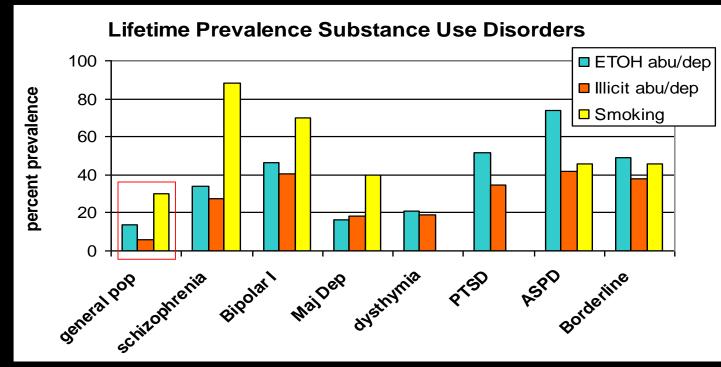


Co-Occurring Mental Health Disorders in Patients with OUD

Presenter: Jason Ehret, MD

Dual Diagnosis: Scope of the Problem



•General pop, schizophrenia, bipolar, unipolar, dysthymia (ECA data early 1980's) Regier et al.(JAMA,1990)

•PTSD (NCS data early 1990's) Kessler et al. (Arch. Gen Psy,1995)

•Borderline (1980's – 1990s), Trull et al. (Clin Psy Rev, 2000)

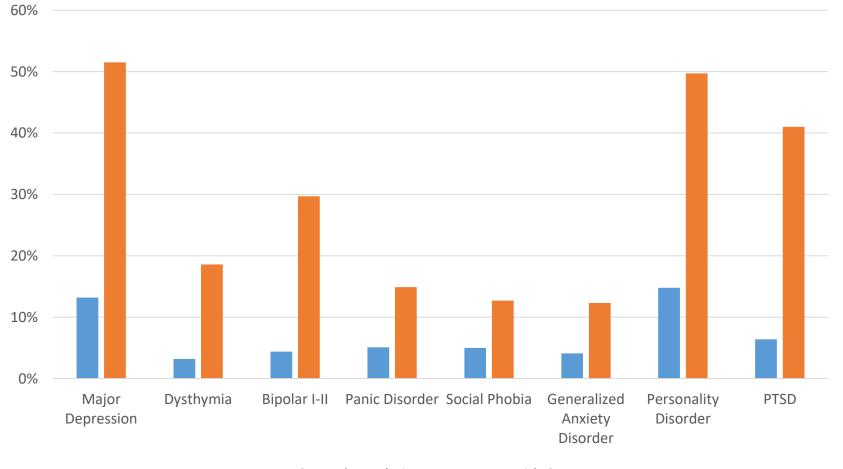
•All smoking data (1980 local outpt study), Hughes et al. (Am J Psy,1986)

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Lifetime Prevalence of Psychiatric Disorders: General Population vs OUD

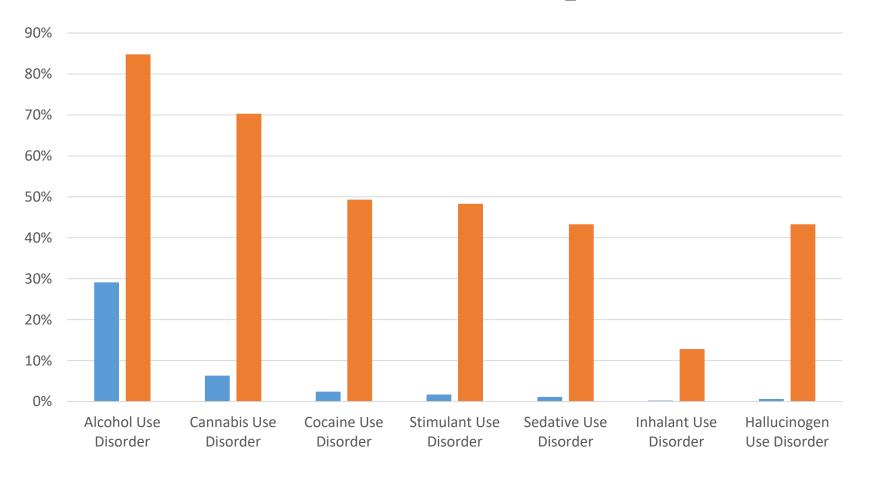


General Population Persons with OUD Grant et al 2004, Grella et al 2009, Hasin et al 2015, Mills et al 2004

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Lifetime Prevalence of Substance Use Disorders: General Population vs OUD



General Population Persons with OUD

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Grant et al 2004, Grant et al 2016, Grella et al 2009, Hasin et al 2015



Psychiatric Disorders and Opioid Dependence Reciprocally Increase Risk

- Pre-existing psychiatric disorders:
 - Generalized anxiety disorder: 11x risk of developing opioid dependence
 - Bipolar I disorder: 10x risk of developing opioid dependence
 - Panic disorder: 7x risk of developing opioid dependence
 - Major depression: 5x risk of developing opioid dependence
- Pre-existing opioid dependence:
 - 9x risk of developing panic disorder
 - 5x risk of developing major depression
 - 5x risk of developing bipolar I disorder
 - 4x risk of developing generalized anxiety disorder

Martins et al 2009

Common Presentation

Methamphetamine Use

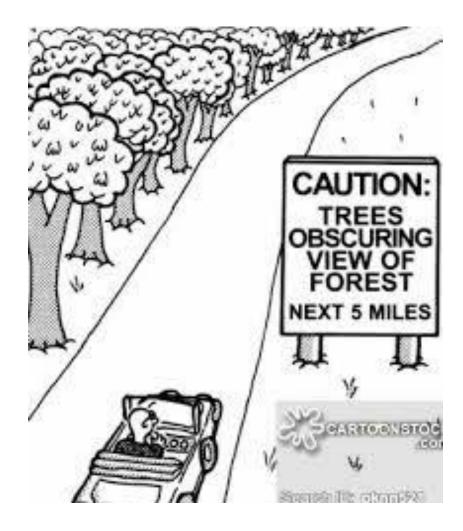
Bipolar Disorder

Anxiety

ADHD

Depression

PTSD



Trauma

PC-PTSD

Instructions:

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

1. Have had nightmares about it or thought about it when you did not want to? YES / NO

2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it? YES / NO

3. Were constantly on guard, watchful, or easily startled? YES / NO

4. Felt numb or detached from others, activities, or your surroundings? YES / NO

PHQ-9

Over the past 2 weeks, how often have you been bothered by any of the following problems?	Not At all	Several Days	More Than Half the Days	Nearly Every Day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed or hopeless	0	1	2	3
 Trouble falling asleep, staying asleep, or sleeping too much 	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
 Feeling bad about yourself - or that you're a failure or have let yourself or your family down 	0	1	2	3
 Trouble concentrating on things, such as reading the newspaper or watching television 	0	1	2	3
 Moving or speaking so slowly that other people could have noticed. Or, the opposite - being so fidgety or restless that you have been moving around a lot more than usual 	0	1	2	3
 Thoughts that you would be better off dead or of hurting yourself in some way 	0	1	2	3

Table 2

Distribution of PHQ-9 Scores According to Depression Diagnostic Status*

	Major Depressive Disorder (N = 41)	Other Depressive Disorder ($N = 65$)	No Depressive Disorder (N = 474)	
Level of Depression Severity, PHQ-9 Score	n (%)	n (%)	n (%)	
Minimal, 0-4	1 (2.4)	8 (12.3)	348 (73.4)	
Mild, 5–9	4 (9.8)	23 (35.4)	93 (19.6)	
Moderate, 10-14	8 (19.5)	17 (26.1)	23 (4.9)	
Moderately severe, 15–19	14 (34.1)	14 (21.5)	8 (1.7)	
Severe, 20-27	14 (34.1)	3 (4.6)	2 (0.4)	

^{*}Depression diagnostic status was determined in 580 primary care patients by having a mental health professional who was blinded to the PHQ-9 score administer a structured psychiatric interview.

MDQ

 you felt so good or so hyper that other people thought you were not your normal self or you were so hyper that you got into trouble? you were so irritable that you shouted at people or started fights or arguments? you felt much more self-confident than usual? you got much less sleep than usual and found that you didn't really miss it? you were more talkative or spoke much faster than usual? thoughts raced through your head or you couldn't slow your mind down? 	
you felt much more self-confident than usual? you got much less sleep than usual and found that you didn't really miss it? you were more talkative or spoke much faster than usual?	
you got much less sleep than usual and found that you didn't really miss it? you were more talkative or spoke much faster than usual?	
you were more talkative or spoke much faster than usual?	
thoughts raced through your head or you couldn't slow your mind down?	
you were so easily distracted by things around you that you had trouble concentrating or staying on track?	
you had more energy than usual?	
you were much more active or did many more things than usual?	
you were much more social or outgoing than usual, for example, you telephoned friends in the middle of the night?	
you were much more interested in sex than usual?	
you did things that were unusual for you or that other people might have thought were excessive, foolish, or risky?	
spending money got you or your family in trouble?	
2. If you checked YES to more than one of the above, have several of these ever happened during the same period of time?	

Don't Bring a Knife to a Gun Fight



Screening for bipolar disorders in patients with alcohol or substance use disorders: Performance of the Mood Disorder Questionnaire

Jan van Zaane ª 📯 🖾, Belinda van den Berg ^{a, d}, Stasja Draisma ^a, Willem A. Nolen ^b, Wim van den Brink ^c

	BD ^a	BPD	APD	ADHD	Any externalizing disorder
Prevalence, $n(\%)$	31 (19.5)	23 (14.5)	31 (19.5)	48 (30.2)	98 (38)
Sensitivity, (95% CI)	.45 (.32–.48)	.30 (.16–.44)	1.00	.57 (.45–.69)	.59 (.49–.69)
Specificity, (95% CI)	.54 (.47–.61)	.77 (.70–.84)	.61 (55–.67)	.60 (.53–.67)	.67 (.60–.74)
False positives	.46	.23	.39	.40	.33
False negatives	.55	.70	0	.43	.41
PPV ^b , (95% CI)	.20 (.13–.27)	.11 (.05–.17)	.30 (.21–.39)	.35 (.26–.44)	.52 (.43–.61)

Diagnostic Clues

Bipolar Disorder

- Early onset depression < 25 years
- Multiple depressive episodes (> 5)
- 90% have recurrent MDEs
- MDEs vary in character (e.g. some episodes melancholic, some atypical)
- Seasonality (depressed late fall/ winter; manic spring)
- Index mood episode can be postpartum
- Family history of bipolar disorder

MDD

- Later onset depression > 25 years
- Fewer episodes
- 50% have recurrent MDEs
- MDEs similar in character
- Seasonal pattern less likely
- No bipolar history

Ruminating Thoughts VS. Racing Thoughts

DSM Version: DSM IV - TR

A. A distinct period of abnormally and persistently elevated, expansive, or irritable <u>mood</u>, lasting at least 1 week (or any duration if hospitalization is necessary).

B. During the period of mood disturbance, three (or more) of the following symptoms have persisted (four if the mood is only <u>irritable</u>) and have been present to a significant degree:

(1) inflated self-esteem or grandiosity

(2) decreased need for sleep (e.g., feels rested after only 3 hours of sleep)

(3) more talkative than usual or pressure to keep talking

(4) flight of ideas or subjective experience that thoughts

are <u>racing</u>

(5) <u>distractibility</u> (i.e., attention too easily drawn to unimportant or irrelevant external stimuli)

(6) increase in goal-directed activity (either socially, at work or school, or sexually) or <u>psychomotor agitation</u>

(7) excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments) C. The <u>symptoms</u> do not meet criteria for a <u>Mixed Episode</u>.

D. The mood disturbance is sufficiently severe to cause marked impairment in occupational functioning or in usual social activities or relationships with others, or to necessitate hospitalization to prevent harm to self or others, or there are psychotic features.

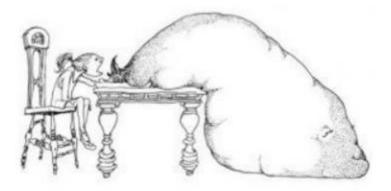
E. The symptoms are not due to the direct physiological effects of a <u>substance</u>(e.g., a drug of abuse, a medication, or other treatment) or a general medical condition (e.g., hyperthyroidism).

Note: Manic-like episodes that are clearly caused by somatic <u>antidepressant</u>treatment (e.g., medication, electroconvulsive therapy, light therapy) should not count toward a diagnosis of <u>Bipolar I Disorder</u>.

Bipolar Disorder Spaghetti Model





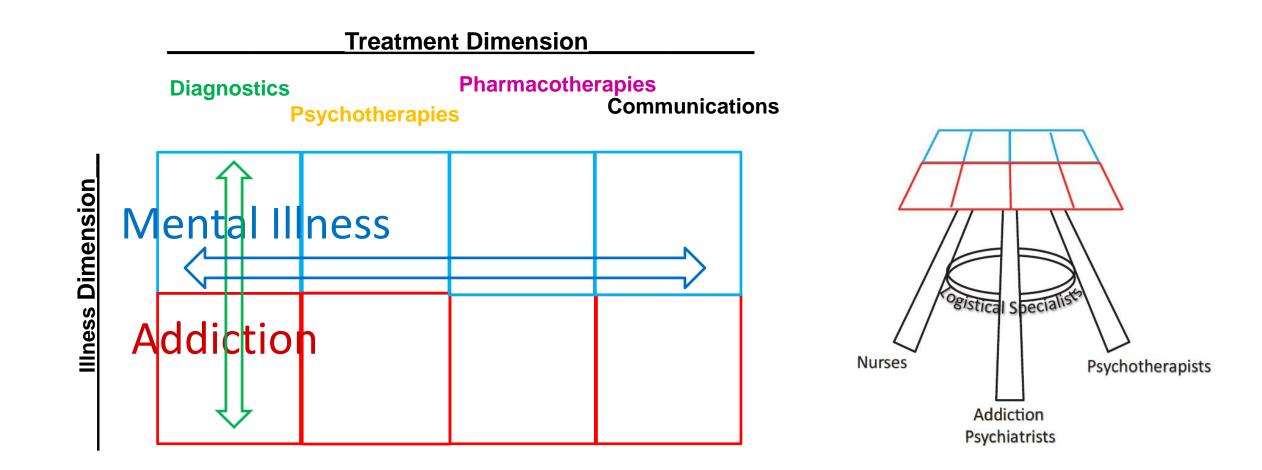


Have you heard of tiny Melinda Mae, Who ate a monstrous whale? She thought she could, She said she would, So she started in right at the tail. And everyone said, "You're much too small," But that didn't bother Melinda at all, She took little bites and she chewed very slow, Just like a good girl should... ...and in eighty-nine years she ate that whale Because she said she would!



The 2 x 4 Model: A Neuroscience-based Blueprint for the Modern Integrated

Addiction and Mental Health Treatment System



Adapted From: Chambers "The 2 x 4 Model", Routledge/CRC press, New York, 2018

Specialty SU Treatment Services (using Evidence-Based models)

- Outreach teams
- Crisis stabilization facilities (short term crisis assessment/treatment facilities that serve MH and/or SU disorders)
- Crisis respite facilities (follow up to stabilization with brief 4-5 day stay while service plans are developed)
- Sobering sites
- Social detoxification/residential
- Outpatient medical detoxification
- Inpatient medical detoxification
- Pre-treatment groups
- Medication-assisted treatment (including methadone treatment)

- Intensive outpatient treatment/day treatment
- Outpatient treatment Residential treatment
- Aftercare/12 step groups
- Supportive recovery/peer-to-peer support (up to 18 months of continuing care after the episode)
- Parent support groups
- · Youth support groups

Housing Supports

- Housing First
- Oxford Houses
- Transitional housing
- Low income sober housing

5/10/2018



The problem -- We know (co-morbidity)

The solution -- We know (integrated care)

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Implementation is the challenge



The SOLUTION

The solution lies in integrated care – the coordination of mental health, substance abuse, and primary care services.

Integrated care produces the best outcomes and is the most effective approach to caring for people with complex healthcare needs.

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INTEGRATION WORKS

Substance

Abuse

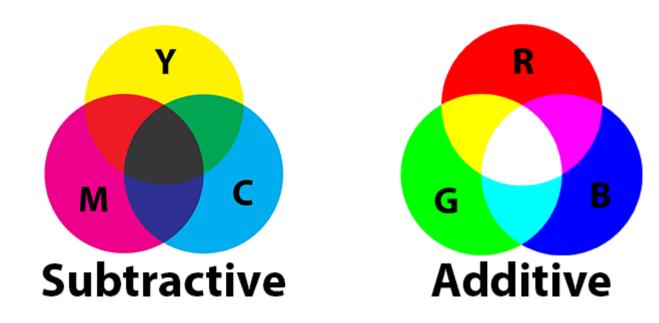
Primary

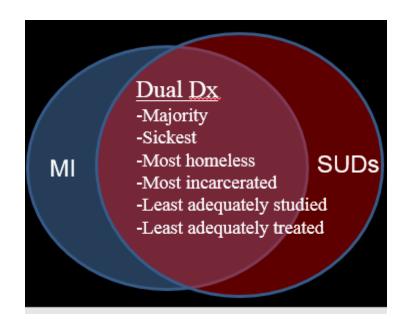
Care

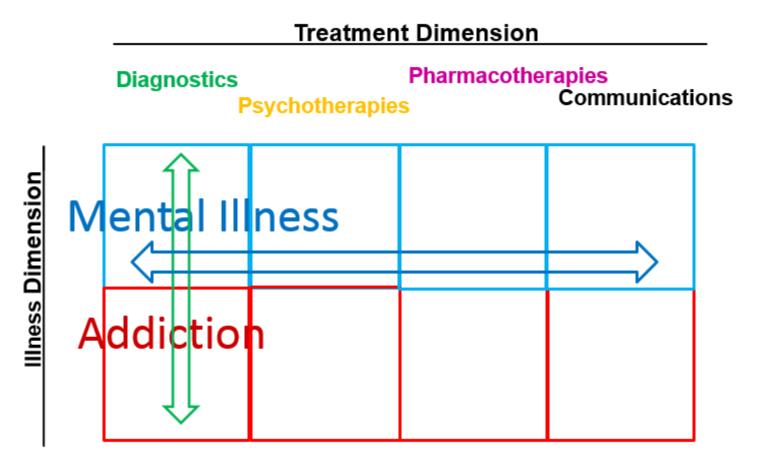
Mental

Health

5/24/2018







Co-Occurring Addictions and Mental Illness: "Dual Diagnosis Disorders"

Key Pearls:

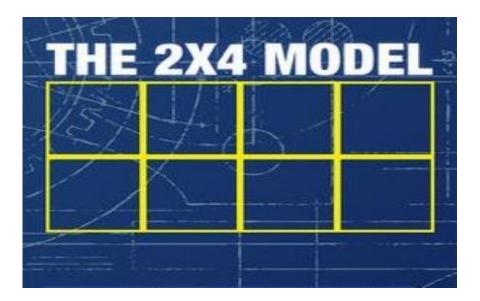
- 1. With Opioid Addiction, having Complex Co-morbidities of Mental illness and Addiction is the Rule and not the exception
- Causality between the Addiction and Mental illness is bidirectional.
 Opioid Use Disorders Biologically pre-dispose to Mental Illness
 Mental Illness Biologically pre-disposes to Acquiring addiction



www.integration.samhsa.gov

SAMHSA-HRSA Center for Integrated Health Solutions





A Neuroscience-Based Blueprint for the *Modern Integrated Addiction and Mental Health* Treatment System

RA Chambers "The 2 x 4 Model", Routledge/CRC press/Taylor and Francis, New York, 2018

Available ON Line (AMAZON/ Barnes and Noble/Routledge):

https://www.amazon.com/Model-Neuroscience-Based-Blueprint-Integrated-Addiction/dp/1138563854/ref=mt_paperback?_encoding=UTF8&me=&qid=

Or directly from the author (RA Chambers) with a 30% discount. <u>robchamb@iupui.edu</u>



- Abrahamsson T, Berge J, Ojehagen A, et al. Benzodiazepine, z-drug and pregabalin prescriptions and mortality among patients in opioid maintenance treatment—a nation-wide register-based open cohort study. Drug Alcohol Depend 2017; http://dx.doi.org/doi:10.1016/j.drugalcdep.2017.01.013
- Chan YY, Chen YH, Yang SN, et al. Clinical efficacy of traditional Chinese medicine, suan zao ren tang, for sleep disturbance during methadone maintenance: a randomized, double-blind, placebo-controlled trial. Evid Based Complement Alternat Med 2015; 2015:710895. doi: 10.1155/2015/710895. Epub 2015 Aug 4
- Chambers, RA. The 2 x 4 Model: A Neuroscience-based Blueprint for the Modern Integrated Addiction and Mental Health Treatment System, Routledge/CRC Press/Taylor and Francis/New York 2018
- Dean AJ, Bell J, Christie MJ, et al. Depressive symptoms during buprenorphine vs. methadone maintenance: findings from a randomised, controlled trial in opioid dependence. European Psychiatry 2004;19:510-513
- Dreifuss JA, Griffin ML, Frost K, et al. Patient characteristics associated with buprenorphine/naloxone treatment outcome for prescription opioid dependence: results from a multisite study. Drug Alcohol Dep 2013;131:112-118
- Farney RJ, McDonald AM, Boyle KM, et al. Sleep disordered breathing in patients receiving therapy with buprenorphine/naloxone. Eur Respir J 2013;42:394-403
- Fava M, Memisoglu A, Thase ME, et al. Opioid modulation with buprenorphine/samidorphan as adjunctive treatment for inadequate response to antidepressants: a randomized double-blind placebo-controlled trial. Am J Psychiatry 2016;173:499-508

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- Grant BF, Hasin DS, Stinson FS, et al. Prevalence, correlates, and disability of personality disorders in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. J Clin Psychiatry 2004;65:948-958
- Grant BF, Saha TD, Ruan WJ, et al. Epidemiology of DSM-5 drug use disorder: results from the National Epidemiologic Survey on Alcohol and Related Conditions-III. Jama Psychiatry 2016;73(1):39-47
- Grella CE, Karno MP, Warda US, et al. Gender and comorbidity among individuals with opioid use disorders in the NESARC study
- Hasin DS, Grant BF. The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) waves 1 and 2: review and summary of findings. Soc Psychiatry Psychiatr Epidemiol 2015;50:1609-1640



- Hedges DW, Brown BL, Shwalb DA, et al. The efficacy of selective serotonin reuptake inhibitors in adult social anxiety disorder: a meta-analysis of double-blind, placebo-controlled trials. J Psychopharmacol 2007;21:102-111
- Huhn M, Tardy M, Spineli LM, et al. Efficacy of pharmacotherapy and psychotherapy for adult psychiatric disorders: a systematic review and meta-analysis. JAMA Psychiatry 2014;71:706-715
- Krupitsky E, Zvartau E, Blokhina E, et al. Anhedonia, depression, anxiety, and craving in opiate dependent patients stabilized on oral naltrexone or an extended release naltrexone implant. Am J Drug Alcohol Abuse 2016;42:614-620
- Li Y, Liu XB, Zhang Y. Acupuncture therapy for the improvement of sleep quality of outpatients receiving methadone maintenance treatment: a randomized controlled trial. Zhongguo Zhong Xi Yi Jie He Za Zhi 2012;32:1056-1069
- Martins SS, Keyes KM, Storr CL, et al. Pathways between nonmedical opioid use/dependence and psychiatric disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions. Drug Alcohol Dep 2009;103:16-24
- Mills KL, Lynskey M, Teesson M, et al. Post-traumatic stress disorder among people with heroin dependence in the Australian treatment outcome study (ATOS): prevalence and correlates. Drug Alcohol Dep 2005;77:243-249
- Nunes EV, Sullivan MA, Levin FR. Treatment of depression in patients with opiate dependence. Biol Psychiatry 2004;56:793-802
- Park TW, Saitz R, Ganoczy D, et al. Benzodiazepine prescribing patterns and deaths from drug overdose among US veterans receiving opioid analgesics: case-cohort study. BMJ 2015;350: h2698. doi: 10.1136/bmj.h2698
- Peirce JM, Brooner RK, King VL, et al. Effect of traumatic event re-exposure and PTSD on substance abuse disorder treatment response. Drug Alcohol Depend 2016;158:126-131
- Robabeh S, Jafar MM, Sharareh H, et al. The effect of cognitive behavior therapy in insomnia due to methadone maintenenace therapy: a randomized clinical trial. Iran J Med Sci 2015;5:396-403
- Rush AJ, Trivedi MH, Wisniewski SR, et al. Acute and longer-tern outcomes in depressed outpatients requiring one or several treatment steps: a STAR*D report. Am J Psychiatry 2006;163:1905-1917



- Sajid, A, Whiteman, A, Bell, RL, Greene, MS, Engleman, EA, Chambers, RA. Prescription drug monitoring program data tracking of opioid addiction treatment outcomes in Integrated dual diagnosis care involving injectable naltrexone" American Journal on Addictions, 25: 557-564, DOI: 10.1111/ajad.12441
- Sateia MJ, Buysse DJ, Krystal AD, et al. Clinical practice guideline for the pharmacologic treatment of chronic insomnia in adults: an American Academy of Sleep Medicine clinical practice guideline. J Clin Sleep Med 2017;13:307-380
- Saunders EC, McGovern MP, Lambert-Harris C, et al. The impact of addiction medications on treatment outcomes for persons with co-occurring PTSD and opioid use disorders. Am J Addict 2015;24:722-731
- Schiff M, Nacasch N, Levit S, et al. Prolonged exposure for treating PTSD among female methadone patients who were survivors of sexual abuse in Israel. Soc Work Health Care 2015;54:687-707
- Schutte-Rodin S, Broch L, Buysse D, et al. Clinical guideline for the evaluation and management of chronic insomnia in adults. J Clin Sleep Med 2008;4:487-504
- Seal KH, Maguen SH, Bertenthal D, et al. Observational evidence for buprenorphine's impact on posttraumatic stress symptoms in veterans with chronic pain and opioid use disorder. J Clin Psychiatry 2016;77:1182-1188

5

0

- Seyffert M, Lagisetty P, Landgraf J, et al. Internet-delivered cognitive behavioral therapy to treat insomnia: a systematic review and meta-analysis. PLoS One 2016; 11(2):e0149139. doi: 10.1371/journal.pone.0149139
- Smith MT, Perlis ML, Park BS, et al. Comparative meta-analysis pf pharmacotherapy and behavior therapy for persistent insomnia. Am J Psychiatry 2—2;159:5-11
- Tang NKY, Lereya ST, Boulton H, et al. Nonpharmacological treatments of insomnia for long-term painful conditions: a systematic review and metaanalysis of patient-reported outcomes in randomized controlled trials. Sleep 2-15;38:1751-1764
- Winkler A, Auer C, Doering BK, et al. Drug treatment of primary insomnia: a meta-analysis of polysomnographic randomized controlled trials. CNS Drugs 2014;28:799-816
- Wu JQ, Appleman ER, Salazar RD, et al. Cognitive behavioral therapy for insomnia comorbid with psychiatric and medical conditions: a metaanalysis. JAMA Intern Med 2015;175:1461-1472