The Impact of Trauma in the Medical Environment: Trauma & Addiction Focused SBIRT

Michael F. Barnes, Ph.D., MAC, LPC
Chief Clinical Officer
Trauma, by the numbers!

- Each day in the United States there are:
  - 43 people will be murdered
  - 2,200 rapes (moderate estimate)
  - 123 suicides (20 veterans per day)
  - 128 opiate overdose deaths
  - 241 alcohol related deaths
  - 4,754 people with be diagnosed with cancer and 1,670 will die from cancer.
  - 2,191 people will die from heart disease, 573 will die from sudden cardiac arrest
  - 1,808 people will die in tobacco related illnesses
  - 102 people die from automobile accidents
  - 548 children admitted to emergency departments due to falls from playground equipment

- Now multiply these numbers by 365!
Why is Trauma Integration important?

According to the National Center for PTSD:

• **61% of men and 51% of women** report having experienced at least one traumatic event (lifetime)

• **10% of men and 6% of women** report having experienced four or more traumatic events (lifetime) (14% of middle class Americans!)

• Of these trauma victims, 8% receive diagnosis of PTSD

• 1% of American population (New England Journal of Med)

• **Women are diagnosed with PTSD twice as often as men.**
  • 10% of Women & 5% of men will be diagnosed
  • There are multiple reasons for this: Biological, socialization issues, Type of trauma, age of trauma
Introduction - **What is PTSD?**

It is a:

**Bio**-Psycho-Social-Spiritual Disorder

At its core, PTSD is a biological process that results in significant emotional, systemic, and behavioral consequences.

• **Posttraumatic injury!**

Trauma Integrated addiction treatment MUST recognize the biological and systemic factors that maintain the disorder and identify appropriate interventions for treating each.

Like Addiction, PTSD impacts families in the form of Secondary and Transgenerational Trauma!
State 0: (zero): calm, responsive, awake
State 1: slightly anxious, annoyed, nervous, physical tension
State 2: highly anxious, angry, panic symptoms, intense physical tension (stomach, chest, breathing), powerful fight or flight responses
State 3: Dual activated (a mixture of activation with dissociative symptoms): tension with somatic collapse, anxiety, sleepy, panic, hopelessness, heaviness, blurred vision
State 4: pure dissociation marked by a distinct lack of physical sensation and flat affect, numbed out, blank, feeling ‘floaty’, depersonalized, and disconnected

No Solutions
"Scared to death"

New Normal
DSM-5 Diagnostic Criteria for PTSD

• Criterion A: Traumatic Event
  • How does someone get traumatized?
    • Direct *personal experience* of an event that involves threatened death, actual or threatened serious injury, or threat to one’s physical integrity;
    • Or *witnessing an event* that involves death, injury, or a threat to the physical integrity of another person;
    • Or *learning about* unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associates;
    • Or *experiencing repeated or extreme exposure to aversive details of the traumatic event* (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).
To be truly Trauma-Integrated, must be able to address both Shock Trauma (Big T) and Developmental Trauma (chronic little t).

**Shock Trauma is classic PTSD.**
- Defensive Orienting Response is overwhelmed, incomplete Fight/Flight Response, and Remain stuck in incomplete orienting response, hypervigilant and controlling

**Developmental Trauma:** may have similar symptoms as PTSD, but often does not have a Criteria A trauma event.
- Based on consistent mis-attunement from caregivers, chronic early abuse and neglect, poor attachment, and a variety of childhood shock traumas
- Live in high state of Sympathetic Nervous System Response, due to constant threat
- Only other alternative is Parasympathetic Freeze Response
- Live in Dually-Activated Autonomic Nervous System States
- Become disconnected from emotions and body response to stress

**Fail to develop and meet biologically based core needs:**
- Connection, Attunement, Trust, Autonomy, Love-Sexuality
PTSD and Cardiac Disease


- Analysis of 13 studies associated with PTSD and Cardiac Concerns

- Persons with PTSD have increased risk of hypertension, obesity, stroke, and cardiovascular disease.

- Cardiovascular system impacted by:
  - Trauma related dysregulation of Hypothalamic-Pituitary-Adrenal Axis (lower cortisol levels) resulting in chronic inflammatory injury (common with PTSD).
  - Chronic dysregulation of the autonomic nervous system.
    - Consistent experience of elevated levels of stress and activation of the sympathetic nervous system (flight-flight, hypervigilance, control).
  - Increased alcohol abuse, cigarette smoking.

- Family members and relational partners may have higher rates of PTSD than the patient!
PTSD and Cancer


  • N= 469 cancer survivors
  
  • 21% had PTSD Diagnosis at 6 months
  • 6.1% had PTSD symptoms at 4 years
  
  • Breast Cancer survivors has very different findings
  • 3.7 times less likely to have PTSD at 6 months
  • More likely to have PTSD diagnosis at 4 years (with more severe symptoms)
Risk Factors for PTSD in Cancer

- Diagnosis of advanced disease (Abbey et al., 2015)
- Young age (Abbey et al., 2015)
- Recently completed treatment (Abbey et al., 2015)
- Reduced socioeconomic status (Swartzman et al., 2017)
- Reduced education level (Swartzman et al., 2017)
- History of trauma prior to cancer diagnosis (Cordova et al., 1995)
- History of mental health conditions (Cordova et al., 1995)
- Poor social support (Wachen et al., 2014)
- Certain types of cancer (Butler et al., 1999)
PTSD and Fibromyalgia, and Rheumatoid Arthritis

  - Number of patients reporting at least 1 traumatizing event: 82% Fibromyalgia & 61% RA
  - FMS patients reported more emotional abuse and sexual harassment than RA patients.
  - There was no difference in the reported frequency of physical abuse and sexual abuse.
  - FMS patients also reported significantly more traumatic events than RA patients.

  - The association of traumatic exposures with PTSD and other mental health conditions is well known.
Adverse Childhood Events – ACE Study

• ACE Studies – Typically include 10 specific types of ACES:
  • **Childhood Abuse** (Emotional, Physical, and Sexual)
  • **Neglect** (Emotional and Physical)
  • Witness **domestic violence**
  • Parental **marital discord**
  • Living with **substance abusing, mentally ill, or criminal household members**
    • Original study included having a family member who was **incarcerated**
    • 2/3 research participants reported one ACE in their childhood
    • Of those reporting 1 Ace 86% Were also exposed to at least 1 additional ACE
    • 38.5% reported 4 or more additional exposures
      (Dong, Anda, Felitti, Dube, Williamson, Thompson, Loo & Giles, 2004)
  
• 1 in 14 Middle Class Americans have 4 or more ACES (Felitti, et al., 1998)
• At substantially high risk for later morbidity and early mortality
**Prevalence of PTSD and Substance Use Disorders**

Bride (2007) - of treatment-seeking substance abusers:

- 60% to 90% have history of physical or sexual abuse
- 30% to 50% meet criteria for PTSD

Among persons who develop PTSD, **52% of men and 28% of women** are estimated to develop an **alcohol use disorder** and **35% of men and 27% of women** develop a **drug use disorder** (Najavits, 2007)

The numbers are even higher for veterans, prisoners, victims of domestic violence, first responders, etc. (Najavits, 2004a, 2004b, 2007)

Individuals with PTSD are **3 to 4 times more likely to develop SUDs** than individuals without PTSD and have earlier histories with A & D, more severe use, and poor treatment adherence (Khantzian & Albanese, 2008)

Clients with PTSD/SUD are more vulnerable to poorer short- and long-term outcomes, more likely to relapse!
Adverse Childhood Experiences (ACES) – Influence on negative health outcomes

- 60% of United States population have experienced at least one ACE (Centers for Disease Control and Prevention, 2010)

- Individuals with ACES have higher likelihood of experiencing physical and/or psychological health consequences (Afifi et al., 2008)
  - Alcoholism (7.4 x higher), IV drug use (11.3 x higher), Depression (4.5 x higher), Suicide attempts (12 to 15 x higher)
  - emotional dysregulation, dissociation, poor attachment, Obsessive-Compulsive Disorder, Depression,

- Often engage in high risk behaviors that are often the cause of premature death:
  - Heart Disease, Stroke, liver disease, lung cancer, COPD, rheumatoid arthritis
  - Sex with over 50 individuals, unwanted pregnancies, sexually transmitted diseases (Dube & Felitti, 2003)
  - Hepatitis, Diabetes, Cirrhosis
Adult Symptoms of Childhood Trauma (Schwartz, 2016)

- **Cognitive Distortions** (inaccurate beliefs about self, others, the World)
- **Emotional Distress** (Overwhelmed, Anxious, Helpless, Hopeless, Loneliness, Shame, Unfairness, Injustice, Depression, Suicidal Thoughts)
- **Disturbing Somatic Sensations** (Disconnect from body)
- **Disorientation** (Loss of orientation between the past, present, and future)
- **Hypervigilance**
- **Avoidance**
- **Interpersonal Problems** (withdrawing from, blaming, pushing away, or criticizing friends and family. Patterns probably learned from family of origin)
- **Reduced Brain Development** (Deficits in social skills and academic success)
- **Health Problems** (High blood pressure, blood sugar imbalances, food cravings, addictions, suppress immunity, digestive disturbances, sleep disturbances)
- Problems with **Connection, Attunement to Personal needs, Trust, Autonomy/Boundaries, and love/Intimate relationships** (Heller & LaPierre, 2014)
Medical Complications Associated with ACES

  - N= 48,526 adult patients.
  - 55.4% reported at least one ACE and 13.7% reported four or more ACES
  - Score of 4 or more – increased odds for binge/heavy drinking, smoking, risky HIV behavior, diabetes, myocardial infarction, coronary heart disease, stroke, depression, & disability caused by health.

  - First study to present evidence of a link between childhood stressors, menstrual cycle disruption, and fertility difficulties

  - Each of the ACEs was associated with an increased prevalence and risk of frequent headaches.
  - ACEs at 5 or greater had 2-fold experience of frequent headaches
• Who should be screened for Trauma/ACES in Primary Medical Clinic

1. Patients with the following health problems:
   • Obesity (current or past history)
   • Gastro-Intestinal complaints
   • Chronic diseases not well managed or patients who appear non-compliant with self-management
   • PTSD or known history of experience of traumatic events
   • Anxiety
   • Depression
   • Substance abuse disorders (including alcohol, elicit drugs)

2. Patients in high-risk settings such as homeless shelters, women’s shelters, etc.

3. Patients with high health care utilization (Multiple complaints, 3 or more visits in 6 months)

• From E. Aponte 2017, Capstone Project, Umass Doctoral Program in Nursing
• Using criteria above, survey of 71 adult clients of mixed age, race and gender.
• 58 (81.7%) reported at least one ACE Experience; 13 (18.3%) reported No ACES; Only 17 (24%) were in counseling of some type

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Response</th>
<th>Response</th>
<th>Diagnosis</th>
<th>Average ACE Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>39%</td>
<td>28</td>
<td>PTSD</td>
<td>10.4</td>
</tr>
<tr>
<td>Anxiety</td>
<td>38%</td>
<td>27</td>
<td>Substance Abuse</td>
<td>7.2</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>31%</td>
<td>22</td>
<td>Depression</td>
<td>6</td>
</tr>
<tr>
<td>Diabetes</td>
<td>10%</td>
<td>7</td>
<td>Anxiety</td>
<td>5.4</td>
</tr>
<tr>
<td>Chronic Pain</td>
<td>17%</td>
<td>12</td>
<td>Bipolar</td>
<td>5.2</td>
</tr>
<tr>
<td>Chronic Respiratory</td>
<td>14%</td>
<td>10</td>
<td>Chronic Pain</td>
<td>4.9</td>
</tr>
<tr>
<td>Obesity</td>
<td>11%</td>
<td>8</td>
<td>Chronic Respiratory</td>
<td>4.9</td>
</tr>
<tr>
<td>PTSD</td>
<td>10%</td>
<td>7</td>
<td>ADHD</td>
<td>4.8</td>
</tr>
<tr>
<td>Arthritis</td>
<td>8%</td>
<td>6</td>
<td>Diabetes</td>
<td>4.3</td>
</tr>
<tr>
<td>Bipolar</td>
<td>8%</td>
<td>6</td>
<td>Obesity</td>
<td>4.1</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>6%</td>
<td>4</td>
<td>Cardiovascular</td>
<td>3.6</td>
</tr>
<tr>
<td>ADHA</td>
<td>6%</td>
<td>4</td>
<td>Arthritis</td>
<td>3.2</td>
</tr>
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SECONDARY TRAUMA:
The Impact of Traumatic Events on Parents, Partners, and Other Family Members
1. FAMILY SECONDARY TRAUMATIC STRESS RESPONSE:

Posttraumatic Stress Response

- Family members report having experienced emotional, cognitive and behavioral symptoms that are similar to those reported by the primary victim.
  - Anxiety, Fear, Anger
  - Intrusive thoughts about the traumatic event
  - Nightmares
  - Flashbacks
  - Hypervigilance
  - Feeling a need to control others behavior, the environment, their own feelings.

- Sleep disturbances, Fatigue, Dissociation
- Feeling detached or estranged from others.
- Avoidance of activities that remind them of the trauma
- Avoidance of places that remind them of the trauma
How does each family member’s response to the illness & associated trauma in the creation of a new Homeostasis?

Like a mobile adjusts to wind to maintain stability, all families adjust to life’s demands to maintain stability, and system integrity.

- Intoxication
- Anxiety, Hyperarousal/Agitation
- Intrusive Thoughts, Nightmares
- Dissociation, Depression
- Anger, Conflict, Arguments
- Medical, Legal, Employment Crises

“Trauma Survivor/Patient”
Adapted from Kiser & Black, 2005

The FAMILY INFORMED TRAUMA TREATMENT (FITT) MODEL illustrates the intergenerational response to traumatic events, focusing on the impact on child response, adult/parental response, sibling relations, parent-child relations, and adult intimate relations. The model highlights the relationship between these responses and the family unit, showing how acute and longer-term effects, individual development, and family life cycle are influenced. The diagram emphasizes the importance of understanding these dynamics to inform effective treatment strategies.
Trauma Symptoms Override Ability to Look at Chronic Disease issues. Critical to Understand Trauma & Family

- **3 Generation Assessment**
- **Health/Illness Belief System/Schemas**
- **Individual Development of family members**
- **Organization (5 R's) Rules, Roles, Routines, Rituals Relationships (Boundaries)**
- **Family Life Cycle Stages**

- **Trauma Continuum Unhealed Wounds**
  - Betrayal
  - Abandonment
  - Overdose
  - Mental, Physical & Emotional Abuse
  - Fear/Terror
  - Arrests
  - Lies
  - Dissociation
  - Anxiety
  - Anger/Rage
  - Grief & Loss

- **Unhealed Wounds**
  - Lies
  - Mental, Physical & Emotional Abuse
  - Arrests
  - Dissociation
  - Anxiety
  - Anger/Rage
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  - Lies
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  - Grief & Loss
TRAUMA FOCUSED SBIRT
2 Primary goals of T-SBIRT

1. Help patient’s generate insight into the extent and effects of their trauma exposure

2. Enhance patient’s motivation to engage in behavioral or mental health services.
**SBIRT for Trauma Related Issues**

<table>
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<tr>
<th>S</th>
<th><strong>Screening</strong> – Screening patients at risk for trauma related issues, PTSD, Adverse Childhood Events. Inquire about family history of traumatic events and the patient’s personal experience of traumatic events. Use screening tools such as the 4 Question Primary Care PTSD Screen and/or the 10 Question Adverse Childhood Events Questionnaire. Important to assess 3 generations for ACES.</th>
</tr>
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<tr>
<td>BI</td>
<td><strong>Brief Intervention</strong> – Establish rapport with the patient. Introduce the significant influence that trauma related issues can have on the health of the trauma survivor. Ask if the patient would be willing to participate in a screening that could assist the medical team in identifying medical and therapeutic interventions that could address and alleviate both the traumatic stress and any associated medical conditions. Assess readiness to change; explore options for change, identify a plan for change, using Motivational Interviewing.</td>
</tr>
<tr>
<td>RT</td>
<td><strong>Referral to Treatment</strong> – For patients who have responded positively to the screening instruments, refer for trauma therapy, addiction treatment, etc.</td>
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When delivering T-SBIRT, service providers complete the protocol with their clients in the following sequence:

1. **Make a brief statement** about known connections between stress, trauma, and poor life outcomes.
2. **Ask permission** to screen for and discuss issues of stress and trauma.
3. **Ask about sources** of current life stressors using open-ended questions.
4. **Screen for exposure** to traumatic events using the Trauma History Screen\(^7\) or other validated tool.
5. **Assess for current symptoms** with the Primary Care Post-Traumatic Stress Disorder (PC-PTSD) screen.\(^8\)
6. **Ask about** “positive” and “unhelpful” strategies used to cope with trauma memories and symptoms.
7. **Inform clients** that it can be difficult to eliminate substance misuse or other unhelpful coping strategies without simultaneously addressing trauma.
8. **Gauge and enhance motivation** to pursue behavioral or mental health services.
9. **Make a referral to treatment** when indicated following best referral practices.
10. **Offer an educational booklet** on post-traumatic stress, published by the federal government.\(^9\)
11. **Implement an evidence-based** calming exercise if necessary.
The 4-question Primary Care PTSD Screen

1. **Have you had nightmares about it or thought about it when you did not want to?**
   - Yes or No

2. **Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?**
   - Yes or No

3. **Were constantly on guard, watchful, or easily startled?**
   - Yes or No

4. **Felt numb or detached from others, activities, or your surroundings?**
   - Yes or No

A score of 3 or higher should prompt additional evaluation.

Source: Prins, et al. Primary Care Psychiatry. 2003
While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in your household **often** . . .
   • Swear at you, insult you, put you down, or humble you?
   • **Or**
   • Act in a way that made you afraid that you might be physically hurt
     If yes enter 1 _____

2. Did a parent or other adult in the household **often** . . .
   • Push, grab, slap, or throw something at you?
   • **Or**
   • **Ever** hit you so hard that you had marks or were injured?
     If yes enter 1 _____

3. Did an adult or person at least 5 years older than you **ever** . . .
   • Touch or fondle you or have you touch their body in a sexual way
   • **Or**
   • Try to or actually have oral, anal, or vaginal sex with you?
     If yes enter 1 _____
While you were growing up, during your first 18 years of life:

4. Did you **often** feel that . . .
   • No one in your family loved you or thought you were important or special?
   • **Or**
   • Your family didn’t look out for each other, feel close to each other, or support each other?  
     If yes enter 1 ____

5. Did you **often** feel that . . .
   • You didn’t have enough to eat, had to wear dirty clothes, and had no one to protect you?
   • **Or**
   • Your parents were too drunk/high to take care of you or take you to the doctor?  
     If yes enter 1 ____

6. Were your parents ever separated or divorced?  
   If yes enter 1 ____
While you were growing up, during your first 18 years of life:

7. Was your mother or stepmother . . .
   - Often pushed, grabbed, or had something thrown at her?
   - Or
   - Sometimes or often kicked, bitten, hit with a fist or hit with something hard?
   - Or
   - Ever repeatedly hit over at least a few minutes or threatened with a gun? If yes enter 1 ____

8. Did you live with anyone who was a problem drinker/alcoholic/used street drugs? If yes enter 1 ____

9. Was a household member depressed or mentally ill or did a household member attempt suicide? If yes enter 1 ____

10. Did a household member go to prison? If yes enter 1 ____
How to take action on this issue

- Make sure staff is knowledgeable about trauma, PTSD, ACES and trained on what to look for.

- Designate which staff members will be talking to the patient and completing the Screening.
  - Provide information about why you are screening for trauma related issues.
  - “We know that childhood experienced can have long-term effects on adult health.”
  - Ask the patient if they would be willing to participate in screening for trauma related issues. Be clear, concise, and non-judgmental when reviewing their answers.
  - Respond with compassion
    - “I’m sorry/sad that this happened to you. How do you think it has impacted your health?”

- When possible hire a behavioral health profession or have a therapist as a consultant, referral resource.
  - I have found it more likely that a patient will follow up if they are returning to the medical office for services.

- Know the treatment resources in your area for a wide variety of issues.
  - Mental health resources (public & private), Addiction services (public & private)
Michael F. Barnes, Ph.D., MAC, LPC
Chief Clinical Officer
Foundry Treatment Center
Steamboat Springs, Colorado
303-885-1846
mike.barnes@foundrysteamboat.com
www.Forgingnewlives.com
www.Drmikebarnes.com