

# CLINICAL PROVIDER QUICK TIPS

ADDRESSING STIMULANT USE IN PRIMARY CARE SETTINGS

WHAT YOU NEED TO KNOW

CME AVAILABLE AT NO COST

**UCLA**

David Geffen School of Medicine

**Integrated Substance Abuse Programs**



Opioid and Stimulant Implementation Support  
Training and Technical Assistance

## Session Title

Methamphetamine use disorder,  
mental health sequela and  
treatment in primary care

## Presenter

Joe Sepulveda, M.D., FAPA, FASAM

Chief of Psychiatry at Family Health Centers of San Diego

Medical Director for Substance Use Disorder Services

Vol Assistant Clinical Professor, UCSD Health Sciences, Dept. of Psychiatry

joes@fhcsd.org

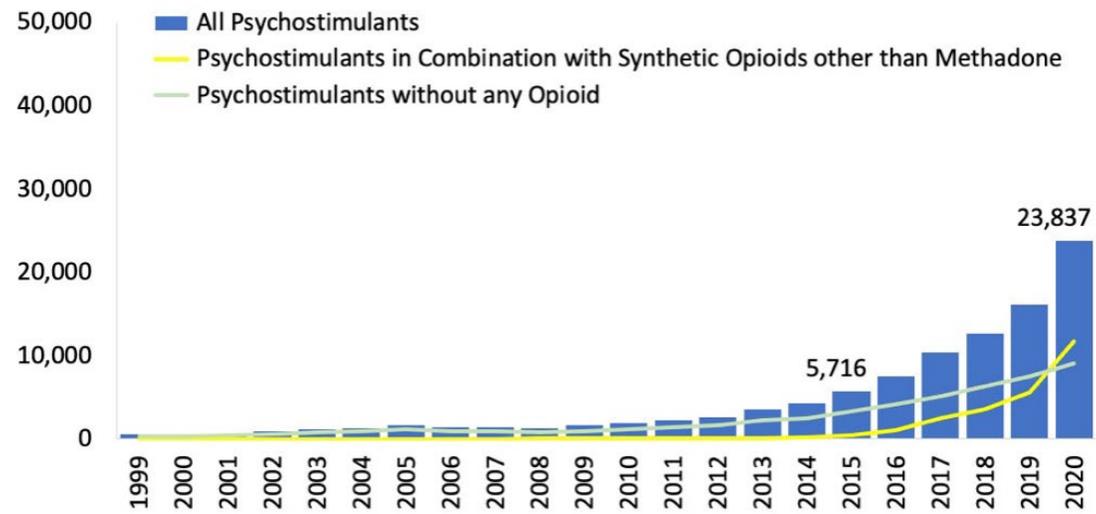


### Takeaway Tips

- Engaging patients with stimulant use disorder in the primary care setting
- Understanding the psychiatric manifestations secondary to methamphetamine use
- Treating psychiatric manifestations secondary to methamphetamine use

# Methamphetamine +/- Opioids and deaths

**Figure 6. National Overdose Deaths Involving Psychostimulants with Abuse Potential (Primarily Methamphetamine)\*, by Opioid Involvement  
Number Among All Ages, 1999-2020**



\*Among deaths with drug overdose as the underlying cause, the psychostimulants with abuse potential (primarily methamphetamine) category was determined by the T43.6 ICD-10 multiple cause-of-death code. Abbreviated to *psychostimulants* in the bar chart above. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2020 on CDC WONDER Online Database, released 12/2021.

# Key principles for the busy primary care physician treating Stimulant Use Disorder

- Avoid confrontation
- Therapeutic alliance
- Meeting the patient where they are at
- Motivational Interviewing
- Frequent follow-up visits
- Counseling plus medication
- Exercise



# Challenges in treating patients with Stimulant Use Disorder

- Ambivalence on need to stop
- Cognitive impairment
- Poor memory
- Poor judgement
- Poor treatment retention
- Anhedonia
- Psychotic presentation
- Psychiatric co-morbidity



# Psychosocial Treatment for Stimulant Use Disorder

## Summary of Evidence Review

Practice	Motivational Interviewing	Contingency Management	Community Reinforcement Approach	Cognitive Behavioral Therapy
Review rating	Strong Evidence	Strong Evidence	Strong Evidence	Strong Evidence
Focus of the practice	Resolving clients' ambivalent feelings and insecurities and enhancing the internal motivation needed to change their behavior	Positively reinforcing desired behaviors	Identifying behaviors that reinforce stimulant use and making a substance-free lifestyle more rewarding than one that includes substances	Helping clients improve the quality of their lives not by changing their circumstances, but altering their perceptions of those circumstances
Can be used in outpatient healthcare settings	✓	✓	✓	✓
Can be used in inpatient healthcare settings	✓	✓	✓	✓
Specific training available	✓	--	✓	✓
Web-based version available	--	✓	✓	✓
Can be practiced by peers	✓	--	--	--
Has been used successfully with males and females	✓	✓	✓	✓
Special populations with whom the practice has been successfully implemented	Men who have sex with men	Men who have sex with men; Co-occurring opioid use disorder; Severe mental disorders	Adolescents	--
Intensity and Duration of Treatment	No prescribed intensity and duration	No prescribed intensity and duration; typically 12 weeks	No prescribed intensity and duration; recommended for 24 weeks	No prescribed intensity and duration; typical range of 5 to 10 months

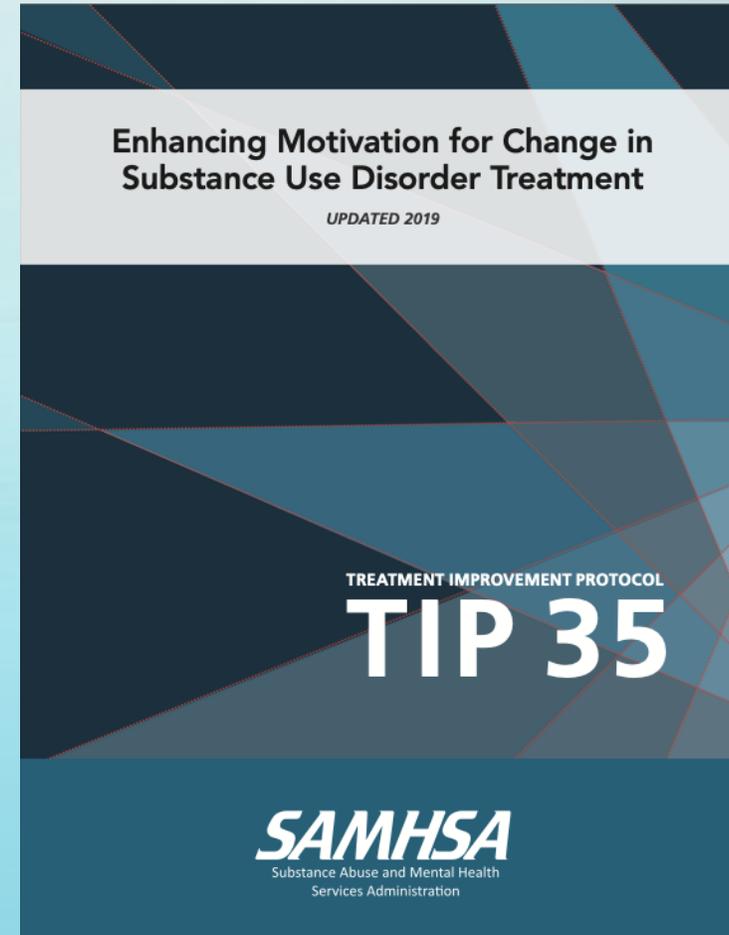
# Motivational Interviewing (MI)

- Evoke change talk from individuals overcome ambivalent feelings and insecurities
- In the process, individuals become more likely to make changes they verbalize
- MI does not have a prescribed time period

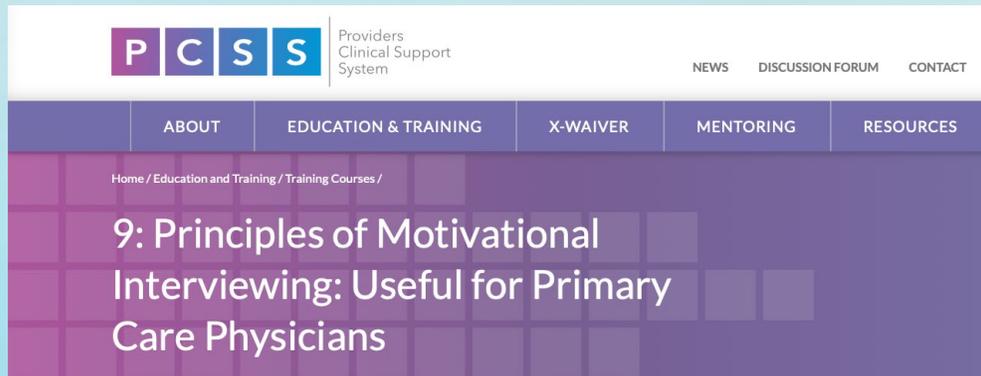


# Five Principles of MI

- Empathy through reflective listening
- Identify discrepancies between patient's goals/values and current behaviors
- Avoid arguments and direct confrontations
- Adjust to a patient's resistance rather than opposing it directly
- Support self-efficacy and optimism



# Additional Motivational Interviewing Resources



The screenshot shows the PCSS (Providers Clinical Support System) website. The header includes the PCSS logo and navigation links for NEWS, DISCUSSION FORUM, and CONTACT. A secondary navigation bar lists ABOUT, EDUCATION & TRAINING, X-WAIVER, MENTORING, and RESOURCES. The breadcrumb trail reads: Home / Education and Training / Training Courses /. The main content area features the title "9: Principles of Motivational Interviewing: Useful for Primary Care Physicians" on a purple background.

<https://pcssnow.org/education-training/training-courses/principles-of-motivational-interviewing-useful-for-primary-care-physicians/>



<https://csam-asam.org>



The screenshot shows the PCSS website with the PCSS logo on the left and the American Psychiatric Association logo on the right. The main content area has a dark blue background with the title "Motivational Interviewing: Brushing up on the Basics" in white text.

<https://pcssnow.org/wp-content/uploads/2018/09/PCSS-Final-Webinar-Presentation-Carla-Marienfled-091918.pdf>



<https://www.asam.org>

# Acute physical & psychological effects... Some are seen as beneficial by patients

- Physical

## Increase

- Energy/Productivity
- Heart Rate
- Blood pressure
- Respiration
- Pupil size

## Decrease

- Appetite (weight loss)
- Sleep
- Reaction time

- Psychological

## Increase

- Energy
- Confidence
- Alertness
- Mood/Euphoria
- Sex Drive
- Talkativeness

## Decrease

- Boredom
- Loneliness
- Timidness

# Chronic methamphetamine use

- Skin Excoriations
- Delusional parasitosis
  - Formication



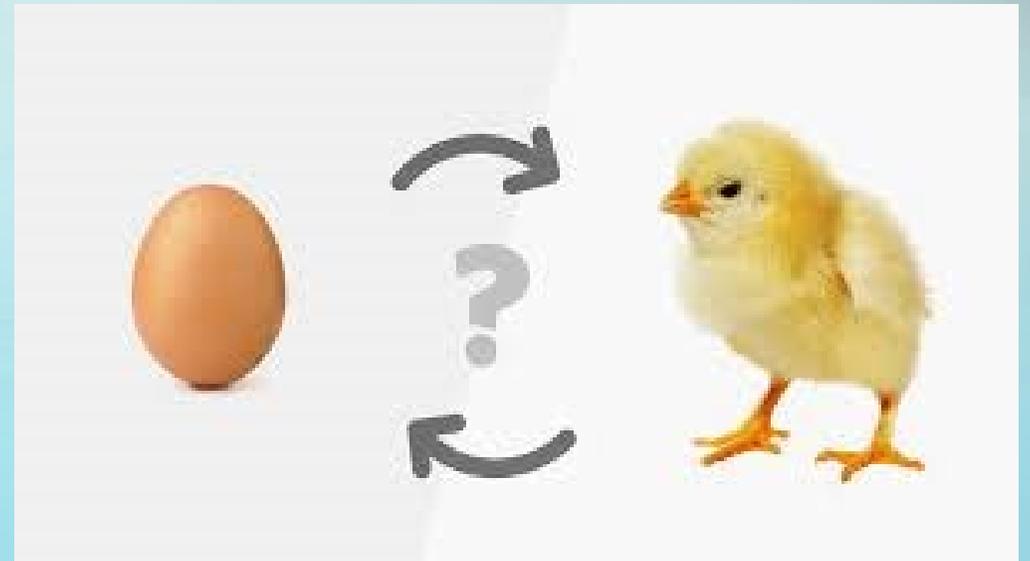
# Chronic psychological effects of Methamphetamine use

- Psychosis
  - Hallucinations
  - Paranoia
  - Persecutory delusions
- Depression
- Poor concentration
- Poor memory
- Irritability
- Panic reactions
- Insomnia
- Confusion
- Fatigue

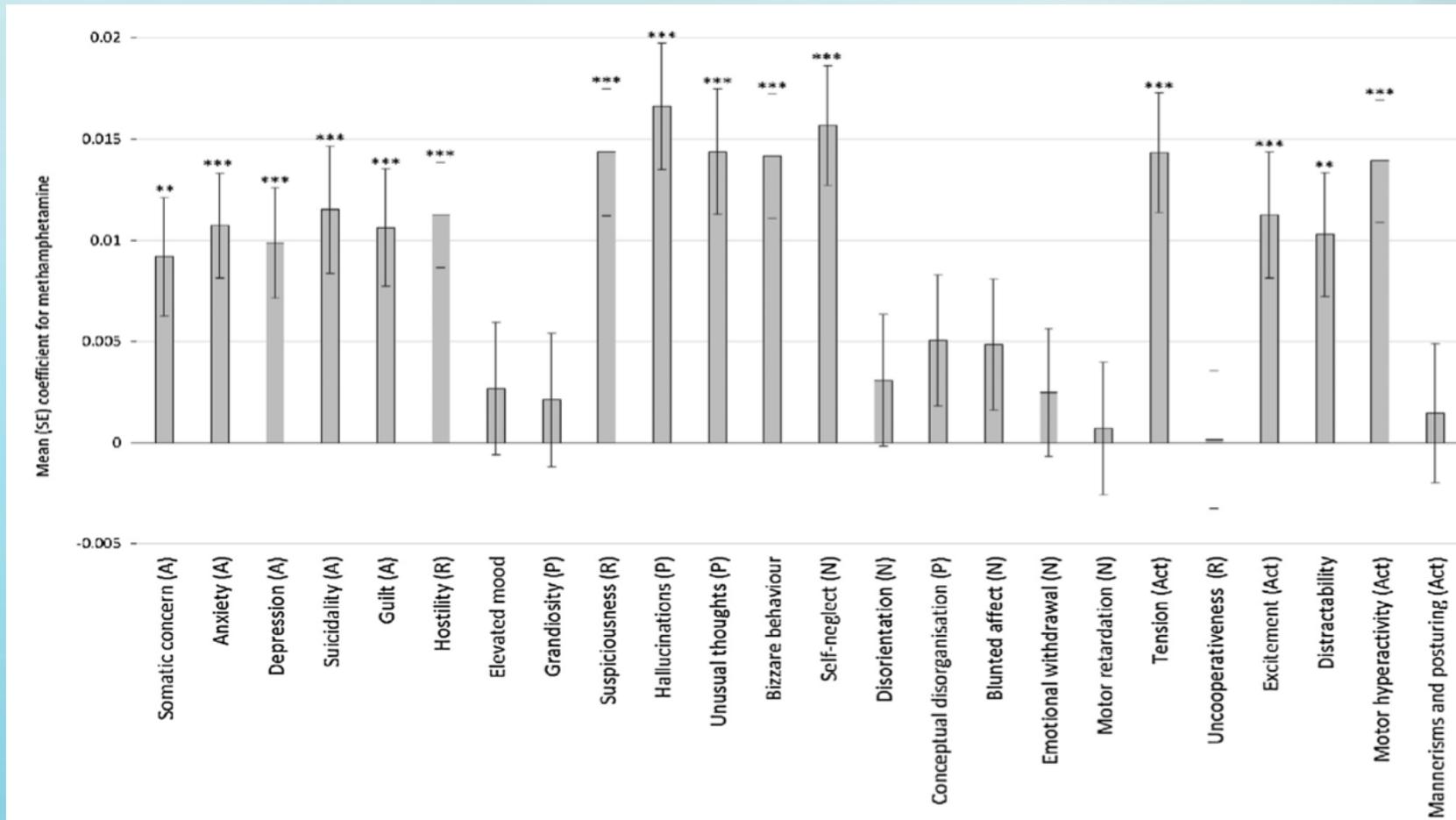


# Challenges to disentangling psychiatric symptoms caused by Methamphetamines vs pre-existing psychiatric disorders

- Conflates psychiatric symptom profiles
  - Difficult to identify diagnostic boundaries
- Acute presentation DDX often
  - Psychotic disorder vs. Substance induced psychotic disorder
- Methamphetamine Psychosis
  - Affects ~26-46% of people with a methamphetamine use disorder
- Up to half of regular methamphetamine users
  - Have a comorbid psychiatric disorder
  - ~40% major depressive disorder
  - ~20% primary psychotic disorder
  - ~30% with meth-induced psychosis will be re-diagnosed with a schizophrenia spectrum disorder diagnosis within 8 years



# The profile of psychiatric symptoms exacerbated by methamphetamine use



# Symptoms exacerbated by Methamphetamine use cluster on three dimensions

BPRS item	Factor 1 "Affective symptoms"	Factor 2 "Positive psychotic symptoms"	Factor 3 "Stimulant effects"
Somatic concern	0.42		
Anxiety	0.47		
Depression	0.71		
Suicidality	0.70		
Guilt	0.45	0.34	
Hostility	0.67		
Suspiciousness		0.88	
Hallucinations		0.67	
Unusual thought content		0.89	
Bizarre behavior		0.41	0.37
Self-neglect	0.61		
Tension	0.32		0.43
Excitement			0.75
Distractibility			0.61
Motor hyperactivity			0.90

Note: Only factor loadings > .30 are shown.

# Methamphetamine Induced Psychosis (MAP)

- Increase risk of psychosis
  - Earlier onset of use
  - Longer duration of use
  - Higher quantity use
  - Polydrug use
  - Nature of Meth use (i.e. crystal)
- Transient psychosis
  - Almost indistinguishable from acute Paranoid Schizophrenia
  - Usually subsides 2 weeks to 1 month from abuse abstinence
- Persistent Psychosis
  - >1 month after abstinence
  - Chronic cognitive issues
- Long-term treatment and follow-up
  - 1/3<sup>rd</sup> of MAP may transition to primary psychosis over time



# Medication for Methamphetamine Induced Psychosis (MAP)

- Second generation antipsychotics (SGAs)
  - Preferred
  - Lower incidence of extrapyramidal symptoms (EPS)
- First generation antipsychotics
  - Can worsen sx's of dysphoria and anxiety
- Effective antipsychotics for MAP
  - Aripiprazole
  - Olanzapine
  - Quetiapine
  - Risperdal
  - Haloperidol

Second-  
Generation  
Antipsychotic  
Medications

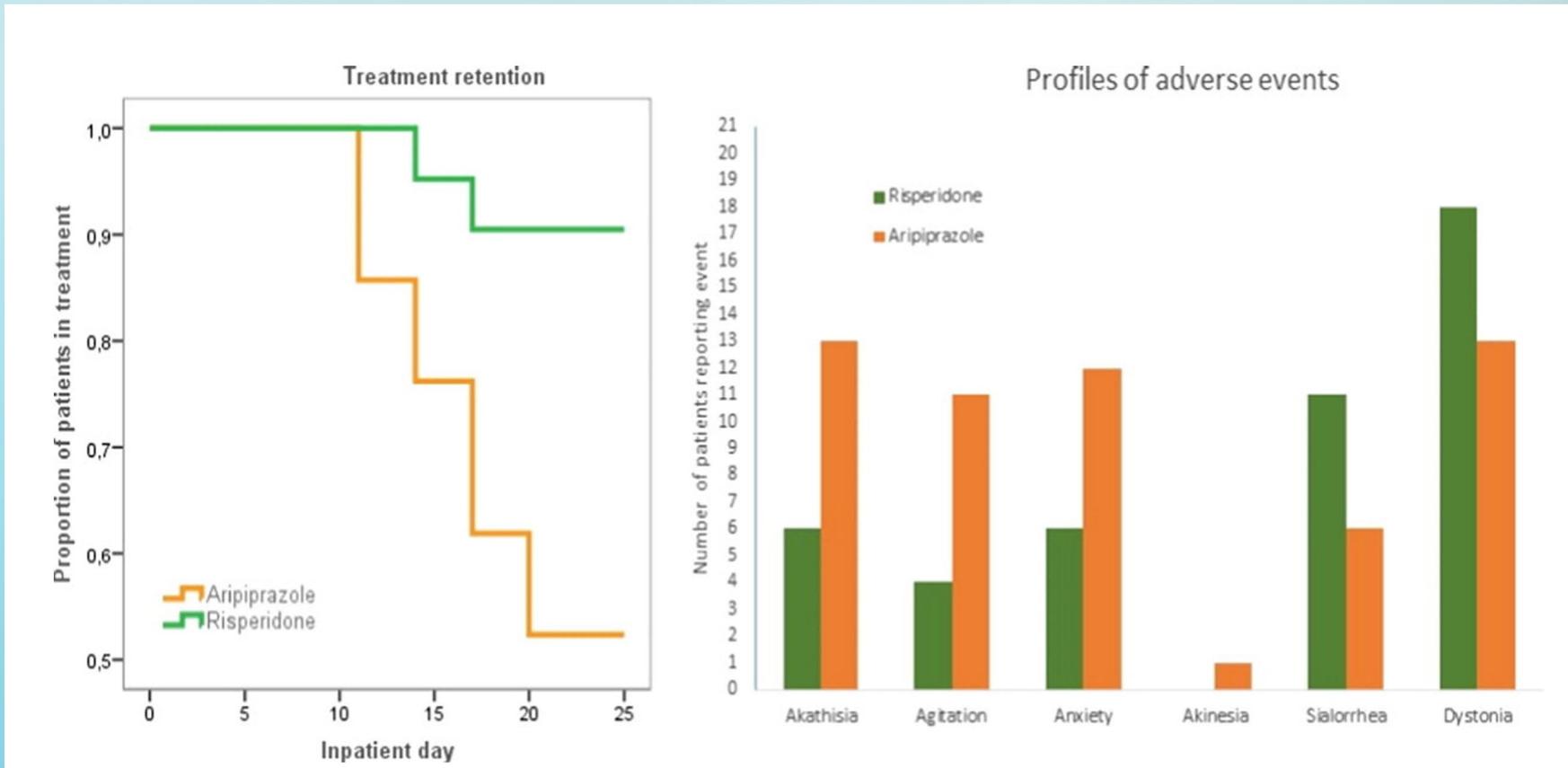
# Medication for Methamphetamine Induced Psychosis (MAP)

- Haloperidol (1-40 mg/day PO)
  - Higher rates of EPS
- Olanzapine (5-20 mg/day PO)
  - Weight gain
  - Sedation
- Quetiapine (50-800 mg/day PO)
  - Sedation
  - Weight gain
- Aripiprazole (5-30 mg/day PO)
  - Akathisia
- Risperdal (2-8 mg/day PO)
  - Weight gain
  - Sedation
  - Dose-dependent EPS



**SIDE EFFECT**

# Medication for Methamphetamine Induced Psychosis (MAP) – Risperdal vs. Abilify



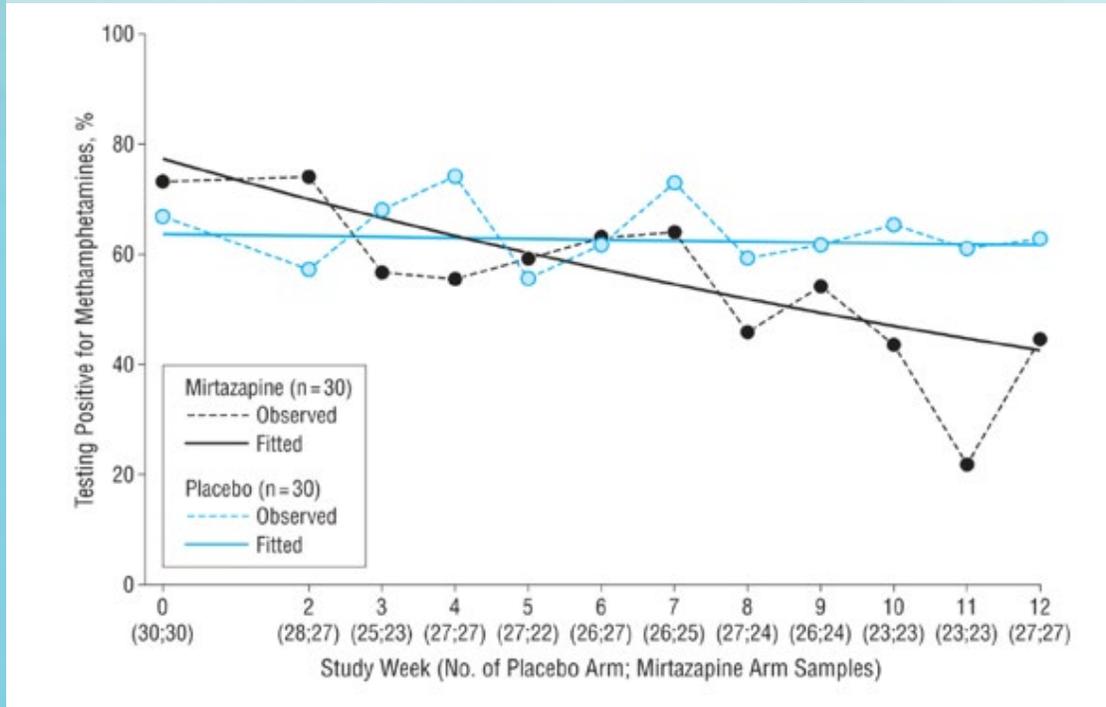
Wang, G., et al, J Subst Abuse Treatment. 2016

# Stimulant Use Disorder, Depression and Anxiety

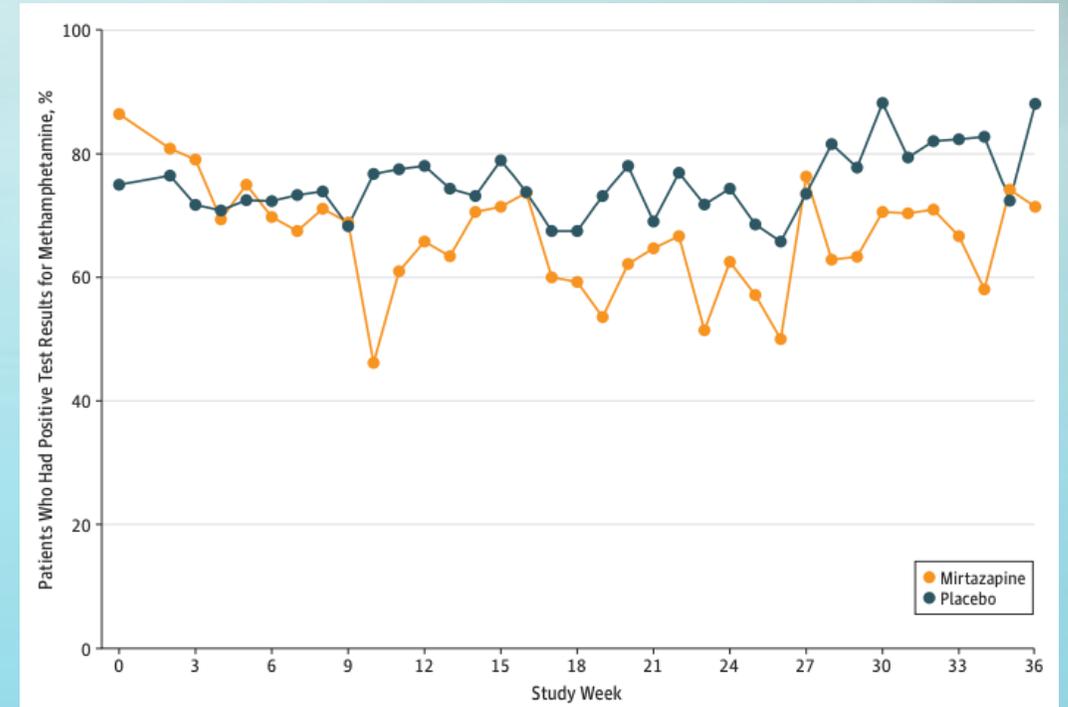
- Treat co-occurring psychiatric disorders such as depression and anxiety
- May be important in preventing relapse to methamphetamine use
- Relapse is often triggered by affective symptoms.
- Mirtazapine and Wellbutrin may help reduce methamphetamine use



# Mirtazapine effects on Methamphetamine use



Colfax, GN, et al., Arch Gen Psychiatry. 2011 Nov.; 68(11): 1168-1175



Coffin, PO., et al., Arch Gen Psychiatry. 2011 Nov.; 68(11): 1168-1175

# Bupropion effects on Methamphetamine use

Randomized trial of bupropion SR 150 mg bid vs placebo for 12 weeks in methamphetamine users with *less than daily meth use*

Total sample	Bupropion (N=41)	Placebo (N=43)	P value
End of treatment abstinence	29% (12)	14% (6)	0.087

Only 32% (13/41) of bupropion participants were deemed medication adherent via week 6 plasma bupropion level. Adherence was strongly associated with end of treatment meth abstinence.

Bupropion only	Adherent (N=13)	Non-adherent (N=28)	P value
End of treatment abstinence	54% (7)	18% (5)	0.018

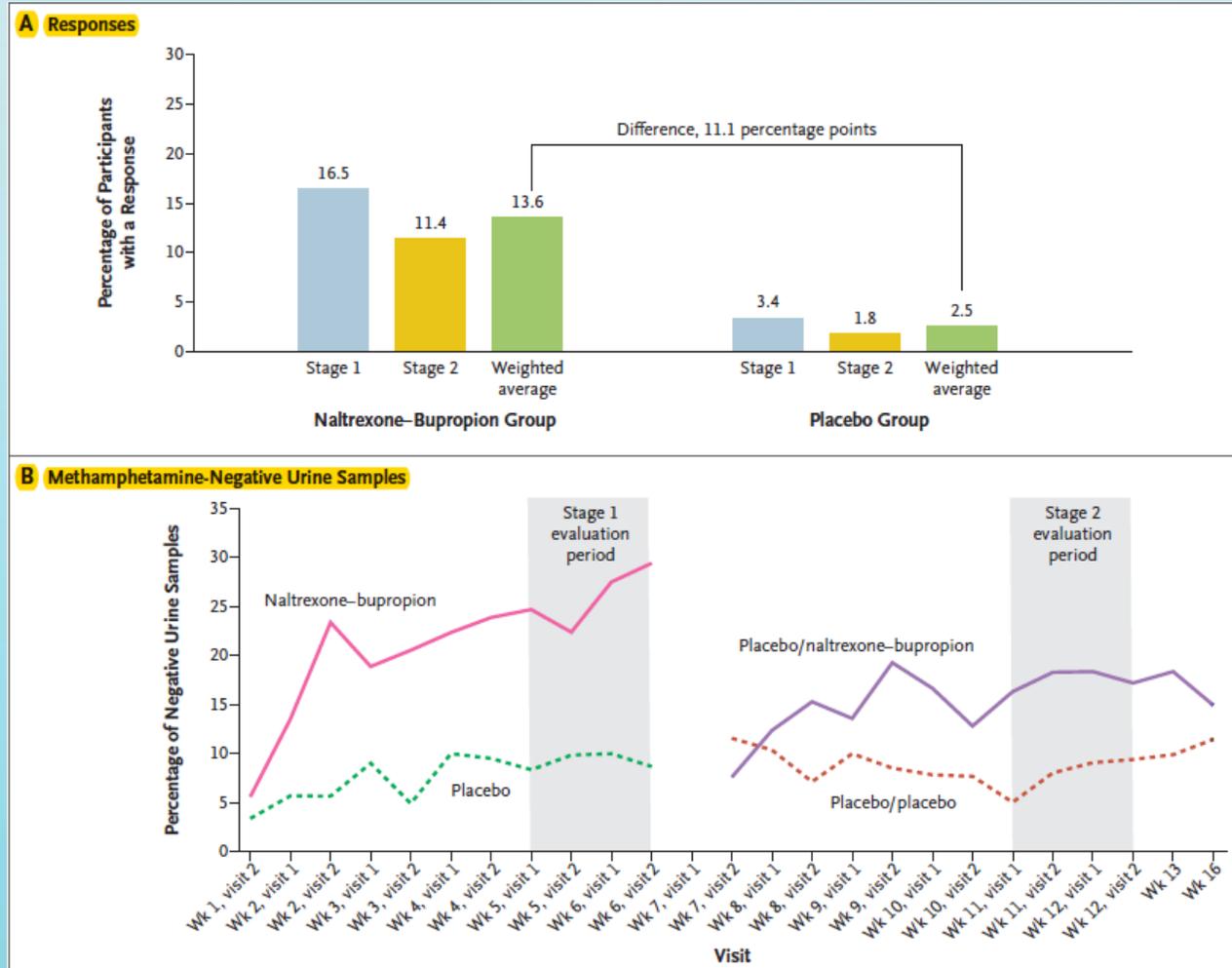
# Mirtazapine

- Start mirtazapine at 15 mg qHS
- Increase to 30 mg qHS after 7 days
- May increase to 45 mg qHS
- Treats
  - Depression
  - Anxiety
  - Helps with Insomnia
- Common side effects
  - Weight gain
  - Sedation

# Bupropion

- Start Bupropion XL 150 mg daily
- Increase 300 mg daily after 7 days
- May increase to 450 mg daily
- Treats
  - Depression
  - Smoking cessation, SR formulation
- Avoid
  - Abuse ETOH/Sedatives or undergoing abrupt ETOH/Sedative discontinuation
  - Bulimia/Anorexia Nervosa
  - Increase risk of Seizures
- Common Side effects
  - Dry mouth
  - Anxiety
  - insomnia

# Naltrexone LAI + Bupropion XL



# Naltrexone PO and Naltrexone LAI + Bupropion XL

- Patients must be opioid-free for a minimum of 7-10 days before starting Naltrexone treatment
- Administer Naltrexone extended-release injectable suspension 380 mg via intramuscular injection monthly or oral naltrexone 50 mg daily.
- Naltrexone extended-release injectable suspension in combination with Bupropion XL (In the study previously shown):
  - Administered Naltrexone extended-release injectable suspension 380 mg via intramuscular injection **every three weeks** in combination with Bupropion XL
  - Titrated Bupropion XL 150 mg on day 1, 300 mg on day 2, and 450 mg daily beginning day 3
  - Doses can be reduced to alleviate adverse effects although in the trial the prescribing clinicians were encouraged to attempt to raise the dose back up to the 450 mg daily dose



THANK YOU

## Clinical Provider Quick Tips

-- Addressing Stimulant Use in Primary Care



For content information/questions:

[slarkins@mednet.ucla.edu](mailto:slarkins@mednet.ucla.edu)

For information about CME:

[kvalencia@mednet.ucla.edu](mailto:kvalencia@mednet.ucla.edu)

Check website often for more Quick Tips Videos and Resources:

[www.uclaisap.org/clinicalproviderquicktips](http://www.uclaisap.org/clinicalproviderquicktips)

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