

Co-Occurring PTSD and Substance Use Among Returning Veterans

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Veterans and Co-occurring Disorders

- Epidemiology and phenomenology of co-occurring PTSD and SUD among Veterans
 - Patient vignettes
 - Implications for treatment
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PTSD

- **An event that involved actual or threatened death or serious injury; person's response involved intense fear, helplessness, or horror and**
 - **Re-experiencing the trauma**
 - **Avoidance of the trauma and numbing of responsiveness**
 - **Symptoms of increased arousal**
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Co-Occurring PTSD and Other Disorders in 1190 Male Vietnam Theater Veterans

%	<u>Prevalence of PTSD</u>		OR
	With Disorder	Without Disorder	
Depression	73.6	13.6	17.6
Alcohol Abuse/Dep	32.6	13.3	3.2
Drug Abuse/Dep	56.0	14.6	7.4



Zatzick et al., 1997

Co-Occurring PTSD and Other Disorders in 432 Female Vietnam Theater Veterans

%	<u>Prevalence of PTSD</u>		p
	With Disorder	Without Disorder	
Depression	51.4	7.1	<0.005
Alcohol Abuse/Dep	40.7	8.2	.086
Panic Disorder	70.1	7.9	0.03



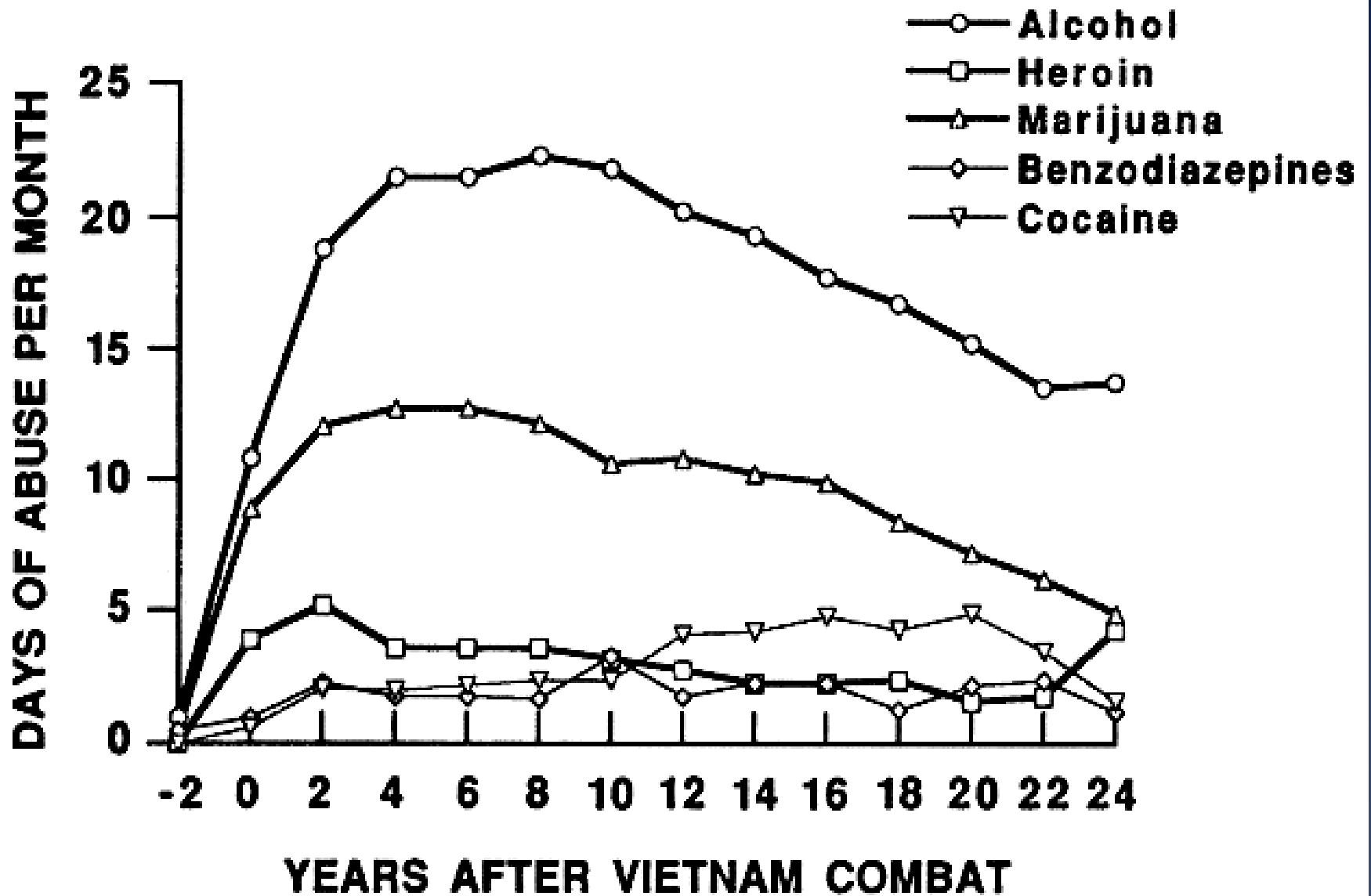
Zatzick et al., 1997

PTSD and Substance Use

- 61 Vietnam Combat Veterans with PTSD
 - Admitted for inpt. Tx.
 - Mean age 45.4 yrs.
 - Extensive interviews about longitudinal course of illness
 - Free from substance use minimum 30 days



PTSD and Substance Use



PTSD and Substance Use

Self Reports of Effects of Substances in Combat Related PTSD

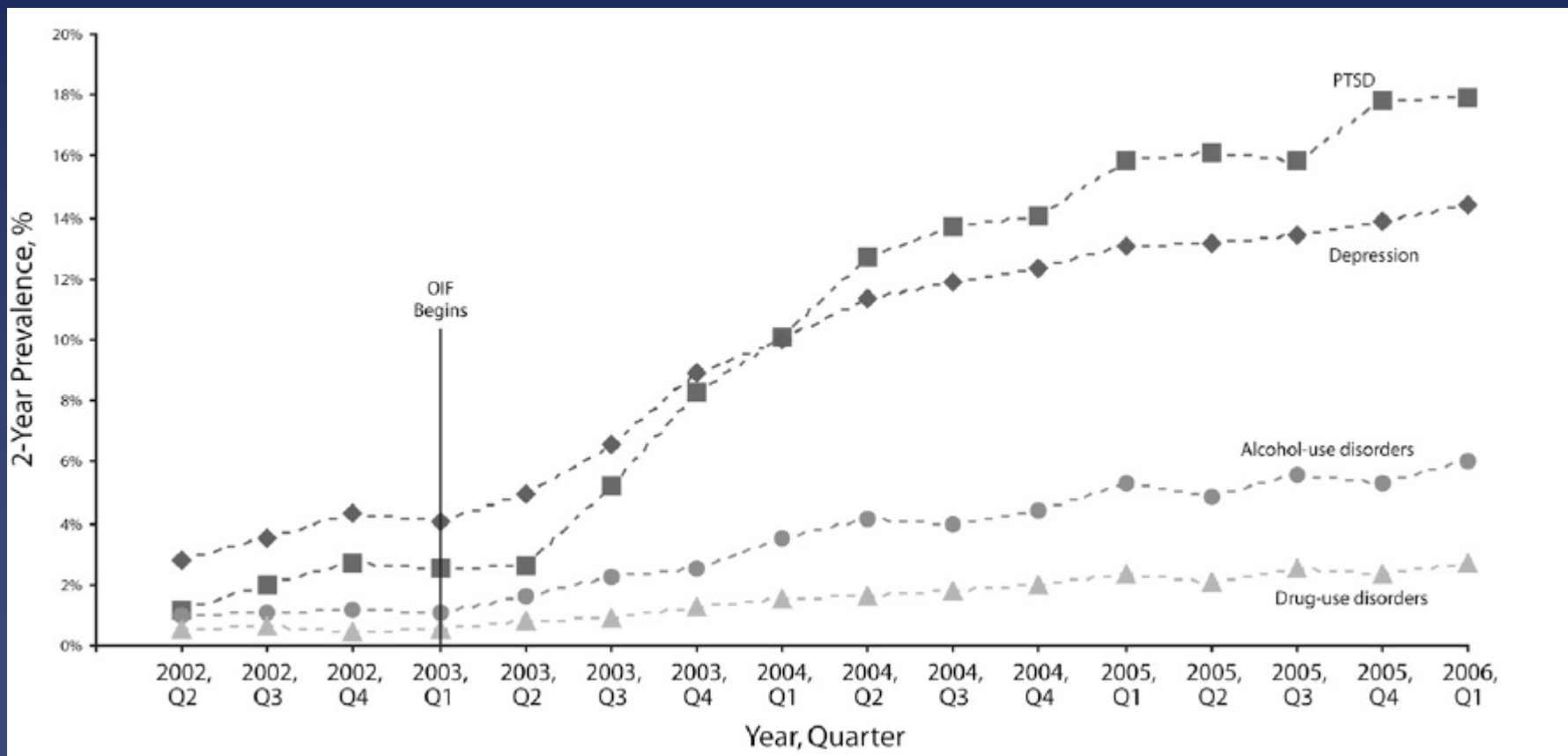
	ETOH	MJ	Heroin	Benzo	Cocaine
Intrusive	+	0	+	0	0
Hyperarousal	+	+	+	+	-
Avoidance	0	0	0	0	0

+ = Helps - = Worsens 0 = No effect



Bremner et al., 1996

Prevalence of Diagnoses Among Cohorts of Veterans Entering VA Care



Predictors of Screening Positive for ETOH Misuse with ETOH Behavioral Problems Among 1120 Iraq War Soldiers

	<u>OR</u>	<u>95% CI</u>	<u>p</u>
Marital Status	0.32	0.20-0.52	<.05
Combat	0.96	0.82-1.14	ns
Killing Others	1.21	0.83-1.75	ns
Threat to Oneself	1.12	0.95-1.32	ns
Exposure to Death	1.03	0.84-1.27	ns
Atrocities	1.61	1.10-2.36	<.05
Psychiatric Problem	2.33	1.39-3.92	<.05

Neurocognitive Outcomes following Iraq Deployment

- Neurocognitive assessments prior to and post deployment in 654 Army soldiers
- Similar baseline and subsequent assessments in 307 non-deployed soldiers
- Deployment associated with
 - **Worse performance in:**
 - » Sustained attention
 - » Verbal learning
 - » Visuo-Spatial memory
 - **More:**
 - » Confusion
 - » Tension
 - **Better:**
 - » Reaction time



Veterans Presenting to 86 Outpatient PTSD Programs 4/1/04 to 12/31/06

	<u>Iraq/Af.</u>	<u>Gulf War</u>	<u>Vietnam</u>
N	6523	2376	20,170
Mean Age	32.29	41.15	58.44
Female	11%	10%	0
Received Fire	95%	84%	96%
PTSD Dx	79%	84%	91%
ETOH Abuse/Dep	20%	25%	29%
Drug Abuse/Dep	6%	13%	13%

**4/1/04 to 12/31/06 Cohort of Iraq/Afghanistan Veterans
Presenting to 86 Outpatient PTSD Programs Compared to
Veterans Presenting from 2/1/92 to 10/31/94 in 105
Outpatient PTSD Programs**

	<u>Iraq/Af.</u>	<u>Gulf War</u>	<u>Vietnam</u>
N	6523	1045	17,094
Mean Age	32.29	32.26	46.26
Female	11%	12%	0
Received Fire	95%	74%	97%
PTSD Dx	79%	55%	80%
ETOH Abuse/Dep	20%	34%	54%
Drug Abuse/Dep	6%	16%	30%

Close-up on Women Vets

- 7.5% of veterans now; 10% by 2010
- 15% of active duty military
- 20% of new military recruits, >24% USAF
- 17% of National Guard and reservists
- 12% of those deployed in Iraq/Afghanistan
- Increased exposure to combat

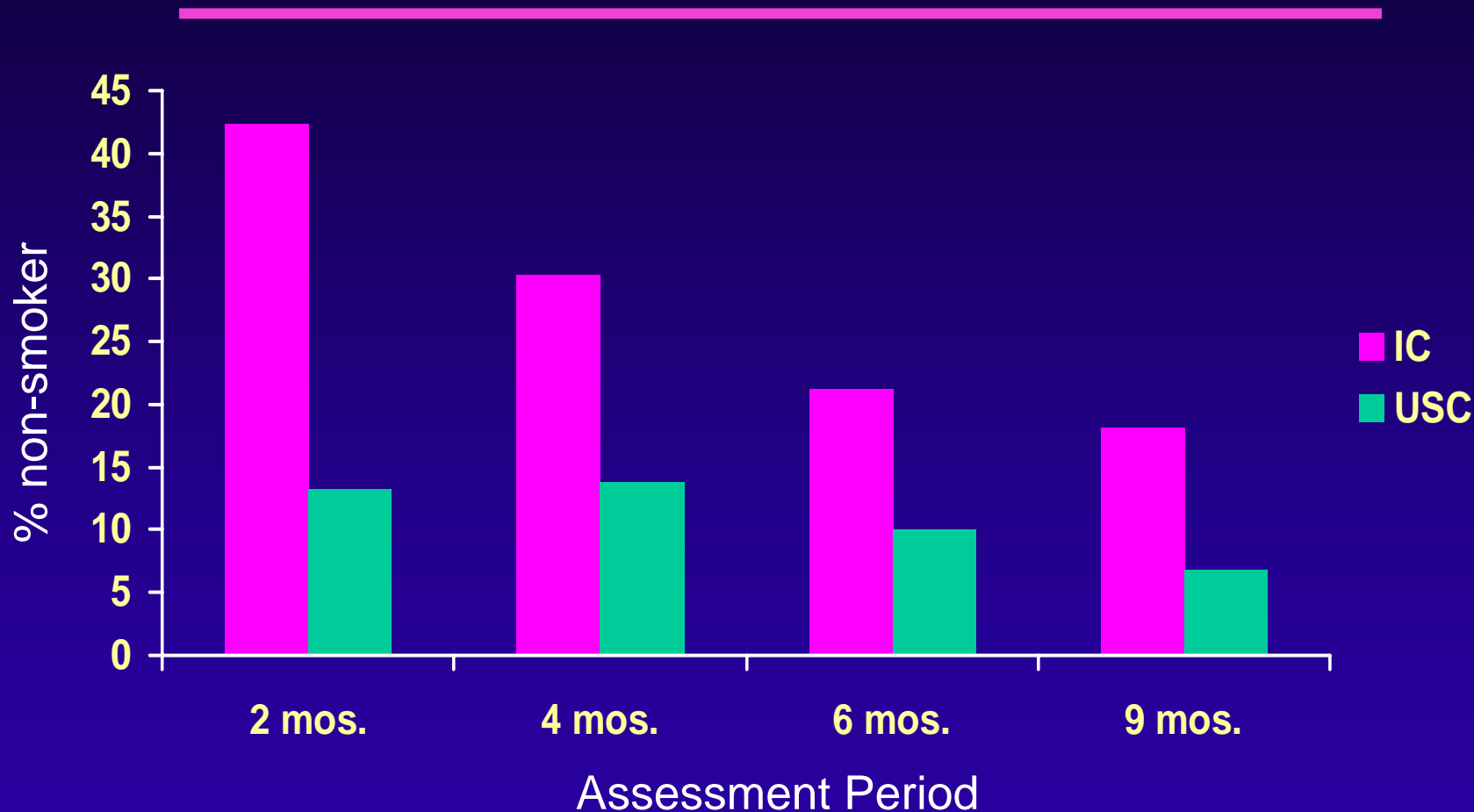


Evidence-Based Psychotherapy

- **Prolonged Exposure Therapy**
 - Imaginal and en vivo exposure, EMDR (eye movement desensitization and processing)
 - **Cognitive Therapy**
 - Cognitive Processing Therapy (CPT)
 - Seeking Safety
 - **Anxiety/Symptom Management**
 - **Supportive Therapy**
 - **Psychodynamic Therapy**
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Integrated Care for Tobacco Dependence & PTSD

7-Day Point Prevalence for Non-Smoking Status (n=66)



GEE Analysis Results: Odds Ratio = 5.23, $p < .0014$

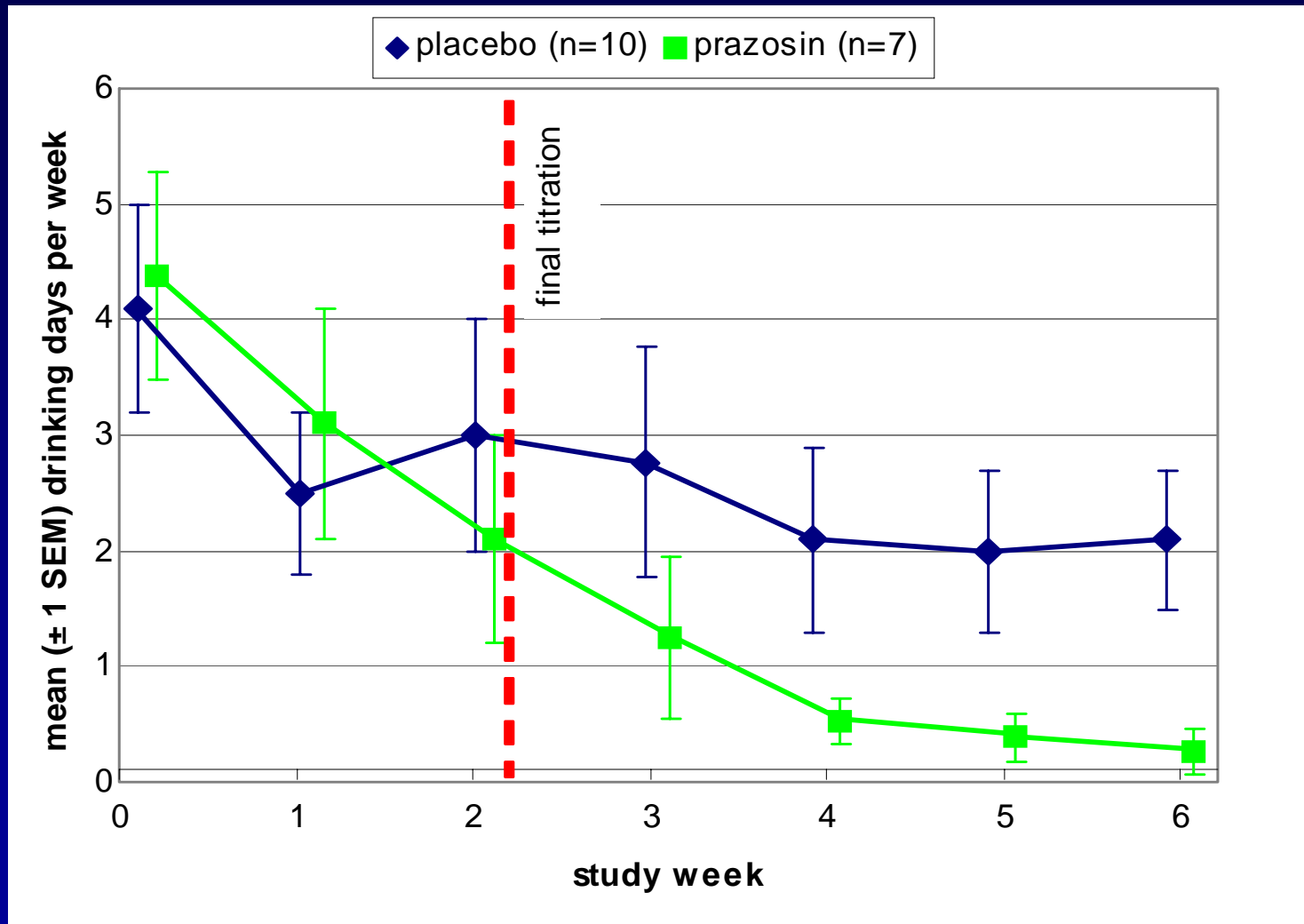
Pharmacotherapy of PTSD

- Sertraline and Paroxetine (SSRIs) only FDA approved agents
 - Tricyclic antidepressants, monoamine oxidase inhibitors and other antidepressants appear to benefit some patients
 - Atypical antipsychotics may also have some usefulness
 - Prazosin beneficial for nightmares
 - Benzodiazepines controversial in patients with co-occurring substance dependence
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Prazosin vs. Placebo Parallel Group Study

Outcome Measure	Prazosin (n = 17)	Placebo (n = 17)	statistic (change scores)	Effect Size (Cohen's d)
CAPS Distressing Dreams Baseline Endpoint	6.5 ± 1.0 2.9 ± 2.7	6.1 ± 1.0 5.2 ± 2.2	$t = 2.48^*$	0.9
PSQI Baseline Endpoint	13.5 ± 4.2 9.7 ± 3.9	13.4 ± 2.7 12.6 ± 4.1	$t = 2.82^*$	0.7
CGIC (endpoint)	2.3 ± 1.0	3.7 ± 1.2	$t = 3.56^{**}$	1.3
CGIC – proportion moderately or markedly improved	12/17	2/17	Fisher's Exact $p < 0.001^{**}$	N/A

Prazosin vs. Placebo for ETOH Dependence (Male Completers Only)



Controlling for drinking days per week at baseline and week number, the prazosin group reported fewer drinking days per week than the placebo group during the final 3 weeks of the study ($\beta = -1.84$; 95% CI = -2.74, -.93; $p < 0.001$).

Veterans and Co-occurring Disorders

- **Veterans need PTSD and SUD treatment**
 - **Intervention now could reduce adverse lifelong impact of SUDs on newly returning veterans with PTSD**
 - **Integrated treatment of PTSD and SUDs shows promise**
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