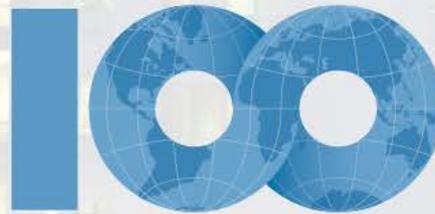


The Opioid Crisis and Its Effect on Pain Management for Cancer Patients

G. Caleb Alexander, MD, FACP

November 14, 2018



**A CENTURY OF SAVING LIVES
MILLIONS AT A TIME**

**JOHNS HOPKINS
BLOOMBERG SCHOOL
OF PUBLIC HEALTH**

Disclosures

- Chair: U.S. Food and Drug Administration Peripheral and Central Nervous System Advisory Committee
- Consultant: IQVIA
- Equity Holder: Monument Analytics, whose clients include life sciences companies and plaintiffs in opioid litigation
- Member: OptumRx National P&T Committee
- Funding: FDA, CDC, AHRQ, NHLBI, NIDA, AstraZeneca, Department of Health and Human Services, Arnold Foundation, Robert Wood Johnson Foundation



Communication 101: “Don’t be such a scientist!”



Madelyn Linsenmeir, 1988-2018



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Madelyn Linsenmeir, 1988-2018

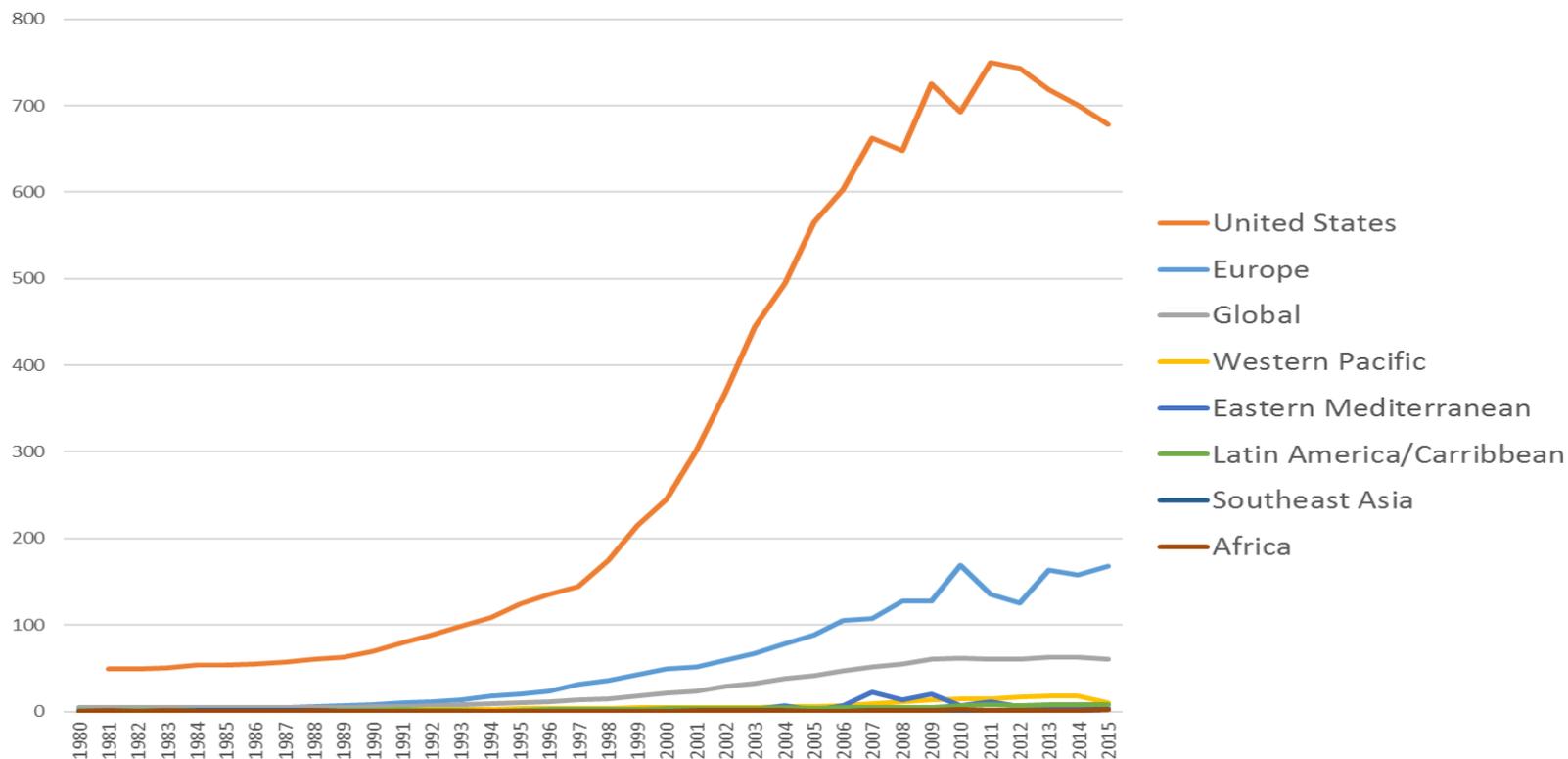


49,000 people died in 2017 from opioid overdoses. This number does not include people like my sister, who died a week ago tonight not from an overdose but a staph infection that bloomed throughout her body as a result of IV drug use. The term opioid epidemic has been used to the point of non-meaning, and the response to it has been equally meaningless. But this is what the opioid epidemic looks like. It has freckles and a dimple on its right cheek. It is 30 years old and has a singing voice so beautiful people stop in the street to listen. It has a son, two sisters, a mother and a father. Its name is Madelyn Ellen Linsenmeir. This is what the opioid epidemic looks like.



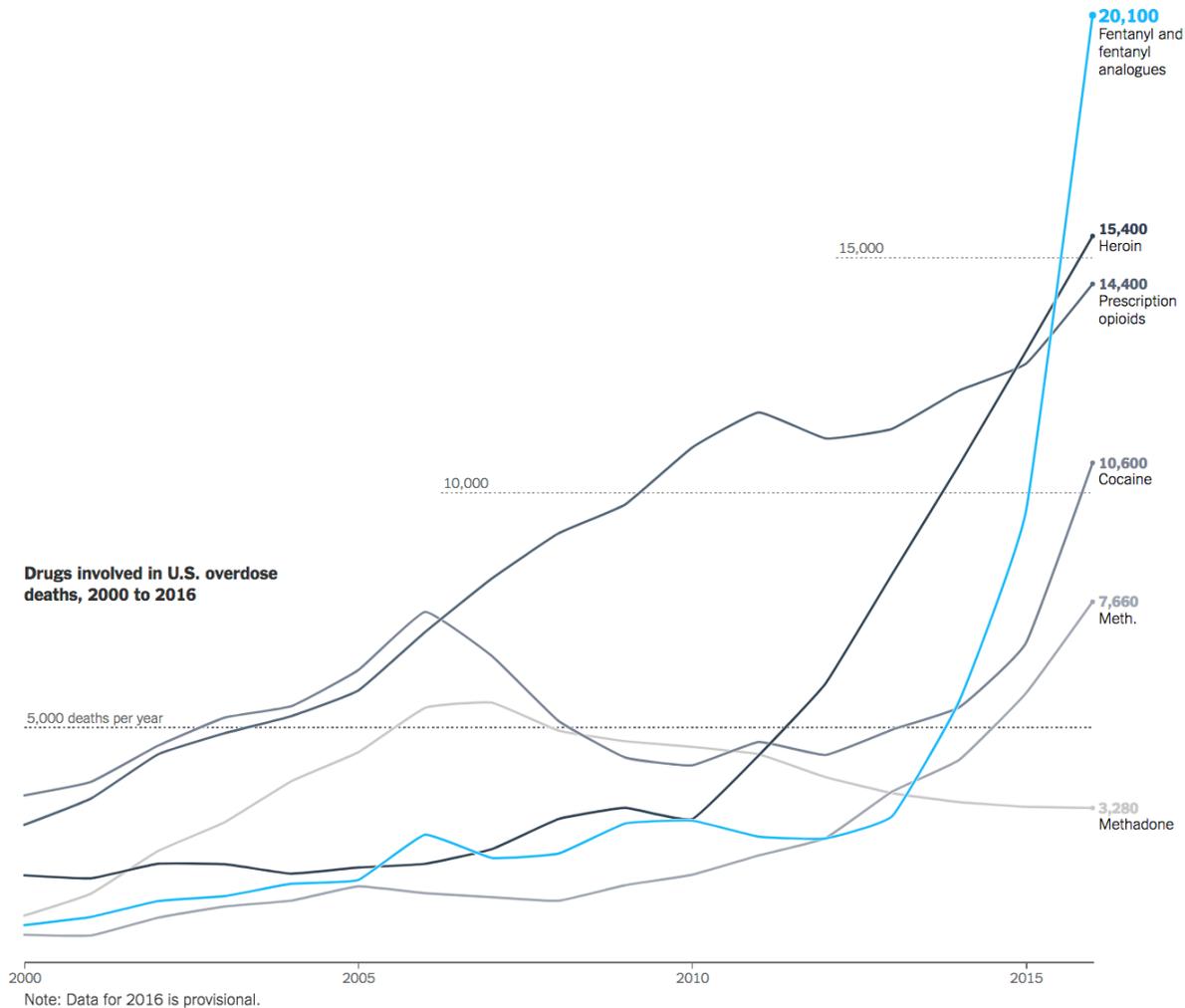
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Volume of Prescription Opioid Use in the U.S. and Other Countries, 1990-2015



Sources: International Narcotics Board; World Health Organization population data.
By: Pain & Policy Studies Group, University of Wisconsin/WHO Collaborating Center, 2017

Drugs Involved in U.S. Overdose Deaths, 2000-2016



What does the opioid epidemic have to do with cancer?



Chronic Cancer versus Non-Cancer Pain: A Distinction without a Difference?

In 1824, Jeremy Bentham published the “Book of Fallacies” in which he criticized fifty arguments used in political debate and explained the sinister interests that led politicians to use them. One of these fallacies he describes as the “sham distinction”, now known better as a “distinction without a difference”. This logical fallacy appeals to a distinction between two things that ultimately cannot be explained or defended in a meaningful way. When it comes to cancer and non-cancer pain, one really must question why we are drawing a distinction between these two entities and whether it is science or politics that demands there be a difference.

Eric Widera. www.geripal.org. March 3, 2016.



Chronic Cancer versus Non-Cancer Pain: A Distinction without a Difference?

Even if you are more of a splitter than a lumpner, it still doesn't make sense when you include what we know about the biology of cancer. Cancer, despite recent "moonshot" ideas, is not a single entity. There are numerous types of leukemia, lymphomas, skin cancers, bones cancers, lung cancers... The list can go on and on. The etiology of pain that may result from these cancers also vary: it can be due to muscle damage, bone invasion and central sensitization, nerve impingement or destruction, chemotherapy induced neuropathy, liver capsular expansion, and on and on the list goes.

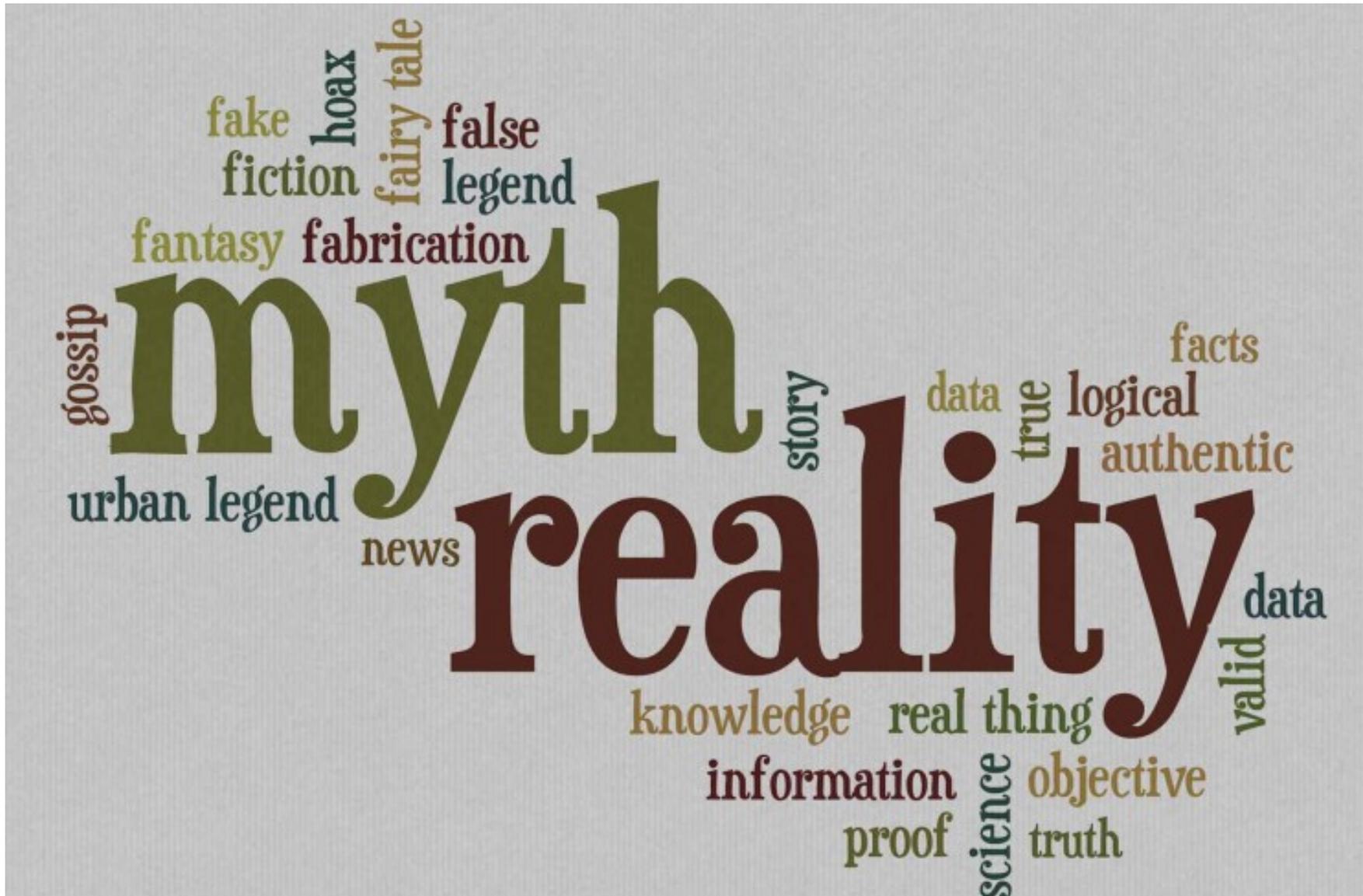
Eric Widera. www.geripal.org. March 3, 2016.



Epidemic's Effects on Cancer Patients

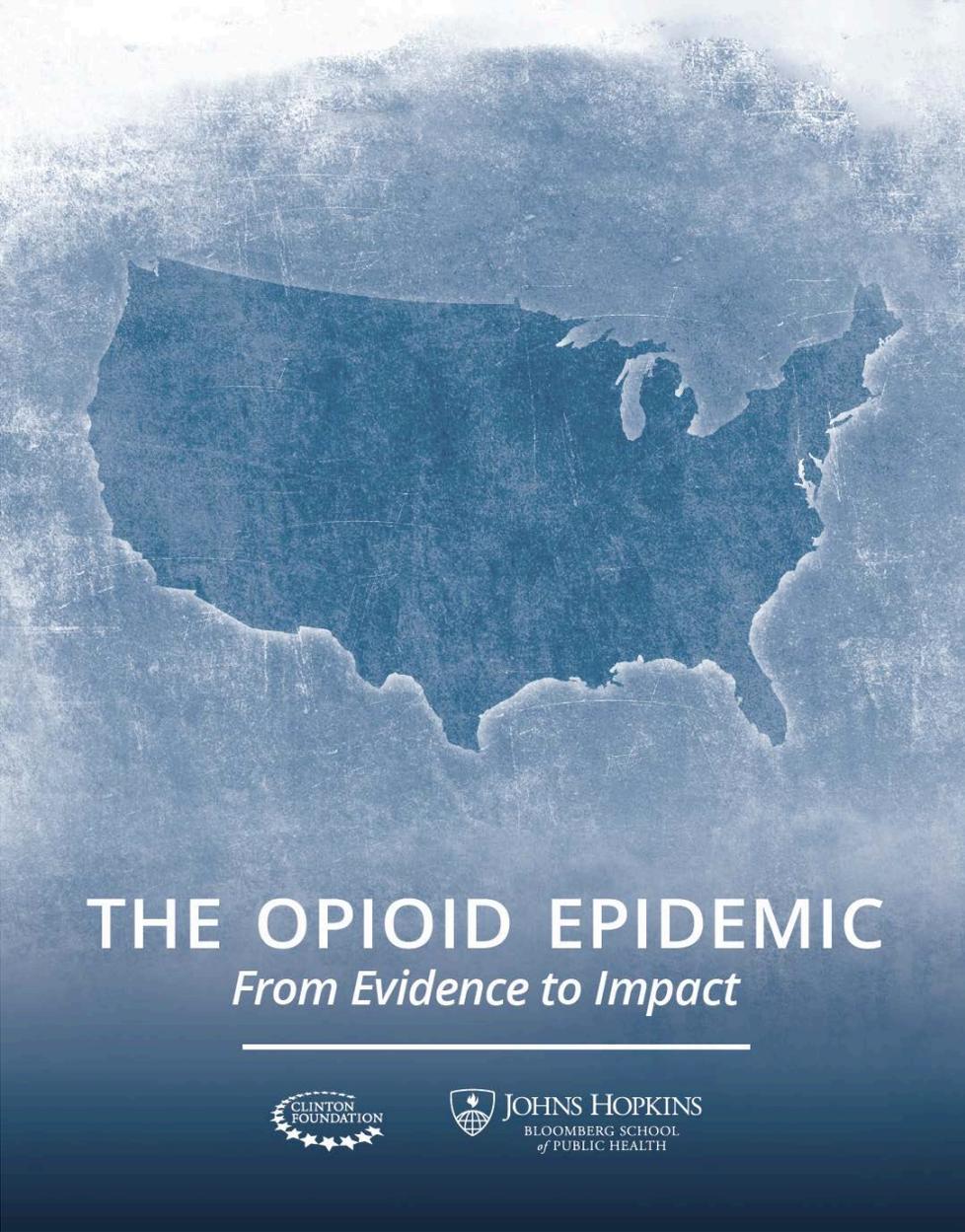
Beneficial Effects (?)	Harmful Effects (?)
<ul style="list-style-type: none">• Reduced access to opioids• Improved pain control• Diversified analgesic regimens• Improved clinical outcomes• Reduced adverse effects• Decreased polypharmacy	<ul style="list-style-type: none">• Reduced access to opioids• Worsened pain control• Oversimplified analgesic regimens• Worsened clinical outcomes• Increased adverse effects• Increased polypharmacy





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THE OPIOID EPIDEMIC

From Evidence to Impact



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