Behavioral Health is Essential To Health

Prevention Works

Treatment is Effective

People Recover
Trauma Informed System of Care:
Changing Our Perspective

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National Center for Trauma Informed Care

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Events/circumstances cause trauma.

An individual’s experience of the event determines whether it is traumatic.

Effects of trauma include adverse physical, social, emotional, or spiritual consequences.
Traumatic Events:

(1) render victims helpless by overwhelming force;
(2) involve threats to life or bodily integrity, or close personal encounter with violence and death;
(3) disrupt a sense of control, connection and meaning;
(4) confront human beings with the extremities of helplessness and terror; and
(5) evoke the responses of catastrophe.

(Judy Herman, Trauma and Recovery, (1992)

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DEFENDING CHILDHOOD

• PROTECT
• HEAL
• THRIVE

REPORT OF THE ATTORNEY GENERAL’S NATIONAL TASK FORCE ON CHILDREN EXPOSED TO VIOLENCE

NOV 2012
Prevalence

• 80% of child fatalities due to abuse and neglect occur within the first 3 years of life and almost always in the hands of adults responsible for their care.

• In the US, we lose an average of more than 9 children and youths ages 5 to 18 to homicide or suicide per day.

• According to the National Survey of Children Exposed to Violence, an estimated 46 million of the 76 million (61%) of children currently residing in the US are exposed to violence, crime and abuse each year.

• 1 in 10 children in this country are polyvictims.
Effects

• Their fear, anxiety, grief, guilt, shame, and hopelessness are further compounded by isolation and a sense of betrayal when no one takes notice or offers protection, justice, support, or help.

• Exposure to violence in the first years of childhood deprives children of as much as 10% of their potential IQ, leaving them vulnerable to serious emotional, learning and behavior problems by the time reach school age.
Have you ever experienced violence or trauma in any setting?

- **Men:** 60.55% Yes, 39.45% No
- **Women:** 74.02% Yes, 25.98% No

**Data in table for:**
- **Interview Type:** Baseline
- **Record Type:** Interview
- **FFY - Federal Fiscal Year:** 2009-2013
- **Federal Fiscal Year - Quarter:** 1st-4th quarter
- **Program:** CMHI, ENBH-OA, ErmrkAG, ErmrkCG, HIV/AIDS, HTI, Jail Div, MAI-TCE, MHTG, NCTSI, NCTSI-A, Older Adult, PBHCI, SOCXI, SSH
SAMHSA Trauma Measures

Have had nightmares about it or thought about it when you did not want to

Tried hard not to think about it or went out of your way to avoid situations that remind you of it

Were constantly on guard, watchful, or easily startled

Felt numb and detached from others, activities, or your surroundings

No

Yes

77.86%  22.14%

83.12%  16.88%

76.35%  23.65%

72.61%  27.39%

FY 2013: TRAC Crosstabulation/Frequency Report - Trauma Measures

Data in table for:

Interview Type: Baseline
Record Type: Interview
Administrative
FFY - Federal Fiscal Year: 2009-2013
Federal Fiscal Year - Quarter: 1st-4th quarter
Program: CMHI, ENBH-OA, ErmrkAG, ErmrkCG, HIV/AIDS, HTI, Jail Div, MAI-TCE, MHTG, NCTSI, NCTSI-A, Older Adult, PBHCI, SOCXI, SSH
Severity of Victimization Scale

- Ever attacked w/ gun, knife, other weapon: 41%
- Ever hurt by striking/beating: 34%
- Ever abused emotionally: 28%
- Ever forced sex acts against your will: 7%
- Age of 1st abuse < 18*: 97%
- Happened several times or for long time: 32%
- By multiple people: 32%
- By family member/trusted one: 24%
- Victim afraid for life/injury: 18%
- People you told not believe you/help you: 12%
- Result in oral, vaginal, anal sex: 6%
- Currently worried someone attack: 10%
- Currently worried someone abuse: 8%
- Currently worried someone beat/hurt: 8%
- Currently worried someone force sex acts: 2%
- General Victimization Scale**: 36%

*Low Severity (0) 20% 45% 60% 80% 100% 0%
*Mean of 15 items

**Moderate Severity (1-3) 41% 34% 28% 7% 0% 20% 40% 60% 80% 100%
**High Severity (4-15) 97%

Source: SAMSHA CSAT 2011 GAIN AT Summary Analytic Data Set subset to AAFT (n=5,321)
National Child Abuse Statistics
2011 (Childhelp.org)

• A report of child abuse is made every ten seconds.
• More than four children die every day as a result of child abuse.
• It is estimated that between 50-60% of child fatalities due to maltreatment are not recorded as such on death certificates.
• Approximately 80% of children that die from abuse are under the age of 4.
• More than 90% of juvenile sexual abuse victims know their perpetrator in some way.
• Child abuse occurs at every socioeconomic level, across ethnic and cultural lines, within all religions and at all levels of education.

• About 30% of abused and neglected children will later abuse their own children, continuing the horrible cycle of abuse.

• In at least one study, about 80% of 21 year olds that were abused as children met criteria for at least one psychological disorder.

• The estimated annual cost of child abuse and neglect in the United States for 2008 is $124 billion.
National Child Abuse stats cont.

- Children who experience child abuse & neglect are about 9 times more likely to become involved in criminal activity.
- Abused children are 25% more likely to experience teen pregnancy. Abused teens are more likely to engage in sexual risk taking, putting them at greater risk for STDs.
- As many as two-thirds of the people in treatment for drug abuse reported being abused or neglected as children.
- More than a third of adolescents with a report of abuse or neglect will have a substance use disorder before their 18th birthday, three times as likely as those without a report of abuse or neglect.
Estimated child fatalities per day attributed to child maltreatment

Note: National data is likely to underestimate the number of children who died from maltreatment.
Types of Child Abuse in 2011

- **Neglect**: 78.5%
- **Physical Abuse**: 17.6%
- **Sexual Abuse**: 9.1%
- **Psychological Maltreatment**: 9.0%
- **Medical Neglect**: 2.2%
- **Other/Unknown**: 10.6%

Percentages are calculated against the number of unique victims, and a child may see multiple types of abuse or multiple instances of the same type of abuse.¹
Prevalence in the General Population

- 90% of public mental health clients have been exposed to trauma.
- In the general population, 61% of men and 51% of women reported exposure to at least one lifetime traumatic event, but majority reporting more than one traumatic event.

(Kessler, et al, 1995)
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(Kessler, et al, 1995)
THE BASIC PSYCHOLOGICAL MOTIVE OR CAUSE OF VIOLENT BEHAVIOR IS THE WISH TO WARD OFF OR ELIMINATE THE FEELINGS OF SHAME AND HUMILIATION – A FEELING THAT IS PAINFUL AND CAN EVEN BE INTOLERABLE.

OUR TASK IS TO REPLACE IT WITH A FEELING OF PRIDE.

Hodas, 2004
ACE Study

Compares adverse childhood experiences against adult status, on average, a half century later
ACE Study slides are from:

- Robert F. Anda MD at the Center for Disease Control and Prevention (CDC)

- September 2003 Presentation by Vincent Felitti MD “Snowbird Conference” of the Child Trauma Treatment Network of the Intermountain West

- “The Relationship of Adverse Childhood Experiences to Adult Medical Disease, Psychiatric Disorders, and Sexual Behavior: Implications for Healthcare” Book Chapter for “The Hidden Epidemic: The Impact of Early Life Trauma on Health and Disease” Lanius & Vermetten, Ed)
Other Critical Trauma Correlates: The Relationship of Childhood Trauma to Adult Health

- Adverse Childhood Events (ACEs) have serious health consequences
- Adoption of health risk behaviors as coping mechanisms
  - eating disorders, smoking, substance abuse, self-harm, sexual promiscuity
- Severe medical conditions: heart disease, pulmonary disease, liver disease, STDs, GYN cancer
- Early Death

(Felitti et al., 1998)
Adverse Childhood Experiences

- Recurrent and severe physical abuse
- Recurrent and severe emotional abuse
- Sexual abuse

• Growing up in household with:
  - Alcohol or drug user
  - Member being imprisoned
  - Mentally ill, chronically depressed, or institutionalized member
  - Separation/Divorce
  - Mother being treated violently
  - Both biological parents absent
  - Emotional or physical abuse

(Fellitti, 1998)
ACE Questions:

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household often or very often… Swear at you, insult you, put you down, or humiliate you? Or Act in a way that made you afraid that you might be physically hurt?

2. Did a parent or other adult in the household often or very often… Push, grab, slap, or throw something at you? Or Ever hit you so hard that you had marks or were injured?

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 Attempt or actually have oral, anal, or vaginal intercourse with you?

4. Did you often or very 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?
5. Did you **often or very 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 or high to take care of you or take you to the doctor if you needed it?

6. Were your parents **ever** separated or divorced?

7. Was your mother or stepmother: **Often or very often** pushed, grabbed, slapped, or had something thrown at her? **Or** **Sometimes, often, or very often** kicked, bitten, hit with a fist, or hit with something hard? **Or** **Ever** repeatedly hit at least a few minutes or threatened with a gun or knife?

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

9. Was a household member depressed or mentally ill, or did a household member attempt suicide?

10. Did a household member go to prison?
Adverse Childhood Experiences are Common

Of the 17,000 HMO Members:

• 1 in 4 exposed to 2 categories of ACEs

• 1 in 16 was exposed to 4 categories.

• 22% were sexually abused as children.

• 66% of the women experienced abuse, violence or family strife in childhood.
## The ACE Comprehensive Chart

<table>
<thead>
<tr>
<th>Adverse Childhood Experiences</th>
<th>Neurobiological Impacts and Health Risks</th>
<th>Long-term Health and Social Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>The more types of adverse childhood experiences...</td>
<td>The greater the neurobiological impacts and health risks, and...</td>
<td>The more serious the lifelong consequences to health and well-being</td>
</tr>
</tbody>
</table>
Emotional Problems
Childhood Experiences Underlie Chronic Depresssion

% With a Lifetime History of Depression

ACE Score

Women

Men

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Childhood Experiences Underlie Suicide

% Attempting Suicide

ACE Score

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• 2/3rd (67%) of all suicide attempts
• 64% of adult suicide attempts
• 80% of child/adolescent suicide attempts

Are Attributable to Childhood Adverse Experiences

Women are 3 times as likely as men to attempt suicide
Men are 4 times as likely as women to complete suicide.
ACE Score and Hallucinations

* Adjusted for age, sex, race, and education.
ACE Score and Impaired Memory of Childhood

ACE Score

Percent With Memory Impairment (%)

ACE Score

1 2 3 4 5

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Health Risk Behaviors
Adverse Childhood Experiences and Current Smoking

ACE Score

Almazar Consulting
ACE Score and Intravenous Drug Use

% Have Injected Drugs

ACE Score

N = 8,022  p<0.001

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“Male child with an ACE score of 6 has a 4600% increase in likelihood of later becoming an IV drug user when compared to a male child with an ACE score of 0. Might drugs be used for the relief of profound anguish dating back to childhood experiences? Might it be the best coping device that an individual can find?”

(Felitti, 1998)
Is drug abuse self-destructive or is it a desperate attempt at self-healing, albeit while accepting a significant future risk?”

(Felitti, 1998)

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Basic cause of addiction is experience-dependent, not substance-dependent

Significant implications for medical practice and treatment programs
Serious Social Problems

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Childhood Experiences Underlie Rape

% Reporting Rape

ACE Score

Almazar Consulting
Women with ACE Score of 4+ are 500% more likely to become victims of domestic violence.

Both men and women are more likely to become perpetrators of domestic violence.
ACE Score and the Risk of Being a Victim of Domestic Violence

Women

Men

Risk of Victimization (%)

ACE Score

0 1 2 3 4 5

0 1 2 3 4 5

Almazar Consulting
ACE Score and the Risk of Perpetrating Domestic Violence

Well-being

Women

Men

Risk of Perpetration (%)

ACE Score

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Adverse Childhood Experiences and Likelihood of > 50 Sexual Partners

Adjusted Odds Ratio vs. ACE Score

ACE Score

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ACE Score and Unintended Pregnancy or Elective Abortion

<table>
<thead>
<tr>
<th>ACE Score</th>
<th>Unintended Pregnancy</th>
<th>Elective Abortion</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 or more</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Adverse Childhood Experiences and History of STD

Adjusted Odds Ratio

ACE Score

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Sexual Abuse of Male Children and Their Likelihood of Impregnating a Teenage Girl

Percent who impregnated a teenage girl

- Not abused
- 16-18 yrs
- 11-15 yrs
- <=10 yrs

Age when first abused

- 1.3x
- 1.4x
- 1.8x

1.0 ref

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Frequency of Being Pushed, Grabbed, Slapped, Shoved or Had Something Thrown at Oneself or One’s Mother as a Girl and the Likelihood of Ever Having a Teen Pregnancy

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Pink (Self)</th>
<th>Green (Mother)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Often</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very often</td>
<td></td>
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</tbody>
</table>

Percent who had a teen pregnancy

Pink = Self
Green = Mother
ACE Score and Indicators of Impaired Worker Performance

Prevalence of Impaired Performance (%)

- Absenteeism (>2 days/month)
- Serious Financial Problems
- Serious Job Problems

ACE Score

- 0
- 1
- 2
- 3
- 4 or more

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“What happened to you?” instead of “What’s wrong with you?”
Trauma Symptoms = Tension Reducing Behaviors

“How do I understand this person?”

rather than

“How do I understand this problem or symptom?”
▪ All behavior has meaning

▪ Symptoms are ADAPTATIONS

▪ We build on success not deficits
Resilience Questionnaire
What’s Your Resilience Score?

This questionnaire was developed by the early childhood service providers, pediatricians, psychologists, and health advocates of Southern Kennebec Healthy Start, Augusta, Maine, in 2006, and updated in February 2013. Two psychologists in the group, Mark Rains and Kate McClinn, came up with the 14 statements with editing suggestions by the other members of the group. The scoring system was modeled after the ACE Study questions. The content of the questions was based on a number of research studies from the literature over the past 40 years including that of Emmy Werner and others. Its purpose is limited to parenting education. It was not developed for research.
Please circle the most accurate answer under each statement:

1. I believe that my mother loved me when I was little.
2. I believe that my father loved me when I was little.
3. When I was little, other people helped my mother and father take care of me and they seemed to love me.
4. I’ve heard that when I was an infant someone in my family enjoyed playing with me, and I enjoyed it, too.
5. When I was a child, there were relatives in my family who made me feel better if I was sad or worried.
• 6. When I was a child, neighbors or my friends’ parents seemed to like me.
• 7. When I was a child, teachers, coaches, youth leaders or ministers were there to help me.
• 8. Someone in my family cared about how I was doing in school.
• 9. My family, neighbors and friends talked often about making our lives better.
• 10. We had rules in our house and were expected to keep them.
• 11. When I felt really bad, I could almost always find someone I trusted to talk to.
• 12. As a youth, people noticed that I was capable and could get things done.
• 13. I was independent and a go-getter.
• 14. I believed that life is what you make it.
• How many of these 14 protective factors did I have as a child and youth? (How many of the 14 were circled “Definitely True” or “Probably True”?)
Excerpts from ACES too High

• ACE=7, Resilience=5. ...I raised 2 sons...became an aerospace production engineering. I was mentally and emotionally haunted until I sought therapy. Until I addressed these issues and accepted no responsibility for them I was an internal emotional prisoner of myself.

• ACE = 5, Resilience = 8. I’m very proud of what I’ve achieved despite my poor start in life. My brother has not fared so well and is depressed with a gambling problem.

• ACE – 3, Resilience – 11. One of the lucky ones . . . My parents were
• Ace score 10, Resiliency score 2. Given what I lived through I guess I am the overachiever that my therapist says I am. I have B/A and Master’s in History and own my own business. Married 24 years and 2 children. Doing very well in my life. I have PTSD, Depression and Anxiety Disorder.

• I have a high ace score of 7 and a high resilience score of 8... My dad was a raging abusive alcoholic, and my mom allowed it to happen. He was emotionally and verbally abusive to the whole family and also physically abusive to my mother. My brother and I were always scared he was going to kill her. We called the police on him a few times in his fits of rage. He committed suicide when my mom asked for a divorce when I was 12. I came from a middle-upper middle class family and this was all a secret.

• I did something a little different with these questionnaires. My ACE score was 8, my resiliency 7. Nothing I can do about the ACE score. What was, was. The resiliency questionnaire, however, I also answered from the viewpoint of supports I currently have in my life. Score? 11. What this tells me is that even though I had a horrible childhood, the existence of a good support system as an adult has made a major difference in my healing. I am doing things that doctors and therapists said I never would. I do have challenges, and some days are harder than others, but am no longer designated SMI, and I have a fulfilling, mostly joyful life. What happened in the past does not have to ruin the rest of my life.
Neurodevelopment of Childhood
Bruce D. Perry, M.D., Ph.D.
www.ChildTrauma.org
The Brain Matters

• The human brain is the organ responsible for everything we do. It allows us to love, laugh, walk, talk, create or hate.

• The brain - one hundred billion nerve cells in a complex net of continuous activity - allows us our humanity.

• For each of us, our brain’s functioning is a reflection of our experiences.
The biological unit of survival for human beings is the clan.

Evolutionary pressure which resulted in our species was applied to the clan, not the individual.

We are unavoidably inter-dependent upon each other.
The compartmentalization of Western life

- Separate by age
- Separate by wealth
- Separate by work
- Separate in education, by profession
- Separate by transportation
- Separate by generation
- *Separate by ethnicity, religion, race*
Decrease in Size of Households

*Privacy and Isolation*
Developmental Stages

- Emotional Regulation for infants
- Maternal dyad
- Repetitive, patterned interaction to hardwire self-regulation
- Exploration of individual self, tentative independence, tolerating manageable separations
- Independence
Brainstem
- Blood pressure
- Body temperature
- Heart rate
- Arousal states

Diencephalon
- Motor regulation
- Affect regulation
- Hunger/satiety
- Sleep

Limbic
- Affiliation
- Attachment
- Sexual Behavior
- Emotional Reactivity

Neocortex
- Abstract Thought
- Concrete Thought

Mother
- Caregiver
- Peers, Teachers
- Community

Family and Friends
- Caregiver

Peers, Teachers
- Community

Brainstem
Serum Cortisol

- Cortisol Response to a Cognitive Stress Challenge in PTSD Related to Childhood Abuse

**Finding:** There were elevated levels of cortisol in both the time period in anticipation of challenge (from time 60 to 0) and during the cognitive challenge (time 0–20). PTSD patients and controls showed similar increases in cortisol relative to their own baseline in response to the cognitive challenge. (Bremner, Vythilingam, et al 2002)
Implications for Children

• EXPERIENCE CAN CHANGE THE MATURE BRAIN - BUT EXPERIENCE DURING THE CRITICAL PERIODS OF EARLY CHILDHOOD ORGANIZES BRAIN SYSTEMS!
  – From Bruce Perry, Trauma and Brain Development
The Four R’s

A trauma-informed program, organization, or system:

<table>
<thead>
<tr>
<th>Realizes</th>
<th>Recognizes</th>
<th>Responds</th>
<th>Resists</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Realizes</strong> widespread impact of trauma and understands potential paths for recovery</td>
<td><strong>Recognizes</strong> signs and symptoms of trauma in clients, families, staff, and others involved with the system</td>
<td><strong>Responds</strong> by fully integrating knowledge about trauma into policies, procedures, and practices</td>
<td><strong>Seeks to actively Resist</strong> re-traumatization.</td>
</tr>
</tbody>
</table>
Biochemical changes during and after the traumatic event 2

- Cortisol - Chronically low or high levels - results in reduced immune functioning, impaired regulation of the adrenalin, and damage to passages in the brain responsible for memory.
  - While high, cortisol, thins stomach lining and bones, impairs the immune system, decreases blood flow to the intestines.
Traumatic Reminders

• Loss of Control

• Power Differential

• Lack of Predictability
SAMHSA’s Six Key Principles of a Trauma-Informed Approach

• Safety
• Trustworthiness and Transparency
• Peer Support
• Collaboration and Mutuality
• Empowerment, Voice, and Choice
• Cultural, Historical, and Gender Issues
• A chronic overreaction to stress overloads the brain with powerful hormones that are intended only for short-term duty in emergency situations.

• Serum cortisol levels

• Chronic hyperarousal – nervous system does an amazing job of preparing the individual to deal with the stress but:
Growth, reproduction and immune system all go on hold

- Leads to sexual dysfunction
- Increases chances of getting sick
- Often manifests as skin ailments

- Increases permeability of the blood brain barrier

- Dr. Robert Sapolsky: “Why Zebras Don’t Get Ulcers” – study on salmon

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Other Implications

• Know Thyself
• We don’t fix people or their problems
• Be clear as to why you are sharing
• Creating safe space is everyone’s duty
• Use appropriate channels and resources
• Be less judgmental
I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.

~ Maya Angelou
Raul@almazarconsulting.com

847.613.8361

SAMHSA’s National Center for Trauma Informed Care

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