

State of the Science: Current Trends in Research & Treatments for PTSD



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State of the Science: Current Trends in Research & Treatments for PTSD

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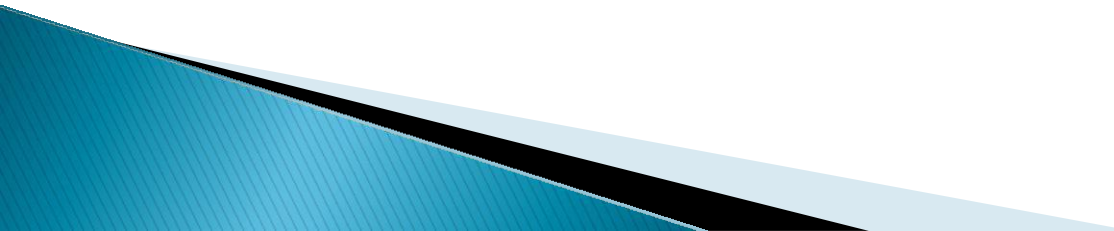


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Disclosures

<i>Grants</i>	<i>Department of Defense, National Institute of Mental Health, The Boeing Company, Navy SEAL Foundation, PESI Foundation</i>
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Does Treatment X work?

- 1. As compared to what?*
- 2. What does it mean for a treatment to “work”?*

Is Treatment X better than no treatment?

Is Treatment X better than placebo or sham?

Is Treatment X better than Treatment Y?



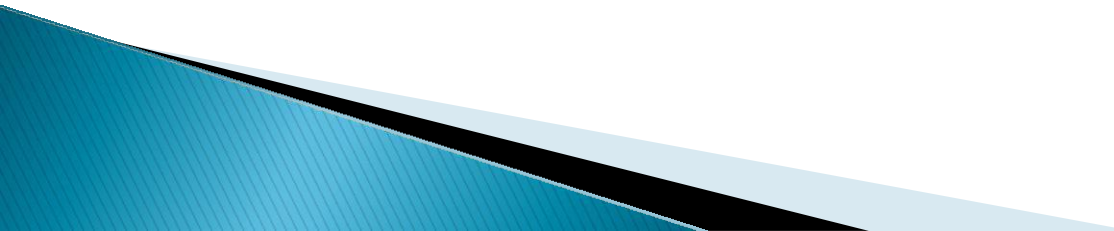
Is Treatment X better *at reducing PTSD symptoms* than no treatment?

Is Treatment X better *at reducing PTSD symptoms* than placebo or sham?

Is Treatment X better *at reducing PTSD symptoms* than Treatment Y?

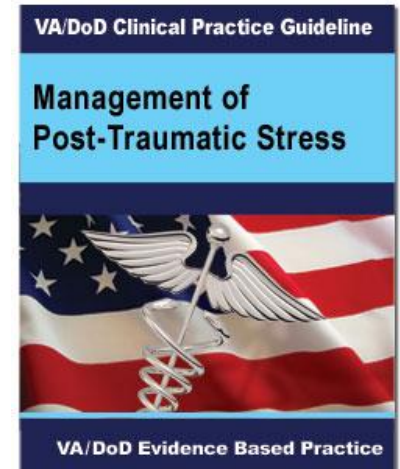


*What treatments, delivered how, by whom,
and under what circumstances, are most
effective for this person?*



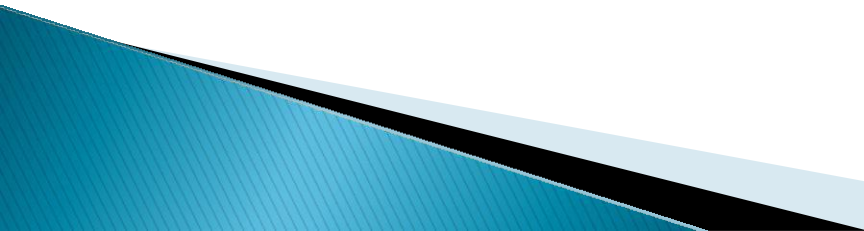
CLINICAL PRACTICE GUIDELINES

- APA Clinical Practice Guideline for the Treatment of PTSD, 2017
- VA/DOD Clinical Practice Guideline, 2017
- NICE Guideline, 2018
- Australian PTSD Guidelines, 2021
- Institute of Medicine, 2014



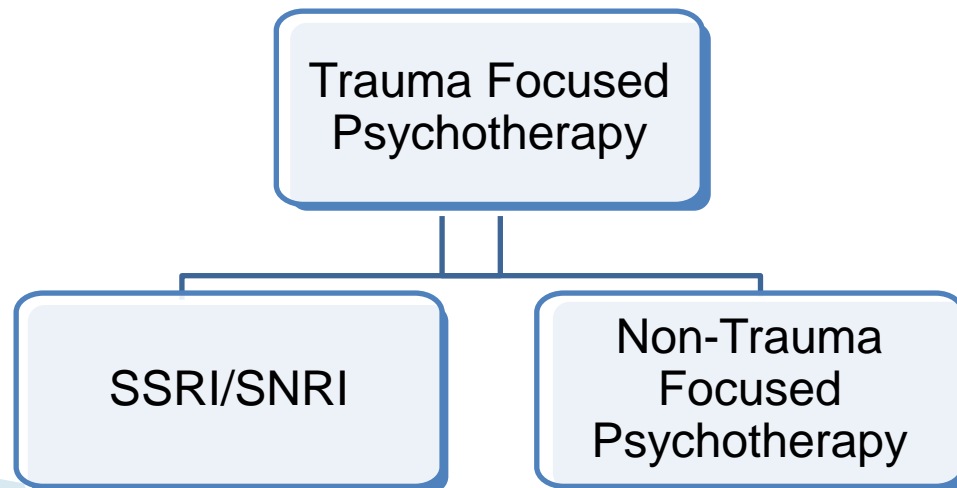
WHAT DOES THE EVIDENCE SAY?

Trauma-focused psychotherapy works

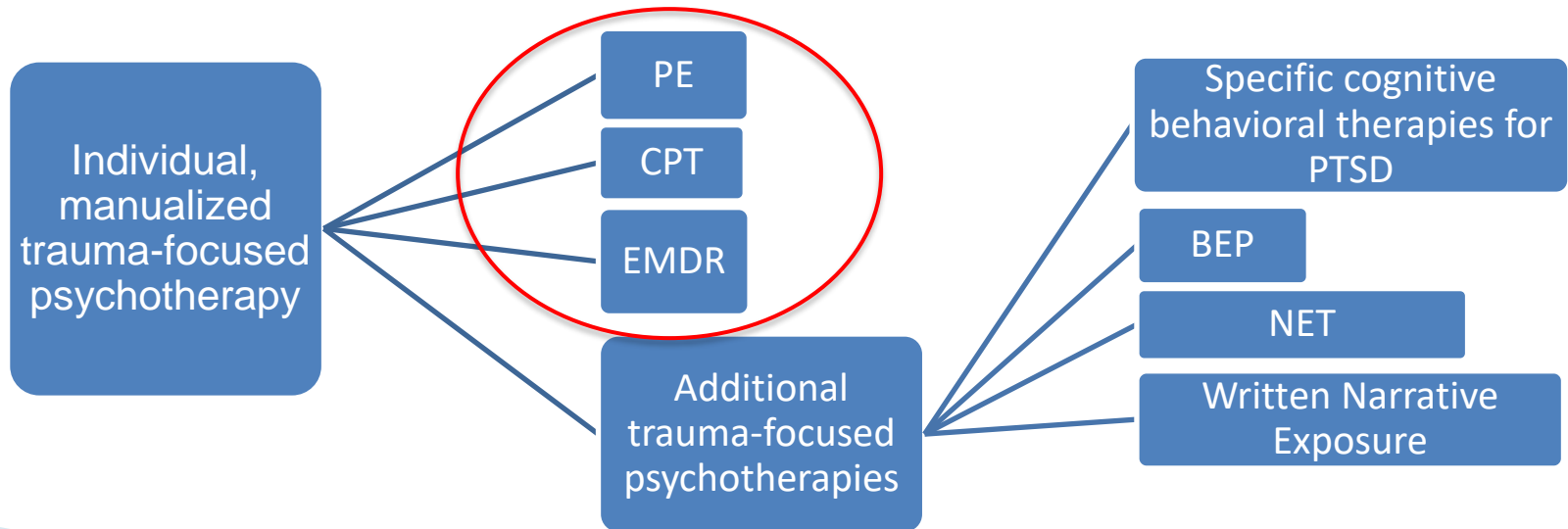
- Untreated PTSD can impact health and enjoyment of life
 - With no treatment, symptoms are unlikely to get better and may get worse
 - Myth Busting: Trauma-focused psychotherapy for PTSD is not laying on a couch, won't go on indefinitely, and is not the same as talking to a support group.
 - There are several recommended treatments, not just for PTSD but also for the comorbid symptoms
 - There are side effects to medications and to psychotherapy; it is hard work and symptoms may worsen initially
- 

***We recommend* individual, manualized trauma focused psychotherapy over other pharmacologic and non-pharmacologic interventions for the primary treatment of PTSD.**

***When individual trauma focused psychotherapy is not readily available or not preferred, we recommend* pharmacotherapy or individual non-trauma-focused psychotherapy. There is *insufficient* evidence to recommend one over the other.**

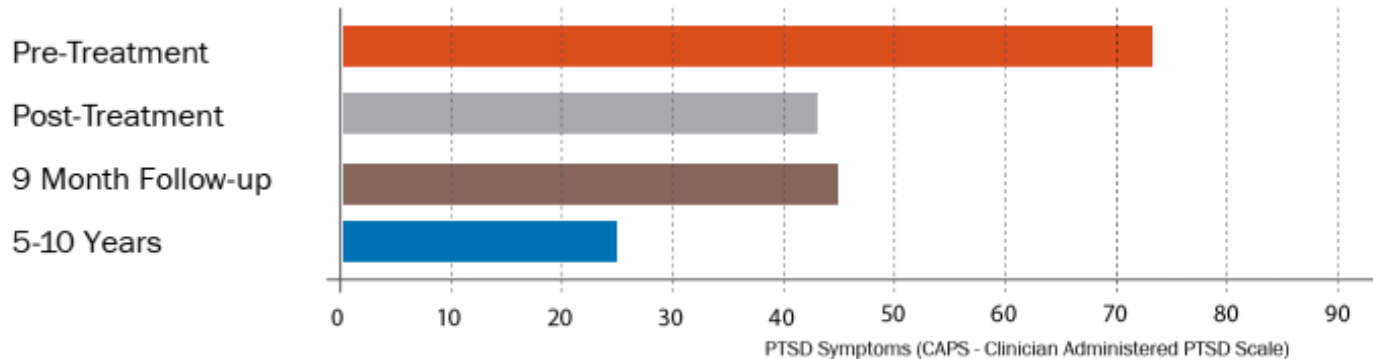


We recommend individual, manualized trauma focused psychotherapies that have a primary component of exposure and/or cognitive restructuring to include Prolonged Exposure (PE), Cognitive Processing Therapy (CPT), Eye Movement Desensitization and Reprocessing (EMDR), specific cognitive behavioral therapies for PTSD, Brief Eclectic Therapy (BEP), Narrative Exposure Therapy (NET), and written narrative exposure.

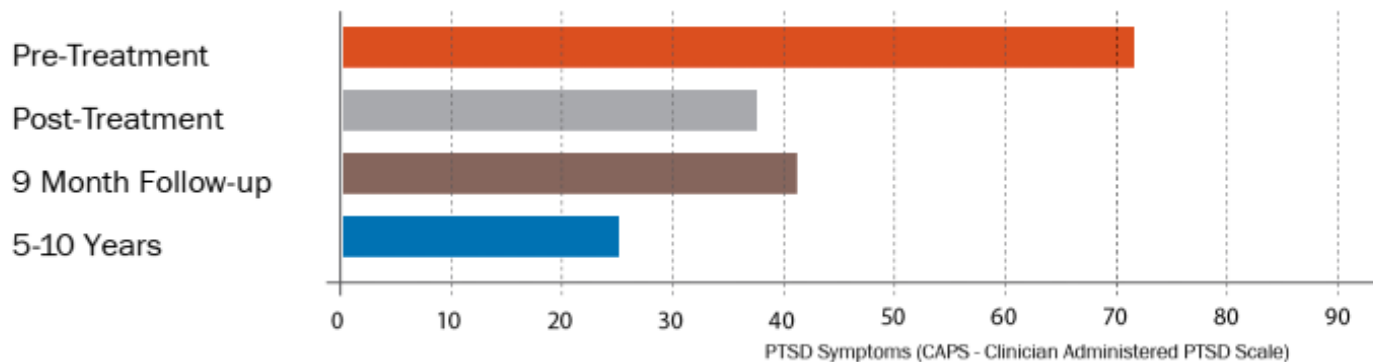


Effects of Trauma Focused Cognitive Psychotherapy Last

Prolonged Exposure



Cognitive Processing Therapy



Resick, Patricia A.; Nishith, Pallavi; Weaver, Terri L.; Astin, Millie C.; Feuer, Catherine A. *Journal of Consulting and Clinical Psychology*, Vol 70(4), Aug 2002, 867-879. doi: 10.1037/0022-006X.70.4.867

What treatment	Cognitive processing therapy (CPT)			
Delivered how	Individual Weekly	Group Daily		
By whom	Mental health therapists Community members / peers			
Under what circumstances	In-person Outpatient Native language	Online Residential	Telephone Inpatient Via interpreter	Smartphone
For whom	Men War trauma Single trauma Substance use Adults English	Women Sexual violence Repeated trauma Suicidal Adolescents non-English	Depression	Veterans Child abuse MVA Children Literate Illiterate

If individual trauma-focused psychotherapy is not readily available or not preferred, then recommend:

Pharmacotherapy:

Sertraline
Paroxetine
Fluoxetine
Venlafaxine

Manualized individual non-trauma-focused psychotherapy

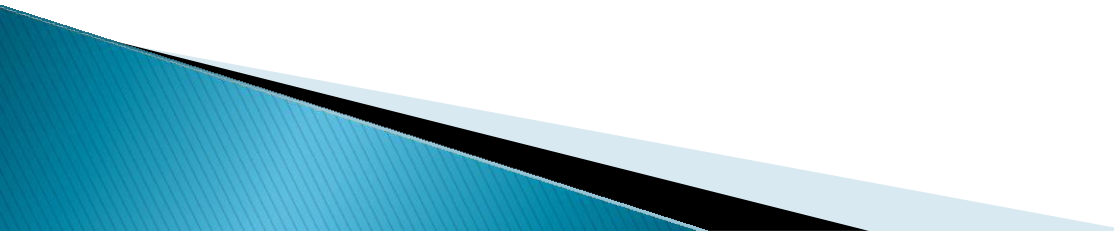
Present-Centered Therapy (PCT)
Stress Inoculation Training (SIT)
Interpersonal Psychotherapy (IPT)

There is insufficient evidence to recommend one over the other.

	Trauma Therapies	SSRI/SNRI	Novel Treatments	Experimental
How many people feel better?	Over 80%	Over 60%	Over 50%	Unknown
How much better do people feel?	Large reduction in symptoms 53% no longer have the condition	Small to moderate reduction in symptoms 42% no longer have the condition	Small to moderate reduction in symptoms Unknown if it eliminates the condition	Unknown reduction in symptoms Unknown if it eliminates the condition
How long does the treatment take?	Daily for 2 weeks to weekly for 3 months	Daily for months to years	Varies	Varies
What are the risks?	Mild discomfort during treatment	Headaches, sleep problems, weight gain, sexual side effects	Headaches, sleep problems, weight gain, sexual side effects, seizures	Unknown
How do we know?	Decades of scientific studies conducted by independent researchers	Decades of scientific studies conducted by independent researchers and marketing information from companies	A few small studies conducted by researchers and marketing information from companies	Testimonials and marketing information from companies

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MYTH BUSTING

- ▶ 1) You don't have to tell your trauma narrative to get better!
 - ▶ 2) Trauma treatments have lower suicide rates than coping, readiness or talk therapies
 - ▶ What about novel treatments?
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The Signal and the Noise

Signal

*Information that conveys
meaning*

Noise

Items of no value that obscure
useful information

The Signal and the Noise

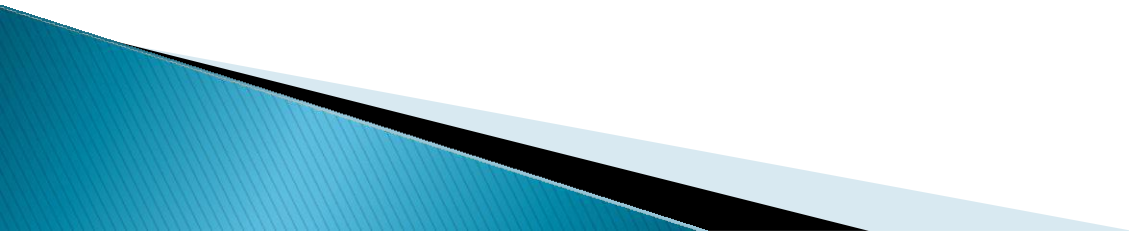
Signal

Treatments that maximize the probability of benefit

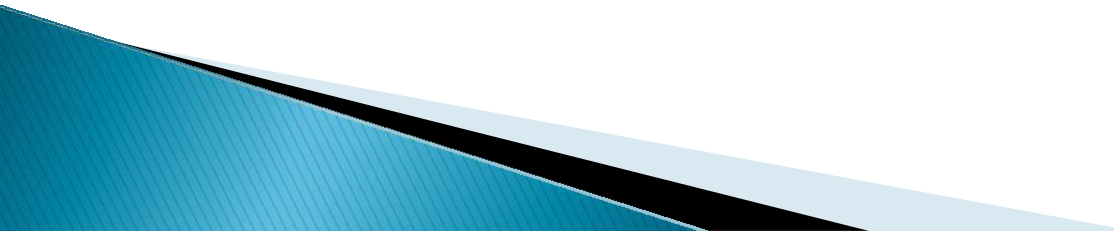
Noise

Treatments with overstated or exaggerated claims of benefit

Distinguishing the Signal from the Noise



A Short List of Novel & Experimental Treatments for PTSD

- *Transcranial magnetic stimulation (TMS)*
 - *Stellate ganglion block*
 - *Cannabis*
 - *Psychedelic-assisted therapy (psilocybin, MDMA)*
 - *Ketamine*
 - *Animal-assisted therapies (e.g., equine therapy)*
 - *Service animals*
 - *Recreational/wilderness therapies*
 - *Essential oils*
 - *Dietary supplements*
- 

Probably Noise

Transcranial magnetic stimulation (TMS)

Stellate ganglion block

Psychedelic-assisted therapy (psilocybin, MDMA)

Ketamine

Animal-assisted therapies (e.g., equine therapy)

Service animals

Recreational/wilderness therapies

Essential oils

Dietary supplements

Unclear (Probably Minimally Effective)

Transcranial magnetic stimulation (TMS)

Stellate ganglion block

Psychedelic-assisted therapy (psilocybin, MDMA)

Ketamine

Animal-assisted therapies (e.g., equine therapy)

Service animals

Recreational/wilderness therapies

Essential oils

Dietary supplements

Unclear (Too Early to Tell)

Trauma-focused therapies

SSRI/SNRI medications

Transcranial magnetic stimulation (TMS)

Stellate ganglion block

Psychedelic-assisted therapy (psilocybin, MDMA)

Ketamine

Essential oils

Dietary supplements

Animal-assisted therapies (e.g., equine therapy)

Service animals

Recreational/wilderness therapies

Possible Signal

Transcranial magnetic stimulation (TMS)

Stellate ganglion block

Psychedelic-assisted therapy (psilocybin, MDMA)

Ketamine

Animal-assisted therapies (e.g., equine therapy)

Service animals

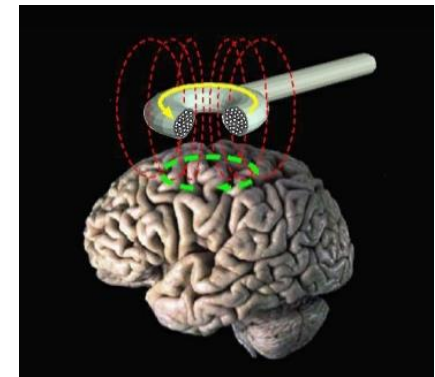
Recreational/wilderness therapies

Essential oils

Dietary supplements

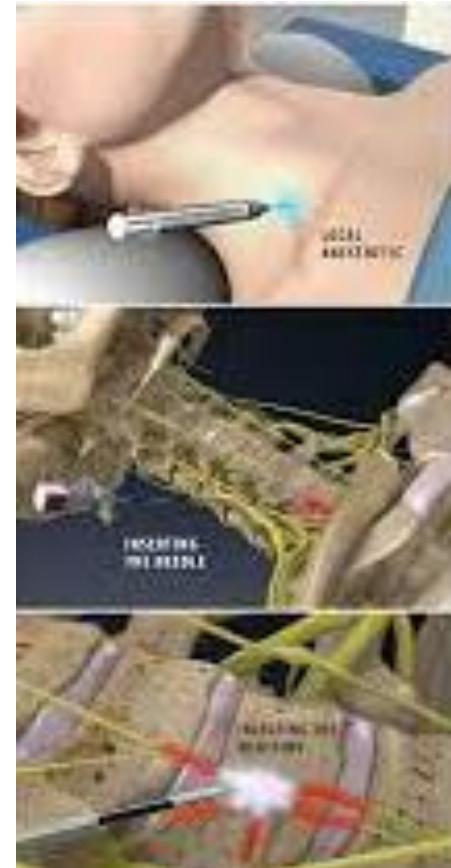
Transcranial Magnetic Stimulation

	TMS
How many people feel better?	Unknown
How much better do people feel?	Moderate reduction in PTSD symptoms Unknown if it eliminates PTSD
How long does the treatment take?	Daily for 6-8 weeks
What are the risks?	Headache, neck pain, tingling, sleepiness, facial twitch, impaired cognition, seizures
How do we know?	Several studies conducted by researchers



Stellate Ganglion Block

	TMS
How many people feel better?	Unknown
How much better do people feel?	Small to moderate reduction in PTSD symptoms Unknown if it eliminates PTSD
How long does the treatment take?	1-3 hours
What are the risks?	Drop in blood pressure, throat irritation, slowed heart rate, seizure
How do we know?	A few studies conducted by researchers



We recommend against treating PTSD with cannabis or cannabis derivatives due to the lack of evidence for their efficacy, known adverse effects, and associated risks.

Preliminary evidence that cannabis could improve PTSD symptoms, particularly nightmares, is offset by the significant side effects.

The lack of well-designed RCTs evaluating the efficacy of cannabis in large samples of patients with PTSD combined with the serious side effects, does not support the use of natural or synthetic cannabinoids as a treatment for PTSD.

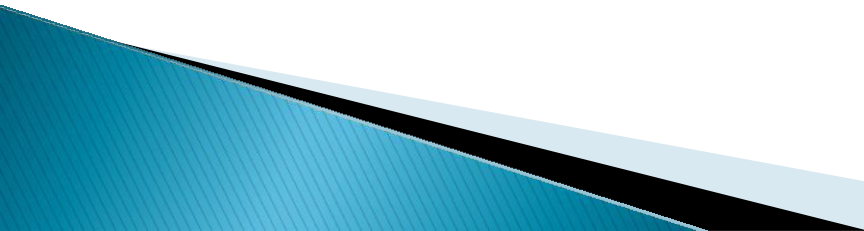
Promotion and Marketing Hype

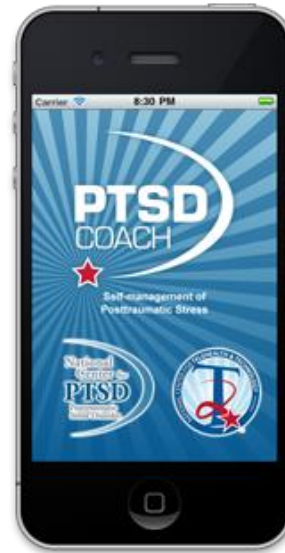
- *Greatly exaggerated, often unsubstantiated claims*
- *Conveying of powerful and unfounded expectancy effects*
- *Excessive appeal to authorities or gurus*
- *Heavy reliance on endorsements from presumed experts*
- *Use of extensive promotional efforts, including sale of paraphernalia*
- *Extensive use of “psychobabble” or “neurobabble”*
- *Tendency of advocates to be defensive and dismissive of critics*
- *Extensive reliance on anecdotal evidence and testimonials*
- *Claims that treatment “fits all” or “cures all”*

Red Flags

- *Use of promotional language:*
 - “Revolutionary” or “Ground-breaking”
 - “Complete satisfaction guaranteed”
 - “If this doesn’t help you, nothing will”
- *Use of nonspecific terms and language:*
 - “Healing” or “Holistic”
- *“Cure all” claims (treatment used for multiple problems)*
- *Availability of products, merchandise, and/or swag for sale*
- *Denial of side effects and risks*
- *“Proof” of effectiveness based exclusively (or nearly exclusively) on testimonials, anecdotal evidence, and/or satisfaction ratings*

Final Thoughts

1. *Think in terms of probabilities and “returns on investment”*
 2. *Think in terms of “better or worse” versus “effective or ineffective”*
 3. *Remember all treatments have limitations, side effects, and risks*
 4. *If it sounds too good to be true, it probably is*
 5. *Most treatments will help few, but few treatments will help most*
 6. *What are you willing to put your money on?*
- 



Resources: Mindfulness,
COVID, PTSD, Couples &
Insomnia
www.ptsd.va.gov



STRIVE

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