

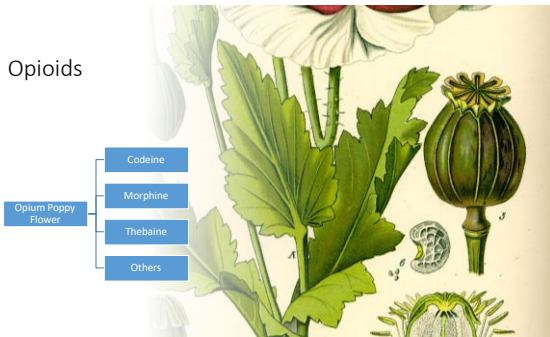
The Opioid Epidemic

Jason Beaman D.O., M.S., M.P.H., FAPA
Associate Clinical Professor
Interim Chair, School of Forensic Sciences
Oklahoma State University Center for Health Sciences

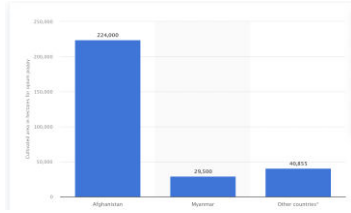
Objectives

- 1** Understand the history of opioid epidemics in the US
- 2** Understand the severity of the current opioid epidemic
- 3** Understand facts/statistics surrounding the opioid epidemic
- 4** Understand treatment efforts to combat the opioid epidemic

Opioids



Opium Cultivation by Country 2020



Medical Opioid Production



Opium Uses

Recreational



Medicinal



"Cure sometimes, treat often, comfort always."
- Hippocrates

Opioid Epidemics in the U.S.

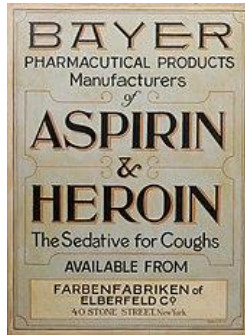
1st: 1890's

2nd: 1970's

3rd: Current

First Opioid Epidemic

- Morphine discovered in 1804
- Hypodermic needle invented around 1865
- Heroin discovered in 1874



First Opioid Epidemic

- By 1900 there were an estimated 250,000 opioid addicted individuals in the U.S.
- Morphine maintenance clinics were established in 44 cities across the United States
- Importation of smoking opium prohibited in 1909
- Harrison Narcotics Tax Act of 1914 made it illegal to prescribe opioids for maintenance of addiction

Second Opioid Epidemic

- Returning soldiers from Vietnam
- Largely heroin
- Dr. Vincent Dole published a paper on the efficacy of methadone maintenance in 1965, which led to the legalization of methadone maintenance treatment by the FDA in 1972



The Current Epidemic



1980s

- Two simultaneous events occurred at the same time:
 1. Development of novel narcotic analgesics by drug manufacturers
 2. The legitimate and necessary development of hospice and palliative care and pain management specialties driven by the medical community
- Pharmaceutical companies took advantage of the physician movement and hijacked it for their own profits



The Beginning

Vol. 98, No. 1
CORRESPONDENCE 123

ADDITION BASE OF PATIENTS TREATED WITH BACLOFEN

In the letter, Hershkov, we indicated our concern for the possibility of a higher incidence of baclofen-related deaths in the United States compared with other countries. We have since received correspondence from several patients who had no history of addiction. The addition of baclofen to their regimen was done in a very cautious manner. We consider the therapy appropriate for the management of spasticity in addition to one of the main goals with baclofen in addition.

John Parnis
Boston Children's Hospital
Boston, MA 02114

1. Hsu H, Hershkov H, Hershkov A, et al. Baclofen in the management of spasticity in addition to one of the main goals with baclofen in addition. *Neurology*. 2013;81:1233-1234.

2. Hsu H, Hershkov H, Hershkov A, et al. Baclofen in the management of spasticity in addition to one of the main goals with baclofen in addition. *Neurology*. 2013;81:1233-1234.

3. Hsu H, Hershkov H, Hershkov A, et al. Baclofen in the management of spasticity in addition to one of the main goals with baclofen in addition. *Neurology*. 2013;81:1233-1234.

4. Hsu H, Hershkov H, Hershkov A, et al. Baclofen in the management of spasticity in addition to one of the main goals with baclofen in addition. *Neurology*. 2013;81:1233-1234.

5. Hsu H, Hershkov H, Hershkov A, et al. Baclofen in the management of spasticity in addition to one of the main goals with baclofen in addition. *Neurology*. 2013;81:1233-1234.

6. Hsu H, Hershkov H, Hershkov A, et al. Baclofen in the management of spasticity in addition to one of the main goals with baclofen in addition. *Neurology*. 2013;81:1233-1234.

7. Hsu H, Hershkov H, Hershkov A, et al. Baclofen in the management of spasticity in addition to one of the main goals with baclofen in addition. *Neurology*. 2013;81:1233-1234.

8. Hsu H, Hershkov H, Hershkov A, et al. Baclofen in the management of spasticity in addition to one of the main goals with baclofen in addition. *Neurology*. 2013;81:1233-1234.

9. Hsu H, Hershkov H, Hershkov A, et al. Baclofen in the management of spasticity in addition to one of the main goals with baclofen in addition. *Neurology*. 2013;81:1233-1234.

10. Hsu H, Hershkov H, Hershkov A, et al. Baclofen in the management of spasticity in addition to one of the main goals with baclofen in addition. *Neurology*. 2013;81:1233-1234.

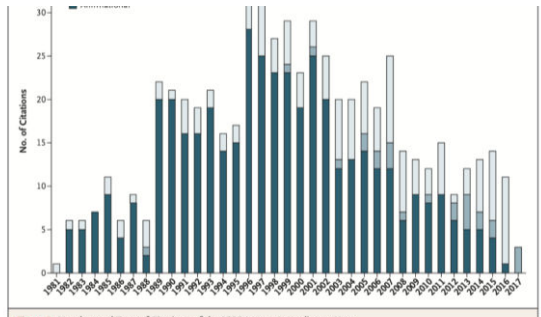
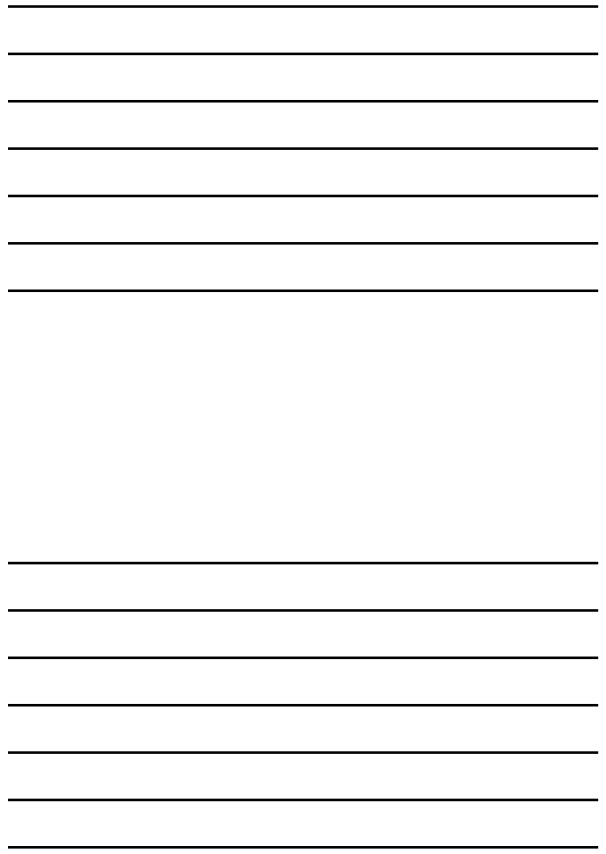


Figure 1. Number and Type of Citations of the 1980 Letter, According to Year.

1990s

- Aggressive Industry Marketing of Opioid Products in the late 1990s/early 2000s
- Opioid phobia and the needless suffering of patients
- Opioid addiction is rare if pain is managed appropriately
- Opioids can be easily discontinued

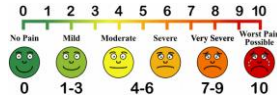


5th Vital Sign



5th Vital Sign

I. Recognize and Treat Pain Promptly
11. **Chart and Display Patient's Self-report of Pain.**—A measure of pain intensity should be recorded in a way that makes it highly visible and facilitates regular review by members of the health care team. This information should be incorporated in the patient's permanent record. The data can be recorded on a vital sign sheet at the patient's bedside (Figure), a page at the front of the patient's record, or a chart in the nursing station or outpatient clinic, depending on the routine work flow of the health care team. Unrelieved pain should be a "red flag" that promptly turns attention to this problem.





The Clinical Journal of Pain, 15(10):6, MAY 1997
PAIN: REVIEW
MOBILE STATUS: UNKNOWN
WWW.PAIN-ONLINE.COM

Share Print

The use of opioids for the treatment of chronic pain. A consensus statement from the American Academy of Pain Medicine and the American Pain Society.

IV. Current information and experience suggest that many commonly held assumptions need modification

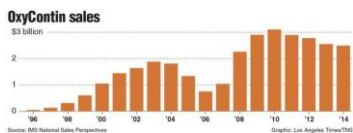
Addiction

Misunderstanding of addiction and mislabeling of patients as addicts result in unnecessary withholding of opioid medications. Addiction is a compulsive disorder in which an individual becomes preoccupied with obtaining and using a substance; the continued use of which results in a decreased quality of life. Studies indicate that the de novo development of addiction when opioids are used for the relief of pain is low. Furthermore, experience has shown that known addicts can benefit from the carefully supervised, judicious use of opioids for the treatment of pain due to cancer, surgery, or recurrent painful illnesses such as sickle cell disease.

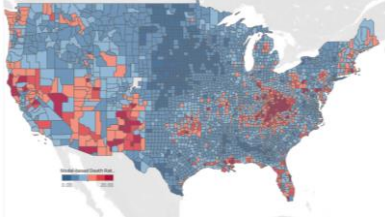


	Product	Current	Discontinued	Both	None	Total
Acetaminophen	\$1,297,899,000	\$1,048,882,000	\$269,017,000	\$1,317,900,000	\$0.00	\$1,317,900,000
Acetaminophen/Aspirin	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Acetaminophen/Codeine	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Acetaminophen/Hydrocodone	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Acetaminophen/Oxycodone	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Acetaminophen/Tramadol	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Codeine	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Codeine/Aspirin	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Codeine/Propoxyphene	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Codeine/Tramadol	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Hydrocodone	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Hydrocodone/Aspirin	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Hydrocodone/Propoxyphene	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Hydrocodone/Tramadol	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Oxycodone	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Oxycodone/Aspirin	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Oxycodone/Propoxyphene	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Oxycodone/Tramadol	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Tramadol	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Tramadol/Aspirin	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Tramadol/Propoxyphene	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Tramadol/Tramadol	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000
Total	\$1,048,882,000	\$1,048,882,000	\$0.00	\$1,048,882,000	\$0.00	\$1,048,882,000

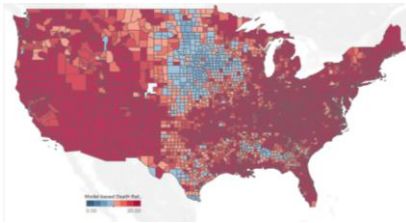
Oxycontin Sales



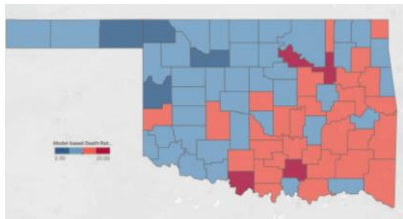
Overdoses in the United States (2003)



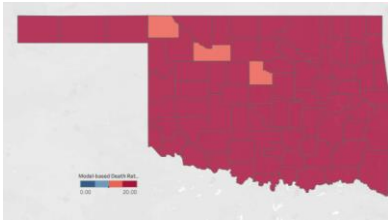
Overdoses in the United States (2020)

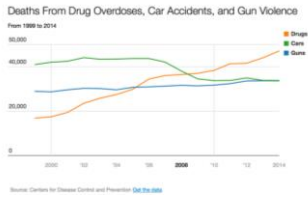


Overdoses in Oklahoma (2003)

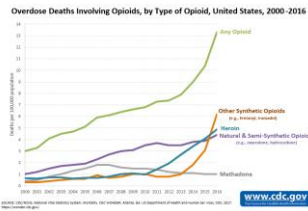


Overdoses in Oklahoma (2020)





Waves of the Current Epidemic



Wave 1

Prescription Opioids

OK County Prescribing Rates per 100

County	2011	County	2020
Harmon	241.7	Harper	205.1
Pittsburg	227.8	Harmon	171.3
Murray	207.5	Love	126.2
McCain	204.1	Kingfisher	110.9
Carter	201.8	Tulsa	103.1
Pottawatomie	190.6	Oklahoma	97.3
Jackson	180.4	Carter	84.3
Stephens	168.1	Muskogee	71.4
Bryan	162.8	Tillman	65
Beckham	162	Adair	62.2

Most Common Substances by Year of Death, Unintentional Poisoning, Oklahoma, 2008-2020

Drug	Number of deaths														Total	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		2021
All UP	579	602	659	661	655	717	757	732	692	759	743	664	614	774	980	10588
Drug overdose	537	557	622	611	608	675	700	665	646	707	679	610	570	733	958	9878
Prescription	474	507	541	510	501	536	535	505	415	424	339	248	198			5733
Prescription opioids	445	455	484	451	422	473	471	432	355	344	266	185	156			4939
Anti-anxiety	152	153	176	177	180	169	139	154	121	100	95	46	44	51	70	1827
Alcohol	77	98	104	110	115	90	121	126	91	101	119	84	59	69	95	1459
Methamphetamines	39	37	68	96	101	123	178	159	227	278	307	339	341	471	619	3383
Cocaine	67	46	39	45	48	44	30	21	40	32	47	42	49	65	72	681
Illicit opioids	<5	11	18	6	15	29	28	25	35	57	68	84	68			445
Any opioid	448	466	498	458	444	502	501	463	390	396	340	259	215	266	410	6056

Wave 3

Fentanyl

Waves of Fentanyl Use

1. Pressed Pills
2. Added to Heroin
3. Sought after on its own

Most Common Substances by Year of Death, Unintentional Poisoning, Oklahoma, 2008-2020

	Number of Deaths														
Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fentanyl	44	56	77	51	48	57	62	39	53	68	64	50	47	127	297

OK Senate
Bill 1446

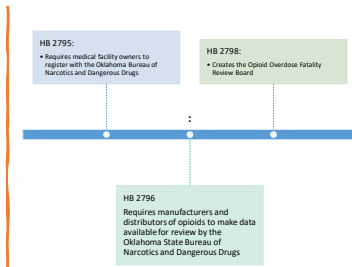
Require continuing medical education (CME) for prescribers on opioid abuse and misuse each year

Restricts initial prescriptions for opioids to a seven-day supply

Failure to check PMP is grounds for disciplinary action by licensing board

Review chronic pain prescriptions every 3 months and make efforts to decrease or try other treatment

OK House
Bills 2018



Questions?

Jason.Beaman@okstate.edu

@sanitydoc
