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Treatment for Methamphetamine Abuse and Dependence

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Matrix/UCLA/LAARC

Supported by NIDA and CSAT

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MA Treatment Issues

- Acute MA Overdose
- Acute MA Psychosis
- MA “Withdrawal”
- Initiating MA Abstinence
- MA Relapse Prevention
- Protracted Cognitive Impairment and Symptoms of Paranoia

Acute MA Overdose

- **Slowing of Cardiac Conduction**
- **Ventricular Irritability**
- **Hypertensive Episode**
- **Hyperpyrexia Episode**
- **CNS Seizures and Anoxia**

Acute MA Psychosis

- **Extreme Paranoid Ideation**
- **Well Formed Delusions**
- **Hypersensitivity to Environmental Stimuli**
- **Stereotyped Behavior “Tweaking”**
- **Panic, Extreme Fearfulness**
- **High Potential for Violence**

Treatment of MA Psychosis

- **Typical ER Protocol for MA Psychosis**
 - Haloperidol - 5mg
 - Clonazepam - 1 mg
 - Cogentin - 1 mg
 - Quiet, Dimly Lit Room
 - Restraints?

Treatment of MA Disorders

- **Traditional Treatments**
 - **Therapeutic Community**
 - **Minnesota Model**
 - **Outpatient Counseling**
 - **Psychotherapy**

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MA “Withdrawal”

- **Depression**
 - **Fatigue**
 - **Anxiety**
 - **Anergia**
 - **Paranoia**
 - **Cognitive Impairment**
 - **Agitation**
 - **Confusion**
- **Duration: 2 Days - 2 Weeks**

Treatment of MA “Withdrawal”

- **Hospitalization/Residential Supervision if:**
 - **Danger to Self or Others, or, so Cognitively Impaired as to be Incapable of Safely Traveling to and from Clinic.**
 - **Otherwise Intensive Outpatient Treatment**

Treatment of MA “Withdrawal”

- **Intensive Outpatient Treatment**
 - **No Pharmacotherapy Available**
 - **Positive, Reassuring Context**
 - **Directive, Behavioral Intervention**
 - **Educate Regarding Time Course of Symptom Remission**
 - **Recommend Sleep and Nutrition**
 - **Low Stimulation**
 - **Acknowledge Paranoia, Depression**

Treatment of MA Disorders

- **State of Empirical Evidence**
 - **No Information on TC or “Minnesota Model” Approaches**
 - **No Pharmacotherapy with Demonstrated Efficacy**
 - **Results of Cocaine Treatment Research Extrapolated to MA Treatment**

Initiating MA Abstinence

- **Key Clinical Issues**
 - **Depression**
 - **Cognitive Impairment**
 - **Continuing Paranoia**
 - **Anhedonia**
 - **Behavioral/Functional Impairment**
 - **Hypersexuality**
 - **Conditioned Cues**
 - **Irritability/Violence**

Initiating MA Abstinence

- **Key Elements of Treatment**
 - **Structure**
 - **Information in Understandable Form**
 - **Family Support**
 - **Positive Reinforcement**
 - **12-Step Participation**
- **No Pharmacologic Agent Currently Available**

Follow-up of 114 MA Users Treated with Matrix Model

Patient Characteristics

Male	54%
Female	46%

Ethnicity

Caucasian	84%
African-American	2%
Hispanic	14%

Age of First Use	21 yrs
Months of Use Before Rx	44 mos

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Follow-up of 114 MA Users Treated with Matrix Model

Amount of Treatment Received

Less than 1 Month	16%
1-3 Months	13%
3-6 Months	33%
6+ Months	38%

Mean Duration of Follow-up - 40 Months

Follow-up of 114 MA Users Treated with Matrix Model

MA Use		
Frequency of MA Use	Baseline	Follow- up
0 in 30 Days	15%	53%
1-3 Times in 30 days	8%	5%
1-2 Times Per Week	14%	7%
3-6 Times Per Week	14%	5%
Daily	49%	30%

Follow-up of 114 MA Users Treated with Matrix Model

Medical/Psychiatric Symptoms

Symptoms in Past 30 Days	Baseline	Follow- up
Hallucinations	30%	9%
Paranoia	24%	7%
“Psychiatric Problems”	24%	5%
Chest Pains	23%	12%
Depression	62%	59%
Headaches	44%	40%

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Follow-up of 114 MA Users Treated with Matrix Model

Employment Status

Status	Baseline	Follow-up
Full-Time	26%	62%
Part-Time	13%	16%
Unemployed	62%	22%

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MA - Cocaine

Follow-up Comparison

- **Matrix Clinic in Rancho Cucamonga, San Bernardino County located 50 miles East of Los Angeles**
- **One to five years follow-up of 100 MA and 100 cocaine users in a CSAT funded study**

MA - Cocaine

Follow-up Comparison

Participant Characteristics

	MA	Cocaine
Male	56.8%	70.3%
Female	43.2%	29.7%
<u>Ethnicity</u>		
Caucasian	78.3%	40.5%
African Amer	0.0%	35.1%
Hispanic	18.9%	16.2%
Other/Unknown	2.8%	8.2%
Avg Age	34 yrs	35.7 yrs

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MA - Cocaine Follow-up Comparison

Study Participation

	MA	Cocaine
Selected for Follow-up	100%	100%
Completed Follow-up	37%	37%
Unable to Locate	38%	36%
In Jail	8%	11%
Deceased	0%	2%
Refused Follow-up	17%	14%

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MA - Cocaine

Follow-up Comparison

Drug of Choice

Frequency of DOC Use at Follow-up	MA	Cocaine
None	44%	47%
1-3x in 30 Days	9%	10%
1-2x Per Week	3%	6%
3-6x Per Week	6%	10%
Daily	37%	27%

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MA - Cocaine

Follow-up Comparison

Employment

Status	MA	Cocaine
Full-Time	54%	51%
Part-Time	16%	14%
Unemployed	30%	35%

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MA - Cocaine Follow-up Comparison

Legal Status

Status	MA	Cocaine
Parole/Probation	11%	11%
None	89%	89%

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MA - Cocaine

Follow-up Comparison

Family Situation

Situation	MA	Cocaine
No Problems	56%	50%
Some Problems	19%	21%
Constant Problems	16%	24%
No Comment	9%	6%

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MA - Cocaine

Follow-up Comparison

Psychological Complaints

Complaints	MA	Cocaine
Headaches	44%	25%
Irritability	72%	47%
Depression	75%	56%
Low Energy	78%	44%
Weakness	66%	38%

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MA - Cocaine

Follow-up Comparison

Medical Complaints		
Complaints	MA	Cocaine
Emer Med Attn (1 yr)	3%	14%
Hospitalized (2 yrs)	8%	30%
“Liver” Problems	3%	44%
Multiple Phys Prob	14%	14%
On Disability	0%	14%