

the treatment of

PTSD

Literature Review: 2007-2023



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Abstract

Post-traumatic stress disorder (PTSD):

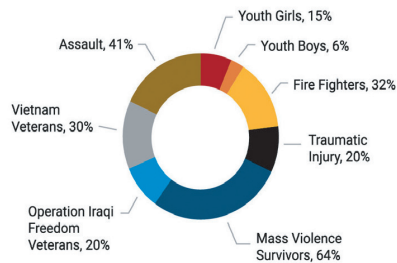
- > The **cause** is readily identifiable...
- > BUT **individual responses** to trauma can be highly variable.

Transformational advances in the conceptual framework for diagnosing and treating PTSD are possible:

- Neuroscientific advancements: HPA axis, threat response, molecular-genetic impact;
- Biological implications on broader social context, especially within marginalized populations;
- Psychedelic-assisted therapies, if legalized in early 2024, may fundamentally alter society.

Introduction

- > PTSD is an interaction between an **individual**, a **traumatizing event (or events)**, and an **individual's social context**.³
- > PTSD presents many faces, and at unpredictable times.^{1,2,3,5}
- > PTSD reported rates¹⁷ for:



Female? More than twice as likely to develop PTSD¹⁷

Economic Burden of PTSD

PTSD costs the United States in excess of \$232B each year (2018).^{5,19}

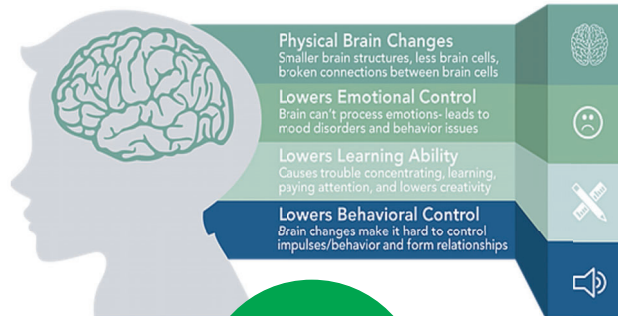
That's enough to:

- > Pay the US military for nearly 3 months;
- > Feed every starving human for 3 months;
- > Buy Facebook or match ALL annual corporate gifting (2021)⁴

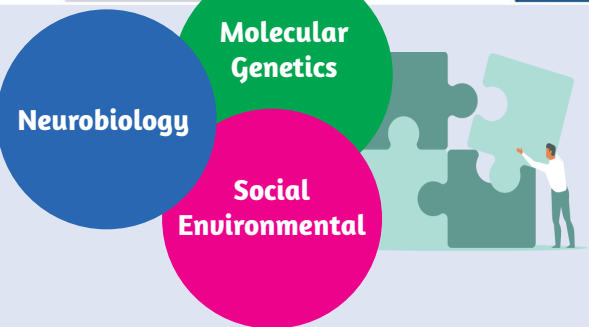
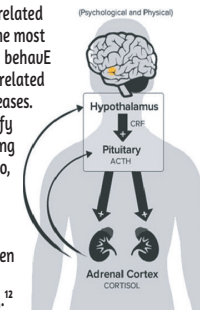


Discussion

THE IMPACT OF TRAUMA^{2,15} ON THE BRAIN...

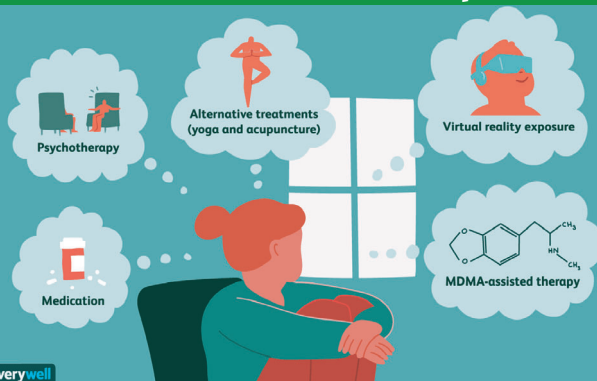


...AND THE BODY
Neurological advancements related to the HPA Axis are among the most well-understood networks in behavioral neuroscience.³ Stress is related to chronic pain and other diseases. Further research might identify potential biomarkers indicating prior traumatic exposure. Also, predictive models can be improved to match therapeutic modalities to individuals in order to lessen avoidance of treatment and encourage continued therapy.¹²



A COMPLICATED PUZZLE
PTSD risk factors include heritable factors (30-40%),¹³ chronic or repeated exposure due to racism, adversity, SES, availability of treatment, social network,⁵ and any other combination of biological, social and environmental factors. Clinicians can improve PTSD screening as many people cannot pinpoint a single traumatic event due to chronic exposure in childhood.¹⁵ Cumulative trauma is a form of complex trauma, or cPTSD, although the clinical definition and inclusion in the DSM-5 is still cause for debate.^{9,15}

PTSD Treatments & Therapies^{4,9,10,12,17,18}



PHARMACOLOGICAL
Although SSRIs are FDA-approved for PTSD, 35-47% of individuals do not respond to treatment.¹²

PSYCHOTHERAPEUTIC
Psychotherapeutic treatments (CBT,¹⁷ PE,¹¹ CPT,¹⁷ EMDR⁴) are the gold standard⁹ yet drop-out rates remain high.

PSYCHEDELIC-ASSISTED THERAPY
If FDA-approved in 2024, exceptionally promising clinical trial efficacy rates across all demographics surpasses 71.2% no longer meeting criteria, and 87% with significant reduction in symptoms after three experiential sessions and manual therapy. Secondary, positive effects related to substance use and chronic pain should be explored. Risk profiles: hypertension, active suicidality.¹²

Chart: University of Maryland Global Campus. Graphics: JR Bee, VeryWell; PTSD Foundation of Texas. ⁴ Source: Forbes, 9/1/21 Study of Corporate Gifting

Results

Exposure to traumatic event(s)

- A Intrusive Symptoms
- B Avoidance & Numbing
- C Negative Beliefs & Mood
- D Arousal & Reactivity

Symptoms > 1 Month

PTSD can be any combination of symptoms from cluster A, B, C and/or D, which results in clinically significant distress or impairment, attributable to the event(s) and NOT due to physiological effects of a substance or medical condition.²

Future Research

- Identify neurobiological markers specific to PTSD
- Improved diagnosis, especially childhood screening (ACEs)
- Improved predictive tools to identify PTSD risk factors
- Study the impact of cumulative exposure to traumatic events
- Study the impact of world events and trends on PTSD rates

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^A Detailed reference list available from pearce23@wfu.edu