



Louisiana's Heroin Epidemic and the Overuse of Opioids

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East Baton Rouge Parish Coroner

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Dr. William "Beau" Clark is serving his second term as Coroner of East Baton Rouge Parish. He is currently the President of the Louisiana State Coroner's Association and Past-President of the Louisiana State Medical Society.

Dr. Clark is a native of Baton Rouge. He received his undergraduate degree from Louisiana Tech, majoring in biology. He later graduated from Louisiana State University School of Medicine in New Orleans and completed his residency in Emergency Medicine at Earl K. Long Medical Center in Baton Rouge. He is board certified by the American Board of Emergency Medicine.

Dr. Clark has served our community in many capacities during his career, from emergency medicine doctor, to a member of the East Baton Rouge Parish Sheriff's Office SWAT team. He has been in the medical field for over 17 years and in law enforcement for nearly 14 years. Since taking office in 2012, Dr. Clark's mission has been to engage his office fully in his 3 jurisdictions; death investigations, mental health investigations and sexual assault investigations.

His many awards include Baton Rouge Eye Bank Champion for Sight, Louisiana Organ Procurement Champion of Donation, Baton Business Reports 40 under 40 and the St. Michael's High School Alumni of the Year.

Beau is married to Vanessa Clark of Baton Rouge and they have two children, Will and Julia. He is a member of St. Jude Parish and is an avid semi-professional amateur endurance athlete.



Heroin

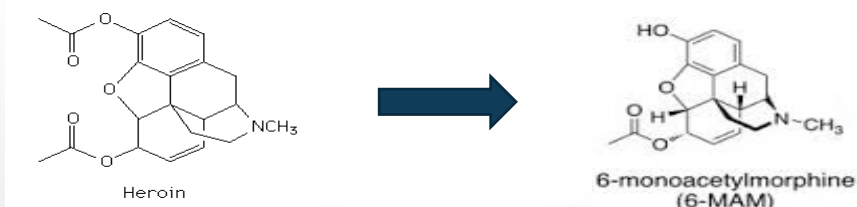
- Heroin is an opioid painkiller and the 3,6-diacetyl ester of morphine. Heroin is used as a recreational drug for its euphoric effects. Its side effects include CNS and respiratory depression and death.



Heroin



- Post mortem toxicology
 - Heroin (diacetylmorphine) is rapidly metabolized (less than 20 minutes) to 6-monoacetylmorphine (6-MAM). The detection of this metabolite allows the definitive determination of a heroin exposure.





Potency

- All prescriptions, including opiates, are regulated by the FDA. If the pill has x mg of drug, then that's what's in it.
- Heroin is illicit; therefore, not regulated in a laboratory, but made by the dealer. Its strength or potency is quite variable.
- In the field of pharmacology, potency is a measure of drug activity expressed in terms of the amount required to produce an effect of given intensity.
- The potency of seized heroin has been variable from 12% to as high as 47%.



Tolerance

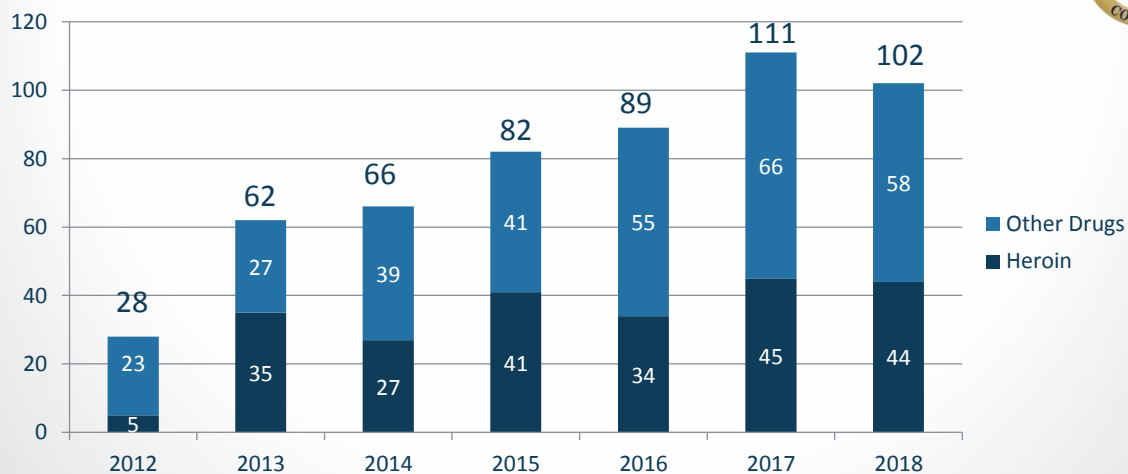
- Drug tolerance is a pharmacology concept where a subject's reaction to a specific drug and concentration of the drug is reduced followed repeated use, requiring an increase in concentration to achieve the desired effect.
- The naive user (first timer) versus the chronic user versus the chronic user that has detoxed from rehab and is unaware that they are again a naive user.



The Situation

- Instant death is often seen in the naïve user- college student that tries heroin for the first time, or maybe tries something that ends up being heroin and they had no idea- this is where the lower potency can kill you.
- Instant death in the user right out of rehab- their receptors have reset and they use a volume of heroin previously used prior to rehab that is too potent.

The Heroin and Opioid Epidemic





Why?

- The law- The LA legislature formerly mandated a life sentence for the distribution of Heroin, which is considered a schedule I. However, in an effort to “prevent the incarceration of non-violent criminals”, the mandatory sentencing was greatly reduced to the 5-10 year range.
- The medicine- In 2010, the LA Board of Pharmacy created and implemented the Prescription Monitoring Program (PMP) in an effort to assist physicians and the DEA to prevent “doctor shopping”, otherwise known as narcotics diversion.



More of the why?

- The Pain Scale
 - At around the same time as Oxycontin’s FDA approval, the American Pain Society, introduced the “pain as the 5th vital sign” campaign, followed soon thereafter by the VA adopting that campaign as part of their national pain management strategy. This declaration was not accompanied by the release of any device which could objectively measure pain, as was done with all previous vital signs, making it the first and only subjective vital sign (http://americanpainsociety.org/uploads/education/section_2.pdf).
 - The Joint Commission joins the list in 2001, issuing standards requiring the use of a pain scale and stressing the safety of opioids. They even published a guide sponsored by Purdue Pharma. This guide reportedly 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.” The Joint Commission framed pain as a patient’s rights issue, inferring that inadequate control of pain would lead to sanctions (http://www.valleypain.org/assets/WSJ.A_Pain_Drug_Champion_has_Second_Thoughts_.pdf).



More of the why?

- Patient Satisfaction Surveys
 - Press Ganey deserves a place with their emphasis on patient satisfaction. They monetized their concept, selling not only surveys but also consulting services to help hospitals improve their scores. Unfortunately, the correlation between patient satisfaction and quality is unclear, with a study from UC Davis suggesting that high satisfaction is actually dangerous, correlating it to higher expenditures, higher rates of hospitalization and a higher risk of death. But acknowledging such literature would affect Press Ganey's lucrative survey sales, so such studies are ignored (<https://www.ucdmc.ucdavis.edu/publish/news/newsroom/6223>).
 - CMS determined that pay for volume CMS developed the value-based purchasing program to shift from pay for volume to pay for value. Hospitals are scored based on their performance on measures of processes of care, outcomes of care, efficiency and the patient experience. The patient experience is based on scoring on HCAHPS surveys that are sent to patients, which includes patient scoring of their satisfaction with their pain control. CMS decided that a patient's satisfaction was as important as whether a patient developed a hospital-acquired condition or even survived their hospitalization, and weighted satisfaction at 30 percent of the overall score (<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalHCAHPS.html>).
 - Because CMS was now attaching significant reimbursement to patient satisfaction, hospital administrators developed initiatives to improve their scores and avoid a penalty.



The Perfect Storm

- A decrease of prescription narcotics on the street, a decrease in sentencing for heroin, and an opportunity for the businessman drug dealer.





Important to Note

- Heroin dealers are rarely Heroin users
 - The dealer is a business man, who sells drugs
 - The user is some one with a medical and psychological illness



The “Bad Guy”

- In the business to make money
- Sells a product that is in high demand
- Has a customer base that will do anything to get the product- the users
- Looking for an environment with a high return on the investment and minimal laws that make business risk averse
- Questionable ethics



The “Bad Guy” in Louisiana

- Not making as much money anymore in the cocaine/crack business
- Heroin is more financially lucrative
- Not really sure about the business model, so we see varying degrees of potency
- If caught, the jail sentence is minimal
- Getting creative- other forms of distribution



The “Good Guy” (Patient)

- In almost all cases investigated, their addiction began through an opiate prescription provided by a physician
- When they were cut off, they turned to the street and found because of the PMP that there was not a lot of diverted prescription opiates available, but the “need” was so tremendous that heroin (which is cheaper and readily available) became the alternative
- Death followed



The General Solutions

- Prevent opioid dependence- easier said than done, but the physician plays an intimate role
 - Treating the patient versus patient satisfaction and the pain scale
 - Educating the patient about opioids
- If opioid dependent, work to get off of opioids
 - Physical and mental addiction



The Specific Solutions

- It's complicated!
- Some steps:
 - Stop using a pain scale (rather use a yes or no system- it's subjective) and stop using patient satisfaction surveys- Medical Community
 - Opioid education and prevention
 - Increase sentencing for distribution- managing the "Bad Guy"
 - Make the "bad guy" businessman go elsewhere to do business- Law Enforcement
 - Getting caught is serious and you go to jail for a long time- Judicial System
 - Responsible prescribing habits- Act 82 (Moreno) and Act 76 (Mills) – (Risk-Benefit Analysis)
 - Treatment of the addict
 - Medically Assisted Treatment (MAT)
 - Cognitive Behavioral Therapy (CBT)



Fentanyl

The Next Chapter



- Almost all overdose deaths investigated in East Baton Rouge are multidrug toxicities. In other words, it is rare for an individual to die from ingesting just one drug.



- It is important to note, that when opioids are discovered in the post-mortem toxicology, they are the main factor involved with the death. The overwhelming CNS depression and respiratory depression are the main significant contributor even in the presence of stimulant drugs, like cocaine and amphetamines.



- Heroin made its appearance on the East Baton Rouge Parish overdose scene in 2012 with 5 deaths, and rose precipitously in 2013, with 35 deaths. That number has increased annually to a record high of 45 deaths in 2017.

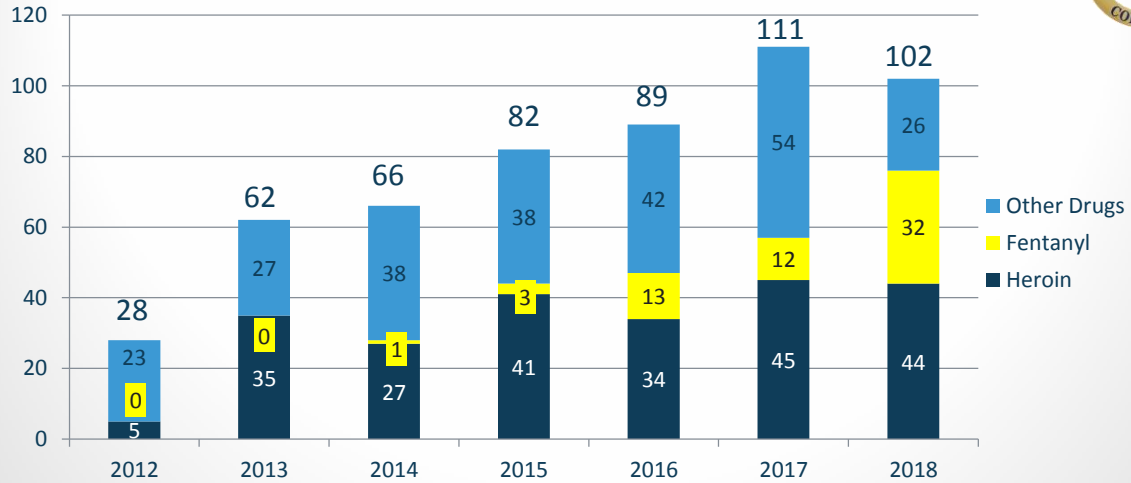


- Fentanyl made its significant appearance in 2016 with 13 deaths. That number grew to 26 in 2017, for a record high.

Police seize massive stockpile of Fentanyl at Ponchatoula house (Tangipahoa Parish Louisiana)



The Heroin and Opioid Epidemic



- In the illicit drug trade, traffickers and dealers do not test the potency of their drug like pharmaceutical companies do with a FDA process. Therefore, their potency is unknown making an incredibly dangerous situation for the end user.



- It is common for a user to request a drug and be given a baggy of white powder that the dealer has no idea what exists in the baggy. For example, we have had cases where a known cocaine addict buys a baggy of white powder from the dealer and overdoses. Later, we discover thru post-mortem toxicology that the substance was fentanyl. This is a common example that the dealer is only interested in making money regardless of the substance they sell or the danger they put their "customer" in. It also illustrates the danger the addict puts themselves in by consuming an unknown substance of unknown potency.



- There has been recent concern about the "weaponizing" of drugs such as fentanyl. The concern being the transdermal absorption of the drug left for the general public to accidentally consume. There have been instances of pamphlets laced with fentanyl that first responders have come in contact with and a subsequent near-fatal exposure occurs.



- This illustrates the importance of the wide-spread distribution of Narcan, not only for the first responders, but also for the general public.



“Memento mori”

Questions and Discussion