

E•QUAL | EMERGENCY QUALITY NETWORK

Opioid Initiative Wave I –
Treating Opioid-Use Disorder in the ED Part 1

Presenter



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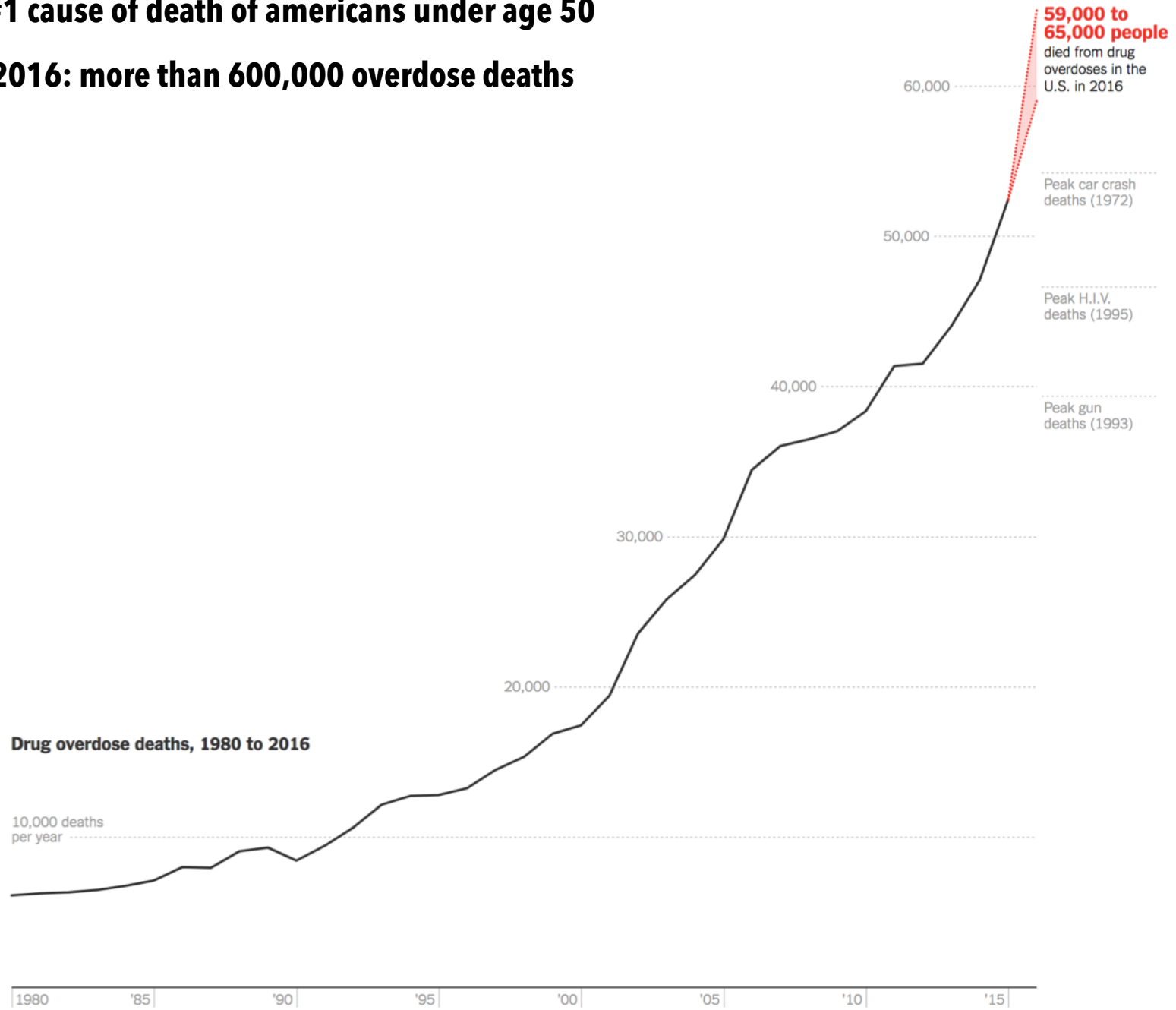


Reuben J. Strayer, MD

**emergency department
management of the
patient with opioid
withdrawal**

OD is #1 cause of death of americans under age 50

1999-2016: more than 600,000 overdose deaths



I have chronic pain and need meds
I overdosed and got naloxone by EMS
I overdosed and am now in cardiac arrest
I inject heroin and now have cellulitis / endocarditis
I have complications from HIV or Hep C
I sell sex to get drugs and now have an STI
I'm homeless
I've been arrested
I've been assaulted
I'm addicted to narcotics and am now in withdrawal
I have a problem and need help
I'm dope sick and can't stop vomiting

opioid withdrawal case

27F no PMH, visiting from LA

opioid addict, prefers fentanyl

arrives at 5p

severe body aches, restlessness, vomiting, diarrhea

4 IV start attempts over 30 minutes, conflict++

receives, over **11 hours** in the ED:

Ondansetron 8mg IV x2: 16mg IV

Promethazine 25mg IVPB x2: 50mg IV

Clonidine 0.2mg PO x 4 doses: 0.8mg PO

Lorazepam 2mg IV x 3 doses: 6mg IV

Haloperidol 5mg IV x 2 doses: 10mg IV

Normal Saline 2 liters IV.

Discharged with promethazine and clonidine prescription

opioid withdrawal case

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Clonidine 0.2mg PO x 4 doses: 0.8mg PO

Lorazepam 2mg IV x 3 doses: 6mg IV

Haloperidol 5mg IV x 2 doses: 10mg IV

Normal Saline 2 liters IV.

Discharged with promethazine and clonidine prescription

opioid withdrawal case

visit #2

arrives at 6p the following day

severe body aches, restlessness, vomiting, diarrhea

now also intermittently drowsy and lightheaded/presyncopal

Ondansetron 8mg IV x1: 8mg IV

Promethazine 25mg IVPB x2: 50mg IV

Clonidine 0.2mg PO x 3 doses: 0.6mg PO

Lorazepam 2mg IV x 3 doses: 6mg IV

Haloperidol 5mg IV x 1 doses: 5mg IV

Ketamine 10mg IV (0.2mg/kg) x 2 doses: 20mg IV

Normal Saline 3 liters IV

Discharged with promethazine and clonidine prescription

opioid withdrawal case

visit #3

arrives at 4p the following day
severe body aches, restlessness, vomiting, diarrhea
now emotionally distraught

Ondansetron 8mg ODT

Buprenorphine 8mg SL

Ondansetron 8mg ODT

Buprenorphine 8mg SL

Discharged with suboxone 8 mg tabs

opioid withdrawal

is hell on earth

"It feels like the worst flu you ever had, the sickest you've ever been, at times suicidal thoughts and complete and total confidence that you are never, ever, ever going to feel better."

"For days, I shook uncontrollably. I sweat through my sheets."

"I wanted to tear my hair out of my skull and my scratch the skin off of my body."

"It feels like the day your wife left and your kitten died and there were no more rainbows anywhere and never will be again."

opioid withdrawal

anxiety, irritability, restlessness, agitation

diffuse pain, myalgias, arthralgias

dysphoria, depression, hopelessness

vomiting, diarrhea, abdominal cramping

autonomic dysfunction: sweating, tremor, ↑HR/BP

rhinorrhea, lacrimation

mydriasis, yawning, piloerection

opioid withdrawal: non-opioid treatments

dysautonomia: clonidine
(dexmedetomidine, lofexidine)

pain: NSAIDs, acetaminophen,
gabapentin, baclofen, tizanidine

GI distress: ondansetron,
phenothiazines, antihistamines,
loperamide, dicyclomine, octreotide

agitation: benzodiazepines,
antipsychotics, ketamine

clonidine 0.1-0.3 mg po q1-3h
dexmedetomidine start at 0.2 mcg/kg/min
lofexidine 0.2-0.4 mg po q6-12h
ibuprofen 400-600 mg po q4-6h
ketorolac 15 mg IV/IM q4-6h
acetaminophen 500-1000 mg po q6h
gabapentin 200-400 mg po q6-8h
baclofen 10 mg po q8h
tizanidine 4-8 mg po q6-8h
ondansetron 4-8 mg po/IV q4-6h
promethazine 25-50 mg IV/IM
metoclopramide 10-20 mg IV q6-8h
diphenhydramine 50 mg IV q6-8h
hydroxyzine 50-100 mg po/IM q4-6h
loperamide 4 mg po q4h
octreotide 100 mcg SC q8h
dicyclomine 20 mg po q6h
lorazepam 2-4 mg PO/IV q2-4h
diazepam 10-20 mg IV q30-60 min
midazolam 2-5 mg IM q2h
haloperidol 2-10 mg IV/IM/PO q4-6h
droperidol 1-5 mg IV/IM q4-6h
olanzapine 5-10 mg IM q4h
ziprasidone 10-20 mg IM q4h
ketamine 0.25 mg/kg IV over 20 min q2h

non-opioid treatments of opioid withdrawal do not address the underlying problem and are therefore relatively ineffective

**because non-opioid treatments
of opioid withdrawal are
relatively ineffective, the
patient's ED course is often
difficult and protracted**

**non-opioid treatments do not
address **cravings**, which leave
the patient much more
vulnerable to self-treating with
street drugs, which are more
lethal than ever before**

**treating withdrawal with non-
opioids misses the opportunity
to **move the patient to recovery**
with MAT**

opioid withdrawal treatment with **methadone**

10 mg IM or 20 mg PO

cannot be prescribed by emergency providers

full agonist harms: respiratory depression

opioid withdrawal treatment with **buprenorphine**

partial agonist + high receptor affinity =
much less likely to cause respiratory depression &
blocks activity of other opioids

the patient who is therapeutic on bup is **safe**

can be prescribed for opioid withdrawal with an X-
waiver or dispensed for 72 hours

warm handoff to outpatient care: **moving OUD
patients from withdrawal to recovery**

precipitated withdrawal

is withdrawal caused by naloxone (or buprenorphine)

best treatment for precipitated withdrawal is
TBD

usual treatment is with non-opioids

may require aggressive sedation until
antagonist wears off

emergency department management of the patient with **opioid withdrawal**

opioid withdrawal is hell on earth

dysphoria, anxiety, severe pain and GI distress

variety of non-opioid therapies can improve symptoms

opioid agonist therapies offer many advantages, including moving the patient to recovery with MAT

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