



NATIONAL LGBTQIA+ HEALTH  
EDUCATION CENTER

A PROGRAM OF THE FENWAY INSTITUTE

# Addressing Methamphetamine and Other Stimulant Use

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# Continuing Medical Education Disclosure

- Program Faculty: Alex S. Keuroghlian, MD, MPH;
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- Disclosure: I have the following relevant financial relationship to disclose— I edited a textbook with McGraw Hill and receive royalties. Any potential conflicts of interest have been mitigated through an attestation that I will not reference the textbook within this presentation.



# Fenway's Roots

## Fenway Health

- Independent 501(c)(3) FQHC
- Founded 1971
- Mission: To enhance the wellbeing of the LGBTQIA+ community as well as people in our neighborhoods and beyond through access to the highest quality health care, education, research, and advocacy
- Integrated primary care model, including HIV and transgender health services

## The Fenway Institute

- Research, Education, Policy



# LGBTQIA+ Education and Training

The National LGBTQIA+ Health Education Center offers educational programs, resources, and consultation to health care organizations with the goal of providing affirmative, high quality, cost-effective health care for lesbian, gay, bisexual, transgender, queer, intersex, asexual, and all sexual and gender minority (LGBTQIA+) people.

- Training and Technical Assistance
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From Planning to Implementation

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# What is Crystal Meth?

- Methamphetamine
- Looks like rock candy
- Snorting: “rush” effect lasts 3-5 minutes
- Injecting: “rush” effect lasts 5-10 minutes
- Swallowing: “rush” effect up to 30 minutes
- Rectal: Variable duration of “rush”
- Intoxication or “high” lasts 4-16 hours

# The Rush

- Caused by a massive release of norepinephrine, dopamine and serotonin
- Increases release of dopamine in nucleus accumbens, which is part of the reward center in the brain
- Increases heart rate, blood pressure, body temperature

# Cost

- Many people do not have to pay, often freely available at a party
- Can also be exchanged for sex
- Can be sold in smaller amounts, lowest about \$20
- The financial toll is related to impaired judgement and loss of job rather than cost of drug itself

# Crystal Meth Use Among Men Who Have Sex with Men (MSM)

- 10x more use among MSM than general population; annual prevalence 12-30% among MSM
- Increased pleasure from sex
- At one circuit party, 43% reported meth use
- Loss of inhibition
- Weight loss
- Alertness
- Issues of aging in the community



# Crystal Meth and Sexual Activity

- Sex lasts longer, with delay in ejaculation
- Can cause erectile dysfunction, increased sildenafil use
- Disinhibition leads to rougher sex, more rectal trauma and trauma to penis
- Multiple partners
- More condomless intercourse

# Why Crystal Meth at 60 Years Old?

- “It’s the best sex I ever had.”
- “I’m not old and invisible.”
- “I love my partner, but we met when shoulder pads were in style.”
- “Younger guys are interested in me, I know it’s the drugs but when you’re high it feels real.”

# Crystal Meth's Appeal for People Living with HIV

- People with HIV report not having to worry about rejection based on status
- Burnout on safer sex: crystal meth use coincides with condomless sex and sex without HIV pre-exposure prophylaxis (PrEP)

# Recreation Vs. Addiction

- Not all people who use crystal meth become physiologically dependent
- While some people may not escalate use, will often have less safe sex while using
- Many people will go for long periods without escalating use and stop
- Some will use for a long period time and gradually increase use
- Others may develop addiction rapidly

# Patterns of Increase in Crystal Meth Use

- Weekend use extends to weekday use
- Extended periods of heavy use
- Increased sexual risk with use
- More intense sexual behaviors, increase in partners, rougher sex
- People living with HIV start to miss taking antiretroviral medication, others start to miss PrEP
- Missed work, constantly covering up use

# Crystal Meth and Sexually Transmitted Infections (STIs)

- At parties where crystal meth is used, multiple partners is the norm
- Syphilis: painless lesion; primary lesion on tonsil or in rectum is often not seen
- Evolution of gonorrhea resistant to ciprofloxacin
- Lymphogranuloma venereum (aggressive form of chlamydia)
- Methicillin-resistant *Staphylococcus aureus*
- HIV
- Hepatitis

# Crystal Meth and Hepatitis C

- Increase risk of transmission with injecting (slamming), more traumatic sex, sharing bumpers and straws with snorting
- Possibility of increase in cognitive deficits with combination of crystal meth, hepatitis C and HIV, separate from how advanced liver disease is
- Crystal meth adversely impacts engagement in hepatitis C care

# Negative Health Effects (Early)

- Paranoid ideation/delusions, hallucinations
- Depression after high is gone
- Serotonin syndrome when mixed with other club drugs or synaptic serotonin reuptake inhibitors (SSRIs)
- Vascular (stroke, myocardial infarction, colitis)
- Seizure related to overheating



# Negative Health Effects (Chronic Use)

- Persistent psychiatric problems: psychosis and depression
- Memory deficits
- Dental decay related to decreased saliva, grinding teeth, increased sugar intake
- Dermatological effects due to skin picking, “crystal bumps”
- Erectile dysfunction
- Muscle wasting
- Damage to relationships, occupation, finances

# Addressing Crystal Meth Use in Clinical Care

- 20-minute follow-up visits
  - Cannot solve all problems
- Avoid argument
- Do not underestimate ambivalence
  - Relapse is common, should not be thought of as good/bad, it just happens
  - Provider's agenda may not be the patient's agenda
  - Patients do hear what we say, when they are ready

# Harm Reduction

- Many people are not ready to stop, but will engage in care
- Ask patients: what is their bottom line, what would lead them to think there is a problem?
- Hydrate, eat
- Fluoride rinse, sugar free hard candy/gum
- Plans for taking medication during use, can someone be on meds while using; discuss PrEP
- Frequent STI screening
- Safer sex, serosorting

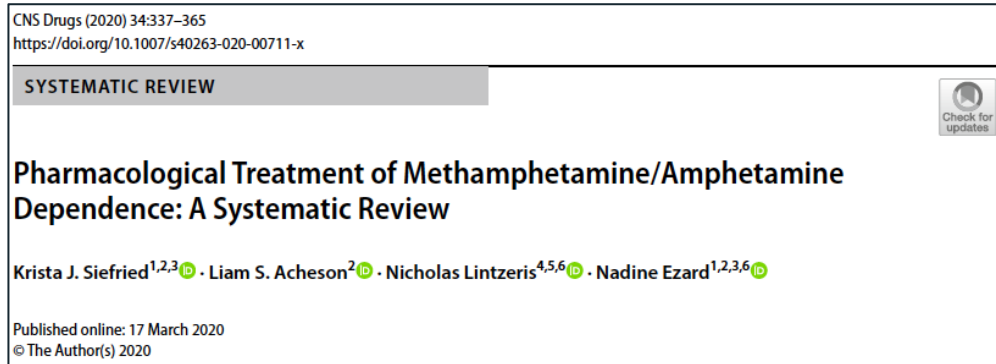
# What Brings Crystal Meth Users Into Recovery?

- Seroconversion
- Work performance
- Relationships/family
- Shame
- Fear around meth-induced psychosis
- HIV not well-controlled
- Primary treatment team

# Sex and Shame

- Important to deal with issues of shame and sex
- Sexual experimentation: multiple partners, receptive sex, sex without condoms or PrEP
- Internet videos
- Sex in sobriety can feel boring, be triggering, can feel less intimate

# Pharmacological Treatment and Non-pharmacological Interventions



- Mixed or weak positive signals, most consistent signals with stimulant agonist treatment (dexamphetamine, methylphenidate), naltrexone and topiramate



- Treatment efficacy in promoting abstinence, reduced use or decreased cravings with behavioral interventions, contingency management, residential treatment, repetitive transcranial magnetic stimulation, and matrix model

# Positive Affect Intervention

- Multi-component intervention developed by Adam Carrico and colleagues
  - Focuses on improving mood states to boost effectiveness of community-based contingency management for stimulant abstinence among methamphetamine users, and in turn achieve more durable reductions in HIV viral load.
- Positive affect intervention focuses on: 1) positive event noting; 2) positive event capitalizing; 3) gratitude; 4) informal and formal mindfulness; 5) positive reappraisal; 6) personal strengths; 7) attainable goals, and 8) acts of kindness (altruism)

# Positive Affect Intervention

- Many people of different skill levels could implement
- Augments contingency management in a compelling way (increasing payments for non-reactive urine drug screens performed 3x/week over 12 weeks)
- Data indicating an impact on viral suppression that is very strong
- Applicable more broadly than only with MSM, and more broadly in terms of other stimulants (e.g., cocaine instead of crystal meth)



# Recovery

- Extreme commitment vs. ambivalence
- Dealing with roles of partners/family
- Inpatient hospitalization often not an option
- Individual and group therapy
- Motivational enhancement therapy
- Partial hospitalization programs
- Crystal Meth Anonymous (CMA), Alcoholics Anonymous (AA), Narcotics Anonymous (NA)
- Tweaker.org

# Early Sobriety

- Often turbulent
- Seroconversion can be trigger to use
- Initially partner/family supportive, however when crisis is over this may change
- Need time in recovery, relapse can happen even after a year out

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The Education Center is part of The Fenway Institute, the research, training, and health policy division of Fenway Health, a Federally Qualified Health Center, and one of the world's largest LGBTQIA+ focused health centers.

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