



ACCEPT

Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics

How to Join:

<https://iecho.org/public/program/PRGM1708646970665RHK0C7J5TR>

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

Session Date: Friday, November 15, 2024

Didactic Topic and Presenter:

Marijuana use in Pregnant and Postpartum Patients

Lizzie Hovis, MD

The Periscope Project

Associate Professor, Medical College of Wisconsin

Content Experts: Sheila Weix and Joe Galey

-
- 12:15 PM: Attendance text-in – Introductions
 - 12:25 PM: Case Presentation
 - Presenter: Luke Richard, MD - PGY-3. Internal Medicine, UW-Madison SMPH
 - 1 PM: Didactic Presentation
 - Presenter: Lizzie Hovis, MD
 - 1:15 PM End of Session

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2024 Universal Activity Number (UAN): JA0000358-0000-24-009-L01-P; JA0000358-0000-24-009-L01-T

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This session is designed to meet the requirements outlined in the Medication Access and Training Expansion (MATE) Act.

([Click here](#) for more information.) Number of hours: 1



ECHO ACCEPT

**Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics
2024-2025**

Marijuana use in Pregnant and Postpartum Patients

11/15/2024

Didactic Presenter: Lizzie Hovis, MD

Case Presenter: Luke Richards, MD

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

Intended Audience:

Nurses, Nurse Practitioners, Pharmacists, Physicians, Physician Assistants, Pharmacy Technicians, Psychologists, Social Workers, Patient/Caregivers, Students

Objectives:

As a result of this educational regularly scheduled series, learners as members of the healthcare team will be able to:

- Describe the epidemiology of perinatal marijuana use
- Summarize evidence regarding maternal, obstetric, fetal and childhood effects of marijuana use in pregnancy
- Discuss recommendations regarding the use of marijuana during pregnancy and lactation

Policy on Disclosure

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Name	Role	Financial Relationship Disclosures	Discussion of Unlabeled/Unapproved uses of drugs/devices in presentation?	COI completion date
Randall Brown	RSS Chair	Usona Institute (Grant / Contract), multi-disciplinary association for psychedelic studies (Grant / Contract)	Yes	1/29/2024
Nada Rashid	RSS Coordinator	No relevant financial relationships to disclose	No	2/5/2024
Kathleen Maher	RSS Coordinator	No relevant financial relationships to disclose	No	2/6/2024
Ritu Bhatnagar	Planner	No relevant financial relationships to disclose	Yes	2/8/2024
Paul Hutson	Planner	No relevant financial relationships to disclose	Yes	1/29/2024
Susan Mindock	Planner	No relevant financial relationships to disclose	No	1/29/2024
Sheila Weix	Planner	No relevant financial relationships to disclose	No	2/9/2024
Kellene Eagen	Planner	No relevant financial relationships to disclose	No	1/29/2024
Joseph Galey	Planner	No relevant financial relationships to disclose	No	2/13/2024
David Leinweber	Planner	No relevant financial relationships to disclose	Yes	1/20/2024
Lizzie Hovis	Presenter	No relevant financial relationships to disclose	No	10/31/2024
Luke Richard	Presenter	No relevant financial relationships to disclose	Yes	11/5/2024

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Objectives

- Describe the epidemiology of perinatal marijuana use
- Summarize evidence regarding maternal, obstetric, fetal and childhood effects of marijuana use in pregnancy
- Discuss recommendations regarding the use of marijuana during pregnancy and lactation

Definitions

Cannabis

Cannabinoids

Cannabidiol (CBD)

Delta-9-tetrahydrocannabinol (THC)

Marijuana

Risk Factors for Perinatal Marijuana Use

Younger age

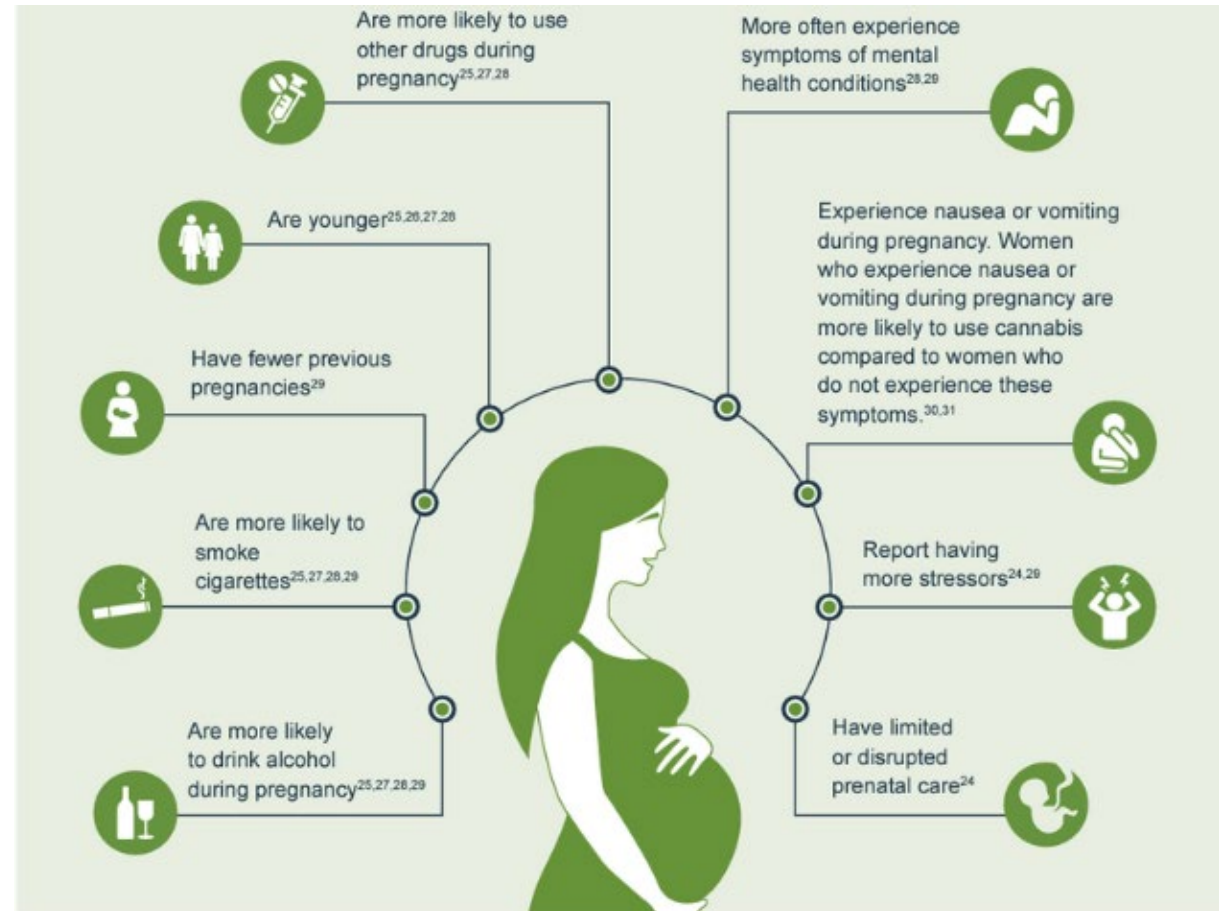
- 22% (<18 yo)
- 19% (19-24 yo)

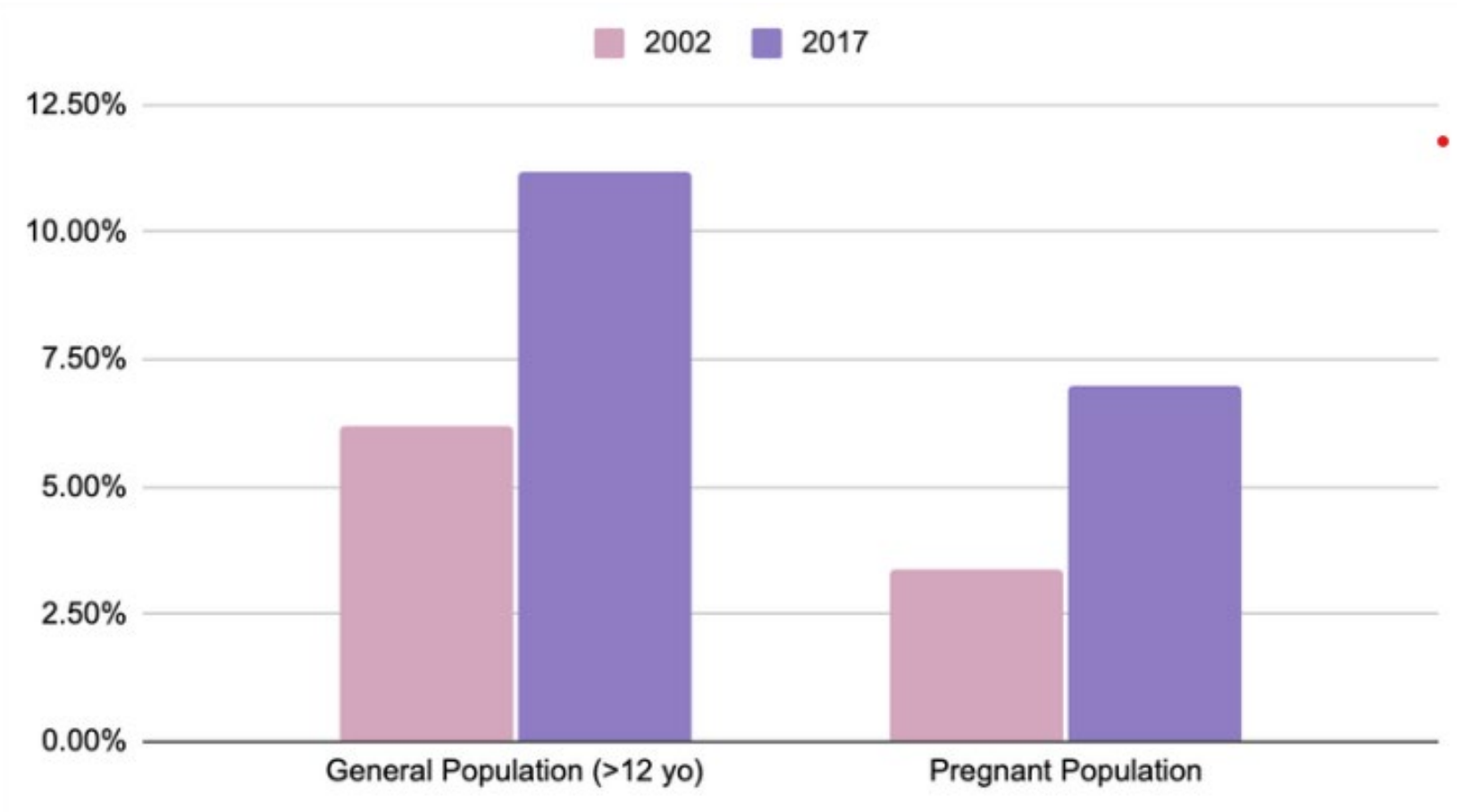
Single/unmarried status

Lower income

Less education

Partner who uses cannabis





Marijuana
Use is
Increasing

Perceived Benefit from Marijuana

Reasons for cannabis use during pregnancy and lactation: a qualitative study

N=52 (30 pregnant patients, 22 pp lactating patients)

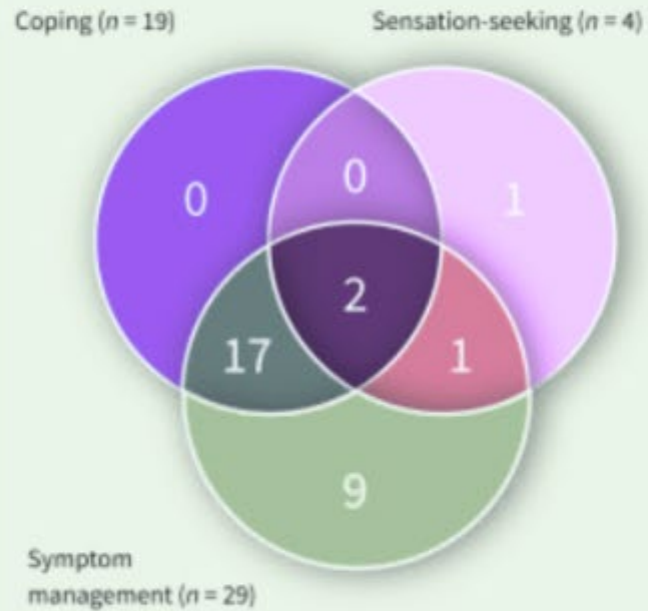
3 identified reasons for marijuana use

- Management of chronic or pregnancy-related symptoms/conditions
- Coping with unpleasant experiences of life
- Sensation seeking (for fun and enjoyment)

Prepregnancy
 $n = 52$



Pregnancy
 $n = 52$



Lactation
 $n = 33$



Vanstone, M., Taneja, S., Popoola, A., Panday, J., Greyson, D., Lennox, R., & McDonald, S. D. (2021). Reasons for cannabis use during pregnancy and lactation: a qualitative study. *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*, 193(50), E1906–E1914. <https://doi.org/10.1503/cmaj>.

Perceived Safety of Marijuana in Pregnancy

70% of a national sample of pregnant women perceived slight to no harm of marijuana use

Cross Sectional National Survey on Drug Use and Health, N= 2247 pregnant women

- 21.6% did not perceive any risk with weekly marijuana use in pregnancy
- Income, age, race, gestational age, and concurrent use of tobacco and/or alcohol were associated with the perception of safety

Risk of Marijuana Use in Pregnancy

Cannabinoids cross the placenta and transfer into human breastmilk resulting in fetal and neonatal exposure

Risks appear to be dose dependent

Perinatal marijuana use has been associated with negative obstetric outcomes including low birth weight and preterm labor

As it relates to structural birth defects data is mixed and inconclusive

In utero exposure to marijuana is an independent risk factor for marijuana use by 14 yo

Risk of Marijuana Use in Pregnancy, Cont.

There exists conflicting data related to effects on infant and child neurodevelopment following in utero exposure

- *2007 and 2012 systematic reviews revealed long term negative impact on attentional skills*
- *2019 systematic review of 21 articles from 7 longitudinal studies*
 - Negative associations in:
 - Motor skills and quantitative skills at age 3
 - Memory, verbal, and perceptual scores as well as vocabulary at age 4
 - IQ at ages 3 and 6
 - Sustained attn and self control at age 6
 - Reading, arithmetic, spelling, underachieving, and educational performance at 10
 - Impulsivity, problem solving capacity, comprehension and rudimentary planning at ages 9-12

Autism Spectrum Disorders (ASD):

- *Mixed findings*
- *Current evidence is not sufficient to conclude that prenatal cannabis use is causally related ASD*

Risk of Marijuana Use in Lactation

Highly lipophilic and can accumulate in breastmilk (with milk to maternal serum ratio as high as 8:1 in individuals who use marijuana chronically)

Mean half life of THC in breastmilk is 17 days

Moderate excretion rate

- Observational Study of 8 women utilizing known amount of inhaled THC with breastmilk concentrations measured at 20 minutes, 1,2 and 4 hours. RID 2.5%

Transfer via breastmilk:

- Theoretical risks to neurodevelopment in infant
- Lethargy, infrequent and shorter feeds have been observed in infants exposed to marijuana via breastmilk

Potential negative impact on breastmilk supply (seen in animal studies)

Potential interference with parents' ability to wake to care for infant

Limitations of Data

Under recognition due to self report

Lack of standardization/information related to dose and composition

Lack of gestational timing of exposure

Evolution of composition and mode(s) of administration

- Avg THC content in cannabis in 1993 and 2019 was 3.4% and 14% respectively
- Advent of vaping, edibles, topicals with potentially different risk profile

Difficulty controlling for confounding factors

- Identifying associations specific to cannabis given frequent co occurrence of factors that have similar fetal, OB and neurodevelopmental effects (eg: alcohol, tobacco use, other substances used)

Data related to structural birth defects is limited to studies with relatively small samples

National Guidelines

ACOG	National Council of State Boards of Nursing	AAP
Recommends women not use marijuana during pregnancy	Advanced practice nurses must consider available evidence around risks of medical marijuana in special populations (including pregnant patients)	Advises pregnant or breastfeeding women to avoid marijuana use.



Case:

MK is 25 year old woman G1P0 at 9wga

Pregnancy unplanned; no longer in a relationship with FOB

CNM referred patient to psychiatry due to elevated PHQ-9 and GAD-7.

Reports low mood, poor sleep, low appetite with poor weight gain in pregnancy, amotivation, anergia.

On evaluation reports daily marijuana use (3-4 x daily)

Next steps?



Case:

Motivational interviewing!

What does marijuana do for you? *Helps with nausea, appetite, sleep, anxiety.*

Any negative impact on your life from marijuana use? *Sometimes makes her feel tired and “lazy.” Unsure if she should be doing this while pregnant but “knows” medications aren’t allowed in pregnancy*

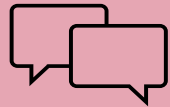
And if unsure...



THE PERISCOPE PROJECT

PERINATAL SPECIALTY CONSULT PSYCHIATRY EXTENSION

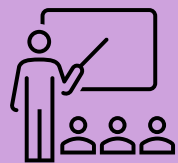
Perinatal psychiatric access program available to providers and professionals caring for pregnant & postpartum women struggling with behavioral health disorders offered at no cost.



Real time consultation between eligible provider and perinatal psychiatrist



Community resource information



Educational materials (live didactic, web-based presentations, toolkit)



Case Presentation

Luke Richard, MD

UW Health, Department of Internal Medicine

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Case Introduction

- ▶ 41-year-old female with a history of opioid use disorder, bipolar I disorder, PTSD who presented to clinic to establish care. She has been living at a residential treatment facility. She would like to discuss resuming suboxone.
- ▶ Discussion question: How do you navigate the prescription of controlled substances for patients living in residential treatment facilities?

Medical & Behavioral Health Diagnosis:

- **Opioid use disorder**
- **Hepatitis C virus infection** – reported history, chronicity unknown, records not available
- **Bipolar I Disorder** – currently experiencing depression (PHQ-9 of 16) with prior manic episodes
- **Severe generalized anxiety disorder** – GAD-7 of 18
- **Post traumatic stress disorder** – childhood sexual trauma, complicated by nightmares
- **Dental caries** requiring extraction
- **Uterine fibroids** s/p total hysterectomy

Current Medications:

- Quetiapine 100 mg, QHS
- Amoxicillin 500 mg TID
- Buprenorphine-Naloxone history:
- **5.7 mg tablet, BID - 32 days** (2–10-day supply each refill, median 6)
- **8 mg film, TID** – 7-day supply prescribed, not filled
- No access for 55 days

Substance Use

- ▶ History:
 - Tobacco use disorder – 30 years
 - Remote history of marijuana and methamphetamine use
 - **Most commonly uses IV heroin**
 - 2 months prior to visit – missed suboxone appointment, used standard dose (0.5 g) of heroin, overdose requiring naloxone and EMS, ED visit followed by incarceration for >30 days
- ▶ Consequences of Substance Use:
 - Social: **Incarceration, lost jobs, frequent moving, poor relationship with family**
 - Physical: **overdose, tolerance, withdrawals, infections**
- ▶ Past treatments:
 - Methadone – several years, intermittent
 - Suboxone

Social History:

- Grew up out of state. Low SES growing up.
- Moved to Wisconsin when pregnant with her third child
- Four children – between 12 and 21 years old
- Education/Literacy: Limited education history.
- Income source: Currently no job. Has worked as a housekeeper in hotels for 20 years.

Family History:

- Mother – cervical cancer, depression, anxiety
- Daughter – autism spectrum disorder
- Son – bipolar I disorder

Patient strengths & protective factors:

- Self awareness
- Desire to seek help
- Children
- Community resources

Risk factors:

- Comorbid, uncontrolled mood disorders
- Poor social support
- Prior incarceration

Labs

- ▶ ALT 408, AST 93, ALP 171, T. bilirubin 0.30, INR 1.0
- ▶ Platelet 245
- ▶ Hepatitis B non-immune
- ▶ Hepatitis A non-immune
- ▶ Hepatitis C, quantitative: 5,238
 - Genotype 3, subtype a
- ▶ HIV negative
- ▶ Urine drug screen negative
- ▶ RUQ US normal

Patient Goals & Motivations for Treatment

- ▶ Overall wellbeing
- ▶ Independence
- ▶ Family time – hunting, fishing and camping

Proposed Diagnoses

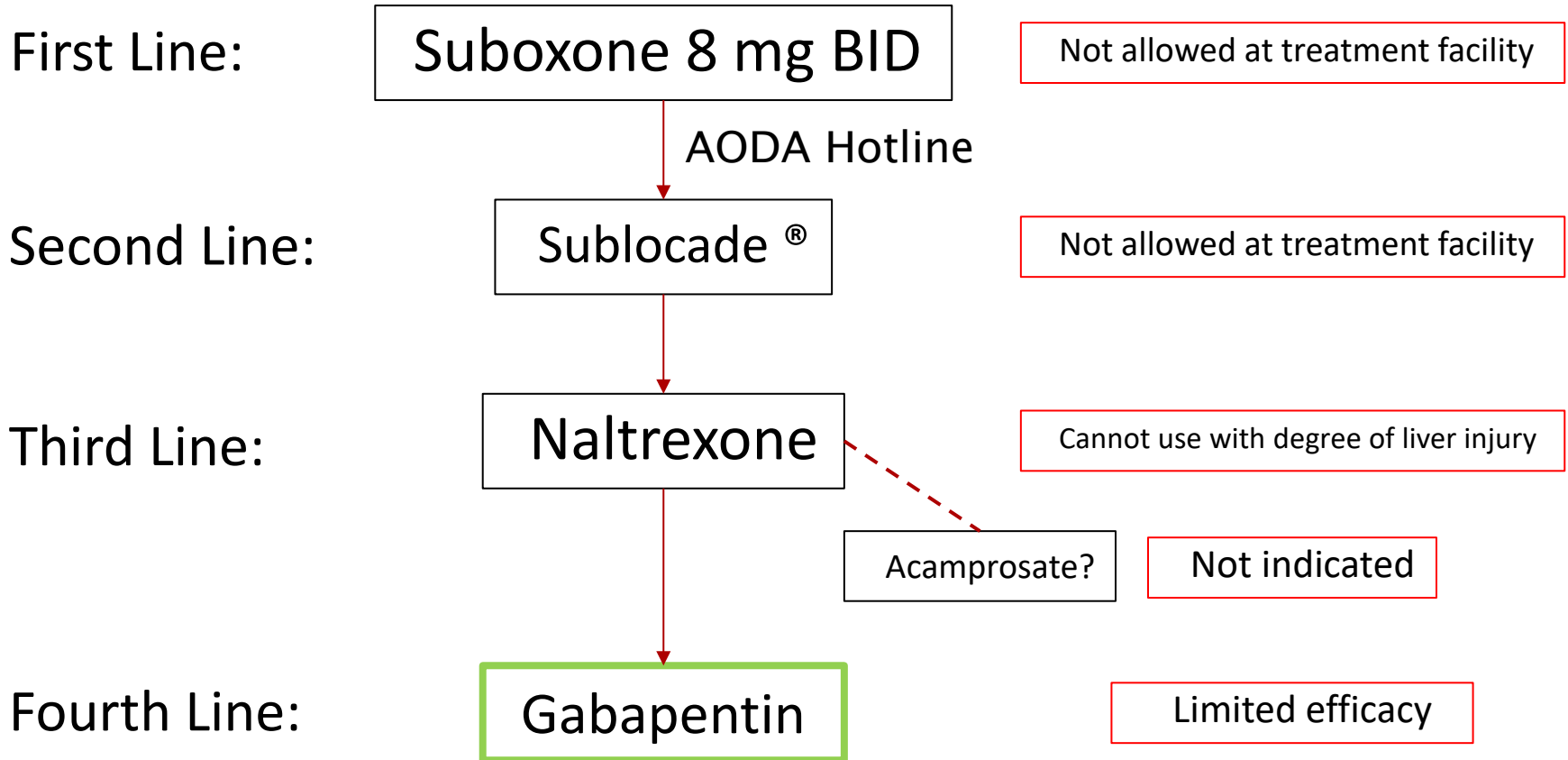
DSM-5 Substance Use Disorder (“Addiction”)

- ▶ Tolerance
 - ▶ Withdrawal
- } Physical Dependence ≠ Use Disorder
- ▶ Larger amts/longer periods than intended
 - ▶ Persistent desire/failed attempts to quit/control use
 - ▶ Much time obtaining/using/recovering
 - ▶ Important activities sacrificed
 - ▶ Continued use despite known adverse effects
 - ▶ Failure to fulfill major obligations
 - ▶ Recurrent hazardous use
 - ▶ Craving
 - ▶ Ongoing use despite interpersonal problems
- 2-3 = mild
4-5 = moderate
≥ 6 = severe

Proposed Diagnoses

- ▶ Opioid use disorder, severe – meets all DSM-5 criteria
- ▶ Complicated by:
 - Chronic hepatitis C infection resulting in liver injury
 - Uncontrolled bipolar I, generalized anxiety, and post traumatic stress disorder

Proposed Treatment Plan



Proposed Treatment Plan

- ▶ Hepatitis C (low risk): Mavyret, 3 tabs daily for 8 weeks. LFTs after 12 weeks. LFTs, INR, CBC every 6-12 weeks
- ▶ Bipolar I Disorder: Referral to psychiatry. Continue quetiapine.
- ▶ Anxiety: Escitalopram
- ▶ PTSD and nightmares: Prazosin
- ▶ Tobacco use disorder: NRT
- ▶ Prophylaxis: Hepatitis A and B vaccines (Twinrix), declined PrEP for HIV

Treatment Course

- ▶ Gabapentin 300 mg BID with limited efficacy
- ▶ Severe withdrawals, but maintained sobriety through treatment program
- ▶ Discharge 4 months after initial visit. Allowed to start suboxone 1 week prior to discharge.
- ▶ Suboxone 8 mg BID. Discontinued gabapentin.
- ▶ Sublocade[®] referral – no show to injection appointment
- ▶ Increased to Suboxone 8 mg TID due to cravings

Discussion:

- ▶ **Primary question: How do you navigate the prescription of controlled substances for patients living in residential treatment facilities?**
 - What is the next best pharmacologic option? Naltrexone, gabapentin, clonidine?
 - What comorbidities should be considered? Liver disease, mental health, other substances, pregnancy.
 - How to advocate for our patients?
 - How to make evidence-based change in the community?

Thank you!

▶ Any questions?

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