The History of the Opioid Epidemic

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2018 SCMA Annual Retreat
Objectives

• Learn more about this history of opioids as pain relief

• Understand the change in epidemiology of opioid use

• What role did having pain as the 5th vital sign play in the increase of opioids

• Introduce the tactics used to combat the opioid epidemic
A Timeline of Opioids

- 3400 BC: the opium poppy was believed to be cultivated in lower Mesopotamia
- 1804: Morphine first distilled from opium by Friedrich Sertürner
- 1853: The hypodermic syringe is invented to inject preparations of opium by Dr. Alexander Wood. Wife may have been the first to die of injected drug overdose (although this has been disputed)
- 1860s: Morphine was used for many years including Civil War times in the United States
- 1898: Bayer Co. produced diacetylmorphine in an attempt to make a less potent form of morphine (it was nearly 2 times as strong)
  - Named “heroin” from the Greek word ‘heros’ (strong, heroic)
  - Promoted as not having side effects like morphine
  - Sold over the counter as a cough suppressant
The Cough Disappears
A Timeline of Opioids

- 1914: U.S. passed the Harrison Narcotics Tax Act
  - Taxed production, importation and distribution of opiates
- 1924: Heroin became illegal due to its addictive effects
- 1928: Formation of the Committee on Problems of Drug Dependence (2)
  - Now College on Problems of Drug Dependence (CPDD)
  - Longest standing group in the US addressing problems with drug dependence
  - Originally formed, in part, to find a non-addictive painkiller
- 1951-1960: Arthur Sackler changed the way drugs are marketed
  - Purchased Purdue Fredrick with brothers Raymond and Mortimer
  - His campaign made Valium the industry’s first $100 million drug (3)
- 1961: United Nations makes access to pain medication a legal right under the Single Convention on Narcotic Drugs, 1961
- 1980: New England Journal of Medicine publishes the letter to the editor from Porter and Jick
Timeline of Opioids

• 1984: MS Contin is produced by Purdue Pharma
• 1986: Paper published in Pain by Drs. Katheen Foley and Russell Portenoy suggesting opioids can be used for treating a variety of pain (4)
• 1996: OxyContin (time released oxycodone) is introduced and marketed largely for chronic pain patients
• 1996: It is believed that David Procter opened the first ‘pill mill’ in Kentucky (seeing up to 80 patients per day charging $80-$120 for prescriptions for narcotics)
  • Lost license after a brain injury in a car accident in 1998
  • Opened several other clinics until 2002 when he, along with nearly every other doctor who worked with him, were convicted of trafficking or conspiracy charges
• 1997-1999: The Joint Commission develops pain standards
  • Veterans Health Administration promoted a national strategy to improve pain management
A Timeline of Opioids

• 2007: Purdue Pharma pays over $600 million in illegal marketing of OxyContin
• 2008: Drug overdoses overtook fatal vehicle accidents as the number one cause of death from injury nationally
• 2014: June 6th, SC passed law requiring 2 hours of CME in controlled substance prescribing prior to license renewal
• 2015: South Carolina enacted the Law Enforcement Officer Naloxone (LEON) program
  • 4,600 administrations in 2014 increased to 6,400 in 2015
A Timeline of Opioids

• 2016: The Centers for Disease Control (CDC) issues new guidelines for responsible opioid prescribing in chronic pain
  • Included in this was a proposal supported by The Joint Commission for ‘an end to mandatory pain assessment’

• 2017: Federation of State Medical Boards released Updated Guidelines for Chronic Use of Opioid analgesics

• 2017: President Trump declares the Opioid Crisis as a National Health Emergency
  • Hopefully alleviating some restrictions to Medicare, Medicaid and the Children’s Health Insurance Program (CHIP)
  • Governor McMaster declares a statewide public health emergency over the opioid epidemic
Defining the Problem
The Build-up in Prescribing
The Height of Opioid Prescribing: 2012

Annual prescribing rates by overall and high dose (≥90 MME/day) prescriptions

Source: QuintilesIMS® Transactional Data Warehouse.
High-dose prescriptions were defined as opioid prescriptions resulting in a daily dosage of ≥ 90 MME.
Average daily morphine milligram equivalents per prescription
Annual prescribing rates by days of supply per prescription
## Trend analysis of opioid prescribing (2006-2008)

<table>
<thead>
<tr>
<th>Opioid prescribing</th>
<th>2006</th>
<th>2016</th>
<th>Average APC (95% CI)</th>
<th>Trend 1</th>
<th>Trend 2</th>
<th>Trend 3</th>
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<tbody>
<tr>
<td></td>
<td>Prescribing Rate per 100 persons</td>
<td>Average APC (95% CI)</td>
<td>Years (APC (95% CI))</td>
<td>Years (APC (95% CI))</td>
<td>Years (APC (95% CI))</td>
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<tr>
<td>All opioid Rx</td>
<td>72.4</td>
<td>66.5</td>
<td>-0.8 (-1.1 to -0.4)</td>
<td>2006-2008 4.1 (2.8 to 5.4)</td>
<td>2008-2012 1.1 (0.5 to 1.7)</td>
<td>2012-2016 -4.9 (-5.3 to -4.5)</td>
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<tr>
<td>High-dosage Rx</td>
<td>11.5</td>
<td>6.1</td>
<td>-6.6 (-7.4 to -5.8)</td>
<td>2006-2009 0 (-2.5 to 2.5)</td>
<td>2009-2016 -9.3 (-10 to -8.5)</td>
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<tr>
<td>Days of supply ≥ 30</td>
<td>17.6</td>
<td>27.3</td>
<td>4.3 (3.8 to 4.9)</td>
<td>2006-2010 9.9 (9.2 to 10.5)</td>
<td>2010-2013 2.9 (1.3 to 4.6)</td>
<td>2013-2016 -1.3 (-2.1 to -0.5)</td>
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<tr>
<td>Days of supply &lt; 30</td>
<td>54.7</td>
<td>39.2</td>
<td>-3.2 (-3.6 to -2.8)</td>
<td>2006-2008 1.3 (-0.1 to 2.7)</td>
<td>2008-2012 -1.2 (-1.9 to -0.5)</td>
<td>2012-2016 -7.3 (-7.7 to -6.8)</td>
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<tr>
<th>Number</th>
<th>2006</th>
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<th>Average daily MME per Rx</th>
<th>Trend 1</th>
<th>Trend 2</th>
<th>Trend 3</th>
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<tr>
<td></td>
<td>59.7</td>
<td>47.1</td>
<td>-2.3 (-2.4 to -2.3)</td>
<td>2006-2010 -1 (-1 to -0.9)</td>
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<tr>
<td>Average days of supply per Rx</td>
<td>13.3</td>
<td>18.1</td>
<td>3.1 (3 to 3.3)</td>
<td>2006-2008 4.4 (4.4 to 4.8)</td>
<td>2008-2011 3.4 (3 to 3.7)</td>
<td>2011-2016 2.5 (2.4 to 2.6)</td>
</tr>
</tbody>
</table>

Source: QuintilesIMS® Transactional Data Warehouse.
Abbrivation: APC, annual percent change; MME, morphine milligram equivalents; Rx, prescription.
* Rate per 100 persons adjusted to the U.S. census population.

† Year category presented in each trend represent year groupings as determined by jointpoint regression.
Indicates that the Annual Percent Change (APC) was significantly different from zero at the alpha = 0.05 level.
§ High-dose prescriptions were defined as opioid prescriptions resulting in a daily dosage of ≥ 90 MME.
Age-adjusted rates of drug overdose deaths

Source: National Vital Statistics System, Mortality File, CDC WONDER.

1. Rate per 100,000 population age-adjusted to the 2000 U.S. standard population using the vintage year population of the data year.
2. Deaths are classified using the International Classification of Diseases, Tenth Revision (ICD-10). All drug overdose deaths are identified using underlying cause-of-death codes X40-X44 (unintentional), X60-X64 (suicide), X85 (homicide), and Y10-Y14 (undetermined). Unintentional drug overdose deaths are identified using underlying cause-of-death codes X40-X44. Note that overall drug overdose deaths and opioid overdose deaths include deaths of any intent. In 2015, 5.7% of drug overdose deaths had undetermined intent; this is a decrease of 14.7% of drug overdose deaths with undetermined intent in 1999. Some of these deaths may be unintentional drug overdose deaths.
3. Drug overdose deaths, as defined, that involve opium (T40.0), heroin (T46.1), natural and semi-synthetic opioids (T40.2), methadone (T40.3), other synthetic opioids excluding methadone (T40.4), and other and unspecified narcotics (T40.6). Specification on death certificates of drugs involved with deaths varies over time. In 2015, approximately 17% of drug overdose deaths did not include information on the specific type of drug(s) involved. Some of these deaths may have involved opioids.
Age-adjusted rates of drug overdose deaths by drug class and year
Opioid-involved overdose deaths by county of occurrence, 2016
Comparing to other countries

Prevalence of opioid use at least once during past year

Per 1,000 adults
- 5-10
- 10-20
- 20-30
- 30-40
- 40-50
- 50-60
- no data

Top 5 countries
- United States: 27.0
- Czech Republic: 15.3
- Estonia: 9.1
- Ukraine: 7.2
- Ireland: 7.2

A Few More Stats

• By the 2000s the United States consumed 83% of the world’s Oxycodone and 99% of the Hydrocodone
• Hydrocodone/acetaminophen became the highest dispensed drug every year from 2006-2010
• By 2012 over 12 million people over age 12 used hydrocodone for non-medical purposes (however this number was declining)
• As the cost of these prescription pills rose. Heroin was a cheap alternative
  • The number of people using heroin increased from 373,000 in 2007 to 620,000 in 2011
  • 80% had used a prescription painkiller first
Even More Stats...

• Between 2006-2015 Purdue and other painkiller producers (along with associated nonprofits) spent nearly $900 million on lobbying and political contributions
  • 8 times what the gun lobby spent during that period

• In *Dreamland* Dr. Joe Gay observed statistics in an area near Columbus, OH
  • Found a 0.979 correlation between prescription pain pills dispensed and the number of overdose deaths from opioids
  • Nearly one death for about every 2 months worth of opioid prescriptions

• More than 250 clinics were shut down in Florida in 2015 (pill mills)

• Most recent figures from the CDC suggest that 145 Americans now die every day from opioid overdoses
The Growing Tidal Wave of Opioid Prescribing
Where We Will Start....

• Dr. Warren Cole wrote in 1960:
  ‘We must appreciate that severe constant pain will destroy the morale of the sturdiest individual...but we are often loathe to give liberal amounts of narcotics because the drug addiction, itself, may become a hideous spectacle’

• 1970s opioids were used mostly for cancer and end of life treatment due to the concern for addiction. Chronic pain was undertreated, in part because “special emotional significance of opioids that interferes with their rational use” (11)

• Pain management specialists (including Dr. Karen Foley) believed the restriction on opioids made little sense
  Felt there was a ‘misconception that drugs with this capability enslave, demoralize and lead the unwitting patient down the primrose path to addiction’

• She helped publish two landmark studies aptly observing that there was ‘no published long term data’ to give evidence of high addiction rates among pain patients
  • However there were no studies of opioid use in chronic pain patients at all

• Her studies, along with Russell Portenoy, observed that the intensive involvement of a single physician was essential to successful treatment, not just the prescription alone (11)
Early 1980s

• American Pain Society claimed risk of addiction was low when opiates are used for pain

• Pain acted against the tendency of opiates to stop the lungs from breathing thus withholding the drugs ‘on the basis of respiratory concern is unwarranted’

• Later, Dr. James Campbell, president of APS, said: ‘if pain were assessed with the same zeal as other vital signs are, it would have a much better chance of being treated properly. We need to train doctors and nurses to treat pain as a vital sign’
Under treatment of pain

• Prior to pain becoming the 5th vital sign, pain was promoted as being under treated
• Surveys suggested tens of millions of people living in pain daily
• Under treatment of pain was seen as an unnecessary epidemic
• There was concern for addiction
  • However, several states passed laws exempting physicians if they prescribed opiates within the practice of responsible healthcare
Encouragement to Prescribe

- The new movement to treat pain with medications led to a change in the perception of pharmacy companies making pain meds
- In 1991 Purdue Fredrick formed Purdue Pharma which became a leader in time released medications
- Backed by speakers like Dr. Russell Portenoy, who promoted opioids for pain relief to primary doctors and internists
Encouragement to Prescribe

• 1998 the Federation of State Medical Boards (FSMB) released a policy reassuring doctors they would not face regulatory action for prescribing even a large amount of narcotics, as long as it was in the course of medical treatment
  • Also pushing for state boards to make under treatment of pain punishable

• The FSMB initiated the project in 1997 to “...assist state medical boards and other healthcare regulatory boards in promoting the appropriate use of controlled substances in the management of chronic cancer and non-cancer pain”

• “state medical boards should be proactive in the promotion of pain management policy initiatives to preclude legislative intervention”
Pain as the 5th Vital Sign
Pain as the 5th Vital Sign

• 1990 Dr. Mitchell Max, president of the American Pain Society (APS), wrote an editorial about the lack of improvement in pain assessment and treatment over past 20 years

• Felt like the failure was patients not being able to tell their doctors about pain due to it being ‘invisible’
  • “Unlike ‘vital signs’, pain isn’t displayed in a prominent place on the chart or at the bedside or nursing station” and physicians were “rarely held accountable” for inadequate pain control

• Recommendations were to:
  • Make pain ‘Visible’
  • Give practitioners a bedside tool to guide physicians in modifying analgesic treatments
  • Increase clinician accountability by developing ‘quality assurance guidelines’

• The following year the APS released standards for relief of acute pain and cancer pain
  • Chart and display pain and relief
  • Use a simple, valid measure of pain intensity
  • Identify values for pain intensity and pain relief that would elicit a review of the current pain therapy
Pain as the 5th Vital Sign

• 1998 the Veterans Health Administration made pain as the 5th vital sign
• The Joint Commission for Accreditation of Healthcare Organizations (JCAHO) followed
• In a guide, sponsored by Purdue Pharma, the Join Commission stated: Some clinicians have inaccurate and exaggerated concerns about addiction, tolerance and risk of death. This attitude prevails despite the fact there is no evidence that addiction is a significant issue when persons are given opioids for pain control
• California legislature required hospitals and nursing homes to screen for pain
  • California Board of Pharmacy assured: “studies showed an extremely low potential for abuse” when used correctly
Pain as the 5th Vital Sign

- 1999 California’s legislature was the first to pass a bill:
  - “every health facility licensed pursuant to this chapter shall, as a condition of licensure, include pain as an item to be assessed at the same time as vital signs are taken. The pain assessment shall be noted in the patient’s chart in a manner consistent with other vital signs”

- A 2002 report from AMA’s Council on Scientific Affairs found that screening for pain and raising pain treatment could lead to an overreliance of opioids
  - That thought was criticized by pain experts as “opiodphobic” (6)
  - A challenge is that there are many variables for the rise in opioid prescribing which were taking place at the same time The Joint Commission changed the standards for pain treatment

- However, by 2004 it was eventually eliminated from the Accreditation Standards
Did it work?

- A 2006 study in the Journal of General Internal Medicine: (Measuring Pain as the 5th Vital Sign Does Not Improve Quality of Pain Management)
- Retrospective review of pain management before and after initiating pain as the 5th vital sign
- Used 7 process indicators of quality pain management
- Quality of care was unchanged (P>0.05 for all comparisons)

- A study reported increased incidence of opioid oversedation (from 11.0 to 24.5/100,000 inpatient days after the hospital implemented numerical pain treatment algorithm (9)
A Comment on Press-Ganey Scores
The Rise of Opioid Prescribing
Marketing From Drug Companies
OxyContin and MS Contin

• Produced by Purdue Pharma
• OxyContin only contains Oxycodone-synthesized in Germany in 1916 from thebaine (an opium derivative)
  • Other pain meds were mixed with acetaminophen or ibuprofen making them hard to liquefy for injection

• Previously Purdue produced MS Contin, long acting morphine in doses of 15, 30, 60, 100 & 200 for cancer patients and post-operative use

• MS Contin, introduced in American in 1984, had much less abuse

• But, remember, in 1996:
  • Pain became the 5th vital sign
  • Pain management organizations were pushing for opioid use
  • Insurance reimbursed for pills, but less for therapy (or not at all)
  • Extended release opioids were thought to be less addictive
  • OxyContin was released
FDA review of OxyContin

• Dr. Curtis Wright was an FDA examiner and brought up concern:
  • He felt it may have addictive properties and only benefit is to reduce number of pills per day: “care should be taken to limit competitive promotion”
  • Dr. Wright later left the FDA to work for Purdue
• The FDA approved a unique warning label allowing Purdue to claim that OxyContin had lower potential for abuse than other oxycodone products due to the time release formula allowed for delayed absorption of the drug
  • The only schedule II drug to get this claim
• Did have a warning label to not crush the drug because it could release ‘a potentially toxic amount of the drug’
  • Some suggest this was more of an instruction to drug abusers
• FDA did not realize it could be dissolved in water and injected
OxyContin Labeling

- When OxyContin was introduced in 1995 the Food and Drug Administration (FDA) approved labeling stating that iatrogenic addiction was “very rare” and that the delayed absorption of OxyContin reduced the abuse liability of the drug (10).

- The FDA required removal of these unsubstantiated claims in 2001.

- However, this was already the belief in the public and the studies to refute those claims would not be published until several years later.
Purdue’s Marketing Strategy

• William Douglas McAdams firm was hired
• Promoted OxyContin beyond cancer and postsurgical patients
  • Aimed to use for moderate pain lasting more than a few days (back, knee, tooth extraction, headaches, fibromyalgia and other injuries) as well as post-surgical
• Urged salespeople to ‘attach and emotional aspect to non-cancer pain so physicians treat it more seriously and aggressively’
• Message mostly went out to primary care doctors
• William Gergely, a Purdue salesman, told the South Florida Sun Sentinel:
  • “they told us to say things like it is ‘virtually’ non-addicting. That’s what we were instructed to do. It’s not right, but that’s what they told us to say...you’d tell the doctor there is a study, but you wouldn’t show it to him”
• Other reports that the response to questions about the risk of addiction is to claim ‘the correct answer was “less than one percent”’
Purdue’s Marketing Strategy

• Many other companies also changed marketing strategies during this time, based on creating a pill (cholesterol, depression, sleep, etc...) then promoting with more salespeople

• In 1995 there were about 35,000 American pharmaceutical reps

• By 2005 there were 110,000 salespeople

• Purdue increased the quota of OxyContin sales to reach bonuses, even so, the goals were nearly always surpassed

• In 1996 Purdue paid $1 million in bonuses tied to OxyContin sales
  • $40 million 5 years later

• Southern Ohio, Eastern Kentucky were reporting hundreds of thousands of dollars in bonuses
  • Generally a stellar year is $30k

• Vouchers to receive the first prescription free were given out
  • 34,000 were redeemed before stopping this program
Purdue’s Marketing Strategy

- As well as many drug representative salesmen, Purdue sent out videos claiming the benefit of OxyContin
- Fifteen thousand videos (which were never approved by the FDA) were sent out, then two years later twelve thousand more were sent
- It promoted the 160mg OxyContin making claims including the claim from the Porter and Jick letter that the chance of addiction was less than 1%
- Michael Freidman (Purdue’s executive Vice-President) testified in a hearing into alarming increase in opioid abuse stating:
  - The marketing of OxyContin had been “conservative by any standard”
  - “Virtually all of these reports involve people who are abusing the medication, not patients with legitimate medical needs”
- **Purdue OxyContin Video-where are they now?**
Whose Responsibility?

• Purdue used a group (co-founded by Arthur Sackler), I.M.S. to follow detailed information on the prescribing habits of doctors
  • This data COULD be used to track patterns of abuse

• Michael Freidman, executive vice president, was asked if they would take action if they saw a doctor was writing thousands of prescriptions
  • He stated it was not up to Purdue to assess “how well a physician practices medicine”
  • When asked why he would want that information, he stated “to see how successful your marketing techniques are”

• Later a pharmacy alerted authorities to a physician prescribing an inordinate amount of prescriptions

• Does Purdue have a responsibility?
J. David Haddox

• Has held many roles at Purdue, when Purdue’s senior medical adviser he:
  • Insisted that OxyContin was not addictive stating:
    • “If I gave you a stalk of celery and you ate that, it would be healthy. But if you put it in a blender and tried to shoot it into your veins, it would not be good.”
  • In 2001 he stated:
    • “A lot of these people say, ‘Well, I was taking the medicine like my doctor told me to,’ and then they start taking more and more.” “I don’t see where that’s my problem”

• Purdue marketed the drug as a 12 hour medication
  • However, a Los Angeles Times report revealed otherwise
  • First study was of 90 women in Puerto Rico taking after surgery
  • Half the patients required more medication before the 12-hour mark
  • This study was never published (13)

• This is important because if the effects are only for 8 hours, you will have withdrawals, leading to the need to use more medication
• This can be the basis for something called ‘pseudo-addiction’
Pseudo-addiction

• A term believed to be coined by Dr. J. David Haddox and Dr. David Weissman in a 1989 article in *Pain*

• ‘A drug seeking behavior that simulates true addiction, which occurs in patients with pain who are receiving inadequate pain medication’

• Supported in a report by American Society of Addiction Medicine in 2001

• However a 2015 study reviewing 227 published articles did not find a diagnosis distinct from addiction (18 directly addressed pseudo-addiction)

  • 4 of the 12 articles which promoted pseudo-addiction received pharmaceutical funding
  • The six which questioned pseudo-addiction received no pharmaceutical funding
Fines for Drug Company’s Illegal Marketing

• Purdue paid $634.5 million fine for misbranding and false advertising
• Insys therapeutics executives (6 total) arrested for kickbacks and fraud to promote fentanyl
  • Fraudulent prior authorizations to have the medication covered
• Pfizer paid more than $3 Billion in fines for misbranding multiple drugs
  • Including $2.3 billion for a criminal suit in 2009 for illegally marketing painkiller Bextra

• However, when this amount is less than 3 weeks of the company’s sales, does it matter?
The Research
The Porter and Jick Letter
“The Porter and Jick Letter”

• Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients, Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare in medical patients with no history of addiction (1).
The Porter and Jick Letter

• 1989 NIH report asked readers to ‘consider the work’ of Porter and Jick
• A 1990 article in Scientific American: ‘An extensive study’
• 1995 Canadian Family Physician called it persuasive
• 2001 Time magazine: Stated it was a ‘Landmark study’ demonstrating that the ‘exaggerated fear that patients would become addicted to opiates was ‘basically unwarranted’
• 2007 textbook (Complications in Regional Anesthesia and Pain Medicine): stated it was a ‘landmark report’ that ‘did much to counteract fears that pain patients treated with opioids would become addicted’
• As of May 2016 the letter had been cited 901 times in scholarly papers
Missed in the Porter and Jick interpretation

• Was only when reviewing hospitalized patients
• Stated when *used for very short periods of time* and *very controlled* they had a low rate of addiction
• Was not online until 2010 so prior, would have to either take the idea from citations or find the actual journal in a medical library
• Many primary care doctors were too busy to look up these studies so took the word of pain management doctors, often lecturing with backing of pharmaceutical companies
Portenoy and Foley’s 1986 paper

• Other than the Porter and Jick NEJM letter the other main study was performed by Dr. Russell Portenoy and Dr. Kathleen Foley

• Published in Pain in 1986: ‘Chronic use of opioid analgesics in non-malignant pain: Report of 38 cases’

• Claimed:
  • We conclude that opioid maintenance therapy can be a safe, salutary and more humane alternative to the options of surgery or no treatment in those patients with intractable non-malignant pain and no history of drug abuse

• Other notes:
  • Few substantial gains in employment or social function could be attributed to the institution of opioid therapy
  • Must have relationship with single provider
2011 Statement from Dr. Russell Portenoy

• In an interview released by Physicians for Responsible Opioid Prescribing:

“None of the papers represented real evidence, and yet what I was trying to do was create a narrative so that the primary care audience would look at this information ... and feel more comfort about opioids in a way they hadn’t before. In essence this was education to destigmatize opioids and because the primary goal was to destigmatize, we often left evidence behind.”
The Role of Heroin
Dreamland : The True Tale of America’s Opiate Epidemic—Sam Quinones

• I can’t say enough about this book for the research and background for this talk. If you are at all interested in knowing more, please pick this up.

• As well, he will be in Greenville and Spartanburg in late march (finalizing the details) for a talk about this subject.

• The following is a VERY abbreviated interpretation of how the Heroin movement from Mexico also contributed to the opiate epidemic
Heroin Movement from Xalisco, Mexico

Ohio overdose deaths rose 162% from 2010-2016
However, opioid prescriptions decreasing
Xalisco Boys Heroin Cells in the US

- Heroin made from Mexico is known as ‘black tar’ due to its appearance.
- Cheaper and more potent than opioid pills and previous heroin brought from Eastern parts of the world.
Heroin cells

• Early 1980s migrants set up heroin trafficking in San Fernando Valley of Los Angeles
• The cells moved East and mostly to smaller cities
• This movement was different for many reasons
  • They would deliver: call a number, someone shows up to deliver
  • Traffickers would only carry small amounts of the heroin
    • This kept charges from being more severe if caught
    • Less ability to make major drug busts
• The movement seemed to meet the rise in opioid prescribing in Ohio first
A Revolution in Drug Dealing

• Would move out of larger cities where crime cells/gangs were more of a concern
• Used marketing techniques including giving free heroin to people who had not ordered in a while or were frequent users
• Would target methadone clinics where recovering addicts were easy prey
• Would often change out drivers/delivery men so it was harder to follow and the traffickers would not become established
‘Mary Ann’ was an entrepreneur. Started using pills at 18. She broke into pharmacies until her boyfriend was put in jail. She came from a middle class family but was pregnant as a teen, on food stamps, welfare and Medicaid. She started ‘doctor shopping’.

- She would pay people to use a counterfeit MRI showing lumbar issues
- She would pay the cash price for the person to see the doctor at a pill mill
- Usually receiving 90 80mg OxyContin, 120 30mg oxycodone and 90 Xanax
- She would keep half in exchange for driving and paying the $250 visit fee
- Many ‘clients’ would want to start their own pyramid scheme, but ended up just using their half of the pills
- They would often have to travel to find pharmacies who would fill the prescriptions
- The problem then became the cost of the medication, often around $1,000
- Until people started to get on Medicaid and Supplemental Security Income
A Story from ‘Dreamland’

• SSI applications doubled from 1998 to 2008
• If you had a Medicaid card after qualifying for SSI, you could get any prescription for three dollars
• The pills could then bring in up to $10,000
• The difference in this cost paid by taxpayers

• Also, many mining communities had residents on disability insurance, however when jobs left, many lived on SSI (but had a Medicaid card) so selling pills became a way of living
What Can Be Done!?!
Jennifer Sabel, an epidemiologist in Washington State, studied death certificates by request of the state’s Labor and Industries. She found the increasing amount of opioid deaths from workers on workers compensation far surpassing crack cocaine in the 1980s and the 1970s heroin epidemic. Direct correlation to the rise in opiates prescribed.

L&I came up with a guideline for general practitioners:
- If no reduction in pain at 120mg, get a pain management referral
- State of Washington was sued by the Pain Relief Network in part claiming ‘opiophobia’

Two Purdue Pharma Executives objected.

Dr. Merle Janes sued L&I stating the guidelines were:

“An extreme anti-opioid discriminatory animus or zealotry known as Opiophobia that informs, permeates and perniciously corrupts the development and management of public health policy”

Due to the lawsuits, the prescribing guidelines hung in limbo for 2 years:
- Although not ‘causation’ 25 workers who had gone to a workers compensation physician with an injury died of opiate overdoses in 2008; 32 more in 2009
CDC Opioid Prescribing Guidelines

• 12 guidelines for responsible opioid prescribing including:
  • Non-opioid therapies should be utilized for non-cancer, palliative or end-of-life care
  • Lowest effective dose should be used, patients should be monitored often
  • Avoid concurrent use of opioids and benzodiazepines
  • Discuss risks and realistic benefits of opioids
  • Prescribe immediate release opioids rather than Long-Acting for chronic pain
  • When prescribing for acute pain, 3 days should be sufficient (rarely >7 days)
  • Use the states prescription drug monitoring program
  • Consider prescribing Naloxone when using >50MME/day
  • Do not dismiss patients, rather consider Medication Assisted Treatment for opioid use disorder
Direct Attention to Fentanyl

• Fentanyl is a synthetic opioid
• Easy to make, cheap to purchase and often laced with other drugs
• Drug deaths involving fentanyl doubled from 2015 to 2016
• Overdose deaths have risen from about 3,000 to 20,000 in the past 3 years

• Fentanyl is coming from China and often doses as low as 2-3mg (a few grains of salt) can cause a fatal overdose
South Carolina

• In 2017 law was passed requiring use of the State Prescription Drug Monitoring Program

• Later law passed restricting initial prescriptions for acute pain to be no longer than 5 days

• Several bills will likely be introduced in the next session
What Can Be Done?

My Opinion

• This was the focus of many other presentations
• I feel that there is not a right answer
  • There are dangers with using regulation as the way to combat opioids, however, a small percentage of physicians have been a major problem
• Funding for treatment (medication assisted treatment, physical therapy and counseling) needs to increase
• Education at all levels (not just physicians)
Questions?
References

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