

Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics

#### **Agenda**

#### Join by video WebEx link:

https://uwhealth.webex.com/uwhealth/j.php?MTID=m9b869fd9833e6a328a77b7275863c8ec

Joining by phone ONLY: +1-415-655-0003 (US Toll)

Meeting ID: 629 820 845

For attendance, purposes please text the following code: TOQNUG to 608-260-7097

Session Date: Friday April 17, 2020

#### **Didactic Topic and Presenter:**

Youth Perceptions of Opioid Safety, Knowledge Gaps, and Preferences for Education in High Schools Olufunmilola Abraham, PhD, MS, BPharm Assistant Professor, University of Wisconsin-Madison

#### **Content Experts:**

Ritu Bhatnagar, MD, Susan Mindock, CSAC, and Sheila Weix, MSN, RN, CARN

12:30 PM: Attendance text-in – Introductions

12:45 PM: Case Presentation

o Presenter: Ivy Sutek, Social Worker

1:10 PM: Didactic Presentation

Presenter: Olufunmilola Abraham, PhD, MS, BPharm

1:30 PM End of Session

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### Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics 2018-2020

Opioid Intoxication and Withdrawal
Friday April 17<sup>th</sup>, 2020
Olufunmilola Abraham, PhD, MS, BPharm. Assistant Professor; University of Wisconsin-Madison Ivy Sutek, Social Worker

Provided by the University of Wisconsin–Madison Interprofessional Continuing Education Partnership (ICEP)

#### **Intended Audience:**

Physicians, Physician Assistants, Nurses, Social Workers, Pharmacists and Counselors.

#### Objectives:

As a result of this educational regularly scheduled series, learners will be able to:

- 1. Review appropriate opioid prescribing and monitoring practices.
- 2. Participate in office-based management of substance use disorders.
- 3. Seek, with greater frequency, overdose prevention education.
- 4. Identify the role of medication-assisted therapies, such as methadone, naltrexone, and buprenorphine in the management of substance use disorders.

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Name/Role	Financial Relationship Disclosures	Discussion of Unlabeled/Unapproved uses of drugs/devices in presentation?
Ivy Sutek, Presenter	No relevant financial relationships to disclose	No
Olufunmilola Abraham, PhD, MS, BPharm., Presenter	No relevant financial relationships to disclose	No
Alyssa Tilhou, MD, Planner	No relevant financial relationships to disclose	No
Kathleen Maher, RSS Coordinator	No relevant financial relationships to disclose	N/A
Briana Kleinfeldt, RSS Coordinator	No relevant financial relationships to disclose	N/A
Randy Brown, RSS Chair	No relevant financial relationships to disclose	Yes
Paul Hutson, Planner, Pharmacy	Consultant for Projections Research Inc.	Yes
Ritu Bhatnagar, Planner, Psychiatrist	No relevant financial relationships to disclose	Yes
Melissa Ngo, Planner, Pharmacist	No relevant financial relationships to disclose	N/A
Susan Mindock, Planner, AODA Counselor	No relevant financial relationships to disclose	No
Sheila Weix, Planner, Nurse	No relevant financial relationships to disclose	No
Lindsey Peterson, MS, CRC, Planner	No relevant financial relationships to disclose	No
Kim Sprecker, OCPD Staff	No relevant financial relationships to disclose	No

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Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics

#### **Patient Case Presentation**

\*Please do not attach any patient-specific files or include any Protected Health Information.

**1.** Date: 3/4/2020

2. Presenter Name: Ivy Sutek, BS, SAC-IT

3. Presenter Organization: Libertas of Marinette

**4.** ECHO ID: 8761

5. Have you presented this patient during this teleECHO clinic before? No

6. PLEASE STATE YOUR MAIN QUESTION FOR THIS PATIENT CASE: Other options, suggested treatment plans

#### **Patient Demographic Information:**

**7.** Age: 38

8. Sex: Female

9. Education/Literacy: Bachelor's degree

**10.** Income source:

- Works intermittently in food service as a bartender/cook, unable to maintain consistent employment
- Lives with a significant other who pays the rent

#### 11. Social Factors/History:

- From the Southern United States
- 2 children, females
- Divorced, married from 2008-2018
- "Gypsy" heritage/values
- Reports sexual abuse age 10
- Reports live-in significant other drinks alcohol daily

#### 12. Substance Use History:

- Assessment date 4/10/2019: Opioid use disorder severe, amphetamine use disorder severe, cannabis use disorder severe- reports 1 gram of meth daily (smoking), 15 Vicodin 10's daily (oral)
- No history of IV drug use
- Has used Kratom for pain
- Longest sober period was 2 years from age 32-34
- Longest sober period from date of admission was 40 days

#### 13. Consequences of Substance Use:

- Social/occupational/educational
  - Co-habitating with significant other drinks alcohol daily, wants to move out but does not have the financial means to do so
  - Unable to maintain employment and financial stability
  - Joint custody of 2 children with ex-husband
  - Sexual assault 11/2019
- Physical (including evidence of tolerance/withdrawal):
  - Paranoia after use of meth
  - Blackouts with use of meth, with a sexual assault during a blackout period in which she was covered in chemicals by the alleged perpetrator

#### 14. Interventions that have been tried:

MAT Program:

Buprenorphine patch 10/5/2018 (prior provider given) Buprenorphine-naloxone 4 mg- 1 mg film 5/30/2019 Pregabalin 25 mg 5/30/2019

Zubsolv 2.9 6/20/19

Prazosin 1 mg daily for PTSD 6/27/2019

Buprenorphine HCl-Naloxone HCl Dihydrate 8.6-2.1 MG 8/22/2019

Naltrexone 25 mg 8/22/2019

Zubsolv 2.9 mg daily 11/7/2019

Wellbutrin 100 mg daily 11/7/2019

Naltrexone 50 mg daily 12/5/2019, 1/23/2020

Lithium CR 600 mg daily 12/5/2019

Risperidone 1 mg daily 12/5/2019

Vivitrol/Naltrexone 380 MG 8/28/2019, 12/05/2019, 1/10/20

Lithium CR 900 mg daily 1/23/2020

Lamictal 100 mg daily 1/23/2020

Venlafaxine XR 75 mg daily 1/23/2020

AODA counseling: IOP, REBT, Supportive counseling, choice clarification, crisis management, management of triggers, motivational interviewing, relapse prevention, treatment planning

Inpatient detox: 10/25/19-10/28/19

Mental Health inpatient: 11/22/2019-11/28/2019 and follow up mental health IOP

AODA Counselor encouraged her multiple times to begin working with an outpatient therapist for her trauma issues but she never followed through

#### 15.

Current Addiction and Mental Health-related Medications:	Medical/Behavioral Health Diagnosis:
<ul> <li>PO naltrexone 50 mg daily</li> <li>IM 380 mg naltrexone</li> <li>Gabapentine 400 MG three times a day</li> <li>Lamotrigine 25 MG daily</li> <li>Lithium 300 MG three times a day</li> <li>Loratadine 10 MG daily</li> <li>Melatonin 3 MG at bedtime as needed</li> </ul>	<ul> <li>Bipolar effective disorder</li> <li>Anxiety</li> <li>PTSD</li> <li>Suicide attempts; 2001, 1/5/2020</li> </ul>
<ul> <li>Olanzapine 10 MG at bedtime</li> <li>Venlafaxine ERC 75 MG daily</li> </ul>	

#### 16.

Patient Strengths/protective factors:	Risk factors:
<ul> <li>Outgoing, friendly</li> <li>Honest about use/relapse</li> <li>Keeps trying/coming back</li> <li>Able to verbalize goals</li> </ul>	<ul> <li>Continued cravings for Methamphetamine</li> <li>Unstable mental health/Bipolar</li> <li>Puts self in risky situations while using</li> <li>Withdrawn/isolates when not using</li> <li>No support</li> <li>Reports significant other drinks alcohol daily and is verbally abusive</li> </ul>

#### 17. Labs (as indicated), include summary of urine testing or last urine drug screen results:

1/30/20 Patient was negative for 13-component urine drug screen, but admitted to use of "super meth" 1 week prior.

Patient had a head CT 11/22/2019: No evidence of intracranial mass, hemorrhage, or edema.

#### 18. Patient Goals/Motivations for Treatment:

"I want to get sober and be happy in life. I want to be a mother that my kids deserve"

"I want to stay sober for one year and be mentally and physically healthy"

#### 19. Proposed Diagnoses:

F11.20 Opioid use disorder severe

F15.20 Amphetamine use disorder severe

F12.20 Cannabis use disorder severe

#### 20. Proposed Treatment Plan:

MAT: Continue p.o. naltrexone 50 mg daily, next IM naltrexone injection 2/7/2020, continue lithium 300 mg three times a day, lamotrigine 50 mg twice a day, Gabapentin 400 mg three times a day, Venlafaxine 75 mg daily

Continue peer support with AODA counseling

UDS negative for all substances

Return to clinic in one week or earlier if clinically indicated

**Libertas:** Attend weekly counseling sessions. Work with a mental health therapist when ready.

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By initialing here \_\_\_x\_\_\_ you have acknowledged that Project ECHO case consultations do not create or otherwise establish a provider-patient relationship between any ECHO clinician and any patient whose case is being presented in a teleECHO clinic.

#### **DSM 5 Criteria for Substance Use Disorder**

A use disorder is characterized by maladaptive use resulting in repetitive consequences over the previous 12 months. A minimum of 2-3 criteria is required for a mild substance use disorder diagnosis, while 4-5 is moderate, and 6-7 is severe (American Psychiatric Association 2013)

- 1. Taking the substance in larger amounts and for longer than intended
- 2. Wanting to cut down or quit but not being able to do it
- 3. Spending a lot of time obtaining the substance
- 4. Craving or a strong desire to use
- 5. Repeatedly unable to carry out major obligations at work, school, or home due to use
- 6. Continued use despite persistent or recurring social or interpersonal problems caused or made worse by use
- 7. Stopping or reducing important social, occupational, or recreational activities due to opioid use
- 8. Recurrent use in physically hazardous situations
- 9. Consistent use despite acknowledgment of persistent or recurrent physical or psychological difficulties from using
- 10. \*Tolerance as defined by either a need for markedly increased amounts to achieve intoxication or desired effect or markedly diminished effect with continued use of the same amount. (Does not apply for diminished effect when used appropriately under medical supervision)
- 11. \*Withdrawal manifesting as either characteristic syndrome or the substance is used to avoid withdrawal (Does not apply when used appropriately under medical supervision)



## Youth Perceptions of Opioid Safety, Knowledge Gaps & Preferences for Education in High Schools

### Olufunmilola Abraham, PhD, MS, BPharm

Assistant Professor, UW-Madison School of Pharmacy Social & Administrative Sciences Division Email: olufunmilola.abraham@wisc.edu

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### Overview

- Opioid prevention programs are especially important for teens
  - Teen prescription drug abuse remains high
  - Critical to proactively combat teen addiction early-onprevention is key!
- Key messages for young people need to be developmentally sensitive
- Little is known about teen preferences



# Research Program Goals



- Promote safe and responsible use of medications among youth
  - Reduce misuse
  - Heighten awareness of unintended negative consequences
  - Enable informed medication use decision-making
  - Increase medication and health literacy



Collaborative Research
On MEdication use
& family health



#### OPIOID MISUSE CAN START IN THE HOME

40.5%

Given by a friend or relative for free

9.4%

Bought from a friend or relative

3.8%

Stolen from a friend or relative

4.9%

Bought from drug dealer or other stranger



35.7%

Prescribed by health care providers

0.7%

Stolen from doctor's office, clinic, hospital, or pharmacy

4.9%

Other

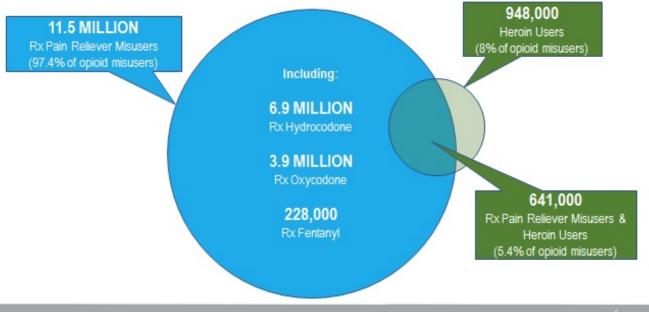
Source: Prescription Drug Use and Misuse in the United States: Results from the 2015 National Survey on Drug Use and Health, SAMHSA



#### OPIOID'S GRIP: MILLIONS CONTINUE TO MISUSE RX PAIN RELIEVERS

PAST YEAR, 2016, 12+

11.8 MILLION PEOPLE WITH OPIOID MISUSE (4.4% OF TOTAL POPULATION)









# Identifying Preferred Educational Interventions for Promoting Opioid Safety among Adolescents

# Study Design & Recruitment

- Mixed methods approach
  - Survey and focus group discussion guide were created by study team using previously-developed questionnaires for adolescents
  - Adolescents' attitudes and knowledge about misuse, safe handling, storage, medication information seeking behaviors, and preferences for education about prescription opioid safety
    - 3 Wisconsin high schools students aged 14-18



# Data Collection & Analysis

### Surveys:

- Administered via REDCap link – laptop, tablet, phone
- → ~ 8–10 minutes long
- R and Stata statistical software

### Focus Groups:

- 5-8 students Audiorecorded &professionally transcribed
- → ~ 45–60 minutes
- Nvivo 12 software



# Demographics

N	190 (%)	No response
Grade		
9th	30 (16.7)	10
10th	79 (43.9)	
11th	33 (18.3)	
12th	38 (21.1)	
Gender		
female	102 (53.7)	
male	74 (38.9)	0
other	14 ( 7.4)	
Race / Ethnicity		
White	101 (53.2)	
Black	2 ( 1.1)	0
Hispanic	60 (31.6)	
Other	27 (14.2)	
RUCA 3.0 zip code designation		
1 or 2: Metropolitan area core / high commuting	128 (71.9)	
7: Small town core	45 (25.3)	12
10.3: Rural areas	5 ( 2.8)	
Age (mean (SD))	16.21 (1.02)	8
People under 18 living in your household? (mean (SD))	2.19 (1.16)	10

190 surveys, 12 uncompleted

53% Female53% White32% Hispanic73% Lived in metropolitanarea

Grades 9-12 represented Average age: 16 years



### **Prescription Opioid Misuse**

- Most students correctly identified opioid misuse as:
  - using someone else's prescription to get an opioid medication (86%)
  - using someone else's prescribed opioid medication (84%)
  - using higher dosages or using the medication more frequently than prescribed (85%)
- ~ 20% of students stated that they would consider using a friend's prescription opioid for relief or consider offering their prescription opioid to a friend for relief



### Consequences of Misuse

- Most students identified that prescription opioid misuse does "quite a bit" or a "great deal" of harm to:
  - physical health
  - mental health
  - school ability
  - family/friend/peer relationships



## Disposal & Storage

- ▶ 14% of students perceived <u>returning an unused opioid</u> <u>medication to the pharmacy</u> as misuse
- 33% of students believed that <u>using an opioid prescription</u> <u>after it expired</u> was not considered misuse
- 65% of students had never learned how to dispose of prescription opioids
- ▶ 70% of students had never learned how to safely store prescription opioids



### **Educational Sources & Preferences**

### Opioid information sources

- Google or other search engines (68%)
- Newspapers (19%)
- Online videos (43%)
- Parents (57%)
- Doctors or nurses (55%)

### Preferences for education:

- Instructor-led lectures (40%)
- Educational websites (34%)
- Online videos (32%)
- Educational video game (21%)
- Written information sheets (20%)



Theme 1: Perceptions and Prevalence of Prescription Opioid Misuse	
Subthemes	Verbatim Quotes
Sharing medications with family	"I got like mouth surgery a while ago, and I couldn't get my prescription medication in time, because I couldn't drive, and both my parents were at work. So my dad had like extra medication from like a mouth surgery like he'd had like three years ago. And he's like here's where it is. You get one, and then you're done." -P1, FG4
Inappropriate disposal	"Like my dad tried to flush his down the toilet, and my mom is like you can't do that. You have to like dispose of them this way. So like we're really aware of that, but honestly, I feel like if you don't have someone in your family that is in the medical profession, you are like 95 times more likely to not know what you're doing, what you should do." -P3, FG4
Inappropriate storage	"yeah, never thought to put a lock on it, just hide it." -P3, FG3
Regional experiences	"I was going to say, 20 minutes north you get meth. Twenty minutes south you get the prescription drugs." -P3, FG2
No personal experience	"Yeah, you don't really hear it and know people are doing it." -P7, FG1
Teen substance misuse	"Teens misuse everything." -P6, FG5



Theme 2a: Reasons of Misuse		
Subthemes	Verbatim Quotes	
Mental health challenges	"they have nobody to talk to, or they have nobody to go to, so they feel that the medicine or the drug is what they can rely on." – P1, FG7	
Stress	"I feel like people don't know how to handle as much. People don't know how to handle stress, so they turn to things that don't actually help with stress, but that's their way out" -P3, FG3	
Peer or family influence	"Peer pressure or like their home life. Like if their parents were into that kind of stuff, then it might promote them to do it more." –P4, FG4	
Recreational use	"They like the feeling that they get when they take them, so they'll do it again." -P5, FG6	
Pain	"It's nice to be pain free." -P6, FG1	
Addiction	"I would say like get addicted to it, and then you keep wanting to get more of it [] because you get so caught into like, I need to have it, that then it probably also hurts your relationship with the people around you because you're more focused on getting more of the drug than on actually interacting with the people around you." -P5, FG5	



Theme 2b: Consequences of Misuse	
Subthemes	Verbatim Quotes
Physical health challenges	"So you have to keep taking more. But then it's just doing worse things to your body." -P7, FG5
Overdose and death	"Well, death is the main one I think. It's a pretty big one." -P1, FG3
Damaged relationships & changes in personality	"You could break relationships with like with your family and friends." -P4, FG6
Decline in school or work performance	"And it's just because they're like, oh, I don't want to be in school anymore, because I'm just going to go smoke with my buddies. And I feel like smoking is like addictive in its own way. But when, if you're like addicted to a prescription painkiller, like that's going to take kids into very similar, if not worse, direction." -P1, FG4
Poor decision-making and legal issues	"Eventually getting into like more illegal things." -P3, FG2



Theme 3a: Sources of Medication Information	
Subthemes	Verbatim Quotes
Television	"Like again, with John Oliver, it's, it was like this family like who owns these prescription drug chains, and they were like having doctor, they were paying doctors off to prescribe more and more fentanyl to their patients, and, yeah, that's no bueno." -P1, FG3
Family	"I feel like I talk to my parents, because it's the most comfortable person to talk to. And then also like I'll talk to my doctor, because they're the professionals about it, so they'll tell me exactly what I need to do." -P4, FG4
Healthcare professionals	"Or whatever the pharmacist tells me at the drive-up window." - P6, FG5
Medication leaflets and pamphlets	"Well, usually the package or the bottle says it itself, but if it doesn't, then I google it." –P5, FG4
Online websites	"Google has all the answers." -P1, FG7
Peers	"Mm-hmm, maybe it was too like maybe if like you had a friend or something that was more knowledgeable on like complications, then you would maybe go to them I'm thinking before like you did anything, but, yeah, doctor or parents if you don't have anybody else." -P1, FG3



### **Theme 3b: Medication Information Misconceptions**

Subthemes	Verbatim Quotes
Incorrect definitions of opioids	"I feel like it's a pill to help you think." -P3, FG7  "I feel like it's a pill that kind of helps out with your physical type body, in a way." -P4, FG7
Incorrect examples of opioids	"Xanax, are those opioids?" -Male, FG3  "Like I said Advil, I said it because like it's powerful, and like it can like show, like a sign that it works, by like helping someone with pain"P2, FG7

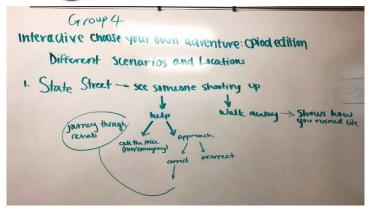


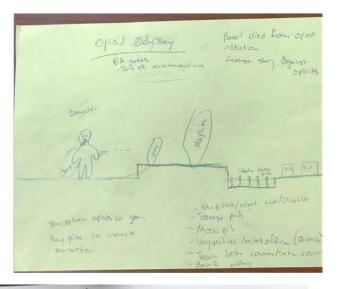
Theme 4: Educational preferences for prescription opioid safety		
Subthemes	Verbatim Quotes	
Speaker presentations	"Like if they brought in a heroin addict, or like this is somebody who was addicted to heroin, they're going to tell you what happened to their life when they were on heroin. Or they bring in somebody who was selling prescription painkillers and got out of prison. And they're like so here's what my life looked like after I sold my prescription drugs." -P1, FG4	
Videos	"I think videos because it's easier." -P1, FG8	
Small group discussions	"Just like in a small room and just talk about it Yeah, something where it's freely and open and like not, like somewhere where they don't have to worry about getting judged." -P7, FG1	
Benefits of educational games	"I feel like that would be interesting because people like use videogames a lot, and they could like learn more about it on the videogames." -P3, FG7	
Barriers to educational games	"I wouldn't play an educational video game, because I'm, when I play video games, I'm not trying to learn stuff, I'm trying to, you know, play the game and get through it as fast as I can." –P2, FG3	
Mandatory learning session with incentives	"They'd have to be mandatory and almost have like a little bit of humor, not, hey, kids, don't do these pills or else you will literally die." -P3, FG2	



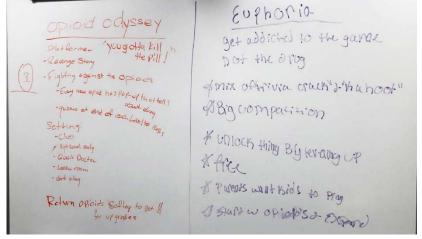
# Game Design















bit.ly/gear\_med\_release

- Digital game to increase awareness about opioid medication safety
- Target audience teens and young adults
- Players learn various aspects of medication safety
  - Sharing medications
  - Safe storage
  - Safe disposal
  - Naloxone education



# Game Design

- Home
- School
- Bus
- Neighborhood







### Conclusions

- Adolescents could benefit from opioid safety education
  - Prevention programs may address misconceptions regarding safe storage and disposal
  - Family, healthcare professionals & teachers play a critical role in teen perspectives on prescription opioid safety
- Game-based learning may help facilitate parent-teen and school-based education on opioid safety





# Comments & Questions?

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