

# CARING FOR YOUTH AND FAMILIES AFFECTED BY OPIOID USE

SARAH M. BAGLEY, MD, MSC
ASSISTANT PROFESSOR OF MEDICINE AND PEDIATRICS
BOSTON UNIVERSITY SCHOOL OF MEDICINE/BOSTON
MEDICAL CENTER







# **DISCLOSURES/FUNDING SOURCE**

#### Conflict of interest statement:

- I have no commercial relationships to disclose
- I will not be discussing any unapproved uses of pharmaceuticals or devices

# Funding Sources:

- National Institute on Drug Abuse K23DA044324
- Jack Satter Foundation
- Evans Junior Faculty Research Merit Award



# **OBJECTIVES**

- 1. Special considerations: language and stigma
- 2. Discuss the impact of the opioid crisis on youth
- 3. Review harm reduction strategies and treatment options for youth
- 4. Identify ways to engage with families impacted by opioid use



# "THE OPPOSITE OF ADDICTION IS NOT SOBRIETY, IT IS HUMAN CONNECTION." JOHANN HARI



# 1. SPECIAL CONSIDERATIONS: LANGUAGE & STIGMA



## LANGUAGE MATTERS

"Recovery" language may not resonate

Figure out the youth's goals and align language

Chronic disease model may be limited



## LANGUAGE MATTERS

"They don't want their life to continue to be defined by their substance use, including if that means being defined by not using substances...Because having your identity be centered around being in recovery is also not, like your life is still being centered around substance using and that works for some people, that's great. But, I don't think that's what most people want... I think the conversation isn't just about ...people won't die ... It's like people will be present for their lives again."

Eitan (non-binary, 23)



# LANGUAGE MATTERS: "HARD TO REACH"

"defines the problem as one within the group itself, not within your approach to them" (Smith 2006)

"it makes it sound like the fault of the non service-user - "you are hard to reach" - like they are sat up on a shelf and we have got to lure them down with biscuits, or something.... actually if you just got a ladder and sat next to them that would be fine."

I am not "hard to reach", generally people don't know how to reach me



# **STIGMA**

- Stigma: significant misinformation about what medication treatment is and benefits
- Addressing stigma must involve family and other loved ones

Addiction Science & Clinical Practice

CASE REPORT

Open Access

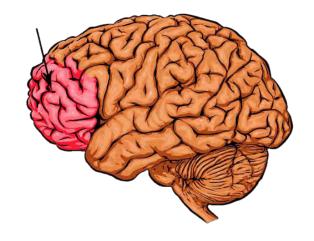
Stigma associated with medication treatment for young adults with opioid use disorder: a case series

Scott E. Hadland<sup>1,4</sup>, Tae Woo Park<sup>2,4</sup> and Sarah M. Bagley<sup>1,3,4\*</sup>

# 2. DISCUSS THE IMPACT OF THE OPIOID CRISIS ON YOUTH



# **BRAIN DEVELOPMENT IS ONGOING**



This has major implications for youth's ability to engage

Going to be harder to think about consequences of use

Behaviors make sense



# **ADOLESCENT DEVELOPMENT:**

#### **RISK AND PROTECTIVE FACTORS FOR SUD**



- Caregiver involvement
- Healthy self-esteem, coping skills • Physical & psychological safety
- Positive norms
- Positive peer relationships





- Mental health conditions
   Age of first substance exposure
- Child abuse and neglect
   Parents, siblings and peers who use
- Academic problems

Trauma

- For opioid use disorder: exposure to prescription opioid
- Peer substance use and drug availability

Positive Physical, Social, and Mental Health



Substance Use Initiation and **Experimentation** 



Chronic Substance Use



**Substance** Use Disorder





No single factor determines whether an adolescent will develop a SUD



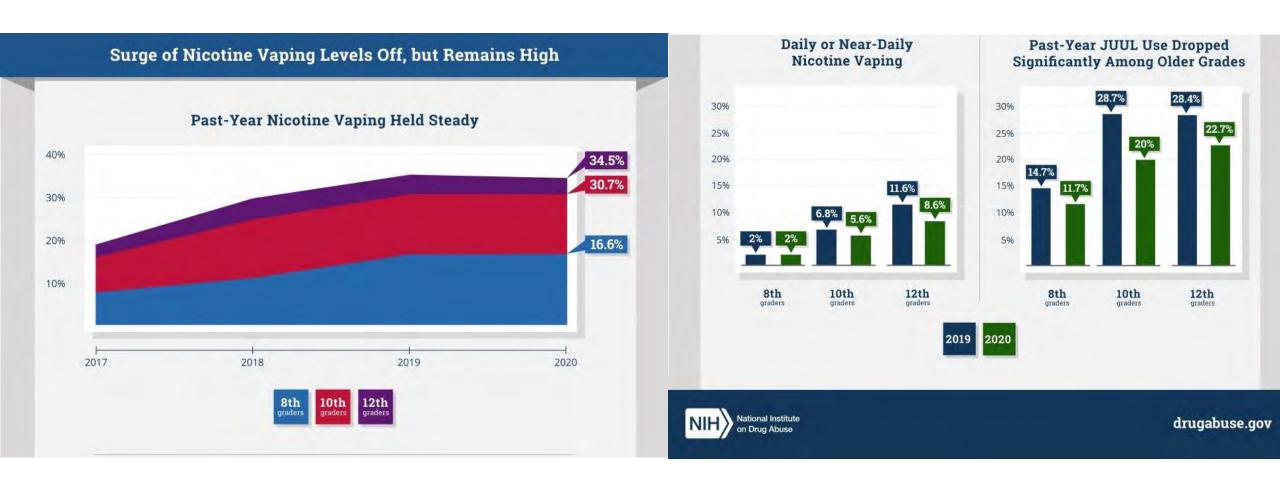
### PREVALENCE OF USE IS DIFFERENT AMONG YOUTH

 Flexible models providing care for other kinds of SUDs are important (this will really mean behavioral treatment)



## PREVALENCE AND KINDS OF DRUG USE DIFFERENT

**TEENS (12 – 17 Y/0)** 



# PREVALENCE AND KINDS OF DRUG USE DIFFERENT

**TEENS (12 – 17 Y/0)** 

2020

2019

Past-Year Marijuana Vaping



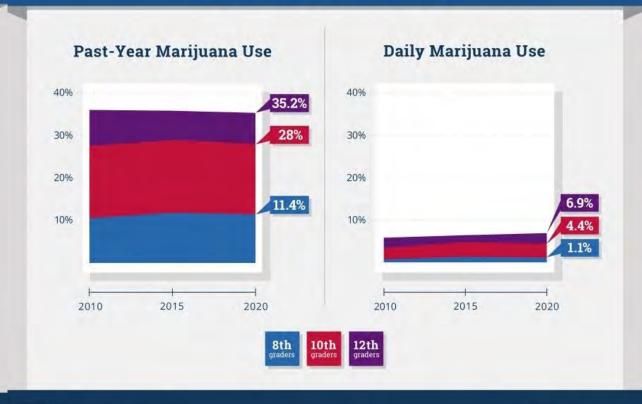


10th

0.8% 0.7%

8th

#### Marijuana Use Remains Steady





2017

2018

25%

20%

15%

10%

5%

drugabuse.gov

12th

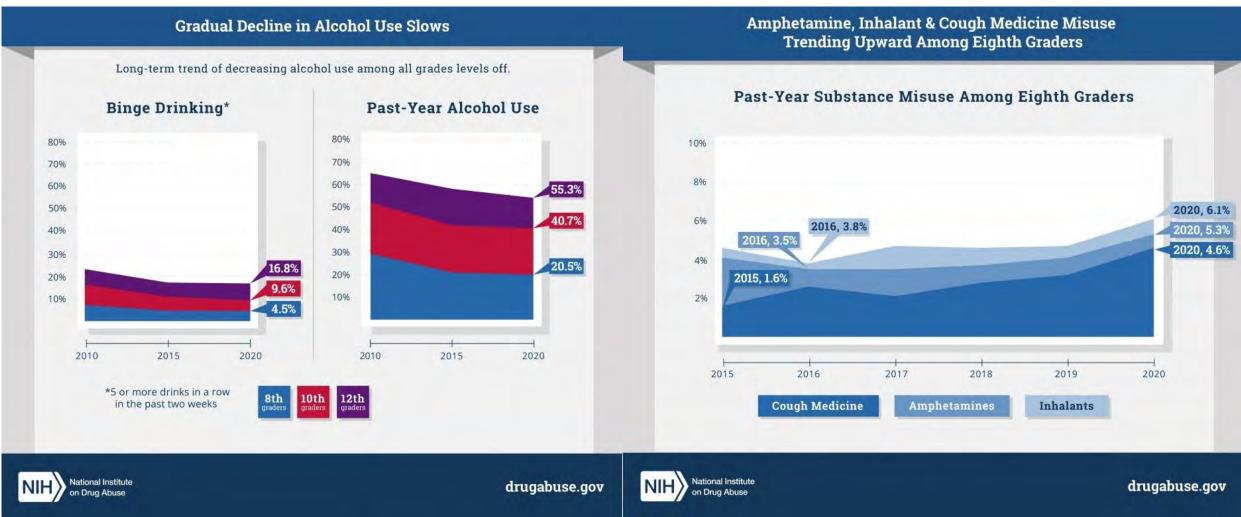


drugabuse.gov



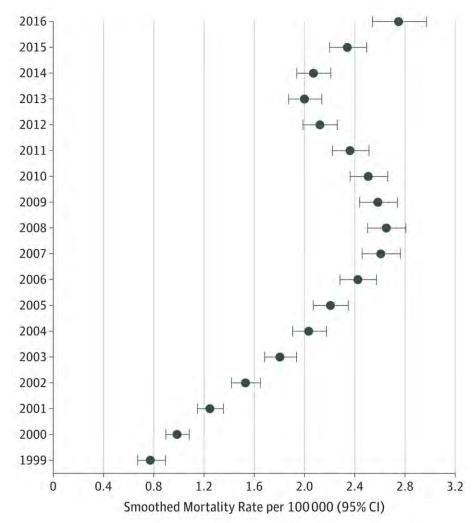
# PREVALENCE AND KINDS OF DRUG USE DIFFERENT

**TEENS (12 – 17 Y/0)** 



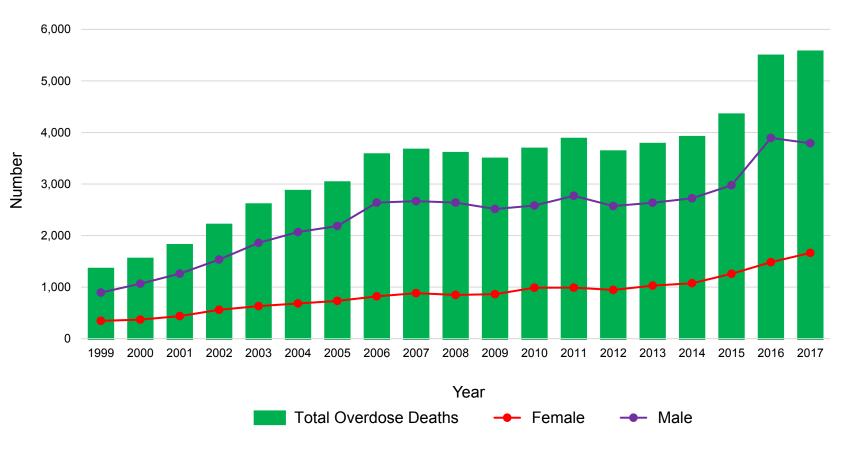
# **OPIOID OVERDOSE EPIDEMIC IMPACTS YOUTH**

US National Trends in Pediatric Deaths From Prescription and Illicit Opioids, 1999-2016



- Between 1999 and 2016, overdose deaths rose among 15- to 19-year-olds:
  - 95% for prescription opioids
  - 405% for heroin
  - 2925% for synthetic opioids (i.e., fentanyl)

## DRUG-RELATED OVERDOSE DEATHS AMONG 15-24 YO

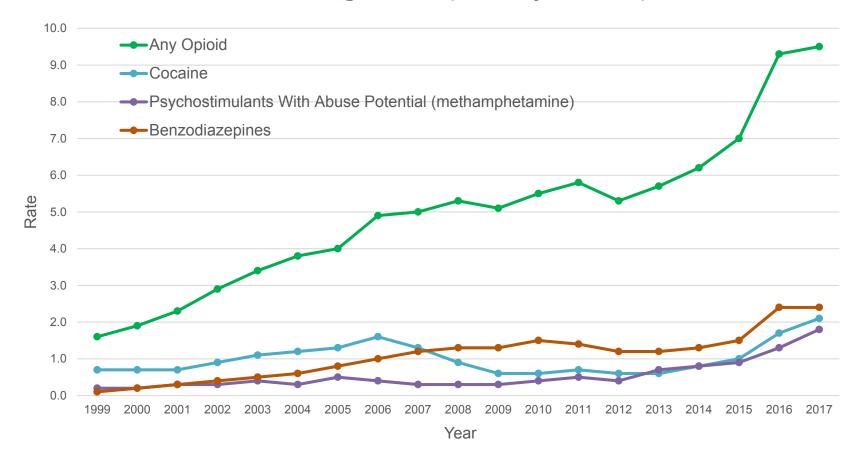


Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018



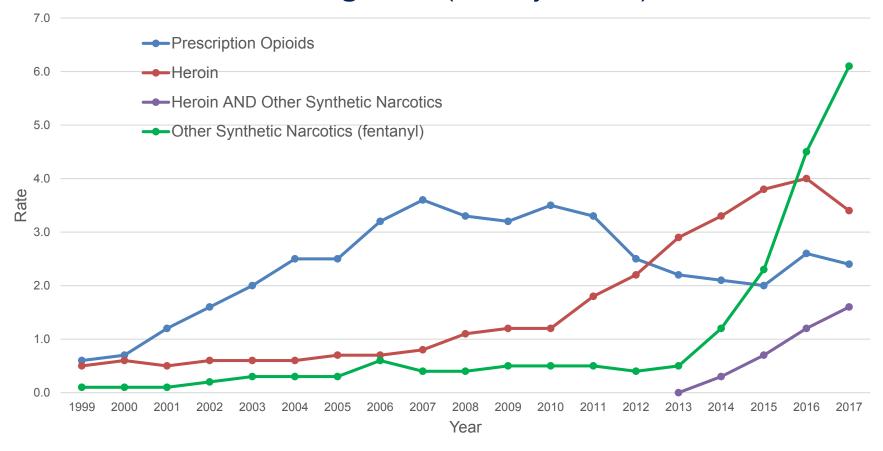
# **OVERDOSE DEATHS - TYPE OF DRUG**

#### **Young Adults (15-24 year olds)**

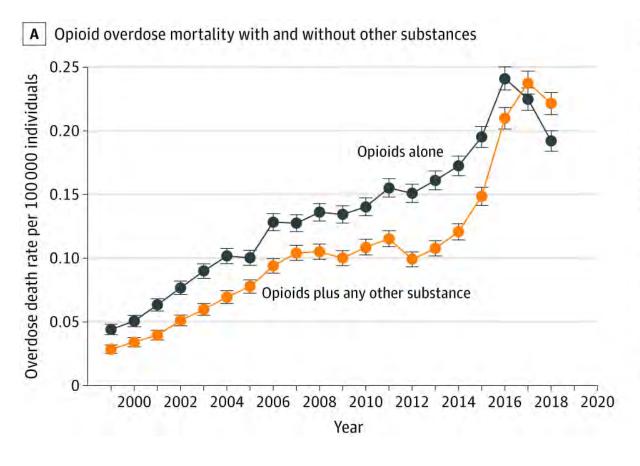


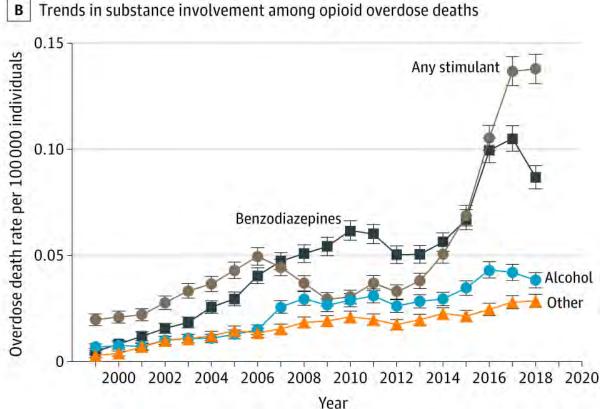
# **OVERDOSE DEATHS - TYPE OF OPIOID**

#### Young Adults (15-24 year olds)



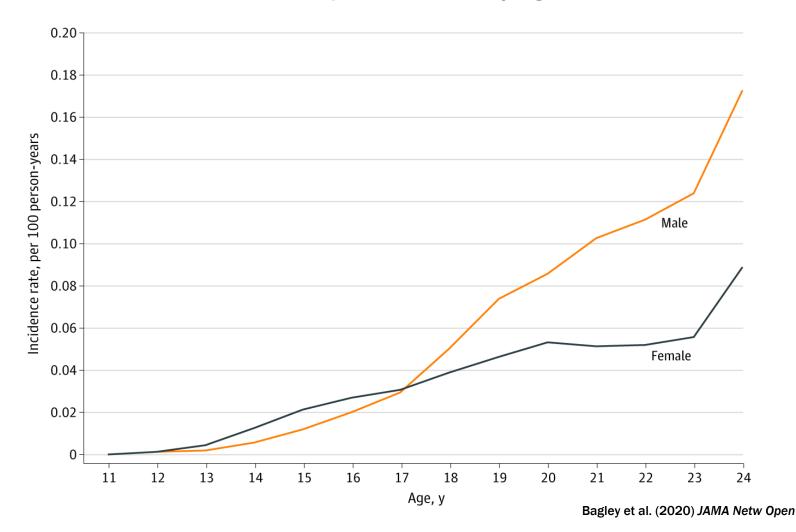
# STIMULANT-INVOLVED DEATHS INCREASING AMONG YOUTH



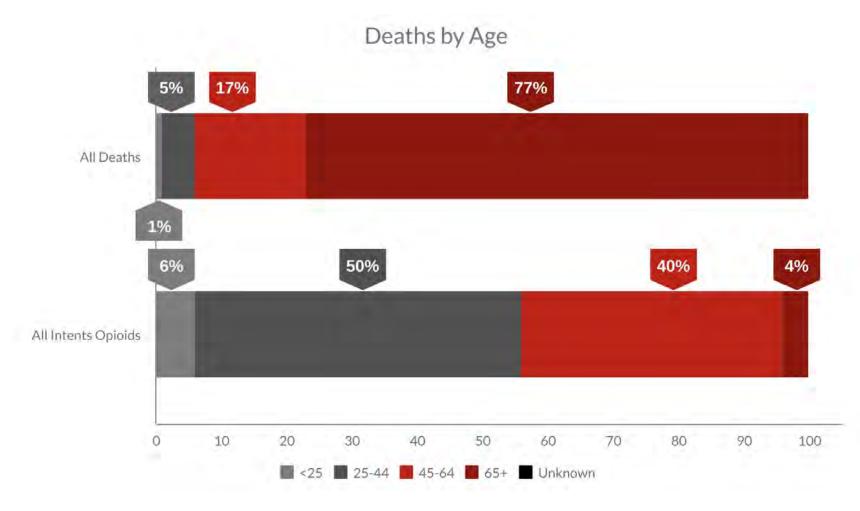


# SEX-BASED DIFFERENCES IN NONFATAL OPIOID OVERDOSE RATES

Figure 2: Incidence Rate of First Nonfatal Opioid Overdose by Age and Gender from 2006 to 2016



# **DISPROPORTIONATE NUMBER OF DEATHS**

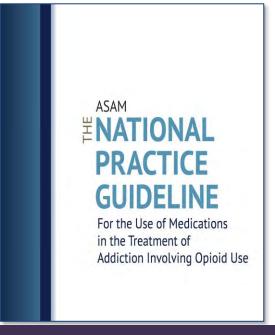




# 3. REVIEW HARM REDUCTION STRATEGIES AND TREATMENT OPTIONS FOR YOUTH



# WHEN IS PHARMACOTHERAPY INDICATED?



**American Society of Addition Medicine** (2015):

Clinicians should consider treating adolescents using the full range of treatment options, including pharmacotherapy

American Academy of Pediatrics (2016): Encourage pediatricians to consider offering medication treatment or discuss referrals to other providers for this service

POLICY STATEMENT

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children



Medication-Assisted Treatment of Adolescents With Opioid Use Disorders

COMMITTEE ON SUBSTANCE USE AND PREVENTION



# MOUD SHOULD BE AVAILABLE TO YOUTH

- Though, there are some unique considerations...
  - Trial data are scarce for adolescents and young adults (only 3 RCTs to date)
  - All available data suggest that medications effective in youth, just as in adults
  - Young adults tend to have the highest rates of attrition from clinical care
  - Parents generally involved for adolescents <18; helpful for administering meds
  - Ideal length of time to remain on medications is unclear



# Medications are effective



## WHAT'S THE EVIDENCE FOR MEDICATION TREATMENT?

Improved retention in care (clinical trials and observational data)

Decreased opioid positive urine drug tests (clinical trials)

Improved mortality (observational data)

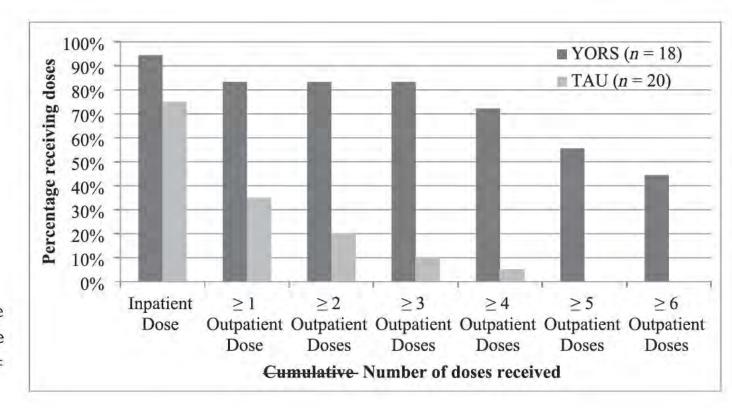
BUT transitional age youth have poorer retention!

# YOUTH OPIOID RECOVERY SUPPORT (YORS)

- Home delivery of medication
- Family engagement
- Assertive outreach to patients and families
- Contingency management for receipt of medication doses



### IMPROVED RETENTION IN NALTREXONE TREATMENT



**Figure 2** Histogram of cumulative extended-release naltrexone (XR-NTX) dose receipt. TAU = treatment-as-usual; YORS = youth opioid recovery support

# IMPROVED TIME TO RELAPSE WITH YORS MODEL

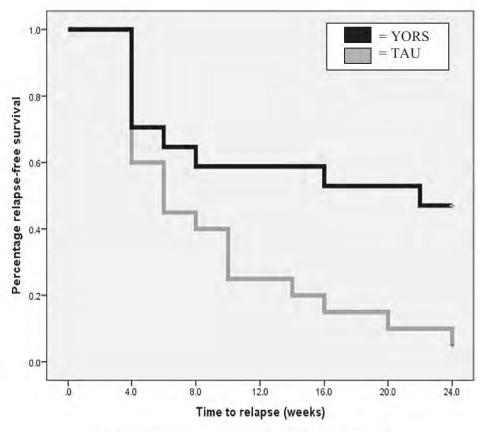


Fig. 1. Kaplan-Meier survival curve of opioid relapse at 24-weeks.



# ADDICTION TREATMENT FACILITIES PRIMARILY SERVE ADULTS

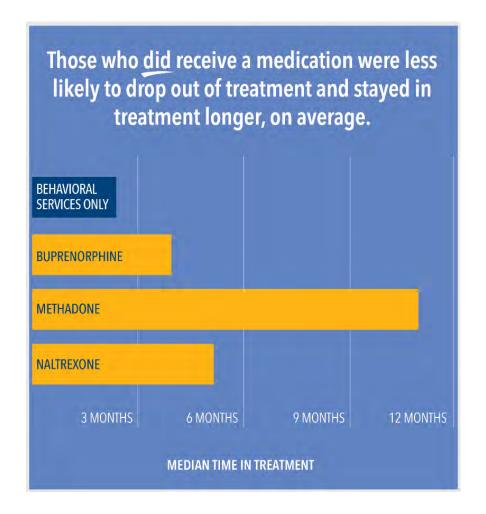
 In a cross-sectional study of addiction treatment facilities, only 26% offered adolescent programs

 Programs that offered treatment for adolescents were half as likely to offer medications for opioid use disorder

# LOW TIMELY RECEIPT OF MEDICATION AMONG YOUTH



Only **1** in **4** youths received treatment within 3 months of OUD diagnosis



## **ACCESS TO TIMELY ADDICTION TREATMENT LACKING**

Research

JAMA Pediatrics | Original Investigation

#### Receipt of Addiction Treatment After Opioid Overdose Among Medicaid-Enrolled Adolescents and Young Adults

Rachel H. Alinsky, MD, MPH; Bonnie T. Zima, MD, MPH; Jonathan Rodean, MPP; Pamela A. Matson, MPH, PhD; Marc R. Larochelle, MD, MPH; Hoover Adger Jr, MD, MPH, MBA; Sarah M. Bagley, MD, MSc; Scott E. Hadland, MD, MPH, MS

**IMPORTANCE** Nonfatal opioid overdose may be a critical touch point when youths who have never received a diagnosis of opioid use disorder can be engaged in treatment. However, the extent to which youths (adolescents and young adults) receive timely evidence-based treatment following opioid overdose is unknown.

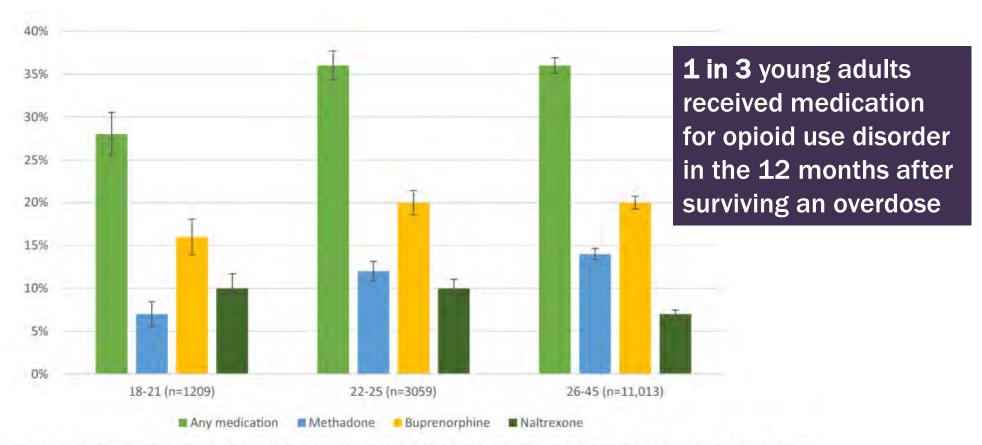
**OBJECTIVE** To identify characteristics of youths who experience nonfatal overdose with heroin or other opioids and to assess the percentage of youths receiving timely evidence-based treatment.

<1/3 received timely addiction treatment after overdose
Only 1 in 54 received MOUD

Supplemental content

Youths who experienced a heroin overdose were significantly less likely than those who overdosed on other opioids to receive any treatment

# YOUTH DO NOT RECEIVED EVIDENCE BASED TREATMENT

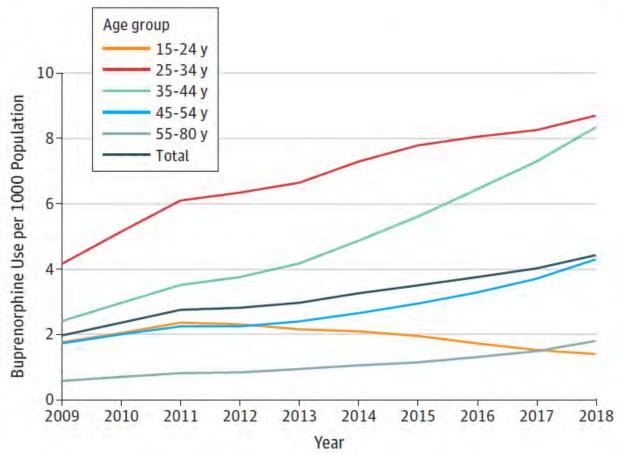


**Figure 1.** Receipt of medication treatment in the 12 months after a nonfatal overdose, stratified by age groups. Error bars represent 95% Cl.\*. \*Individuals could have received more than one kind of medication type.

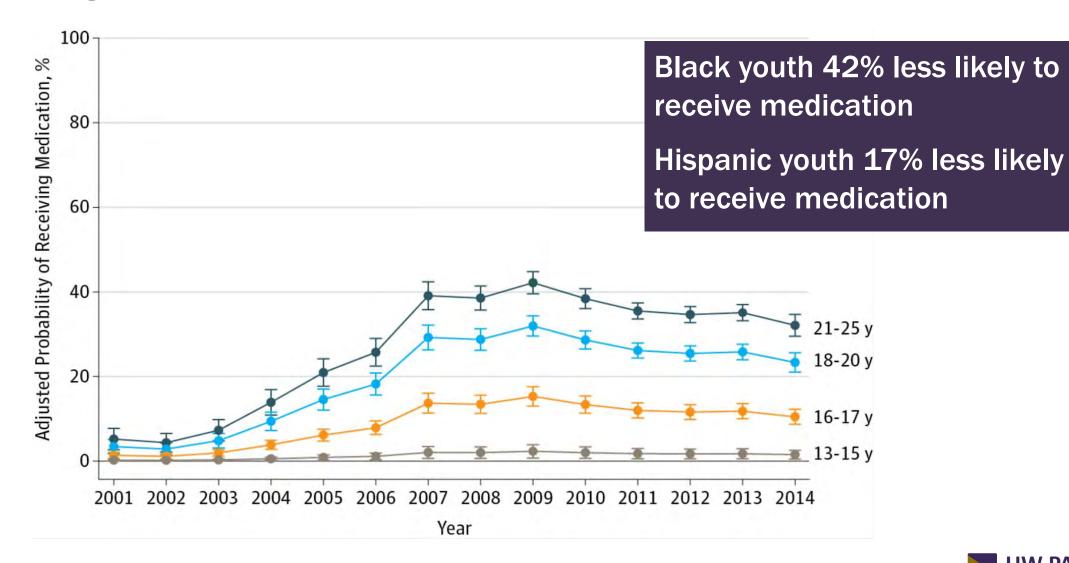
# **WIDENING TREATMENT GAP**

15-24 Y/O

Figure. Trends in Buprenorphine Use in the United States per 1000 Population, Total and by Age Group, 2009-2018



### **INEQUITIES OF MEDICATION RECEIPT**



"The lack of discussion of Black overdose deaths in the national opioid discourse further marginalizes Black people, and is highly consistent with a history of framing the addictions of people of color as deserving of criminal punishment, rather than worthy of medical treatment."

### **DECREASED RETENTION IN CARE OVER TIME**

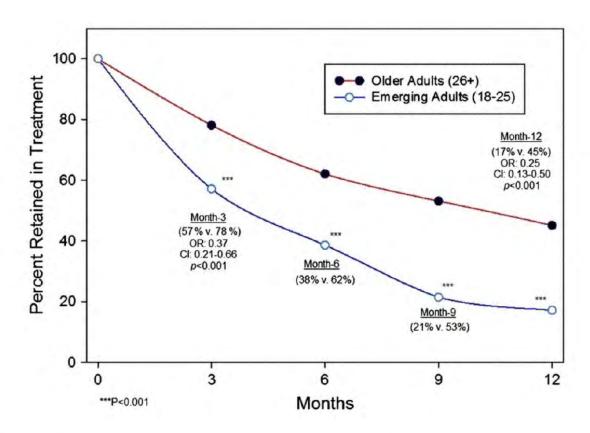


Fig. 2.

Retention over time during 12 months of collaborative care buprenorphine treatment.

### YOUTH HAVE WORSE OUTCOMES THAN OLDER ADULTS

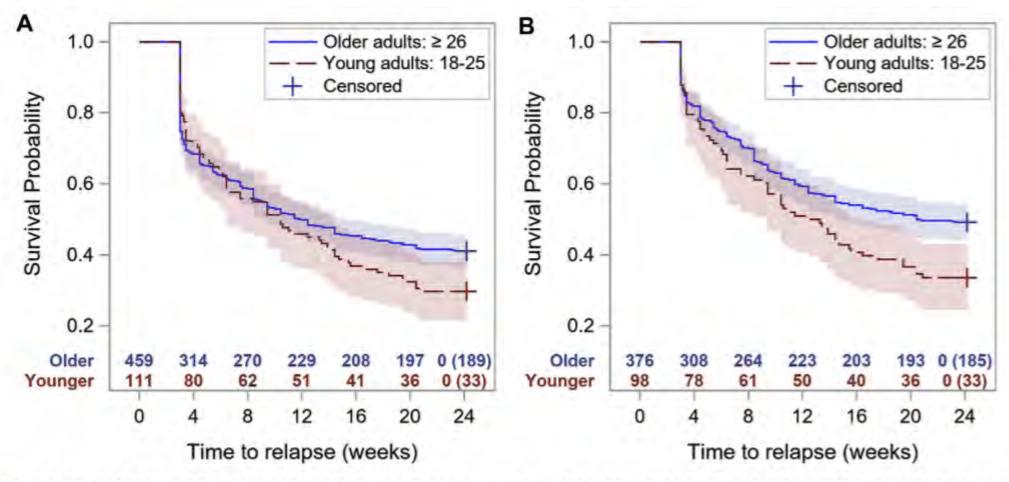


Figure 1. Relapse-free survival curves with 95% confidence intervals by age group among the intention-to-treat sample (A: left panel) and among the per-protocol sample (B: right panel). Corresponding number of subjects at risk are presented along x-axis along with number censored at Week 24.



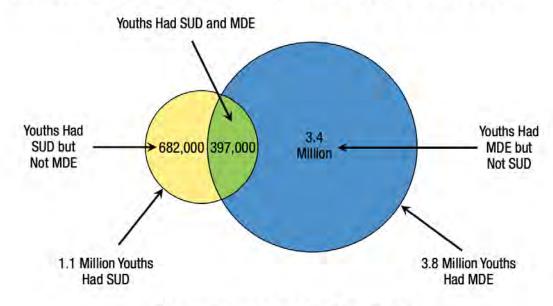
# TREATING CO-OCCURRING MENTAL HEALTH DISORDERS IS CRITICAL

- High prevalence of COD, for many youths they may be the reason that they started to use drugs
- Treat both, can always reassess as time goes on but anxiety and depression symptoms can be truly distressing and interfere with trying to be sober



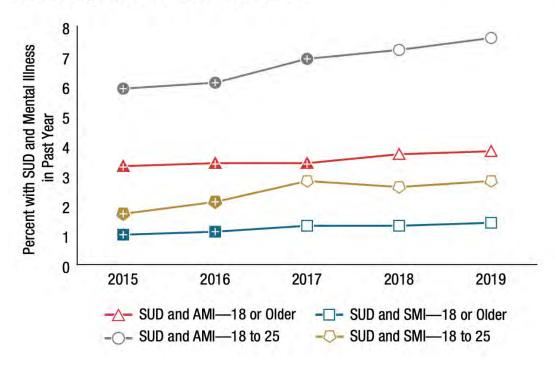
# TREATING CO-OCCURRING MENTAL HEALTH DISORDERS IS CRITICAL

Figure 53. Past Year Substance Use Disorder (SUD) and Major Depressive Episode (MDE) among Youths Aged 12 to 17: 2019



4.5 Million Youths Had Either SUD or MDE

Figure 57. Co-Occurring Past Year Substance Use Disorder (SUD), Any Mental Illness (AMI), and Serious Mental Illness (SMI) among Adults Aged 18 or Older: 2015-2019



### **CO-OCCURRING MENTAL HEALTH DIAGNOSES IN YOUTH**

Table 2 Baseline characteristics of adolescents and young adults engaged in primary care—based outpatient substance use care (N=148).

Variable	NO OUD N = 58	OUD N = 90	TOTAL N = 148
Patients with co-occurring			
behavioral health disorders			
Depression	19 (32.8%)	25 (27.8%)	44
			(29.7%)
Anxiety	15 (25.9%)	33 (36.7%)	48
			(32.4%)
Bipolar disorder	0 (0.0%)	7 (7.8%)	7 (4.7%)
ADHD or ADD	8 (13.8%)	12 (13.3%)	20
			(13.5%)
Mood disorder	2 (3.4%)	12 (13.3%)	14 (9.5%)
PTSD	8 (13.8%)	20 (22.2%)	28
			(18.9%)
Substance use disorder diagnoses			
Opioid use disorder	NA	90 (100.0%)	90
			(60.0%)
Alcohol use disorder	17 (29.3%)	10 (11.1%)	27
			(18.2%)
Nicotine use disorder	9 (15.5%)	46 (51.1%)	55
			(37.2%)
Cannabis use disorder	26 (44.8%)	5 (5.6%)	31
			(20.9%)
Stimulant use disorder	2 (3.5%)	0 (0.0%)	2 (1.4%)
Prescribed medication for OUD (outpatient)		81 (90.0%)	

### HARM REDUCTION AND YOUTH

- Naloxone!
- HIV prevention and PrEP
- Clean syringes and supplies for injecting drugs, fentanyl test strips
- Abstinence may not be the goal for many AYA
- Safer sex supplies



### YOUTH PERCEPTION OF OVERDOSE EXPERIENCES

"And then I really got to the point to where I didn't care if I was going to die, I just had to get something in my body" (male, age 17)

"And ultimately, there's really nothing that's going to be enough to make me change, I had to make the decision to change because my rock bottom is death...I mean I have died, I've overdosed" (female, age 19)



#### COMMENTARY

# Commentary on Monico et al.: The urgent need for developmental competency and effective policy to prevent youth opioid overdose

- 1. Heterogeneity of OUD presentations and individualized treatment planning
- 2. Improved knowledge about overdose and skills for risk reduction
- 3. Reduction of psychological distress (significantly increased during the coronavirus pandemic, with youth representing the highest increase among all age groups) and suicide risk and
- 4. Incentivizing treatment entry through peer influence and peer attachment. "



### **DATA FROM CANADA PAPERS**



# 4. IDENTIFY WAYS TO ENGAGE WITH FAMILIES IMPACTED BY OPIOID USE



### Engagement is Key



### **ENGAGEMENT IS KEY**

 This might mean not getting all the history in the first visit (but getting the necessary info so you can offer a treatment plan)

Holding judgments

 Offering any and all opportunities for youth to make decisions and maintain their autonomy



# RECOMMENDED COMPONENTS TO IMPROVE ENGAGEMENT

- Youth participation in program development
- Parental relationships
- Technology
- The health clinic
- School
- Social marketing



### ADDICTION IS A FAMILY DISEASE

Addiction is a chronic illness

Families can be invited to be part of treatment planning

Their involvement can vary

 Few family-based strategies that have been specifically tested among the AYA population



### FAMILIES CAN BE KEY ALLIES

They know the youth best

 Even when the relationships have deteriorated, important to understand how they may impact the youth

 Can invite them (with permission) to be part of treatment and planning process



### STRATEGIES FOCUSED ON THE FAMILY

 Strategies exist that focus on supporting families affected by addiction whose loved ones may not be in treatment yet.

- The following is not an exhaustive list but provides information on well-known approaches.
  - Community Reinforcement Approach and Family Training (CRAFT)
  - Overdose Education and Naloxone Rescue Kits
  - Al-Anon or other mutual support groups



# ACCESS TO NALOXONE AMONG FAMILY MEMBERS IN MA

Table 2. Enrolment venues for the Massachusetts Department of Public Health Overdose Education and Naloxone State Program between 2008 and 2015 stratified by family members and non family members

Location	Overall $(n = 40801)$	Family member $(n = 10827)$	Non-family member $(n = 29974)$	P-value
HIV prevention programs*	29.6% (11986)	24.1% (2589)	31.5% (9397)	< 0.0001
Community meeting	14.6% (5911)	38.0% (4083)	6.1% (1828)	
Substance use program**	12.8% (5196)	11.2% (1199)	13.4% (3997)	=
Detoxification program	19.9% (8052)	8.4% (905)	24.0% (7147)	-
Methadone program	8.1% (3300)	6.4% (684)	8.8% (2616)	_
Healthcare settings***	5.4% (2186)	3.8% (412)	6.0% (1774)	Ē
Home visit	0.4% (170)	0.6% (65)	0.4% (105)	-
Shelter	2.1% (854)	1.0% (108)	2.5% (746)	-
Other	7.1% (2887)	6.4% (689)	7.4% (2198)	

<sup>\*</sup>Drop in centers, syringe exchange programs and street outreach; \*\*intensive outpatient program, residential halfway house; \*\*\*Outpatient medical clinic, emergency department, inpatient hospital.

### FAMILY BELIEFS ABOUT MEDICATION TREATMENT

- 1. family history of substance use disorder and treatment negatively impacted how young adults perceive their OUD and medication treatment.
- 2. young adults shared that many families held negative or stigmatizing views of medication treatment
- 3. acceptance by family was important but young adults acknowledged that keeping treatment decisions from family was sometimes necessary.



### FAMILY BELIEFS ABOUT MEDICATION TREATMENT

"Like I said, my father and my mother were on it when I was little and... I never want to be like them. And something in the back of my mind has always [been] judgmental... They're junkies, they're on methadone. All my cousins, anybody that mentions suboxone or methadone to them [cousins] they're like that's for junkies, that's for junkies." (male, age 29)



### **THANK YOU!!**

### SARAH.BAGLEY@BMC.ORG @SMBAGLEY

AND THANKS TO RADHIKA PUPPULA FOR HELP CREATING THE SLIDE SHOW

