



# AMERICA'S OPIOID EPIDEMIC

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# THE “OPIATE EPIDEMIC”

- What do they mean by Opiate Epidemic or Crisis?
  - In 2015, there were 33,100 overdose deaths from both prescription narcotics and illegal narcotics.
  - 20,100 of those deaths were caused by prescription medicines
  - Of the remaining 13,000 overdoses, 50% were from heroin used by previous prescription narcotic users.
  - 40% of prescription opioid ODs obtained prescriptions from multiple MDs
- As the FDA and drug industry push for development of “abuse resistant” narcotics, and doctors are educated about limiting narcotic prescriptions; addicted patients turn to heroin because it is cheap and easily available.

# A BRIEF HISTORY OF OPIUM

- Opium has been cultivated for 5000 years for a pain reliever and for rites and rituals
- Opium was used as currency throughout China and the far east for centuries
- Coca leaves (cocaine) has been used medicinally by remote tribes



# A BRIEF HISTORY OF OPIUM

- Raw opium is squeezed from the pods.
- Raw opium is a dark, very thick, sticky substance
- Until various opiate forms were distilled from raw opium in the 1500s, raw opium was smoked or mixed with food for illness and recreation.



# TRANSITION TO MEDICINE

- While semi-purified opium pills were available in the 1500s, a palatable oral preparation wasn't developed until about 1640.
- In 1680 a chemist found opium was much more soluble in alcohol than water and created "tincture" of opium; and named it Laudanum.
- By the late 1700s, many "patent" medicines were sold by 'chemists' (pharmacy) and traveling solicitors.
- Patent medicines were various opiates or cocaine with alcohol, herbs or bitters.

# TRANSITION TO MEDICINE

is a much adulterated article. Instruction to you, as it

No. 8D420 Price, per 1-pound box.....10c

**Laudanum.**  
(Tinct. Opium.)  
U. S. P. Strength. Directions on each bottle for young and old.  
No. 8D424 Price  
1-ounce bottle ..... 8c  
2-ounce bottle.....15c  
4-ounce bottle. ....25c  
Unmailable.

**Paregoric.**  
Always useful, both for children and adults. One of the best known and most extensively used house remedies. Full directions.  
No. 8D426 Price, 2-ounce bottle..10c  
Price, 4-oz. bottle.....15c

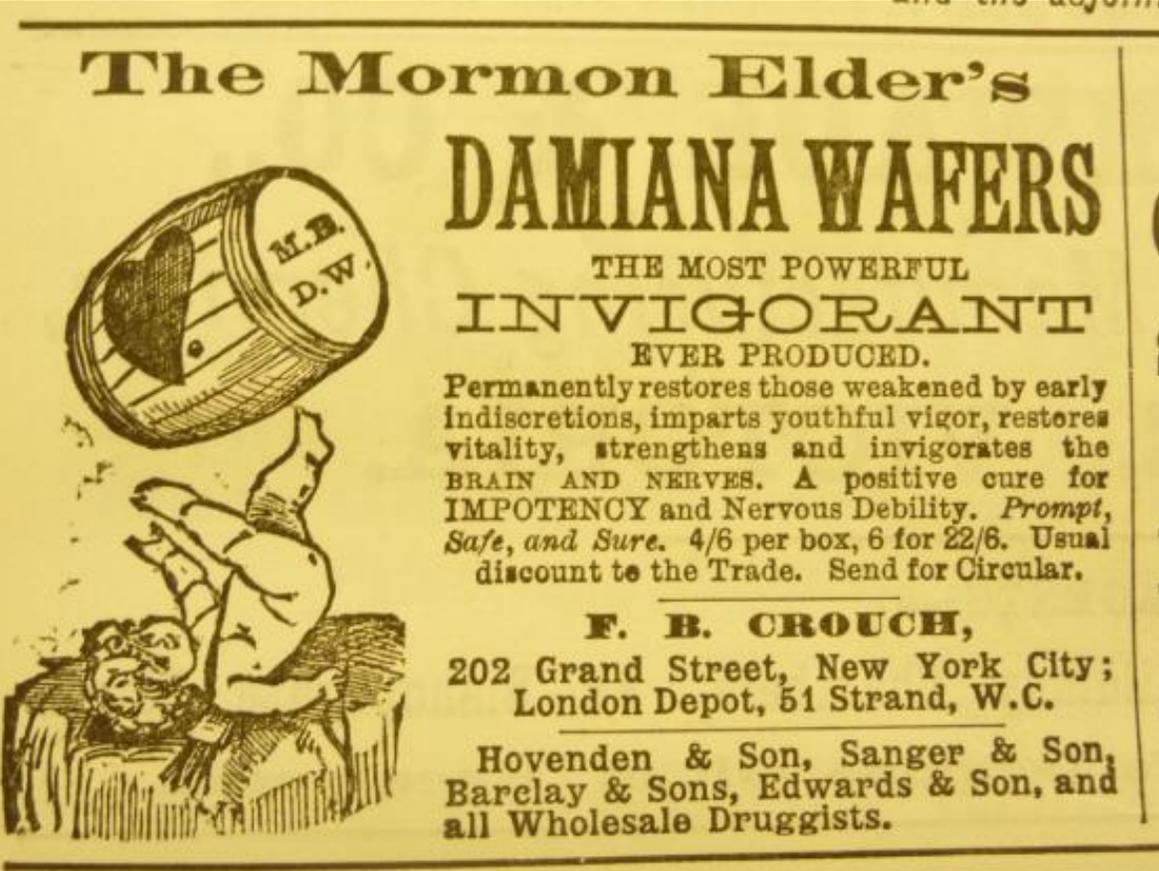
If by mail, postage and tube extra, small, 12 cents; large, 16 cents.

**Tasteless Castor Oil.**



# DON'T FORGET THE COCAINE

- Cocaine was also used in patent medicines.
- Cocaine was marketed as a stimulant, and good for anything that ails you.
- We all know how Coca-Cola got its name.
- Cocaine was particularly popular with women



**The Mormon Elder's**  
**DAMIANA WAFERS**  
THE MOST POWERFUL  
**INVIGORANT**  
EVER PRODUCED.

Permanently restores those weakened by early indiscretions, imparts youthful vigor, restores vitality, strengthens and invigorates the BRAIN AND NERVES. A positive cure for IMPOTENCY and Nervous Debility. *Prompt, Safe, and Sure.* 4/6 per box, 6 for 22/6. Usual discount to the Trade. Send for Circular.

**F. B. CROUCH,**  
202 Grand Street, New York City;  
London Depot, 51 Strand, W.C.

Hovenden & Son, Sanger & Son,  
Barclay & Sons, Edwards & Son, and  
all Wholesale Druggists.

# WHY WERE OPIATES SO POPULAR?

- Victorian England was not a nice place
- Infectious diseases were rampant
- Diarrheal illnesses (cholera, dysentery) were most unpleasant.
- Morphine and tincture of opium were very effective for relief of diarrhea and severe cramps.
- These drugs might not have cured the infection; but they eased suffering of many illnesses and were “prescribed” liberally.

# RECREATIONAL OPIATE USE IN THE 1800S

- The euphoria of opiates became apparent to anyone who took enough of a patent medicine.
- In Victorian England, it was common for artists, poets and writers to use Laudanum recreationally.
  - Lord Byron, Keats, Shelly, and Charles Dickens; to name a few
- Opium would dull hunger, allowing fashionable ladies to not only obtain a tiny waist, but contribute to a desired pallid complexion.
- For the working classes, life was hard. A little morphine would get you through your 12 – 14 hour workday

# ARRIVAL IN AMERICA

- Laudanum arrived with a physician on the *Mayflower*
- Laudanum and Morphine was also widely used in America for diarrhea illness and many other pains.
- Thomas Jefferson acknowledged he became “habituated” to Laudanum for chronic diarrhea
  - Cultivated his own poppy plants at Monticello
- Patent remedies with opium, morphine and cocaine were also common in America.
  - Cocaine and morphine liquids common for children’s teething

# OPIATES IN AMERICA

- Morphine commonly used in the Civil War
  - Many returning soldiers were addicted
- Heroin was used for pain control during the First World War
  - Heroin was thought to be safer than morphine at that time.
- Chinese railroad workers imported opium as important to their culture.
  - Opium imports peaked in the 1890s
- 1906: Pure Food and Drug Act
  - Required any 'dangerous' or 'addictive' substance be identified on the label.
- 1914: Harrison Narcotics Tax Act
  - Required all importers and sellers of opiates be registered.

# FIRST CYCLE OF OPIATE RESTRICTION

- The Harrison Act made prescribing opiates much more difficult
- 1924: Heroin Exclusion Act
  - Made Heroin illegal
  - It resulted in creating a stigma of “addicts”
  - No treatments for addiction were available except imprisonment
- 1938: The Pure Food and Drug Act
  - Created the Food and Drug Administration
  - Established new prescribing regulations for dangerous drugs.

# DRUG RESTRICTIONS

- After FDA, access to many classes of medication were regulated.
  - No longer could ask the druggist for all remedies
  - You needed a physician prescription for three of 5 drug classes
- Physicians became afraid of opiates, morphine and cocaine; although they were still available.
- 1970: Controlled Substances Act
  - Followed a resurgence of heroin addiction in soldiers returning from Vietnam.
  - Created even more restrictions on prescriptions of dangerous drugs

# DRUG RESTRICTIONS

- As a result, pain medicine prescriptions declined substantially.
- Unfortunately, the newer classes of anti-anxiety drugs like Valium and Quaalude became very popular in the suburbs
- 1980: President Reagan's initiative to educate children about the dangers of drug use
  - The "Just Say NO" campaign

# RESURGENCE OF PAIN MEDICINE

- 1980: Dr. Portenoy's famous letter to the NEJM
  - He reported that in his personal experience the development of addiction was rare in patients treated for painful conditions unless they had a previous history of addiction.
- 1990: Anesthesiologists promoted better pain management.
  - The VAS (0-10) pain rating became the "5<sup>th</sup> vital sign"
  - Unfortunately, many doctors didn't understand this pain control advocacy was supposed to be just for post-op patients.
  - This campaign was extended to all patients with pain.

# NEW RISE OF ADDICTING PRESCRIPTIONS

- 1996: Purdue Pharmaceuticals introduced OxyContin.
  - A long-acting and time-release form of oxycodone
  - OxyContin was aggressively marketed to physicians as the safe “wonder drug” for all kinds of pain.
  - The Purdue reps reassured doctors that because the pill’s oxycodone was time release, it couldn’t make your patient high, so it could not be abused.

# OXYCONTIN USE

- Year 1 sales: \$45 million
- 2001: \$1.1 Billion in sales
- 2006: 3.1 Billion in sales
- Widespread abuse
  - It was discovered very early that a person could crush the pill to powder and either inhale it (snort); or dissolve and inject the drug for a high better than heroin
- Sales reps were given bonuses for increased prescriptions.
  - Individual's bonuses ranged from \$35,000 to \$150,000 / year

# THE FALL OF OXYCONTIN

- 2007: The FDA finally caught up to Purdue
  - Succeeded in winning a lawsuit for their “campaign of deception.”
  - The Federal Court fined Purdue \$600 million
  - Three executives personally fined a total of \$35.5 million
- The company developed a new “abuse resistant” form of the pill, but sales never recovered because of its stigma.

# DRUG INDUSTRY RESPONSE TO EPIDEMIC

- Instead of shifting to development of new methods for treating pain, the FDA has encouraged drug companies to develop narcotics that can't be abused.
- There are already 7 “abuse-deterrent” short and long-acting narcotics on the market. More are waiting in the wings for approval.
- Only one new class of narcotic is in development
  - “NKTR-181” and “CR845” are designed to cross the blood-brain barrier much more slowly, so the ‘rush’ or high associated with narcotics is precluded.

# OPIATES IN WORKERS' COMPENSATION

- Need to distinguish recreational abuse from clinical misuse that can occur in workers' compensation
  - The injured worker generally doesn't initiate opiate use with the intent to abuse it.
- Patients can slip into misusing narcotics to dull their anxiety, depression and frustrations
- Patients whose pain is a manifestation of emotional distress (somatization) are at most risk for escalating drug use.
  - Because the source of pain is not anatomic, the person seeks more and more medicine for relief that never comes.

# OPIATES IN WORKERS' COMPENSATION

- Extended narcotic use has risk for Delayed Recovery and safety concerns
  - Long term narcotics use causes depression and hypogonadism
  - Sedation at work and while driving
- Potential for diversion of drugs is higher than abuse in workers' compensation
  - WC pays for my prescription
  - Street value of IR oxycodone is about \$10 - \$20 per 10 mg, depending upon venue
  - An Rx of 10 mg oxycodone, 4 times per day for 30 days is 120 pills
    - Street value is a minimum of \$1200; max in some areas could be \$3600.
  - Diversion is diminished by frequent, but random urine drug testing at follow-up office visits.

# OPIATE COSTS

- The new, abuse deterrent narcotics encouraged by FDA cost 200% - 500% more than generic hydrocodone or oxycodone
- FDA awards 15 year patents for meeting goals of abuse deterrent drugs and reducing narcotic production (normal drug patent is 8 years)
- The need to treat opioid-induced constipation (OIC) increases claim costs by \$13,000 or more per year.
- If a long-acting narcotic is prescribed in the first 90 days of a claim, that claim is 9 times more likely to cost more than \$100,000 for drugs alone.

# WHAT TO DO ABOUT OPIATES IN WC?

- New Workers' Compensation Laws and Regulations
  - March 2016: Massachusetts was the first state to limit an initial WC opiate prescription to a 7 day supply.
  - NY, ME, CT, NJ, OH, UT are introducing similar legislation
  - Several states have developed opiate prescribing "Rules of Best Practice" for WC – typically using the CDC recommendations. If a provider is outside the guidelines, the carrier doesn't have to pay. (OH, MN, VT)
  - Other states have restricted WC formularies for opiates. (TX and WA)

# WHAT TO DO ABOUT OPIATES IN WC?

- 2016: CDC Guidelines for Chronic Narcotic Use in Chronic Pain
  - In 2015, the total amount of opiates prescribed was enough for every American to be medicated *around the clock* for 3 weeks.
  - The USA has a small portion of the world population, yet consumes 90% of manufactured opioid prescription medicine
  - If at all possible, non-narcotic pain methods should be used
  - A maximum of 20 Morphine-milligram-equivalent (MME) per day is strongly encouraged
  - At 50 MME, the risk of opioid overdose **doubles**
  - At 90 MME or higher, the overdose risk is **10X**
    - Opioid weaning of 25% per month is recommended if more than 80 MME

# WHAT TO DO ABOUT OPIATES IN WC?

- Direct injured workers to providers who understand the Opiate problem and CDC Chronic Pain Guidelines.
- Occupational Medicine
  - Personal physicians are 5X more likely to provide a narcotic prescription at the first visit for injury
- Surgeons
  - Seek out orthopedic and spine surgeons who adhere to the CDC Guidelines, which recommend cessation of post-op narcotics by six weeks.

# WORKERS COMPENSATION REFERENCE

- The company Health Systems sells services to manage workers' compensation costs, not just medication issues.
- The publish for FREE the semi-annual journal, "Rx Informer".
  - The publication provides information on current and emerging medication problems in WC; as well as technological developments relevant to WC
  - Current and past issues of Rx Informer is available on-line:
- [www.healthsystems.com/rxinformer](http://www.healthsystems.com/rxinformer)



**THANK YOU, THANK YOU VERY  
MUCH**

