

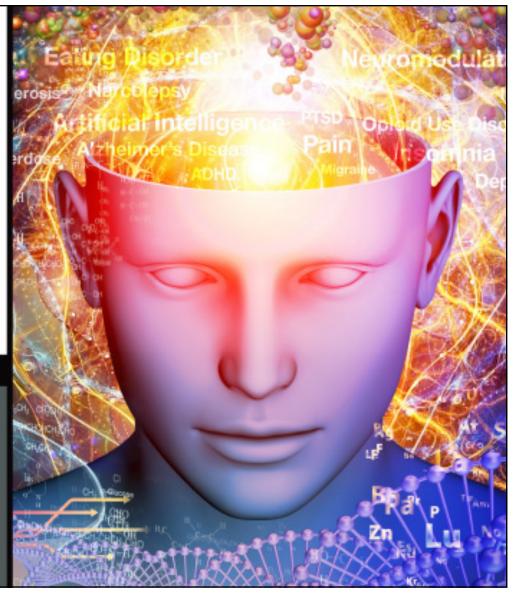
12TH ANNUAL CHAIR SUMMIT

Master Class for Neuroscience Professional Development

February 27-29, 2020 | The LINQ | Las Vegas, Nevada

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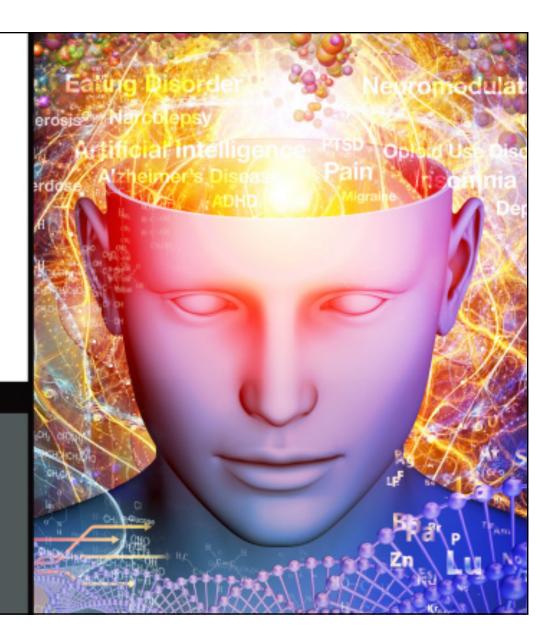




Suicide: Connections to Insomnia

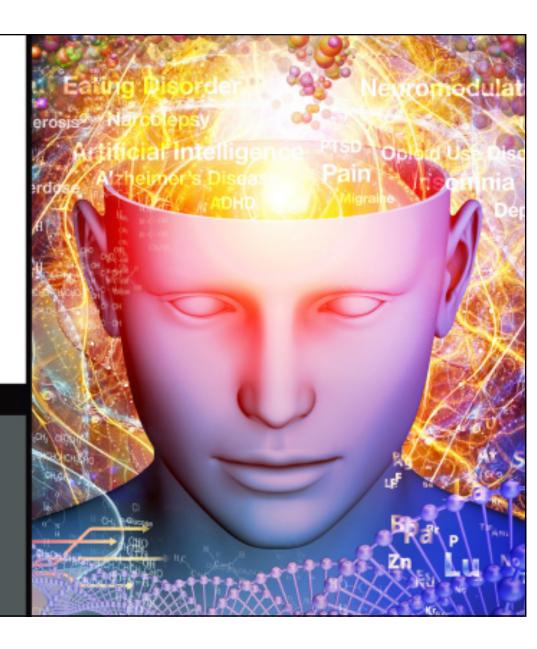
W. Vaughn McCall, MD, MS Case Distinguished University Chair

Case Distinguished University Chair
Department of Psychiatry and Health Behavior
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Learning 4 Objective

Analyze the relationship between suicide and insomnia.



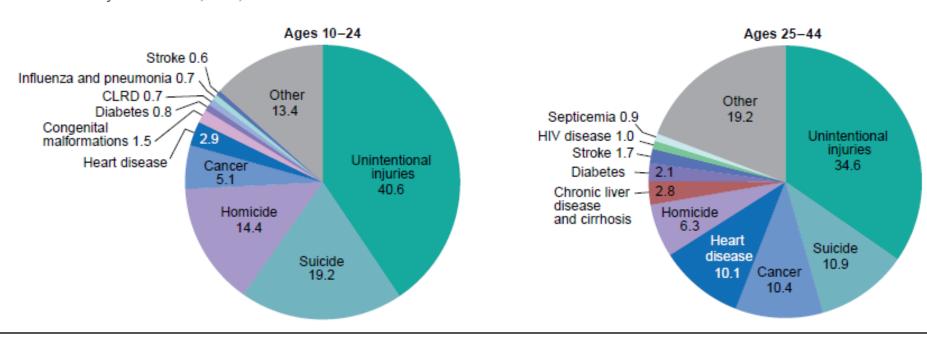
National Vital Statistics Reports



Volume 68, Number 6 June 24, 2019

Deaths: Leading Causes for 2017

by Melonie Heron, Ph.D., Division of Vital Statistics



Risk Factors for Suicide

<u>Unmodifiable</u>

- Age (worse with middle-age)
- Gender (higher in men)
- Race (higher in Caucasians)
- Chronic illness
- Prior suicide attempts
- Trauma

Modifiable

- Active psychiatric disorder
- Alcohol/substance abuse
- Social isolation/living alone
- Trauma
- Access to means, especially firearms
- Hopelessness
- Agitation
- Insomnia/ nightmares

McCall WV, et al. Sleep Medicine. 2010;11:822-827.

Why is Insomnia a Risk Factor for Suicidal Thinking, Suicidal Behavior, and Suicide Death? Psychological Factors

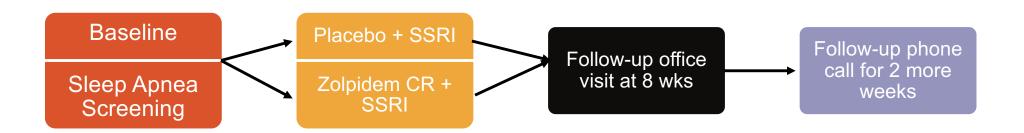
- Compared with good sleepers, patients with insomnia have problems with decision making, as reflected in poorer performance on the Wisconsin Card Sorting Task¹
- Compared with a nonsuicidal psychiatric control group, on psychological tests, suicidal patients produce more passive and more ineffectual responses when presented with a problem to solve²

There are >40 papers identifying insomnia as a risk factor for suicide in adults!³

1. Fortier-Brochu E, et al. Sleep Med Rev. 2012;16(1):83-94; 2. Pollock LR, et al. Psychol Med. 2004;34(1):163-167;

3. McCall WV, et al. Curr Psychiatry Rep. 2013;15:389.

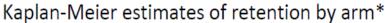
Reducing Suicidal Ideation Through Insomnia Treatment (REST-IT): Study Design



- Randomized to zolpidem CR 6.25mg vs. placebo, may be increased to 12.5mg at the end of week 1, if lack of therapeutic effect and if there are no side effects
- 1:1 randomization, stratified by site, gender, and prior suicide attempts, using variably sized permuted blocks
- Open-label fluoxetine 20 mg may be increased to 40 mg at the end of 4 weeks if HDRS 24 > 15

CR = controlled-release; HRSD = Hamilton Depression Rating Scale; SSRI = selective serotonin reuptake inhibitor. McCall WV, et al. *Am J Psychiatry*. 2019;176(11):957-965.

Kaplan-Meier Estimates of Retention by Arm*



Zolpidem			Placebo			Overall		
At	Dropped		At	Dropped		At	Dropped	
Risk	After	Retention	Risk	After	Retention	Risk	After	Retention
51	1	100%	52	1	100%	103	2	100%
50	1	98%	51	4	98%	101	5	98%
49	2	96%	47	4	90%	96	6	93%
47	1	92%	43	3	83%	90	4	87%
46	2	90%	40	2	77%	86	4	83%
44	-	86%	38	-	73%	82	-	80%
	51 50 49 47 46	Risk After 51 1 50 1 49 2 47 1 46 2	Risk After Retention 51 1 100% 50 1 98% 49 2 96% 47 1 92% 46 2 90%	Risk After Retention Risk 51 1 100% 52 50 1 98% 51 49 2 96% 47 47 1 92% 43 46 2 90% 40	Risk After Retention Risk After 51 1 100% 52 1 50 1 98% 51 4 49 2 96% 47 4 47 1 92% 43 3 46 2 90% 40 2	Risk After Retention Risk After Retention 51 1 100% 52 1 100% 50 1 98% 51 4 98% 49 2 96% 47 4 90% 47 1 92% 43 3 83% 46 2 90% 40 2 77%	Risk After Retention Risk After Retention Risk 51 1 100% 52 1 100% 103 50 1 98% 51 4 98% 101 49 2 96% 47 4 90% 96 47 1 92% 43 3 83% 90 46 2 90% 40 2 77% 86	Risk After Retention Risk After Retention Risk After 51 1 100% 52 1 100% 103 2 50 1 98% 51 4 98% 101 5 49 2 96% 47 4 90% 96 6 47 1 92% 43 3 83% 90 4 46 2 90% 40 2 77% 86 4

^{*} Retention does not differ significantly between arms (p = 0.09).

McCall WV, et al. Am J Psychiatry. 2019;176(11):957-965.

Adherence to Treatment

• Participants took 91% of all prescribed doses of the study drug and 94% of all prescribed doses of the SSRI, with no significant differences between groups (p = .11 and p = .29, respectively).

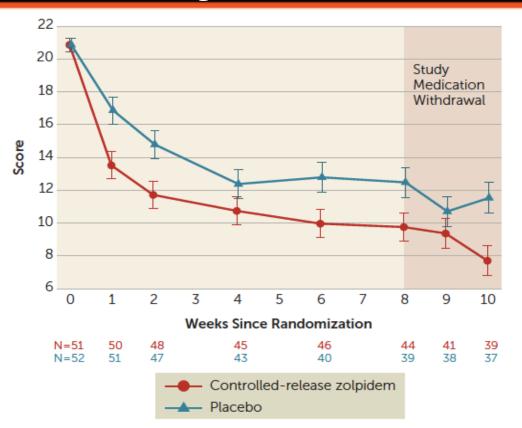
McCall WV, et al. Am J Psychiatry. 2019; 176(11):957-965.

Baseline Characteristics

	Zolpidem (N = 51)	Placebo (N = 52)	Total (N = 103)	
Age [SD] (years)	39.7 [14.5]	41.2 [12.0]	40.5 [13.2]	
Female (%)	63	62	62	
Non-Caucasian (%)	41	37	39	
BMI [SD]	28.3 [6.4]	28.2 [5.6]	28.2 [6.0]	
No Prior antidepressant trials in this episode (%)	57	58	57	
HRSD-24	28.7 [4.7]	29.6 [7.0]	29.1 [5.9]	
Insomnia Severity Index [SD]	20.7 [4.0]	21.1 [4.3]	20.9 [4.1]	
Scale for Suicide Ideation	12.2 [5.3]	11.8 [5.3]	12.0 [5.3]	
Suicidal Ideation Intensity C-SSRS	1.71 [1.03]	1.58 [1.02]	1.64 [1.02]	
Prior Suicide Attempts (%)	29	31	30	

McCall WV, et al. Am J Psychiatry. 2019; 176(11):957-965.

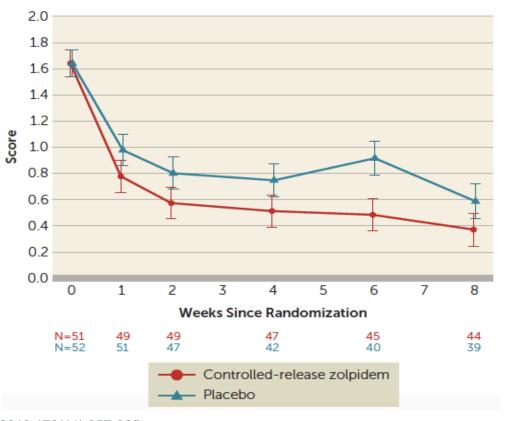
REST-IT Secondary Endpoint: Insomnia Severity



overall p = .006, all weeks p < .05, except week 4

McCall WV, et al. Am J Psychiatry. 2019;176(11):957-965.

REST-IT Primary Endpoint: Suicidality



overall p = .035

McCall WV, et al. Am J Psychiatry. 2019;176(11):957-965.

Conclusions

- Depressed outpatients with suicidal ideation can be recruited and safely retained in RCTs
- Depressed outpatients with suicidal ideation can be reliable partners in RCTs
- Targeted, time limited treatment of insomnia can reduce suicidal ideation in depressed outpatients with suicidal ideation

RCTs = randomized controlled trials.

SMART Goals

Specific, Measurable, Attainable, Relevant, Timely

- In patients with insomnia, assess their risk of suicide.
- Incorporate evidence-based treatments for insomnia to reduce the risk of suicide and suicidal ideation.

Questions Answers

Don't forget to fill out your evaluations to collect your credit.

