Methamphetamine Use Disorder

ZEINA SALIBA, MD

ASSISTANT PROFESSOR, THE GEORGE WASHINGTON UNIVERSITY
PSYCHIATRY, ADDICTION & FAMILY MEDICINE

PollEverywhere

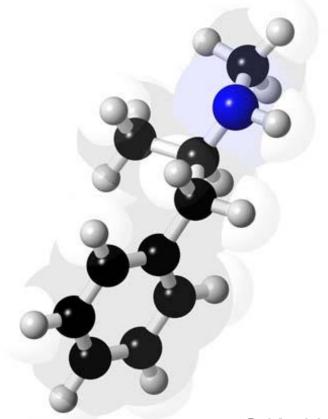
- Purpose
- Instructions

SUDs

- ► Chronic, relapsing nature
- Can inspire cynicism, frustration, resignation
- ▶ Polysubstance increasing
- Psychological, physiologic addiction
- Brain disease plus

Names Speed Chalk Crystal

- Synthetic
- Psychostimulant
- Usu smoked, snorted



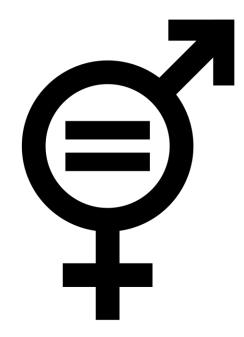
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History

- ▶ 1877- amphetamine, Berlin Germany, Lazar Edeleanu
- ▶ 1919- methamphetamine, Japan, Akira Ogata
- WWII- combat fatigue
- ▶ 1950s- used to treat multiple conditions

Epidemiology

- ► Geographic variation
- ► Fastest-rising drug of abuse worldwide
- ► Early 2000s epidemic, West/Midwest
- mid-2000s: Decreased prevalence



Combat Methamphetamine Epidemic Act of 2005





Meth in Indian Country

- "Native Americans now experience the highest meth usage rates of any ethnic group in the nation."
 - ► NCAI 11/2006
- All have methamphetamine abuse rates nearly 3x higher than whites.
 - ▶ 2006 Bureau of Indian Affairs report
- Meth abuse* rates have reached 30% on some rural Indian reservations

Data

- Data paucity (reservations/urban areas)
 - ▶ IHS doesn't publish/?track meth use
- ▶ Little research on effectiveness of traditional healing practices
- ► Gaps: age groups, ethnic gloss
- Opp: One Sky Center

Data Sources

*school-based surveillance with adolescents

> small research studies

small surveys by tribal councils

AI/NA Youth

► Higher rates of meth use

▶ Differences likely greater

► Multi-drug users, 90%-90%

Tribal Susceptibility

- ▶ National Native American Law Enforcement Association [NNALEA], 2006:
 - 1. "the correlation between meth and alcoholism, where members of drug-smuggling cartels identify alcohol addicts as a primary consumer base targeted for meth distribution, and where the ethnic group with one of the highest alcohol addicts include Native Americans
 - 2. the financial conditions of most tribal communities that force people inclined to utilize illicit drugs to use the 'cheaper' drugs, thereby making meth the drug of choice in tribal communities
 - 3. the geography of tribal reservations makes tribal lands an easy target for drugs being smuggled in across the U.S. borders with Canada and Mexico
 - 4. jurisdictional issues exist that confront tribes and do not confront non-Tribal communities, such as Public Law 280, and outdated tribal codes wherein [the production, sale, or use of] meth is not specifically identified as a crime."

Jurisdictional Loopholes

- 1800s Congressional law gave federal government jurisdiction on Indian reservations for major crimes- didn't specify drugs
- 1978 Oliphant v. Suquamish Indian Tribe Supreme Court case: tribal police has no criminal jurisdiction over non-American Indians
- ▶ 1953-2010 Public Law 280 California was required to assume criminal jurisdiction on all Indian reservations
- 2010 The Tribal Law and Order Act

Limitations

July 2003



Quiet crisis: federal funding and unmet needs in Indian Country

United States Commission on Civil Rights

Law Enforcement

- Underresourced
- Reservations are large with often difficult terrain
- Officers cover large areas
- 90% of tribal police forces surveyed say they need additional druginvestigation training.
 - ▶ Bureau of Indian Affairs Office of Law Enforcement Services
- ► The Indian Civil Rights Act limits tribal courts to imposing one-year sentences and/or fines up to \$5,000

Mechanism

Increased synaptic MA

Video

PK+

- ► Liver metabolism
- Kidney excretion
- Crosses BBB
- Increases BBB permeability
- Smoked or injected, enters the brain in seconds
- Snorted or taken by mouth, produces effects later but last longer

Clinical Manifestations/Symptoms

- Intoxication vs. Withdrawal
- Euphoria, confidence, hyperactivity, rapid speech/thought process
- Increased energy, alertness, decreased need for sleep/insomnia
- ► Heightened sexual desire/improved (at first) function
- Decreased appetite, weight loss
- Mood changes: irritability/aggression, anxiety/panic
- Stereotyped movements of mouth, face, extremities
- SNS activation/Adrenergic hyperactivity- hyperreflexia, tachycardia, diaphoresis, pupil dilation (light-responsive)
- ► Also-hyperpyrexia, HTN, vasospastic events (stroke/MI)
- ?cognitive changes

"Meth mouth"

TOOTH DECAY, DISCOLORED, BROKEN

DRUG SE

dry mouth

clenching and grinding of teeth

POOR ORAL HYGIENE

Related Psychosis

- Suspiciousness/Paranoia
- Hallucinations
- Delusions
- usu w/o delirium
- Overdose psychosis: "spun, tweaking"
- Post-intoxication depression (mild- lethargy; 3-6 months if chronic user)

Disorder

- ▶ DSM-IV TR = methamphetamine abuse/dependence
- ▶ DSM-5 = amphetamine-type substance (stimulant) use disorder
 - problematic pattern use leading to clinically significant impairment or distress

DSM-5 criteria

- ▶ Taken in larger amounts or over a longer period than was intended
- Persistent desire or unsuccessful efforts to cut down or control use
- A great deal of time is spent in activities necessary to obtain, use, or recover from its effects
- Craving, or a strong desire or urge to use
- Recurrent use resulting in a failure to fulfill major role obligations at work, school, or home
- Continued despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of
- Important social, occupational, or recreational activities are given up or reduced because of use
- Recurrent use in situations in which it is physically hazardous
- Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by it
- Tolerance
- Withdrawal

Health Associations/Consequences

- ► High co-morbid rates of psychiatric disorders
 - Dx during sobriety
 - Obtain collateral
 - ► Timeline of sxs/previous episodes
- STIs
- Increased risk of early mortality

Community Impacts

- ▶ 40 to 50% of violent crime cases investigated by FBI (IC) involve meth
- ► Larceny/theft, burglary, sexual assault, sex trafficking, elder abuse
- Child neglect
 - California Indian Legal Services estimated almost ALL cases of children removed from home had at least one parent using meth
 - Many cases of prenatal exposure

Production



TDHE Impact

- Depletes housing stock
- Cost
 - Cleanup
 - Eviction

Tribal Housing Responses

- Institution of policies/procedures/protocols
 - Testing
 - Cleanup manuals
 - Use prohibition on land or by tenants away
 - ► Enforcing lease agreements- eviction
- Banishment/Disenrollment
 - Separation from supports/other benefits
 - Purpose? Efficacy?
 - Individual vs community

Explore

- Sociocultural context of use (peer group, location)
- ► History of Use (age started, periods of sobriety)
- Trauma hx (personal +)

Pharmacotherapy

No FDA-approved medications

► Controlled trials don't show efficacy

► Most meds studied for cocaine

Off-label

► Reduce +/- reinforcement from drug use

► Reduce subjective pre-disposing state

▶ No aversive therapies

Acute Treatment

- Options
 - ► AP if intoxication psychosis
 - ▶ BZD for acute agitation in detox
- ▶ B- or mixed a/B-blockers can exacerbate stimulant-induced CV toxicity
- w/d not life-threatening

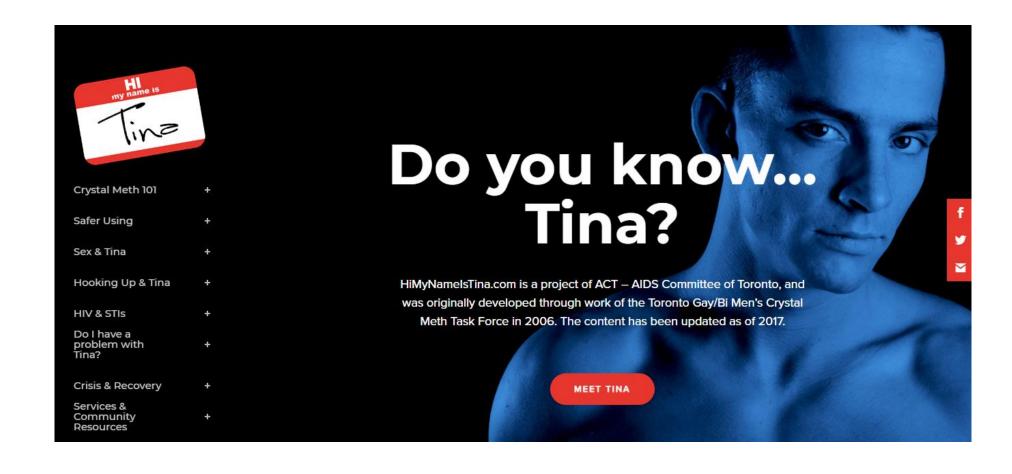
Treatment Barriers

- Addiction treatment usually outsourced
 - Inaccessible
 - ► lack of culturally appropriate healing approaches
- Funding
- ► Limited after-care, community-based ongoing options
- Lack of safe sober housing

Treatment Considerations

- Transportation
- Childcare
- ?Prevention- identify malnutrition & school absenteeism

Harm Reduction

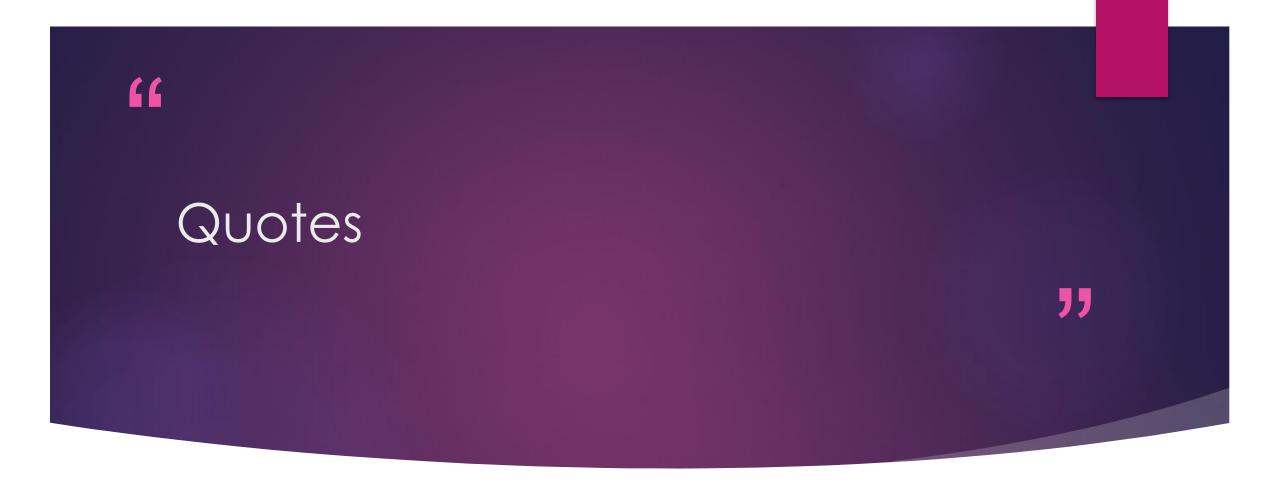


Contingency Management

- ▶ Rewarded behavior (abstinence) more likely to be repeated
- ▶ Benefits fade when (+) reinforcement removed

Motivational Interviewing

- Approach, way of being
- Patient-centered
- Explore ambivalence
- Principles
 - Express empathy
 - Develop discrepancy
 - ▶ Roll with resistance
 - Support self-efficacy



Social Impact & Hope