Challenging My Illusions About the Opioid Crisis

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Disclosure: I am a part-time employee of the RADARS® System, a non-profit data provider to government and the pharmaceutical industry on post-marketing surveillance for controlled substances.
In 1980, the second most dispensed drug in the US was an opioid analgesic (propoxyphene).

The Carter White House stated “diversion, misuse, and abuse of legal drugs may be involved in as many as seven out of ten reports of drug-related injury or death.”

Implication

The roots of the opioid crisis are longer than conventional wisdom suggests.


Nearly all clinicians prescribe opioids. Less than half prescribe ER opioids, but most write <12 Rx/year.

90% any opioid analgesic

40% ER opioids

Physicians, nurse practitioners, physician assistants, clinical pharmacists, dentists in North Carolina

Implication
Concerns about limiting access for pain patients are important, but hard to quantify.

ER opioids comprise only 11% of all opioid analgesic prescriptions.

Implication
Prescribers make cognitive decisions to prescribe IR opioids more often.
Most long-term use of ER opioid analgesics is for low back pain and arthritis.

- 65% Back pain
- 48% Arthritis
- 16% Cancer

Implication

Primary prevention of opioid use requires analysis of the etiology of back and joint pain.

Only 3% of patients receive opioids >150 mg morphine equivalents.

**Implication**

Few patients receive high dose opioids. Lower dose patients also die from overdose.

*J Pain & Symptom Management.* PMID: 20579834 [national commercially insured and Medicaid thru 2005]

The top 5% of opioid analgesic patients account for most of total opioid use measured in morphine equivalents.

- **48%** Medicaid (Arkansas)
- **70%** Commercial Insurance

**Implication**

Reducing high volume opioid prescribing may be a “last mile” problem.
From 2012 to 2015, opioid analgesic prescribing decreased nationwide, but drug overdose deaths increased.

13% decline in opioid prescriptions

40% increase in overdose deaths

Explanations

- heroin
- misclassification
- unused medications
- time-lag


CDC Wonder Database, Multiple Cause-of-Death mortality file [16,730 to 23,402 per year, by CDC definition of overdose]
Half of OD decedents had an active Rx on the day of death. A quarter had no record of Rx in year prior to death.

51% Active Rx on day of OD death
24% No Rx in year before OD death

Implication
Defining “legitimate” patients is daunting... and a waste of time?

22 out of 100,000 patients receiving opioid analgesics each year die from an overdose, or 0.02%.

Implication
Opioids are used safely by many patients, but 1-out-of-4 deaths are occurring among non-patients.

56% of overdose deaths among pain patients occur in people receiving less than 100 average daily MME.

Implication
Concerns about high-dose opioids should not crowd out concern for those receiving lower doses.

Drug overdose deaths continue to be concentrated in urban and surrounding counties.

Implication

The bulk of services need to be focused on urban and suburban areas.

From 2010 to 2015, drug overdose deaths increased in some states (NY, MA), but not others (CA, TX, FL).

Implication
Recent overdose increases are regional.
Are there protective factors?

30 states increased
19 states remained steady
2 states showed decreases followed by increases

Thank you for your attention.

Slides available on my LinkedIn page.

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