### Trauma and Behavior

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Trauma is more than an event. It becomes a lifestyle of reaction, hypervigilance and self medication.

#### Adverse Childhood Experiences (ACE)

- Physical, emotional, sexual abuse; mentally ill, substance abusing, incarcerated family member; seeing mother beaten; parents divorced/separated
  - --Overall Exposure: 86% (among 7 tribes)

	Non-Native	Native
Physical Abuse-M	30%	40%
Physical Abuse-F	27	42
Sexual Abuse-M	16	24
Sexual Abuse-F	25	31
<b>Emotional Abuse</b>	11	30
Household alcohol	27	65
Four or More ACEs	6	33

Am J Prev Med 2003;25:238-244

#### **ACEs and Adult Health**

- ACE Score ≥4
  - 4-12 x risk for alcoholism, drug abuse, depression and suicide attempt
  - 2-4 x risk for smoking, teen pregnancy, STDs, multiple sexual partners
  - 1.4-1.6 x risk for severe obesity
  - Strong graded relationship at all levels of ACEs for almost all outcomes, including heart disease

Am J Prev Med 1998;14:245-258 and Circulation

2004;110:1761-6

- Across 10 countries, adults who experienced ≥3 childhood adversities
  - Hazard ratios 1.59 for diabetes, 2.19 for heart disease
  - Risk similar to the association between cholesterol and heart disease
    - Both in magnitude as well as population prevalence

Arch Gen Psychiatry 2011;68:838-844

- Trauma is the unfinished cycle of energy, it is stored in our nervous system. We've learned a lot from animal research on why Zebras don't get ulcers. (Sapolsky, 1994)
- Trauma is in the constriction (lack of options) and incompletion of the cycle
- We think too much! Don't rationalize fear, shame, blame

# Biology to Sociology

#### The brain itself is changed by stress

- "What fires together, wires together"
- Complex process of "sculpting" the brain, converting experience into neuronal changes
  - Cortisol, Brain-Derived Neurotrophic Factor (BDNF)
  - Chronic stress and depression:
    - shrink the hippocampus and prefrontal cortex
      - $-\downarrow$  Memory, selective attention, executive function/decision making
    - potentiate growth of the amygdala
      - — ↑ Fear/hypervigilience, anxiety, aggression

Traumatized parenting

Traumatized community

Responses are set for survival, not Thrival

# As providers we must be vigilant and ask ourselves the NEXT question, "Could it be...."

#### Universal Symptoms of Trauma (Levine 2001)

- 1. Hyperarousal
- 2. Constriction
- 3. Dissociation
- 4. Feelings of numbness or shutdown (or "freeze")

#### **Recognizing Symptoms**

Physical: Loss of appetite, sleep disturbance

Emotional: Anger, shame, irritability

Spiritual: Feeling, alone, isolation, shame

Cognitive: Confusion shortened attention span

Behavioral: aggression

#### Signs of Mental Health Issues

(American Psychiatric Association)

- Recent social withdrawal and loss of interest in others.
- An unusual drop in functioning, especially at school or work, such as quitting sports, failing in school, or difficulty performing familiar tasks.
- Problems with concentration, memory, or logical thought and speech that are hard to explain.
- Heightened sensitivity to sights, sounds, smells or touch; avoidance of over-stimulating situations.

- Loss of initiative or desire to participate in any activity; apathy.
- A vague feeling of being disconnected from oneself or one's surroundings; a sense of unreality.
- Unusual or exaggerated beliefs about personal powers to understand meanings or influence events; illogical or "magical" thinking typical of childhood in an adult.
- Fear or suspiciousness of others or a strong nervous feeling.
- Uncharacteristic, peculiar behavior.
- Dramatic sleep and appetite changes or deterioration in personal hygiene.
- Rapid or dramatic shifts in feelings or "mood swings"

## Cognitive Trauma

- Affect expression
- Education
- Stress Management
- Affect Modulation
- Creating the Trauma Narrative
- Behavior Management

# Eye Movement Desensitazation & Reprocessing (EMDR)

 "EMDR therapy is recognized as an effective form of trauma treatment in numerous practice guidelines worldwide. In the US, this includes organizations such as the American Psychiatric Association and Department of Defense. More than twenty randomized studies support the effectiveness of the therapy in the treatment of PTSD." EMDR Institute

#### EMDR cont.

"One of the procedural elements is "dual stimulation" using either bilateral eye movements, tones or taps. During the reprocessing phases the client attends momentarily to past memories, present triggers, or anticipated future experiences while simultaneously focusing on a set of external stimulus. During that time, clients generally experience the emergence of insight, changes in memories, or new associations. The clinician assists the client to focus on appropriate material before initiation of each subsequent set."

#### **EMDR**

- **Abbasnejad, M., Mahani, K. N., & Zamyad, A. (2007).** Efficacy of "eye movement desensitization and reprocessing" in reducing anxiety and unpleasant feelings due to earthquake experience. *Psychological Research, 9,* 104-117. *EMDR is effective in reducing earthquake anxiety and negative emotions (e.g. PTSD, grief, fear, intrusive thoughts, depression, etc) resulting from earthquake experience. Furthermore, results show that, improvement due to EMDR was maintained at a one month follow up.*
- Ahmad A, Larsson B, & Sundelin-Wahlsten V. (2007). EMDR treatment for children with PTSD: Results of a randomized controlled trial. Nord J Psychiatry, 61, 349-54.

  Thirty-three 6-16-year-old children with a DSM-IV diagnosis of PTSD were randomly assigned to eight weekly EMDR sessions or the WLC group. EMDR was found to be an effective treatment in children with PTSD from various sources and who were suffering from a variety of co-morbid conditions.
- Arabia, E., Manca, M.L. & Solomon, R.M. (2011). EMDR for survivors of life-threatening cardiac events: Results of a pilot study. Journal of EMDR Practice and Research, 5, 2-13.

  Forty-two patients undergoing cardiac rehabilitation . . . were randomized to a 4-week treatment of EMDR or imaginal exposure (IE). . . . EMDR was effective in reducing PTSD, depressive, and anxiety symptoms and performed significantly better than IE for all variables. . . Because the standardized IE procedures used were those employed in-session during [prolonged exposure] the results are also instructive regarding the relative efficacy of both treatments without the addition of homework.
- Carlson, J., Chemtob, C.M., Rusnak, K., Hedlund, N.L, & Muraoka, M.Y. (1998). Eye movement desensitization and reprocessing (EMDR): Treatment for combat-related post-traumatic stress disorder. Journal of Traumatic Stress, 11, 3-24 Twelve sessions of EMDR eliminated post-traumatic stress disorder in 77% of the multiply traumatized combat veterans studied. Effects were maintained at follow-up. This is the only randomized study to provide a full course of treatment with combat veterans. Other studies (e.g., Pitman et al./Macklin et al.) evaluated treatment of only one or two memories, which, according to the International Society for Traumatic Stress Studies Practice Guidelines, is inappropriate for multiple-trauma survivors. The VA/DoD Practice Guideline also indicates these studies (often with only two sessions) offered insufficient treatment doses for veterans.

#### **EFT**

- A combination of accu-pressure, accupuncture, neurolinguistic programming.
- Founded by Gary Craig
- Simple to use "The Peoples Tool"
- Very effective
- May be "A Bridge Too Far"
- Veterans Stress Project website;
   <a href="http://stressproject.org/scientificresearch/research-information/">http://stressproject.org/scientificresearch/research-information/</a>

- Karatzias, T., Power, K., Brown, K., McGoldrick, T., Begum, M., Young, Y., Loughran, P., Chouliara, Z., and Adams, S. (2011). A controlled comparison of the effectiveness and efficiency of two psychological therapies for Post-traumatic Stress Disorder: Eye Movement Desensitization and Reprocessing vs. Emotional Freedom Techniques. *The Journal of Nervous and Mental Disease (2011)*, 199(6), p 372-378.
- Church, D., Hawk, C., Brooks, A. J., Toukolehto, O., Wren, M., Dinter, I., & Stein, P. (2013)
   Psychological trauma symptom improvement in veterans using EFT (Emotional Freedom
   Techniques): A randomized controlled trial. *Journal of Nervous and Mental Disease*, 201,
   153-160.
- Church, D., Piña, O., Reategui, C., & Brooks, A. J. (2012). Single session reduction of the intensity of traumatic memories in abused adolescents: A randomized controlled trial. *Traumatology*, 18(3), 73-79. doi: 10.1177/1534765611426788.
- Stein, P. K., & Brooks, A. J. (2011). Efficacy of EFT provided by coaches vs. licensed therapists in veterans with PTSD. *Energy Psychology: Theory, Research, and Treatment*, 3(1), 11-18.

#### The VA

- Previously Listed Options
- Native Warriors- Arming For Battle then disarming From Battle
- Using Traditions and community to empower the Warrior-Sweats
- Traditional Storytelling to address "Trauma Narrative"
- Understanding the patient in the context of community-The Warriors' Standing in the Community-Honor
- Warrior as a spiritual entity

#### **Texts**

(Anything by these authors)

- Bessel Van Der Kolk- The Body Keeps Score: The Brain, Mind, and Body in the healing of Trauma
- Peter Levine, Maggie Kline- Trauma Through a Childs Eyes: Awakening the Ordinary Miracle of Healing
- Gabor Mate- In an Unspoken Voice
- Robert Scaer-The Body Bears the Burden: Trauma,
   Dissociation and Disease