

Alcohol & Other Drugs and Co-Occurring Disorders Among Veterans, Active Service Men & Women & Their Families

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Veterans and Co-occurring Disorders

- Co-occurring disorders with focus on PTSD
 - Vietnam Veterans: Relationship between PTSD and substance use disorders
 - Iraq/Afghanistan Veterans: Same issues with window to intervene
 - Patient vignettes
 - Thoughts about treatment
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Co-occurring Disorder: Posttraumatic Stress Disorder (PTSD)

- Civil War: “Nostalgia”
 - World War I: “Shell Shock”
 - World War II: “Combat fatigue”
 - Vietnam, Persian Gulf, Afghanistan, Iraq: “PTSD”
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PTSD

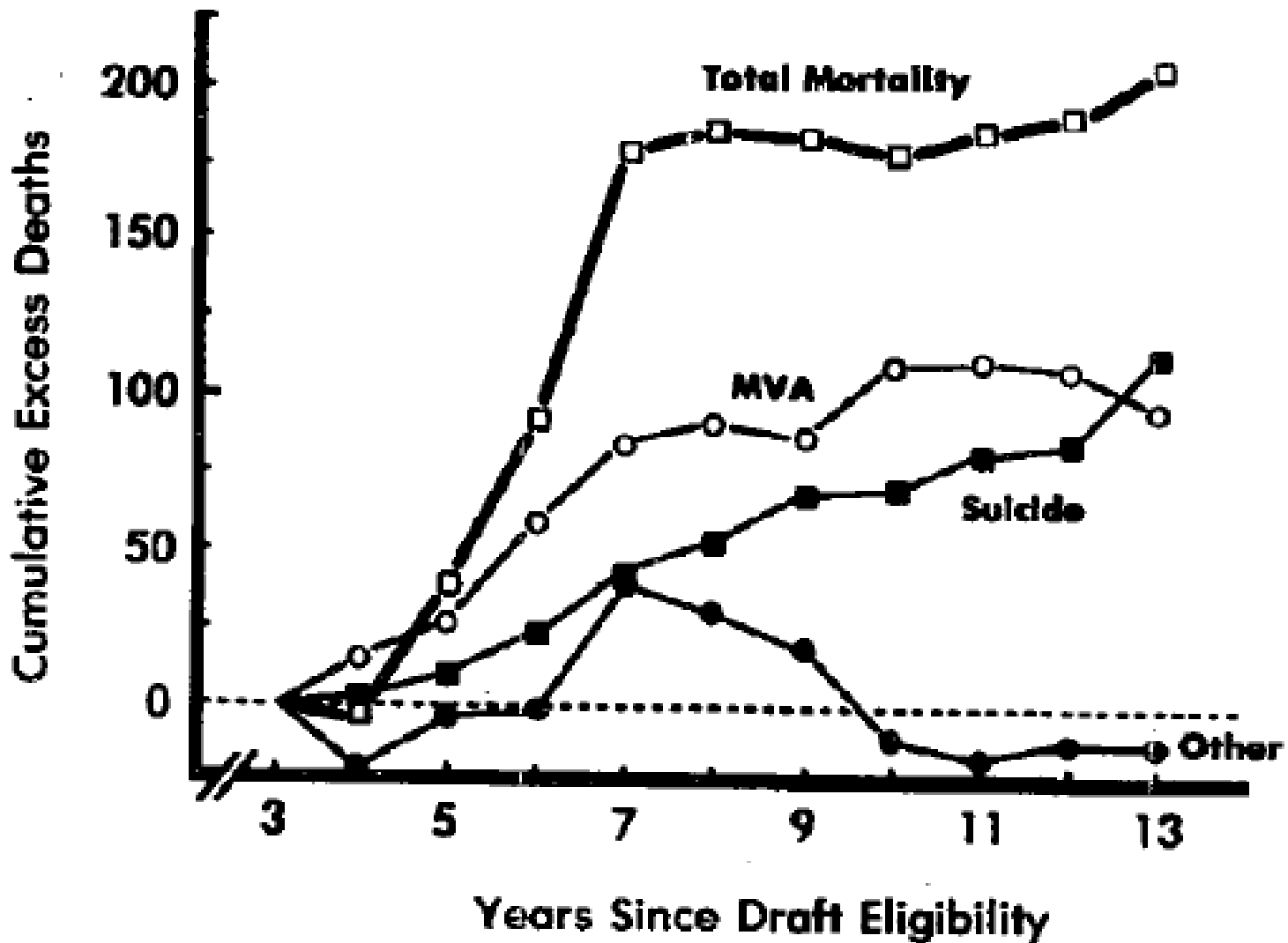
- **An event that involved actual or threatened death or serious injury; person's response involved intense fear, helplessness, or horror and**
 - **Re-experiencing the trauma**
 - **Avoidance of the trauma and numbing of responsiveness**
 - **Symptoms of increased arousal**
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Diseases in Union Civil War Veterans

- From roll books at National Archives, 303 companies of Union recruits randomly selected
- Total 35,730 military files located
- 15,027 linked to pension records and lived until 1890
 - 5.79% GI ailments only
 - 18.0% Cardiac ailments only
 - 17.4% GI and cardiac ailments
 - 5.1% Mental ailments only
 - 38.8% Co-occurring mental and physical ailments
- Younger age at enlistment and higher number killed in company related to development of disease and mortality
- Among those who did not live until 1890 and had death certificates (8623) average age of demise=37.1



14,145 Deaths Among Men in CA and PA 1974-1983. Some Randomly Selected as Military Draft Eligible in '70-'72



Relationship of Vietnam Service to Psychiatric Disorders Men

%	HWZ Stress (n=406)	LWZ Stress (n=783)	Era Vets (n=412)	Civilians (n=450)
Depression	11.1	3.1	4.1	1.5
Alcohol Abuse/Dep	45.6	37.2	37.9	27.1
Drug Abuse/Dep	8.4	4.9	6.0	3.4

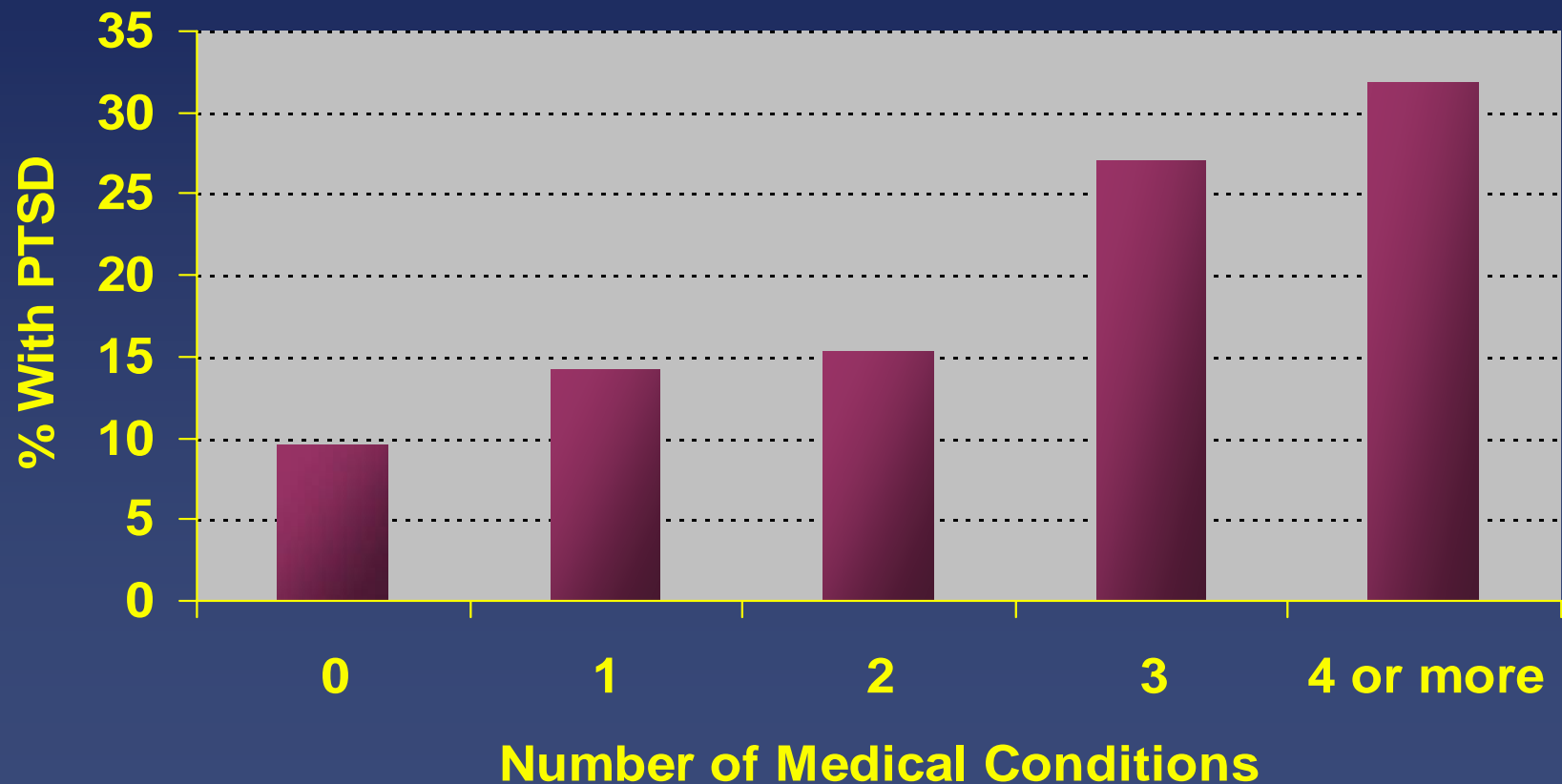
Co-Occurring PTSD and Other Disorders in 1190 Male Vietnam Theater Veterans

%	<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 Medical Conditions in 1190 Male Vietnam Theater Veterans



Relationship of Vietnam Service to Psychiatric Disorders Women

%	HWZ Stress (n=170)	LWZ Stress (n=262)	Era Vets (n=304)	Civilians (n=218)
Depression	22.3	5.8	6.6	5.1
Alcohol Abuse/Dep	10.6	8.2	4.6	1.5
Drug Abuse/Dep	2.5	0.0	0.6	0.9

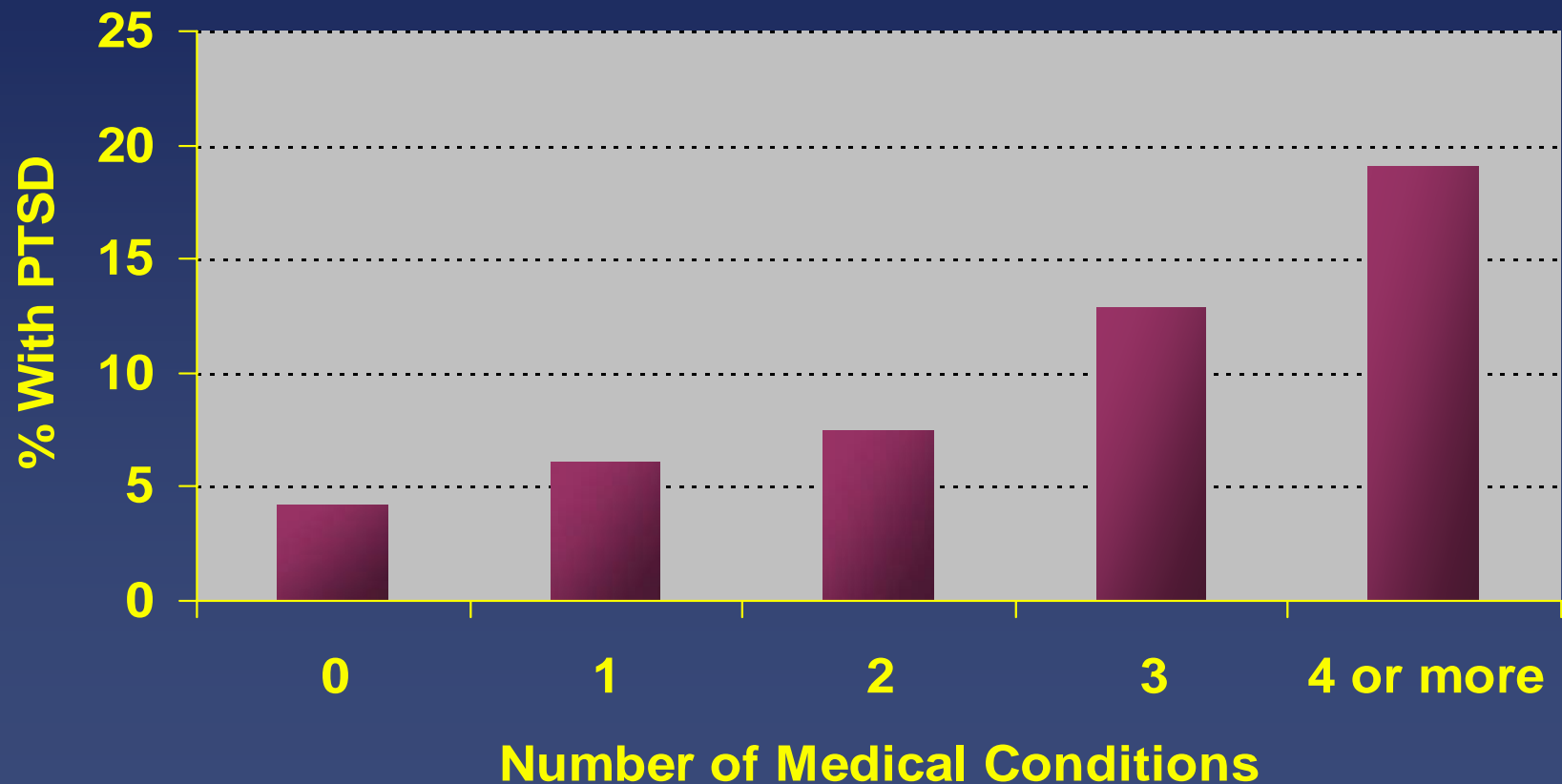
Co-Occurring PTSD and Other Disorders in 432 Female Vietnam Theater Veterans

%	<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

Co-Occurring PTSD and Medical Conditions in 432 Female Vietnam Theater Veterans

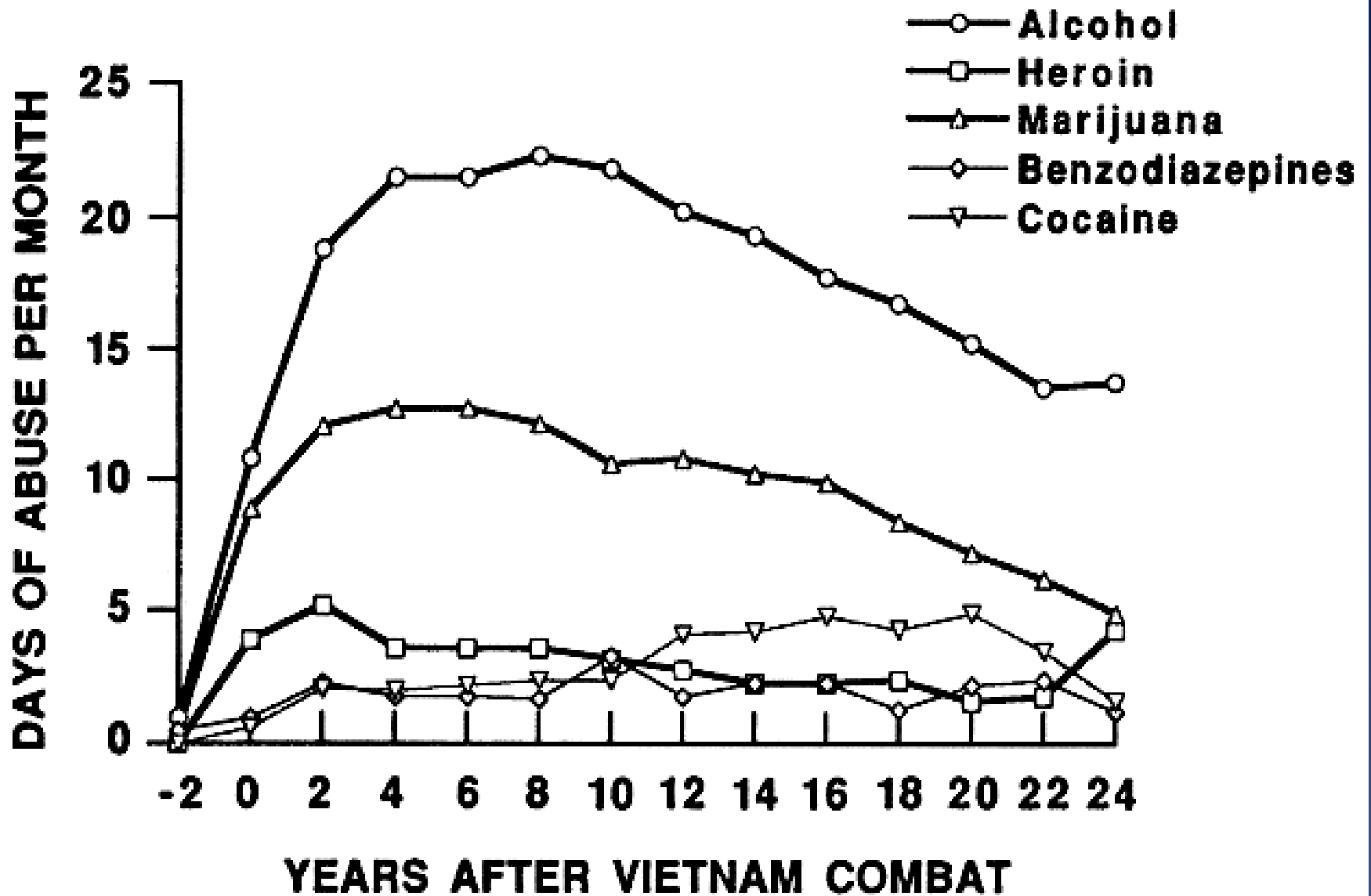


PTSD and Substance Use

- 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

Veterans and Families

- 1200 male Vietnam Theater Veterans and 376 female spouses/partners interviewed
- Families of veterans with PTSD had:
 - Elevated levels of diffuse problems in marital and family adjustment
 - Problems in parenting skills
 - Problems with violent behavior by both partners



Jordan et al., 1992

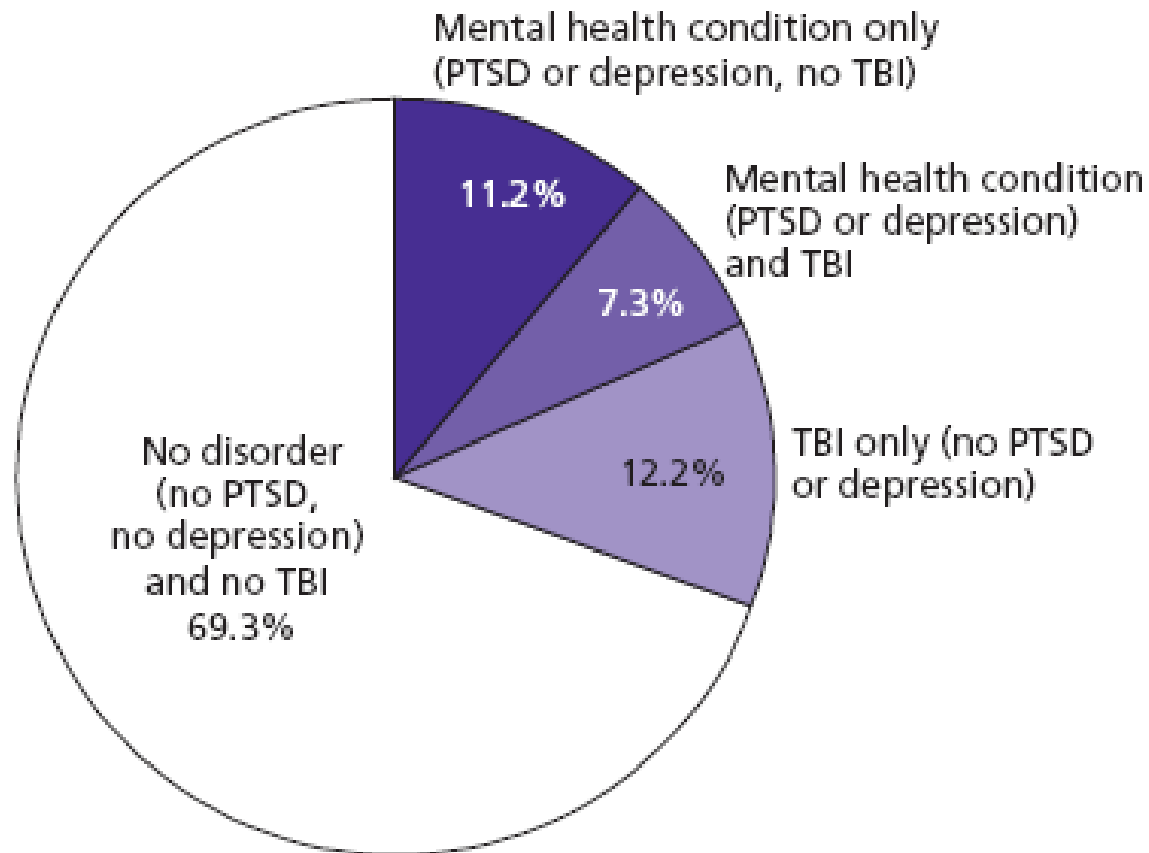
Rand Report: *Invisible Wounds*

Mental Health and Cognitive Care Needs of America's Returning Veterans April 2008

- 1.64 million U.S. troops deployed to Iraq and Afghanistan
- Random digit dialing reached a sample of 1,965 assessed for:
 - PTSD
 - Depression
 - Traumatic brain injury (TBI)



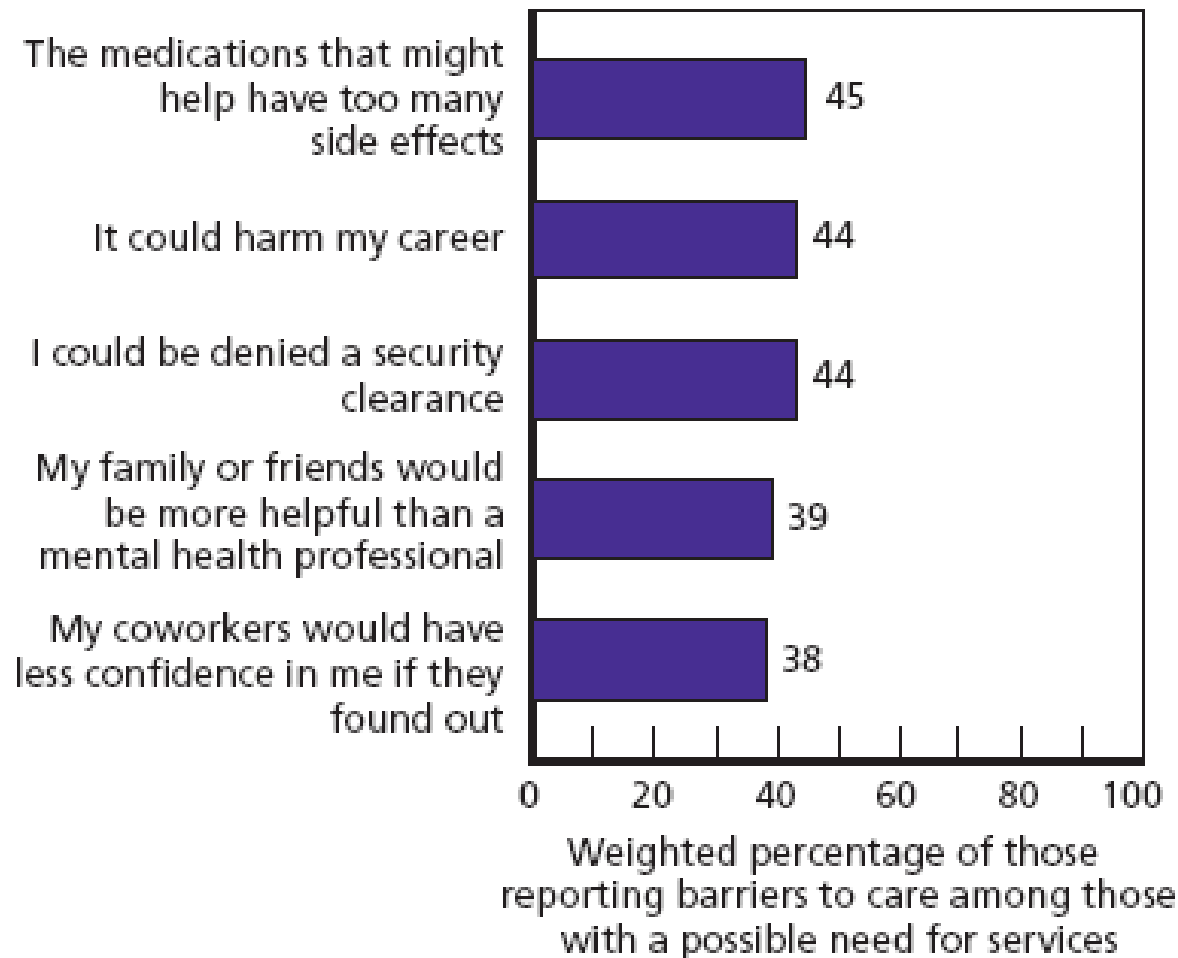
Rand Report: *Invisible Wounds*



Rates of PTSD, depression, and TBI

- About 300,000 currently suffer from PTSD or major depression
- About 320,000 reported experiencing TBI during deployment

Rand Report: *Invisible Wounds* *Reasons for Not Seeking Care*



Spectrum of Post-Deployment Mental Disorders Diagnosed in Iraq/Afghanistan Veteran VA Utilizers (N = 324,846)

Disorder	N	%
PTSD	67,525	21%
Drug Abuse/Dependence ^c	59,477	18%
Depression	45,155	14%
Neurotic Disorders	35,605	11%
Affective Psychosis	25,399	8%
Alcohol Dependence	11,245	3%
Acute Stress Reaction	4,070	1%

^a VHA Office of Public Health and Environmental Hazards, FY02 – FY08, 1st quarter
^b Veterans may receive more than one diagnosis of mental disorder

^c Includes 43,824 veterans with tobacco use disorder

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



Special Clinical Emphasis Areas

Quality Improvement Needs Assessment (N = 420)

Measure	PTSD (%)	No PTSD (%)	OR (95% CI)
Problematic ETOH use	21.4	6.5	3.9 (1.7-9.0)
Problematic drug use	3.1	1.9	ns
Current smoking	32.0	22.4	ns



LUIS SINCO / Los Angeles Times 2004

Special Clinical Emphasis Areas

Quality Improvement Needs Assessment (N = 420)

Measure	PTSD (%)	No PTSD (%)	OR (95% CI)
Suicide risk	21.2	0.9	28.2 (3.8 – 208.8)
Attempted suicide last 4 months	4.1	0.9	ns



Special Clinical Emphasis Areas

Quality Improvement Needs Assessment (N = 420)

Measure	PTSD (%)	No PTSD (%)	OR (95% CI)
severe pain	24.5	8.3%	3.6 (1.8-7.3)
poor physical health	23.0	3.7	7.7 (2.7-22.1)
poor sleep	80.3%	33.2%	14.9 (8.6-25.6)



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



Military Sexual Trauma*

- 27% of men have experienced military sexual trauma
- 60% of women have experienced military sexual trauma
- 3.5% of men have experienced military sexual assault
- 23% of women have experienced military sexual assault
- 1.2% of men have experienced rape
- 11% of women have experienced rape
- 1% of men seeking care at VA facilities have experienced sexual trauma
- 20% of women seeking care at VA facilities have experienced sexual trauma

* Data sources: Department of Defense: [2006 Annual Report on Military Services Sexual Assault](#) [pdf]

Department of Veterans Affairs, "Military Sexual Trauma Among The Reserve Components Of The Armed Forces"

Integrated Care versus the Usual Standard of VA Care for Smoking Cessation in PTSD

A Randomized Clinical Trial

McFall, M., et al. Improving Smoking Quit Rates for Patients with PTSD. *Am J. Psychiatry* 162:1311-1319

Supported by VA Medical Research Service and University of Washington Alcohol and Drug Abuse Institute

Objective

To compare the effectiveness of brief Integrated Care (IC) versus VA's Usual Standard of Care (USC) for nicotine dependence in veterans undergoing mental health treatment for PTSD.

Study Design and Eligibility Criteria

- Design:
 - » Two-group randomized, controlled effectiveness trial comparing IC (n = 33) versus USC (n = 33)
 - Participants:
 - » Inclusions: PTSD Program outpatients who smoked > 10 cigarettes per day
 - » Exclusions: unstable psychosis or BPD, untreated substance dependence, smokeless tobacco
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Integrated Care: Clinic Implementation and Monitoring Strategy

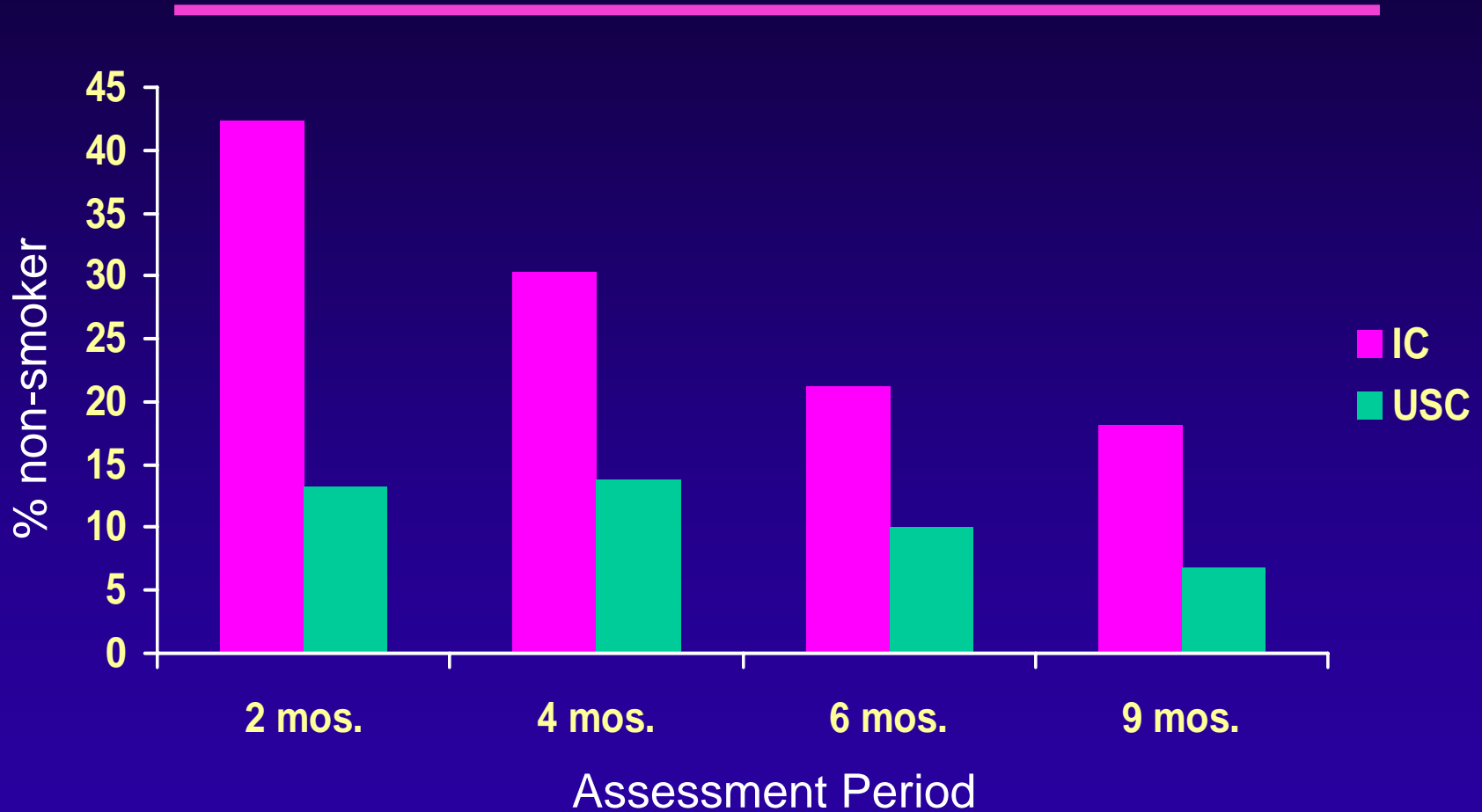
- Initial training and ongoing supervision in IC, adapted from *PHS Clinical Practice Guidelines for Tobacco Cessation*
 - Manualized procedures
 - Charting template
 - Case review and team-based problem solving for relapsers, rolled into weekly staff meeting
 - Provider feedback of smoking status
 - “Clinical champion” to promote the project
-

Integrated Care: *Overview of Clinical Intervention*

- Behavioral Counseling^a
- Pharmacotherapy
- Self-help readings
- Relapse prevention/recovery and maintenance

^a Six weekly sessions (20 minutes each) plus discretionary follow-up visits.

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



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

Evidence-Based Psychotherapy

- **Exposure Therapy**
 - **Imaginal and en vivo exposure, EMDR (eye movement desensitization and processing)**
 - **Cognitive therapy and cognitive processing therapy**
 - **Anxiety/Symptom Management**
 - **Supportive Therapy**
 - **Psychodynamic Therapy**
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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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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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