

trading rights and used the incident to once again wage war. The French, also looking to capitalize on the lucrative trade market in China, decided to join forces with Britain. They used the killing of a French missionary in the interior of China as their excuse for military retaliation, but their primary motive for engaging in the war was monetary greed.<sup>14</sup>

The British and French forces proved to be an overwhelming enemy and methodically defeated Chinese forces in battle after battle. The Europeans occupied Canton by late 1857, and in 1858 brought the Chinese to the treaty table again, this time forcing them to sign the Treaty of Tianjin. The treaty negotiations temporarily halted the fighting. Britain and France proposed an agreement that called for opening new trading ports, allowed residence in Peking for foreign emissaries, gave freedom of movement to Christian missionaries, and permitted travel by foreigners in the Chinese interior. The Chinese refused to sign the treaty, prompting an Anglo-French attack on Peking itself and the burning of the summer palace of the emperor. Finally, in 1860, the Chinese admitted defeat and signed the Treaty of Peking, promising to observe the terms of the earlier Tianjin treaty.<sup>15</sup>

Perhaps the most significant result of the Chinese defeat was the legalization of opium importation by China in 1858. The aftermath of legalization was an unprecedented explosion in the number of addicts. By 1900, China had 13.5 million addicts consuming 39,000 metric tons of opium per year.<sup>16</sup> In 1906 the imperial government reported that 27% of adult Chinese males were opium smokers.<sup>17</sup>

In contrast, during 2008 only 7,700 metric tons of opium were cultivated globally.<sup>18</sup> During the same year, the number of American heroin abusers was estimated at 1.2 million (0.2% of the U.S. population).<sup>19</sup> By comparing these numbers, one can get an idea of what social conditions in China had become by the beginning of the twentieth century.

## Opium in the West

As China was being devastated by opium smoking, England and the United States were slowly cultivating their own addicted consumer base for the fruit of the poppy.

While the opium trade was exploding in the Far East during the 1800s, the scientific minds of Europe were busy discovering various medical uses for opium derivatives. Morphine, derived from processed opium, was discovered by the German pharmacist Friedrich Wilhelm Adam Seturner in 1803. He devised a process to isolate morphine (described in chapter 3) and named it for the Greek god of dreams, Morpheus.

Another German pharmacist, Heinrich Emanuel Merck, began commercial production of morphine about twenty-three years later, in 1827.<sup>20</sup> The Merck family had produced a line of chemists that dated back to 1668, when Friedrich Jacob Merck took over a pharmacy in Darmstadt, Germany, called Engel-Apotheke, meaning “at the sign of the angel.” Today, the company is known as Merck and Company.

Merck and Company dates its U.S. beginnings to the Philadelphia firm Zeitler and Rosengarten, founded in 1822 by German-American chemist George David Rosengarten, who arrived in America in 1818. Rosengarten worked for four years after his arrival as a pharmacist, and when he had saved enough money, he bought a half interest in Zeitler and Seitler, a company that by 1822 had been making quinine sulfate for almost a year. Zeitler and Rosengarten later manufactured morphine and strychnine, among other chemical products, for legal, commercial distribution in the United States and Europe.<sup>21</sup> The company was renamed the Powers-Weightman-Rosengarten Company in 1905, and became known as E. Merck and Company in 1927.

Heinrich Merck began commercial production of the anodyne codeine in 1836, ten years after morphine had been introduced. He would begin commercial production of cocaine in 1862.<sup>22</sup>

In Europe and the United States the preferred way of using opium was in its liquid form. Laudanum or “black drop” as it was also known, was introduced by the Swiss-born alchemist Paracelsus in 1541. This liquid preparation of opium was what many women and men used to experience the effects of the opium high. In the early 1800s it was not socially acceptable for women to frequent bars or saloons, so laudanum conveniently became the drug of choice for many women. Easily available at the local apothecary, it was also a suitable substitute for alcohol for men who did not wish to appear to be drunkards. Laudanum is odorless. A gentleman

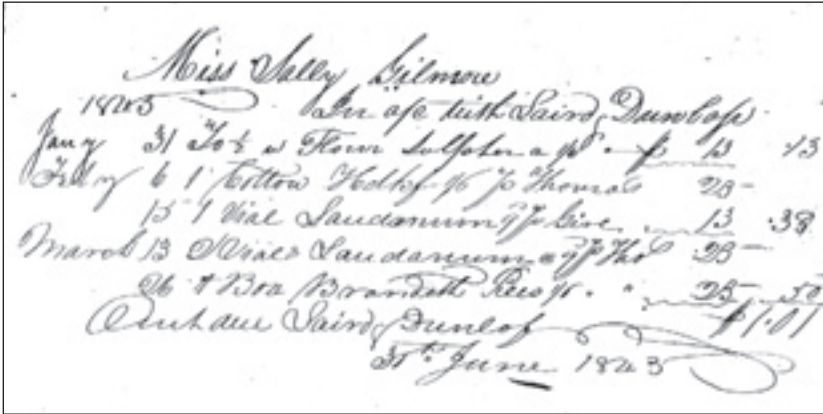
could take a swig of it in place of alcohol and go about his business with no one the wiser.

Gradually, the use of opium in laudanum and in patent medicine remedies reached epidemic proportions in England and the United States. The remedies were marketed in magazine and newspaper advertising. If there wasn't a drugstore nearby, you could place your order through a mail-order distributor. Many of the remedies, with such brand names as Mother Bailey's Quieting Syrup, were spoon-fed to children. Mothers used opium-based remedies to suppress coughs, to cure diarrhea, and to quiet the occasionally cranky child. They inadvertently addicted their children and themselves to drugs like Mrs. Winslow's Soothing Syrup. Use of the opium-laced remedies was so widespread that it became a national problem. The German philosopher Friedrich Engels reported on England's opium problem in *The Condition of the Working Class in England* in 1844. Engels described how children who were given ever-increasing doses of liquid opium by their mothers became "pale, feeble, wilted, and usually die[d] before completing the second year."<sup>23</sup>

Many in the world of the arts succumbed to laudanum dependence. The English writer Samuel Taylor Coleridge was addicted to laudanum, and it is believed that his poem "Kubla Khan" was inspired by a vision he experienced while using the drug. Coleridge wound up physically and intellectually debilitated by his addiction. Thomas De Quincey extolled the virtues of opium in his book *Confessions of an English Opium-Eater* in 1822. He described how opium enhanced the creative powers of the intellect, and he is thought to have been the first to use the term *tranquilizer* in describing opium's effect.

The use of laudanum and patent medicine remedies enabled Europeans and Americans to become legally addicted to products they could purchase over the counter, order through the mail, or obtain by a doctor's prescription at a drugstore. While the chemists' intentions may have been to ease pain and cure physical ailments, the age-old human desire for intoxication created a problem with which we still struggle: opiate addiction.

The result for Chinese and European addicts was basically the same, although their methods of ingestion were different. The Chinese smoked opium and became dreamily euphoric, lost in a world of lessened stress



A pharmacy receipt for the purchase of laudanum, 1843

*Hazelden-Pittman Archives*



A tin of No-to-bac, a nineteenth-century smoking cessation aid that contained opium. The label on the Watkins Cough Remedy bottle states that it contains 11% alcohol and grain of heroin per ounce of elixir. The laudanum bottle label boldly proclaims "POISON" and bears the skull and crossbones warning symbol, yet its instructions read, "Dose—for a child two to four years old, two to three drops; six to ten years old, five to eight drops; fifteen to twenty years old, ten to twelve drops; adults, fifteen to twenty drops."

*Photo: Dennis Becker*



and relaxation, while Americans and Europeans drank or injected liquids filled with what the patent medicine companies called “secret remedy ingredients” to achieve a similar state of euphoria—the “nod.” Regardless of the method of ingestion, the user must, as every opiate addict eventually finds out, return to a reality where the overriding edict is use more or suffer physical and emotional pain. This is the fundamental nature of addiction.

## CHAPTER 2

# The History of Heroin: Heroin in America and the World Trade

**A frightful endemic demoralization betrays itself in the frequency with which the haggard features and drooping shoulders of the opium drunkards are met with in the street.**

OLIVER WENDELL HOLMES SR.

In the United States, the character of addiction to opium and its derivatives was entirely different from the character of the Chinese experience. It was the introduction of the smoking pipe that allowed opium to be consumed in a more powerful, effective way in China. But it was the development of the hypodermic syringe in 1853 by Alexander Wood that pushed addiction to new levels of destruction in America.

The decade before the Civil War found the United States armed with the most powerful painkiller known to man, morphine, and the technology with which to easily inject it into the body. At this time, the opium-addicted population in the United States consisted mainly of Caucasian women who legally purchased opium-laced cough syrups and elixirs, such as Mrs. Winslow's Soothing Syrup, at their local pharmacies, or who obtained laudanum, a tincture of opium, by mail. It was a quiet addiction, almost invisible, because the women stayed at home. This was due in part to male dominance in the social sphere and the perception that it was not right for



An ad for Mrs. Winslow's Soothing Syrup, an opium-based product to be given to infants suffering teething pain

*Hazelden-Pittman Archives*

a decent woman to frequent bars or saloons, let alone an opium den. Eugene O'Neill characterized this phenomenon in his play *Long Day's Journey into Night*. In the play, the mother of a family, Mary Tyrone, is portrayed as a frail individual whose hands shake often. The implication is that she is in a state of withdrawal. The family members do not speak openly of her "problem" but allude to it often. She, like many during the late nineteenth and early twentieth centuries, supposedly developed her addiction as a result of seeking relief from rheumatoid arthritis. Many women took laudanum to alleviate pain or settle coughs and became dependent on the opium-based mixtures.

## Opium Dens

Surveys between 1878 and 1885 indicated that 56–71% of opiate addicts in the United States were middle- to upper-class white women who purchased the drug legally. The rate of addiction was nearly triple that of the rate of addiction in the mid 1990s.<sup>1</sup>

After the U.S. Civil War, large numbers of men who had been wounded and treated with morphine became physically addicted to the drug. Upon their return home, they found it easy to soothe their war wounds with patent medicine remedies available legally or with opium, available in dens that began springing up in major metropolitan areas such as San Francisco

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