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Psychiatry and Addictions Case Conference

UW Medicine | Psychiatry and Behavioral Sciences

TREATING MAJOR DEPRESSION IN THE SETTING OF OUD

NATHAN SACKETT, MD

UW ADDICTION PSYCHIATRY FELLOW

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SPEAKER DISCLOSURES

- ✓ Any conflicts of interest?
  - ✓none

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OBJECTIVES

Explore the relationship between mood sx and OUD.

Review 6 papers examining tx MDD in OUD.

Summarize/Discuss

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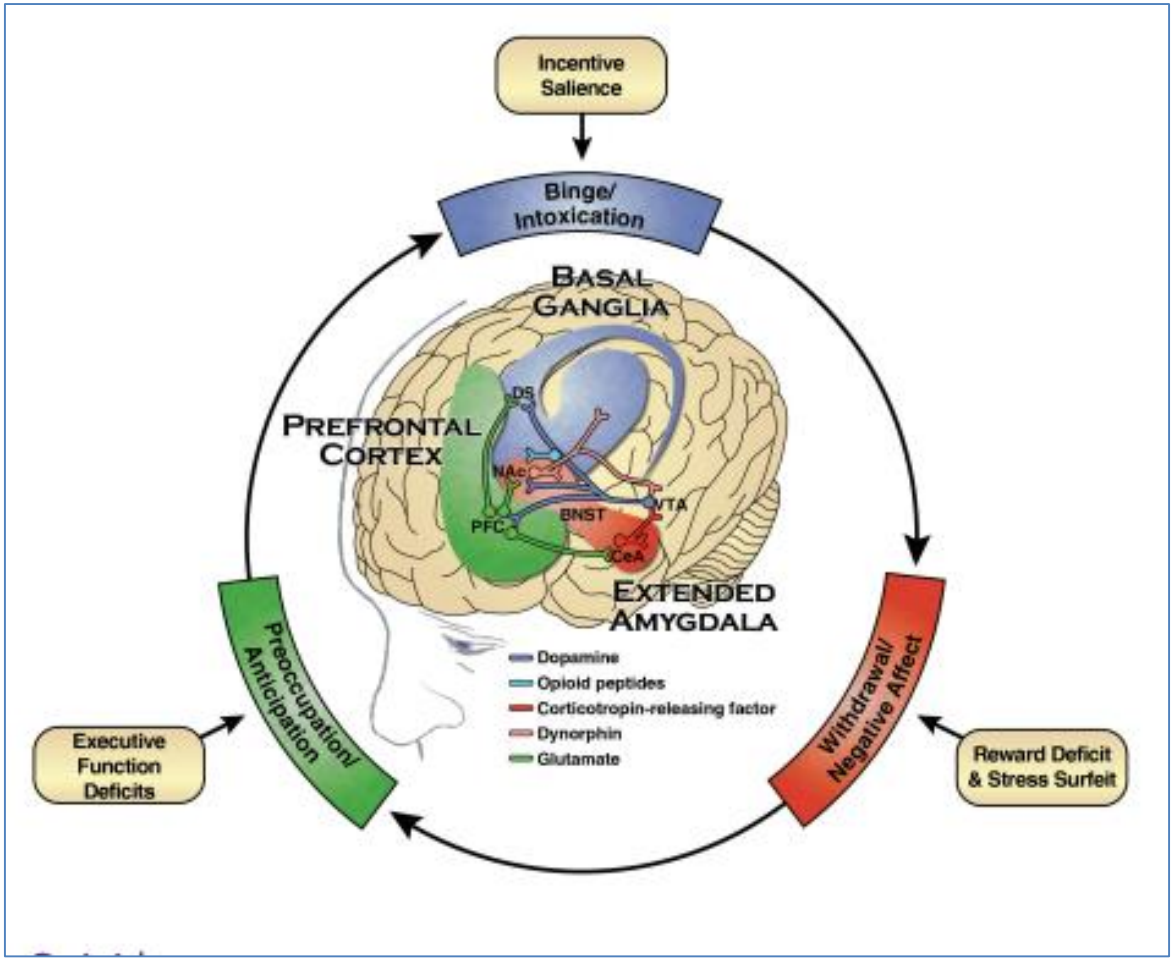
BACKGROUND



LITERATURE

All FDA treatments for depression excludes substance users

Studies examine:

- All Substance Use (alcohol, cocaine, opioids, nicotine) vs Any psychiatric dx;
- Specific SUD vs Any psychiatric dx;
- Specific SUD vs Specific Psychiatric dx (Mood, anxiety, PTSD, BiPD, SCZ);
- All vary by population demographics – gender, age, pregnancy status, SES, treatment type, diagnostic methods, SUD tx phase, SUD use pattern.
- Varied outcome of interest – Psychiatric sx, SU outcome

SIGNIFICANCE

Pathways between nonmedical opioid use/dependence and psychiatric disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions

Silvia S. Martins[a,*], Katherine M. Keyes[b,c], Carla L. Storr[a,d], Hong Zhu[e], Howard D. Chilcoat[a,f]

[a] Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD 21205, USA
[b] New York State Psychiatric Institute, New York, NY 10032, USA
[c] Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, NY 10032, USA
[d] Department of Family and Community Health, University of Maryland School of Nursing, Baltimore, MD 21201, USA
[e] Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD 21205, USA
[f] GlaxoSmithKline Worldwide Epidemiology, Research Triangle Park, NC 27709, USA

- Bidirectional relationship
  - OUD increases risk of developing MDD
    - HR 4.6 (2.8, 7.6)
  - MDD increases risk of developing OUD:
    - HR 5.2(3.2, 8.2)

LITERATURE

Efficacy of antidepressants in substance use disorders with and without comorbid depression
A systematic review and meta-analysis

Marta Torrens[a,*], Francina Fonseca[a], Gerard Mateu[a], Magí Farré[b]

[a] *Psychiatric and Drug Abuse Department, Hospital del Mar-IAPs, Passeig Marítim 25-29, E-08003 Barcelona, Spain*
[b] *Pharmacology Unit, Institut Municipal d'Investigació Mèdica (IMIM), Barcelona, and Universitat Autònoma de Barcelona, Spain*

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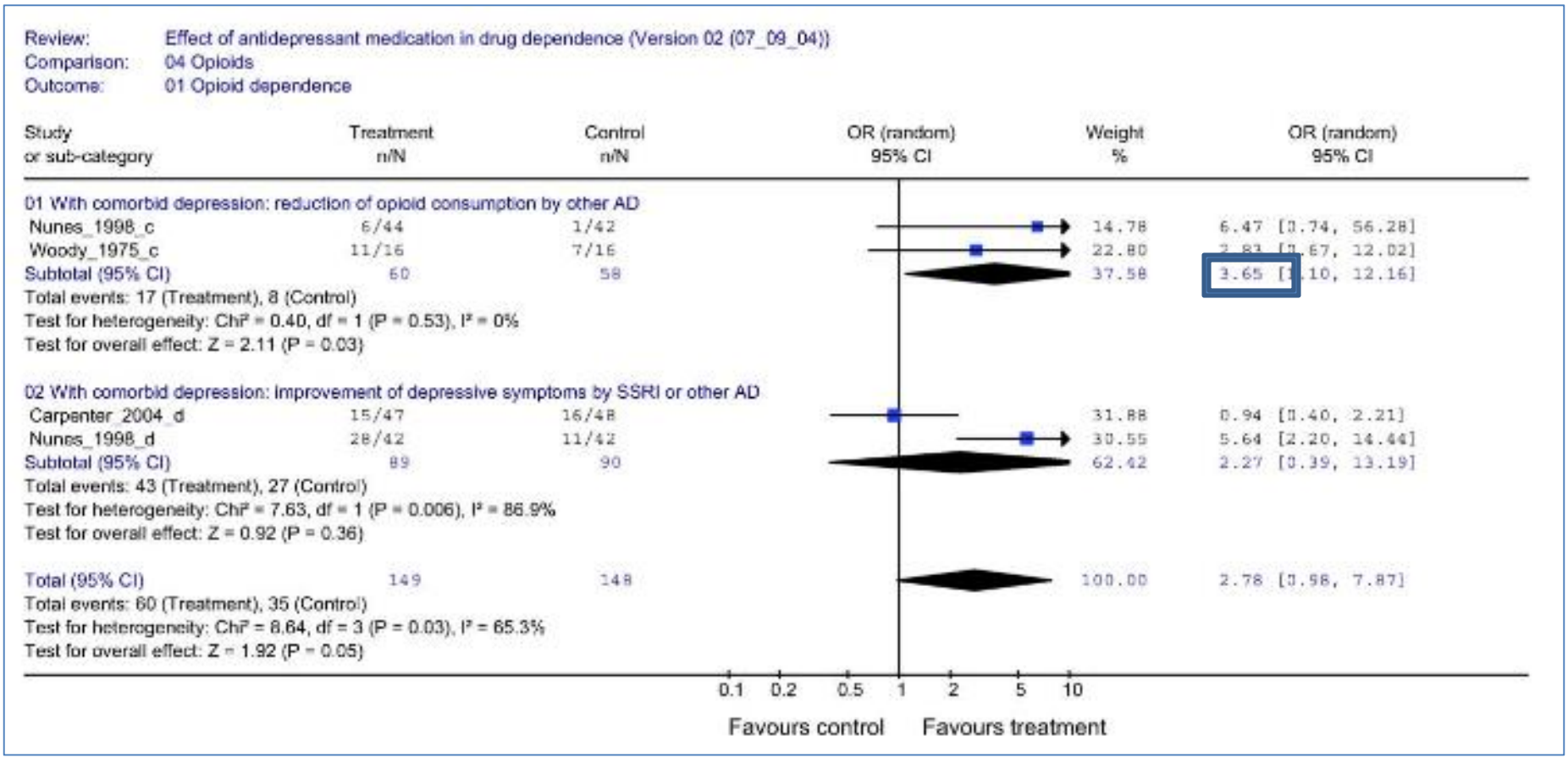

LITERATURE

Treatment of Depression in Patients with Opiate Dependence

Edward V. Nunes, Maria A. Sullivan, and Frances R. Levin

Table 1. Antidepressant trials in Methadone-Maintained, Opiate-Dependent Patients with Depressive Disorders or Symptoms: Methodology and Mood Outcome

Author, Year (Sample Size)	Method of Selecting Depression at Baseline	Medication Trial (Dose mg/day/ Duration Weeks)	Outcome Measures[a]	Outcome on Active Medication[a]			Outcome on Placebo[a]			Composite Effect Size[b] Cohen's d (95% CI)
				Baseline	End Study	% Reduction	Baseline	End Study	% Reduction	
Woody et al 1975 ($N = 35$)	Depressed by psychiatrist's judgement[c]	Doxepin (100–150/16)	HamD +: BDI**:	18.3 9.1	7.1 3.6	61 60	18.3 9.1	15.1 10.3	17 −13	.93 (.04 to 1.83)
Titievsky et al 1982 ($N = 76$)	HamD > 17[c]	Doxepin (up to 100/4)	HamD*: POMS +:	27.5 103.6	19.5 89.5	29 14	27.0 111.0	22.6 105.6	16 5	.56 (−.05 to 1.17)
Kleber et al 1983 ($N = 46$)	Evaluation by psychiatrist, DSM-III MDD	Imipramine (150–225/8)	HamD: BDI:	20.1 15.1	10.1 10.2	50 32	19.5 13.3	11.2 10.4	43 22	.13 (−.48 to .74)
Ziedonis and Kosten 1991 ($N = 15$)	SCID for DSM-III-R MDD or DD (subgroup of cocaine dependent sample)[d]	Desipramine (150/12)	BDI:	9.6	9.0	7	8.5	17.3	−100	.0 (−1.14 to 1.14)
Arndt et al 1992 ($N = 79$)	None, depression outcome reported[e]	Desipramine (250–300/12)	BDI: ASI Psych Comp*:	15 .21	7 .12	53 43	13 .15	9 .20	31 −33	.27 (−.27 to .81)
Margolin et al 1995 ($N = 149$)	None, depression outcome reported; subgroup ($N = 36$) HamD> 12 also reported[e]	Bupropion (200–300/12)	HamD: ASI Psych Comp:	7.8 .09	4.6 .09	41 0	8.2 .10	6.2 .12	24 −20	.22 (−.14 to .57)
Nunes et al 1998 ($N = 137$)	SCID for DSM-III-R MDD, DD, or NOS (evaluation by psychiatrist)[d]	Imipramine (up to 300/12)	HamD***: %mood response*:	16.2	10.0 42	38	15.6	14.4 21	8	.68 (.33 to 1.00)
Petrakis et al 1998 ($N = 144$)	Evaluation by psychiatrist DSM-III MDD, DD, or NOS[d]	Fluoxetine (up to 60/12)	HamD: BDI:	14.0 17.6	8.0 9.6	43 45	14.9 12.6	7.2 7.9	52 37	−.20 (−.81 to .42)
Dean et al 2002 ($N = 49$)	BDI > 21	Fluoxetine (20/12)	MADRS:	28.6	19.9	30	27.8	17.8	36	−.18 (−.75 to .40)
Carpenter et al 2004 ($N = 95$)	SCID for DSM-III-R MDD or DD (evaluation by psychiatrist)[d]	Sertraline (up to 200/12)	HamD: %mood response:	21.1	14.5 32	31	21.1	14.9 33	29	.07 [illegible]
Pooled Estimate of Effect[f]										.26 (.04 to .47)

LITERATURE

The effect of sertraline and environmental context on treating depression and illicit substance use among methadone maintained opiate dependent patients: a controlled clinical trial

Kenneth M. Carpenter*, Adam C. Brooks, Suzanne K. Vosburg, Edward V. Nunes

Division on Substance Abuse, New York State Psychiatric Institute, Columbia University College of Physicians and Surgeons, 1051 Riverside Drive, Box 120, New York, NY, 10032, USA

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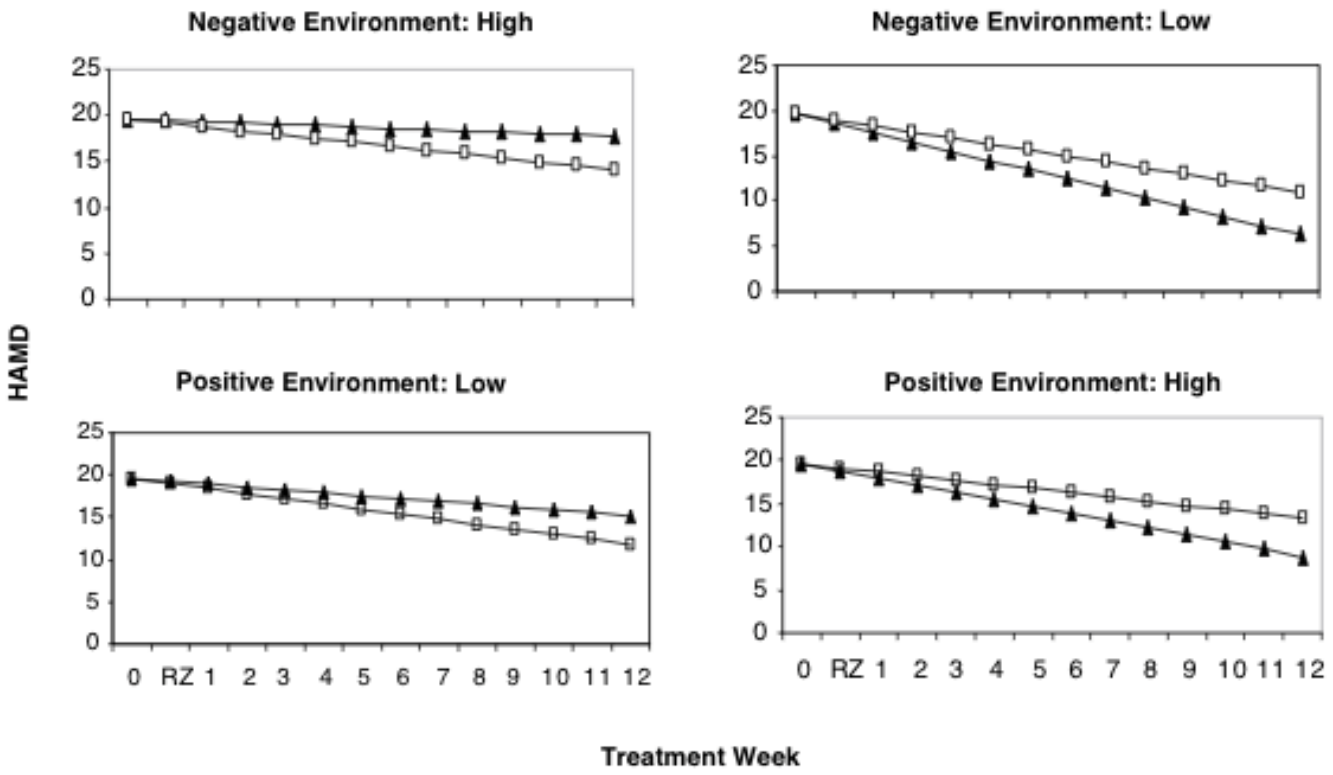

Fig. 1. Depression Scores (HAMD) by treatment group (sertraline (▲); placebo (□) under high and low positive and negative environment conditions.

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LITERATURE

Depression history as a predictor of outcomes during buprenorphine-naloxone treatment of prescription opioid use disorder

Andrew D. Peckham*, Margaret L. Griffin, R. Kathryn McHugh, Roger D. Weiss

Department of Psychiatry, McLean Hospital and Harvard Medical School, Belmont, MA, USA

Table 1
Models to predict successful opioid outcomes during a 12-week treatment study.

	Odds ratios, adjusted		
	Model 1	Model 2	Model 3
Predictors of good opioid outcomes	(N = 360)	(N = 317)	(N = 317)
Gender	0.93	0.82	0.97
Treatment condition[a]	0.78	0.71	0.76
Heroin ever	0.56*	0.57*	0.53*
Major depression lifetime	1.82**	1.63[t]	1.81*
Depression score at baseline		1.01	
Depression score at week 4 of treatment		0.98	
Abstinence goal			1.39
Mutual-help groups during treatment			1.67*

Note. All variables were assessed at baseline (N = 360), with the exception of week 4 depression symptoms and mutual-help group attendance (N = 317).

[t] $p < .055$.

* $p < .05$.

** $p < .01$.

[a] Standard medical management alone or combined with opioid counseling.

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TREATMENT GUIDELINES

Treatment for Substance Use Disorder With Co-Occurring Mental Illness

Muhammad N. Iqbal, M.D., Charles J. Levin, B.A., Frances R. Levin, M.D.

1. SSRI's are first line given safety profile for those with OUD and MDD;
2. TCA's have more data, but carry SE risk; cardiac, QTc, hypotension.
3. All should include Behavioral interventions; 12-step, MI, CBT.

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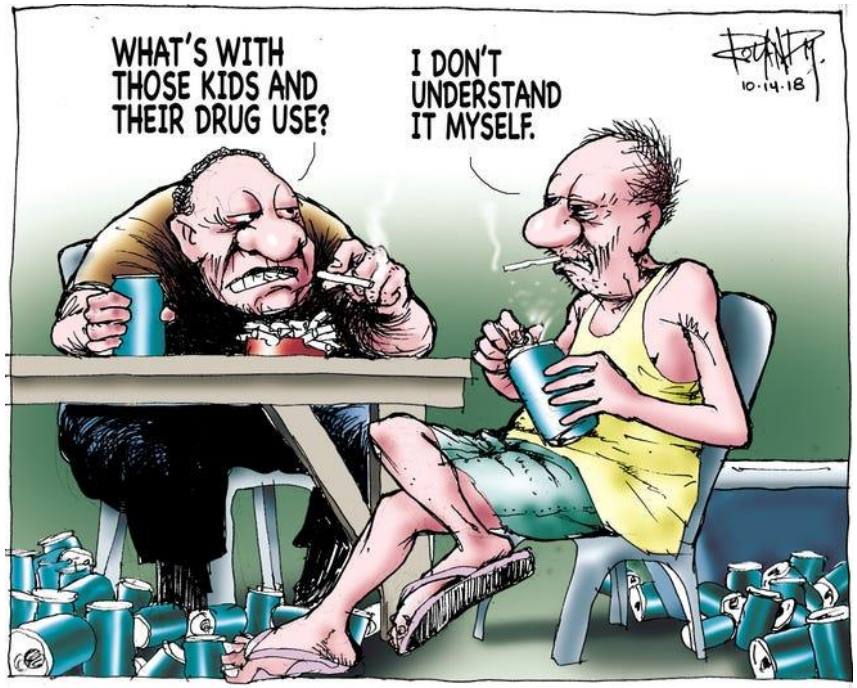
SUMMARY

- Martin et al - Epi study demonstrate 5x risk of MDD in OUD and 5x risk of OUD among those with MDD;
- Torrens et al - meta-analysis (2004); very small effect of antidepressants on opioid use;
- Nunes et al - meta-analysis (2010); very small effect of antidepressant on depressive sx, Cohen's D – 0.26.
- Carpenter et al - RTC (2004); sertraline and social context have small effect on mood sx.
- Peckman et al- secondary analysis demonstrated self-help engagement as a predictor of improved Opioid use outcomes
- Take home: tx MDD with SSRI's, despite limited data.
- More data for TCA's, but SSRI's safer;
- **Context matters – more engagement improves all outcomes.**



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- Peckman et al, 2020
- Pettinati et al 2013
- Iqbal et al, 2019

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