

# Research on Trauma and PTSD in Criminal Justice Populations

Presented by

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# Trauma, Toxic Stress, & PTSD

Elena Quintana, Ph.D.

Institute on Public Safety &  
Social Justice

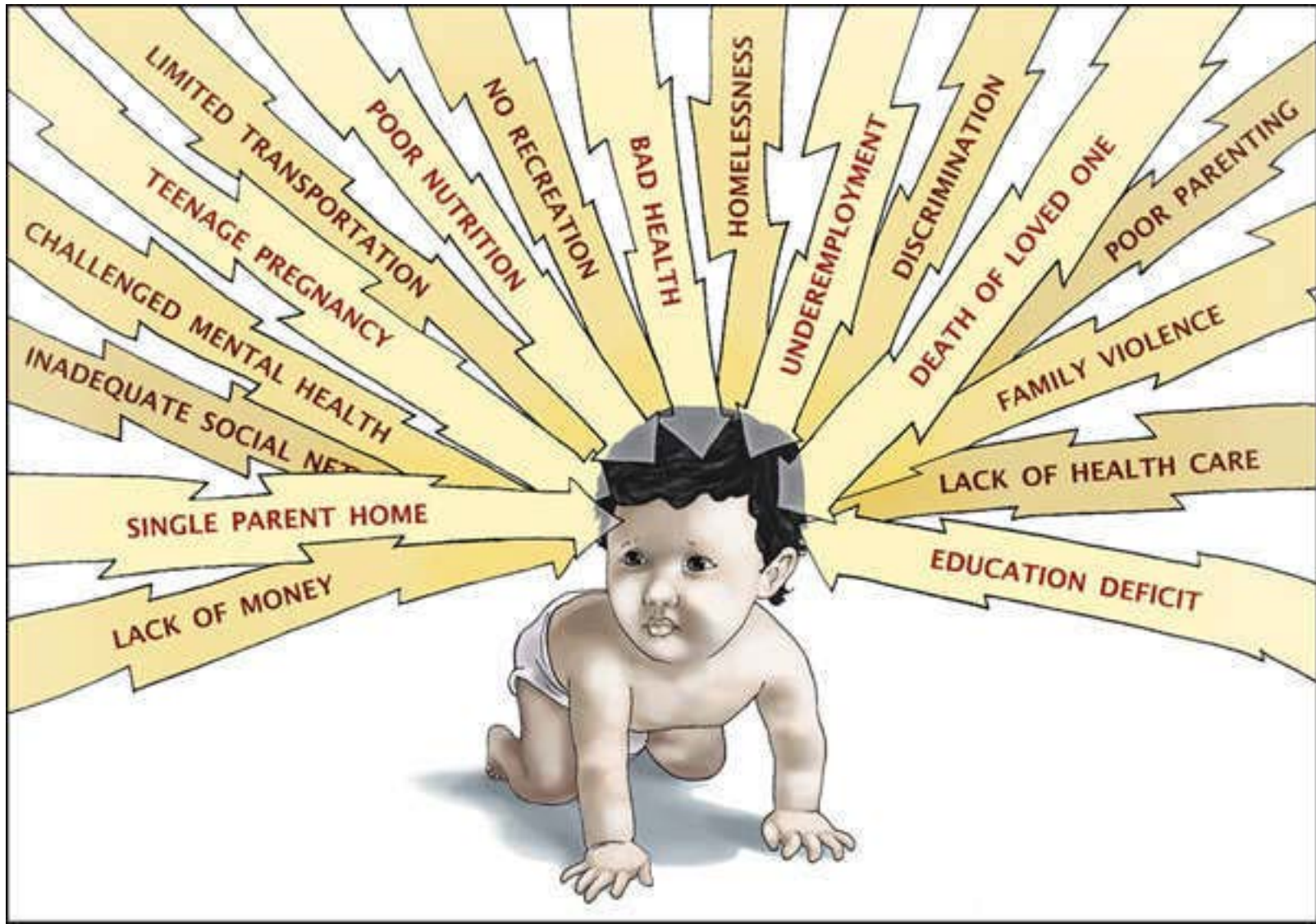
# Defining Life's "Stress Fractures"



- **Trauma**— Bad things that happen to people causing a sense of distress and disorientation. Can be a catastrophic event, episodic, or reoccurring.
- **Toxic stress** strong, frequent, and/or prolonged adversity— such as physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, and/or the accumulated burdens of family economic hardship—without adequate support.

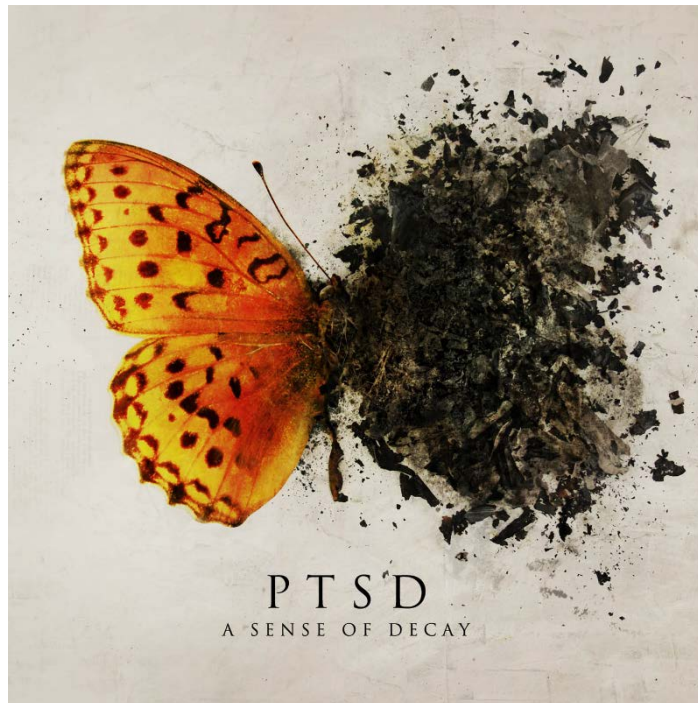
# Toxic Stress

smartcitymemphis.com



# Post-Traumatic Stress Disorder

A mental health diagnosis whose origins are in experiencing or witnessing one or a series of terrifying events. Symptoms may include flashbacks, nightmares and severe anxiety, as well as uncontrollable thoughts about the event.



# Adverse Childhood Experiences

- Drs. Vince Felitti & Rob Anda discovered that after studying thousands of people that bad things that happen in childhood are the consistent predictors of health and the reason for health disparities
- Childhood trauma (especially followed by adult trauma) is common, powerful, and often intergenerational predictor of disease & dysfunction

# Prevalence Percentiles of Adverse Childhood Experiences

## Abuse, by Category

- Psychological (by parents) 11%
- Physical (by parents) 28%
- Sexual (anyone) 22%

## Neglect, by Category

- Emotional 15%
- Physical 10%

## Household Dysfunction, by Category

- Alcoholism or drug use in home 27%
- Loss of biological parent < age 18 23%
- Depression or mental illness in home 17%
- Mother treated violently 13%
- Imprisoned household member 5%

Vincent Felitti,  
M.D., 2012

# ACEs OCCUR IN CLUSTERS

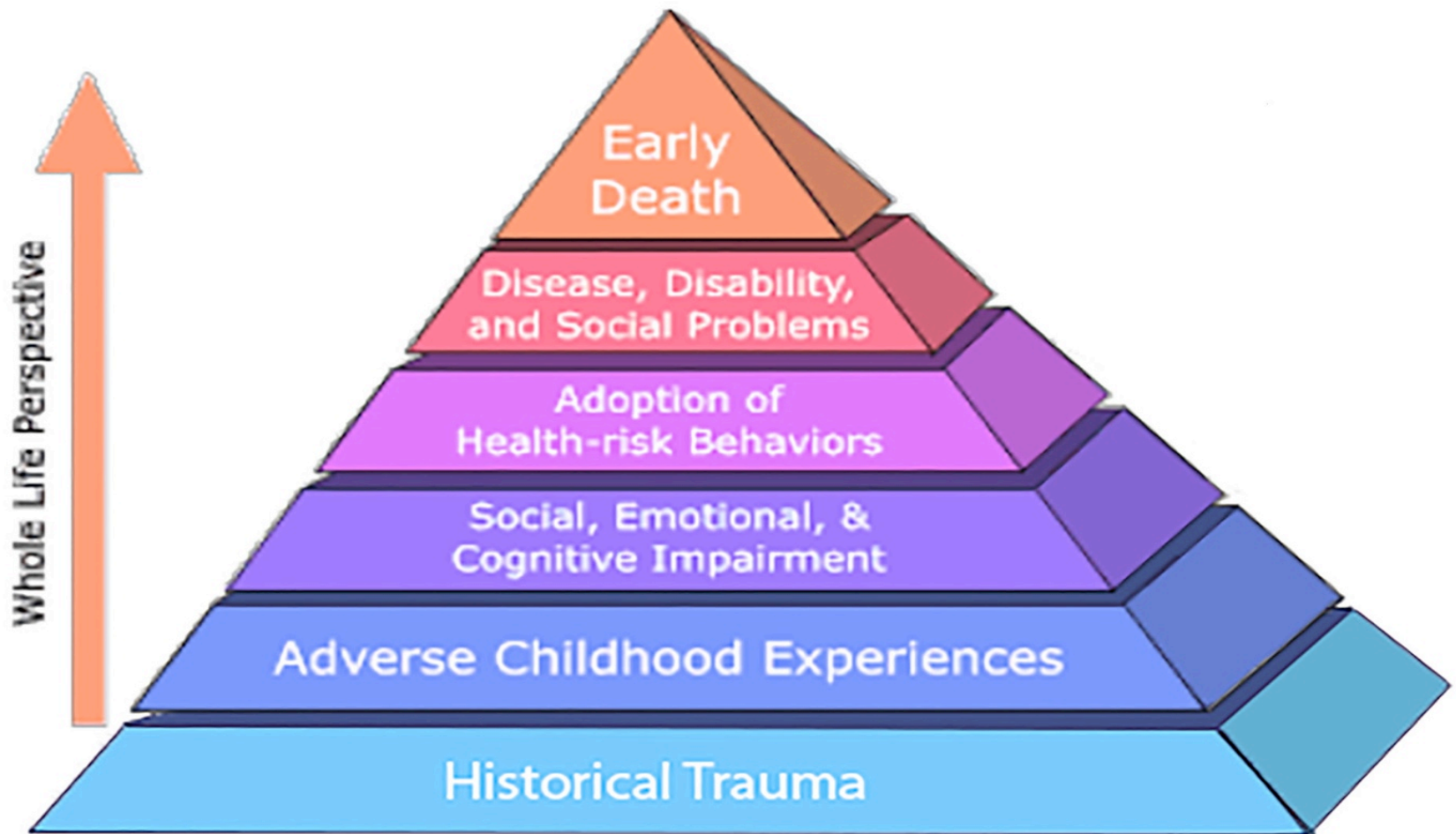
- 2/3 experience at least one category of ACEs
- If any one ACE is present, there is an 87% chance at least one other category of ACE is present, and a 50% chance that there will be 3 or more.
- WOMEN ARE 50% MORE LIKELY TO HAVE A SCORE OF >5.

Vincent Felitti, M.D., 2012



# ACEs Conceptual Framework (Anda, Felitti, Simmons)

People with 6 ACES die, on average, 20 years sooner than those with zero.





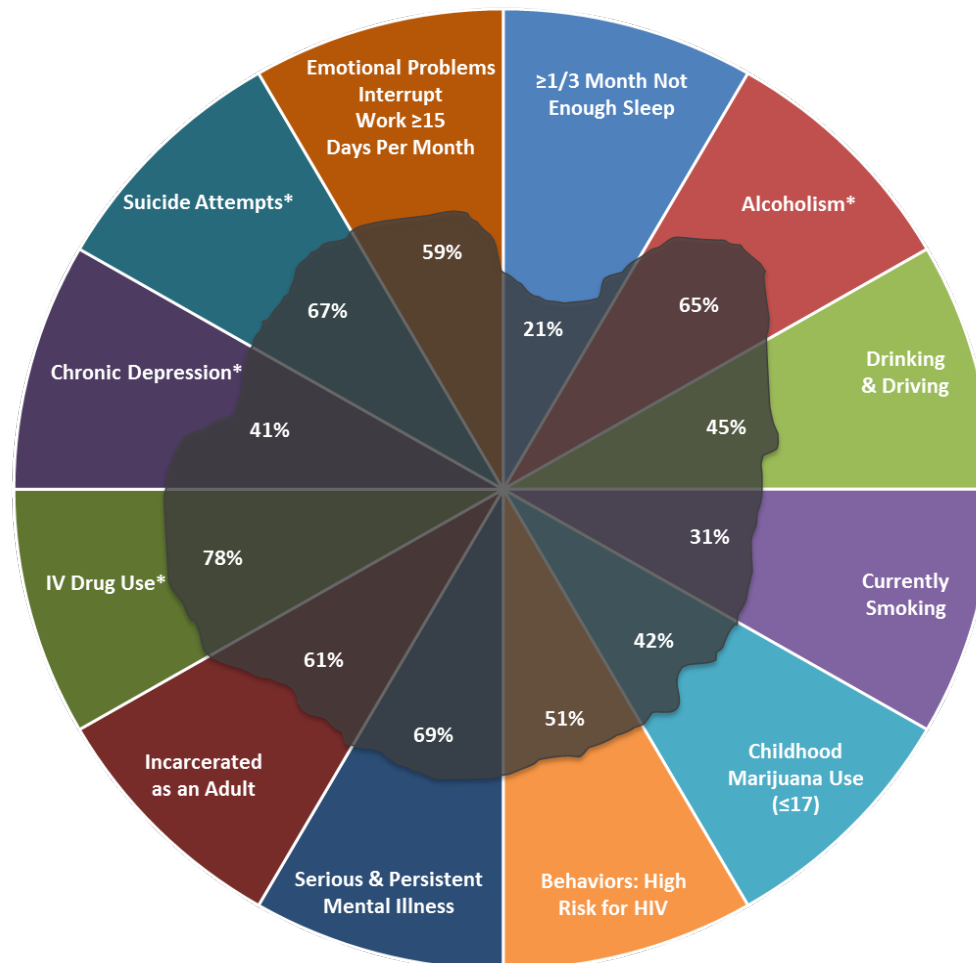
## Population Attributable Risk: ACEs and Behavioral Health

### POPULATION ATTRIBUTABLE RISK

A large portion of many health, safety and prosperity conditions is attributable to Adverse Childhood Experience.

ACE reduction reliably predicts a decrease in all of these conditions simultaneously.

ACE Interface, 2016



# Urban ACEs

## Dr. Roy Wade

- Surveyed hundreds of younger people (avg age 34 vs. 56 in original study) in Philadelphia about adversity.



- The Philadelphia ACE study added five new definitions of trauma to the original ten: (1) experiencing racism, (2) witnessing violence, (3) living in an unsafe neighborhood, (4) being placed in foster care, and (5) experiencing bullying. The Philadelphia ACE score ranges from a minimum of 0 to 14.
- The same health-related results were found with the exception of an increase in heart disease, which was most likely age related

# ACEs & PTSD

- The more ACEs you have, the more likely you are to develop PTSD with or without adult trauma



# Marginalization is Traumatic: Historical Trauma

Loss of homeland, way of life, language, culture, ability to practice your faith, freedom, the right to raise your children, or access to justice

LEADS TO:

- Grief that is unresolved and unspoken
- Internalized oppression
- Increased cortisol levels contributing to a host of health disparities

# Historical Trauma

- The collective emotional and psychological injury both over the life span and across generations, resulting from a cataclysmic history that occurs as a result of genocide and other significant abuses

Yellow Horse Brave Heart (1995)

Continues a legacy of systematic marginalization through current enforcement of policies, practices, and laws that recreate trauma.



# Historical Trauma & Institutionalized Violence

- Nationwide, young people of color have far higher incarceration rates than their white counterparts — black youth are 4.6 times more likely to be incarcerated, Native Americans are 3.3 times more likely, and Latino youth are 1.7 times more likely, according to 2013 data from the U.S. Justice Department.
- - <http://www.rosenbergfound.org/news/2016/pipeline-prison-may-start-childhood-trauma#sthash.gHN5GMsz.dpuf>

# One Thousand Years of Slavery

- Scots and Irish (Alba and Picts) sold their citizens into slavery to the Roman Empire, the Middle East, the Caribbean, and Colonial America for a period of 1,000 years
- In the US the legacy of slavery is largely seen as only an African American historical burden
- When we afford access to opportunity and justice, HEALING can occur





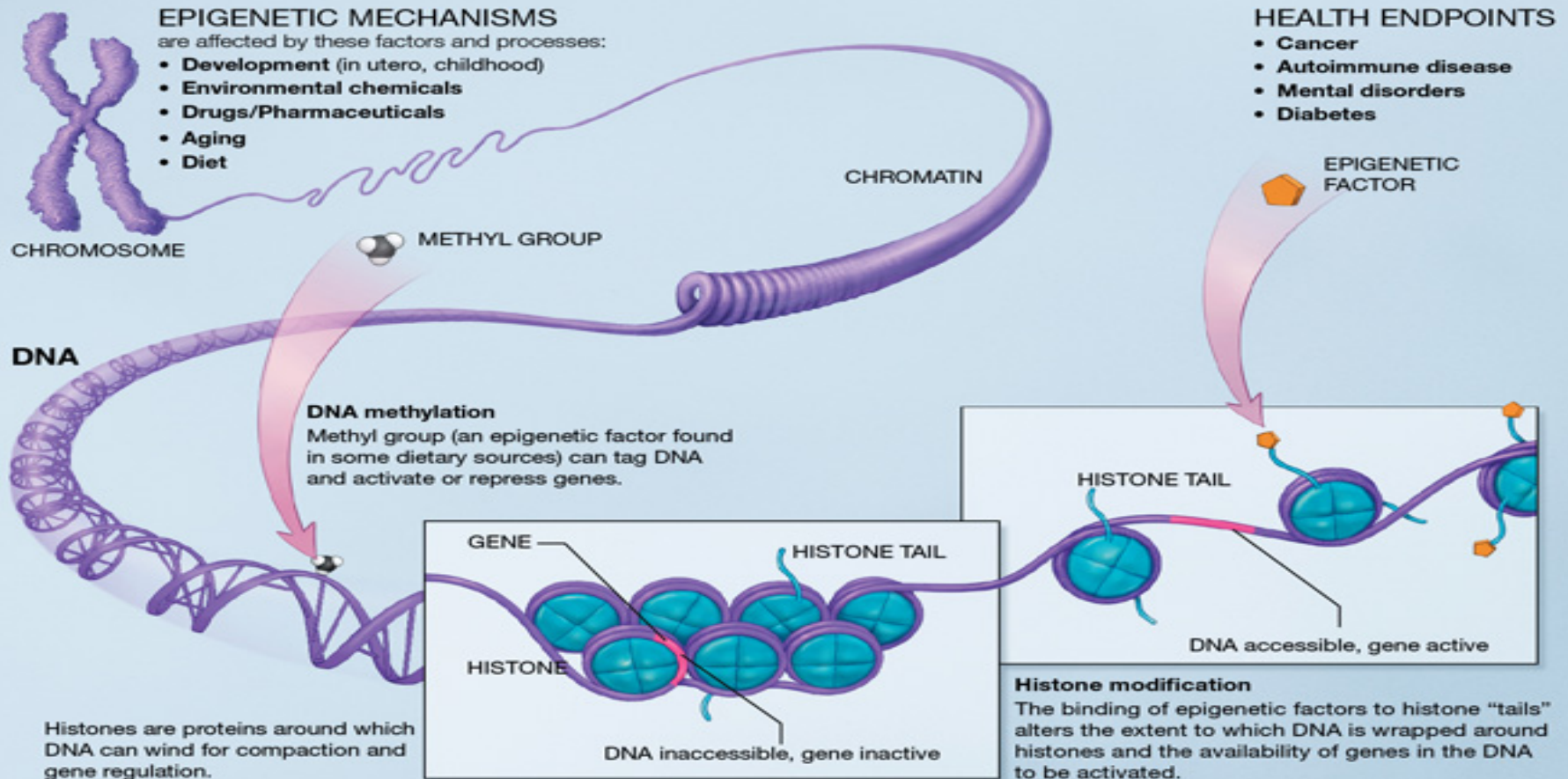
# Inclusion & Equality Breed Wellness

## Effect of Same-Sex Marriage Laws on Health Care Use and Expenditures in Sexual Minority Men: A Quasi-Natural Experiment

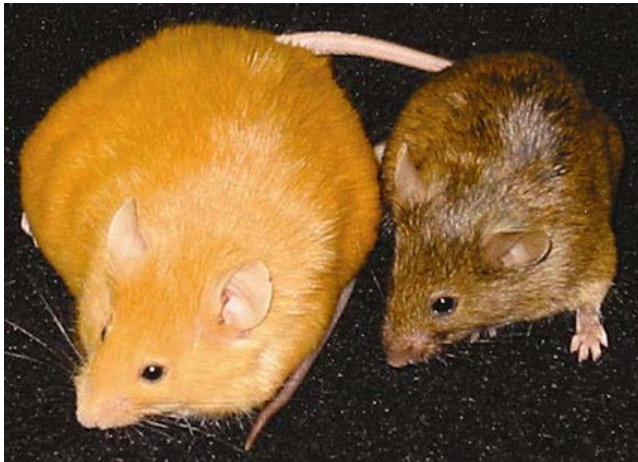
[Mark L. Hatzenbuehler](#), PhD, [Conall O'Cleirigh](#), PhD, [Chris Grasso](#), MPH, [Kenneth Mayer](#), MD, [Steven Safren](#), PhD, and [Judith Bradford](#), PhD

- N: 1211 GBT male patients in a Massachusetts community-based health center
- *Results.* In the 12 months after the legalization of same-sex marriage, sexual minority men had a **statistically significant decrease** in medical care visits, mental health care and mental health care costs, compared with the 12 months before the law change. These effects were not modified by partnership status, indicating that the health effect of same-sex marriage laws was similar for partnered and non-partnered men.

# Histone



# Epigenetic learnings from rodents



Dias, 2013 found that mice that were shocked while smelling cherry blossoms passed this fear onto offspring. Without any previous exposure, the smell of cherry blossoms created jumpy behavior in several future generations.

**With no more than a change in diet, laboratory agouti mice (left) were prompted to give birth to young (right) that differed markedly in appearance and disease susceptibility. (Jirtle, 2000)**

**Mom rats licking their newborns shaped future development. The well-licked rats had better-developed hippocampi and released less of the stress hormone cortisol, making them calmer when startled. In contrast, the neglected pups released much more cortisol, had less-developed hippocampi, and reacted nervously when startled or in new surroundings. (Meany, 2006)**

# Epigenetics & Psychology

Gonzalez-Pardo, Alvarez (2013)

- “Nature” & “nurture” create ongoing construction and deconstruction processes over time.
- Behavior and our reactions to experiences shape gene expression and are stored in cell memory to inform future generations

## Thought Question:

1. If we can be “warned” and shaped by negative experiences inter-generationally, can we also be healed? What might intentionally fostering intergenerational healing look like?

# Mental Illness & Criminal Justice

- For many experiencing a behavioral or mental health crisis based upon trauma that they've experienced, arrest and detention are the only publically-available sources of intervention.
- In the United States there are more than 3 times more seriously mentally ill people in jails and prisons than in hospitals. Torrey, et.al. (May, 2005) *More mentally ill persons are in jails and prisons than hospitals: A survey of the states.*

# Trauma in the Water of “Corrections”

- Police officers & corrections officers have serious toxic stress and impediments to seeking help leading to high rates of suicide and PTSD (Spinaris, 2011)



- Those who are most likely to be arrested have multiple ACEs, are likely to experience toxic stress factors of racism and poverty, lack of access to positive support from community, the education system, caring adults, mental health services providers, and basic health care. (Lisak, 2007)

## Addressing (rather than recreating) Trauma

- Most people who go to court seeking “justice” are actually seeking healing.
- The criminal justice system is not designed to heal anybody (and often does the opposite).
- Our criminal justice system would look very differently if we prioritize HEALING and HEALTH for those who cause and suffer victimization, as well as all system players

# What is Trauma-Informed Care?

- An awareness of the way in which trauma shapes brain development, life outlook, perception, and coping.
- It is an empathic orientation that understands that helping traumatized individuals to be more functional in their communities requires healing treatment, love, acceptance, and resources – not suppression and withdrawal of resources and care.
- Change “What’s wrong with you” to “What happened to you”.



# “Trauma Informed” System Approaches

- Understand that a person who has been abused may have a smaller auditory cortex, and sensitive amygdala
  - Calm de-escalation
  - Respectful approach
  - Eye contact
  - Repeating questions or instructions
  - Writing things down in steps
  - Use of motivational Interviewing

# Examples of Healing Communities

- Promote positive connection
- Inter-reliance
- Healthy boundaries
- Emotional safety
- A focus on healing and well-being
- Rhythm & ritual
- Inclusion

(Bruce Perry, Anne Masten)

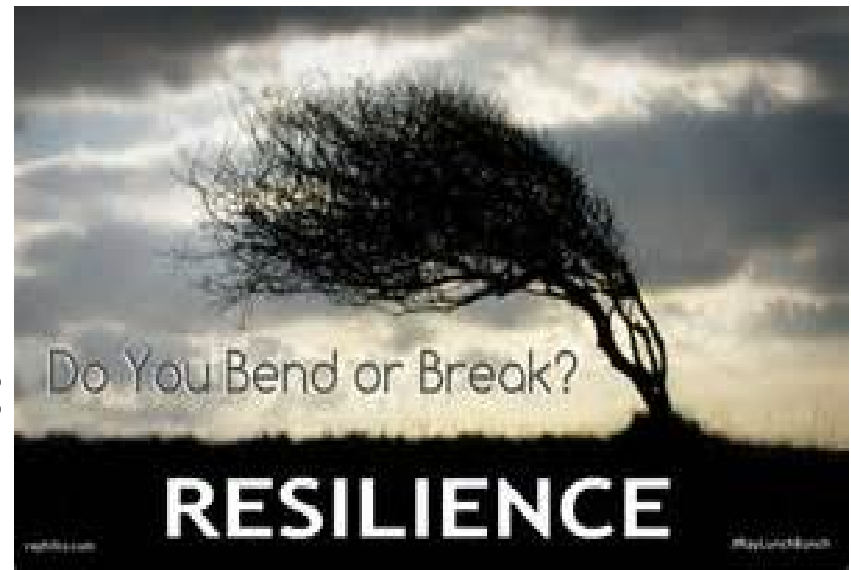


“He killed my father and three brothers. He did these killings with other people, but he came alone to me and asked for pardon. He and a group of other offenders who had been in prison helped me build a house with a covered roof. I was afraid of him — now I have granted him pardon, things have become normal, and in my mind I feel clear.” ~Viviane Nyiramana (*Portraits of Reconciliation, NYT, 4/6/14*)

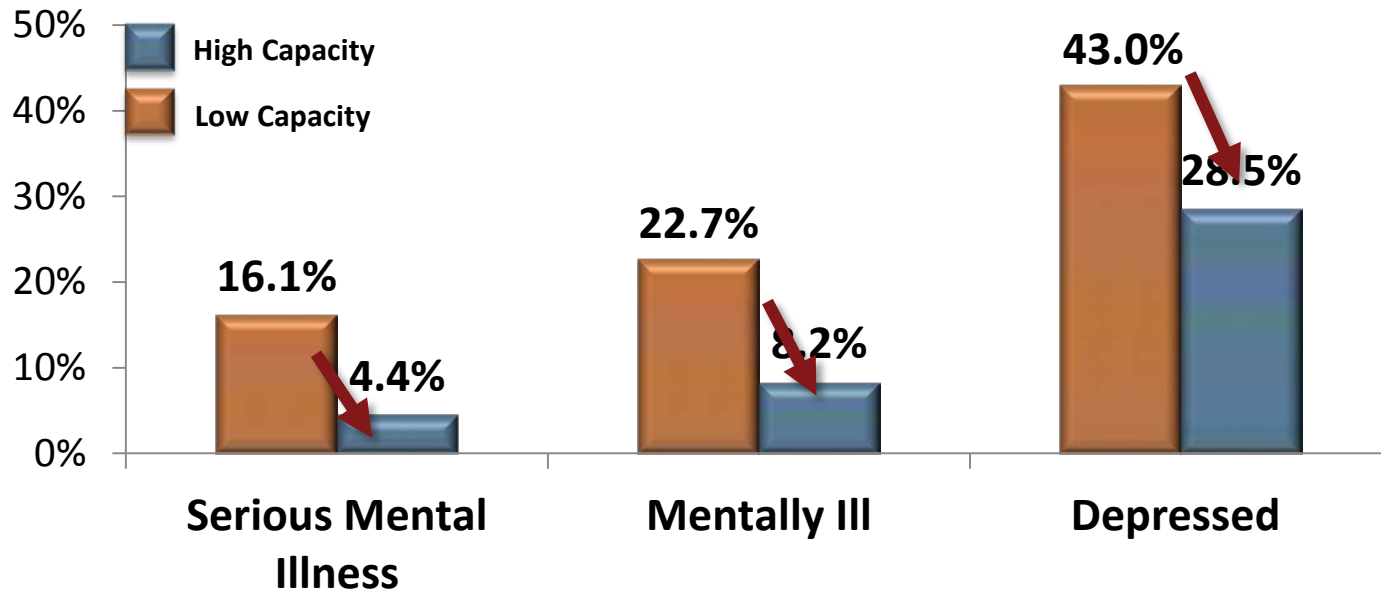


Resilience is a person's capacity to overcome adversity and move forward with courage and optimism

- Human connection
- Access to resources
- Protective Factors include:
  - Supportive social network
  - Diet & exercise
  - Access to healthcare and housing
  - These factors explain the disparate reactions to trauma



## The Power of Community Capacity on Depression and Serious Persistent Mental Illness Among 18- to 34-Year-Olds<sup>8</sup>



Significant differences after controlling for age, education, income, race/ethnicity, and ACE score

# Thank You!

Please direct questions to:

Elena Quintana

[equintana@adler.edu](mailto:equintana@adler.edu)

Research on trauma and PTSD in criminal justice populations

# OVERVIEW OF CONCEPTUAL MODELS AND RESEARCH

## Trauma and Pathways to Crime, Violence, and Addiction

- **Equifinity: Many Roads to Troubled and Troublesome Lives (C,V,A)**
- **Preparedness: Early and Repeated Experiences (Direct, Indirect, Vicarious)**
- **Interconnectedness: Neuro-Psychological-Behavioral**
- **Multiple Morbidities/Syndromic: PTSD and Cognate Problems**
- **Trajectories: Ingress and Egress**



## **The Social Environment**

- **Poverty and its Corollaries are Stressful (Criminogenic/Pathogenic)**
- **Broken Ladders: Entrenched and Structural**
- **Exposure to Street Violence and Disorder (Social and Physical)**
- **System-Induced Trauma**
- **Historical/Intergenerational Trauma**

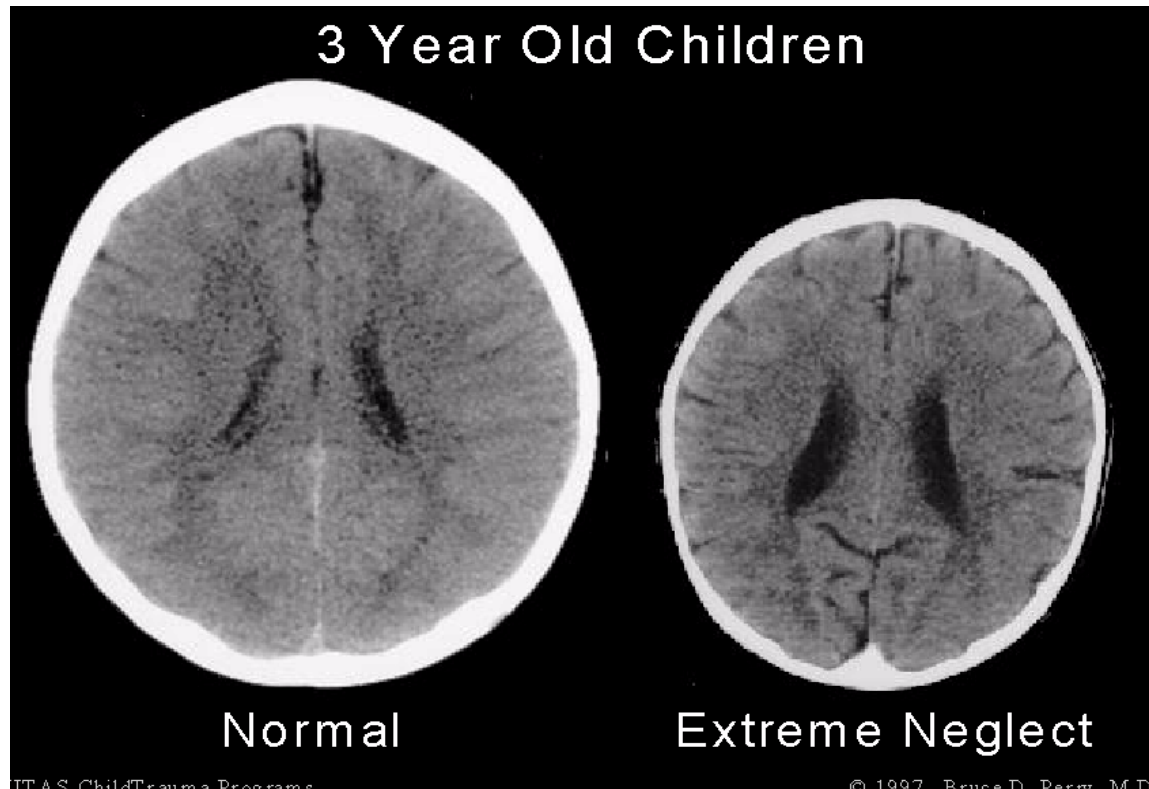
## **The Family Environment**

- **Neglect, Abuse, Abandonment**
- **Parental Incarceration**
- **Under-Developed/Unhealthy Coping Skills**
- **Paucity of Protective Factors and Resiliency**
- **Stock, Currency, Capital**

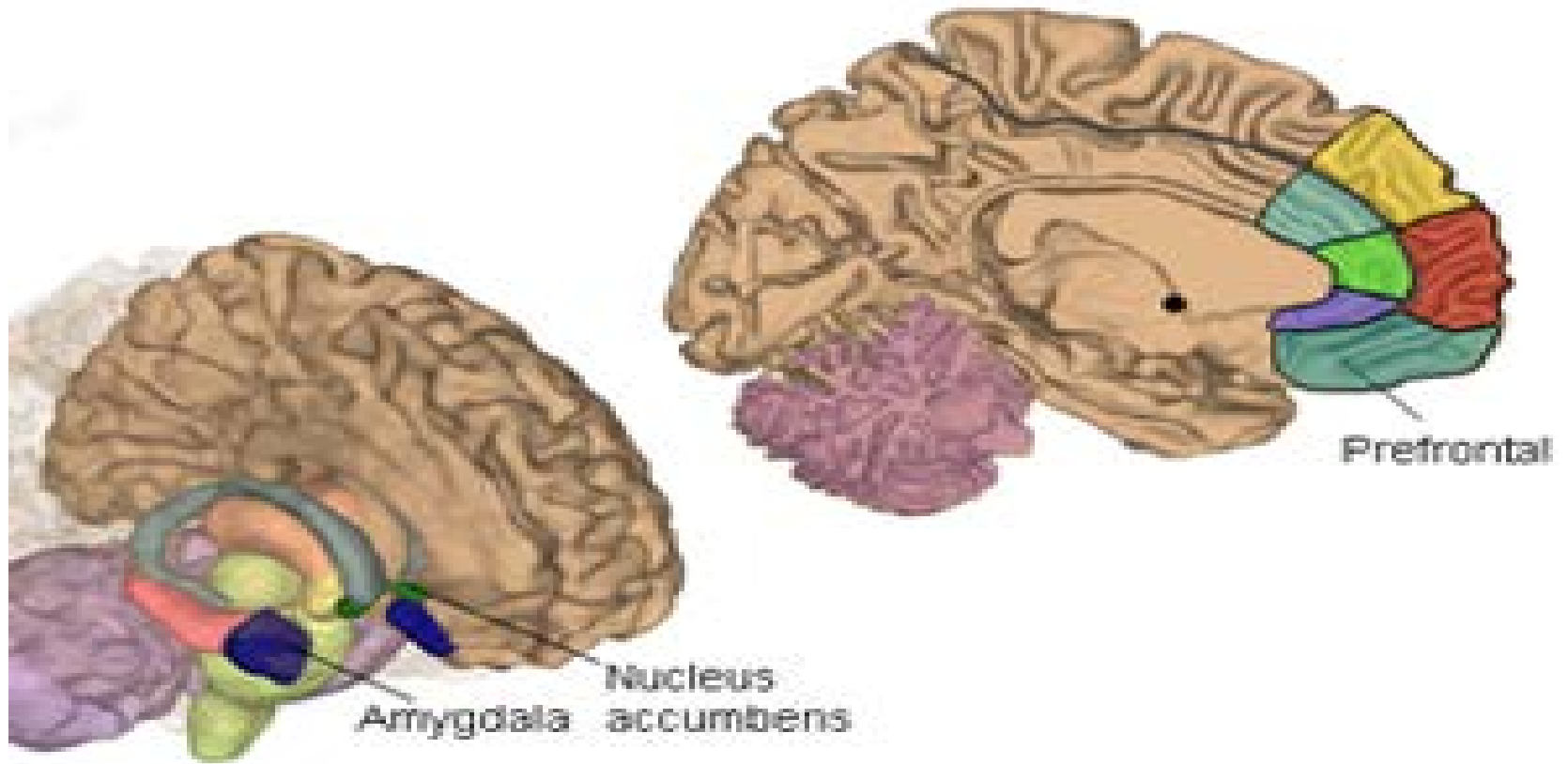
# Trauma, Addiction, and Brain Changes

- **Brain Development**
- **Brain Size**
- **Brain Circuitry**

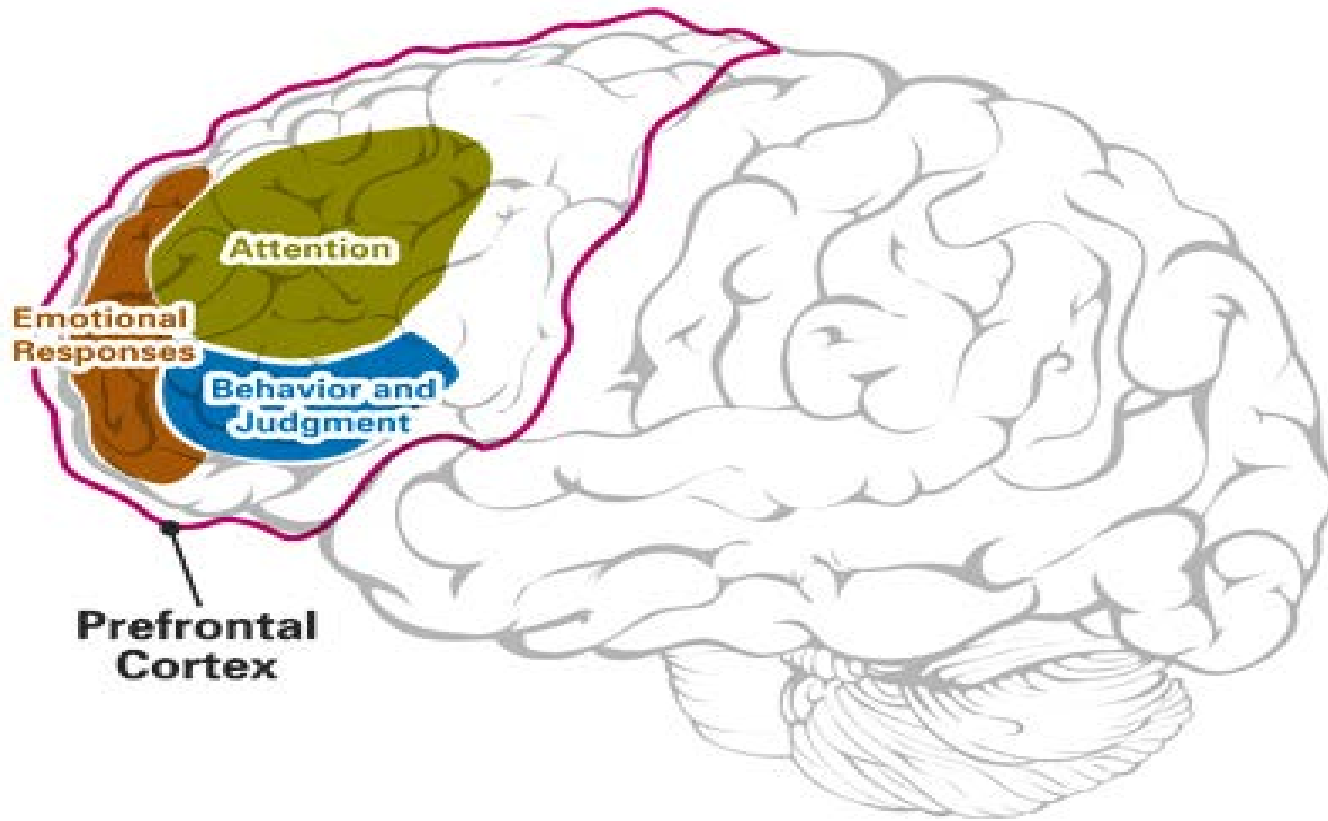
# Brain Imaging



# Neutral Circuitry



# Compromised Function



The background of the slide is a photograph of a man with short dark hair, wearing a white t-shirt, looking down and reading a book. The image is dimmed and has a dark blue overlay at the bottom.

Research on trauma and PTSD in criminal justice populations

# OUR RESEARCH FINDINGS

# 4 research studies with criminal justice samples

## Women in jail, drug treatment (2015)

- n=810
- Clinical interview, DSM-IV
- 49% age 21-39
- 82% Black

## Men in jail, drug treatment (2014)

- n=117
- Average age 33
- 55% unemployed
- 73% Black
- 62% HS grad/GED
- Average 30 arrests

## Men in prison, drug treatment (2016)

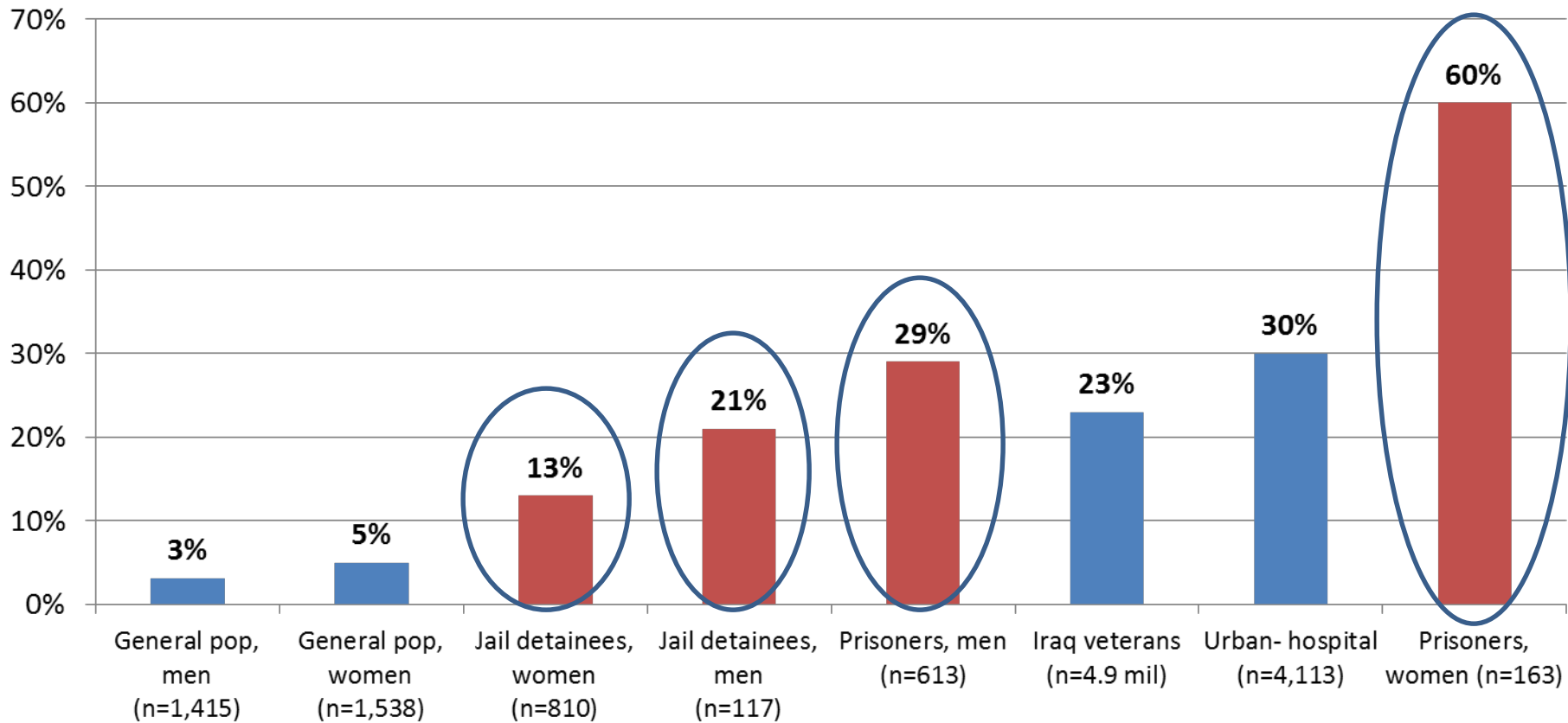
- n=617
- Average age 33

## Women in prison, general population (2010)

- n=163
- Average age 36
- 17% unemployed
- 48% White, 38% Black
- 26% HS grad/GED
- Average 11 arrests



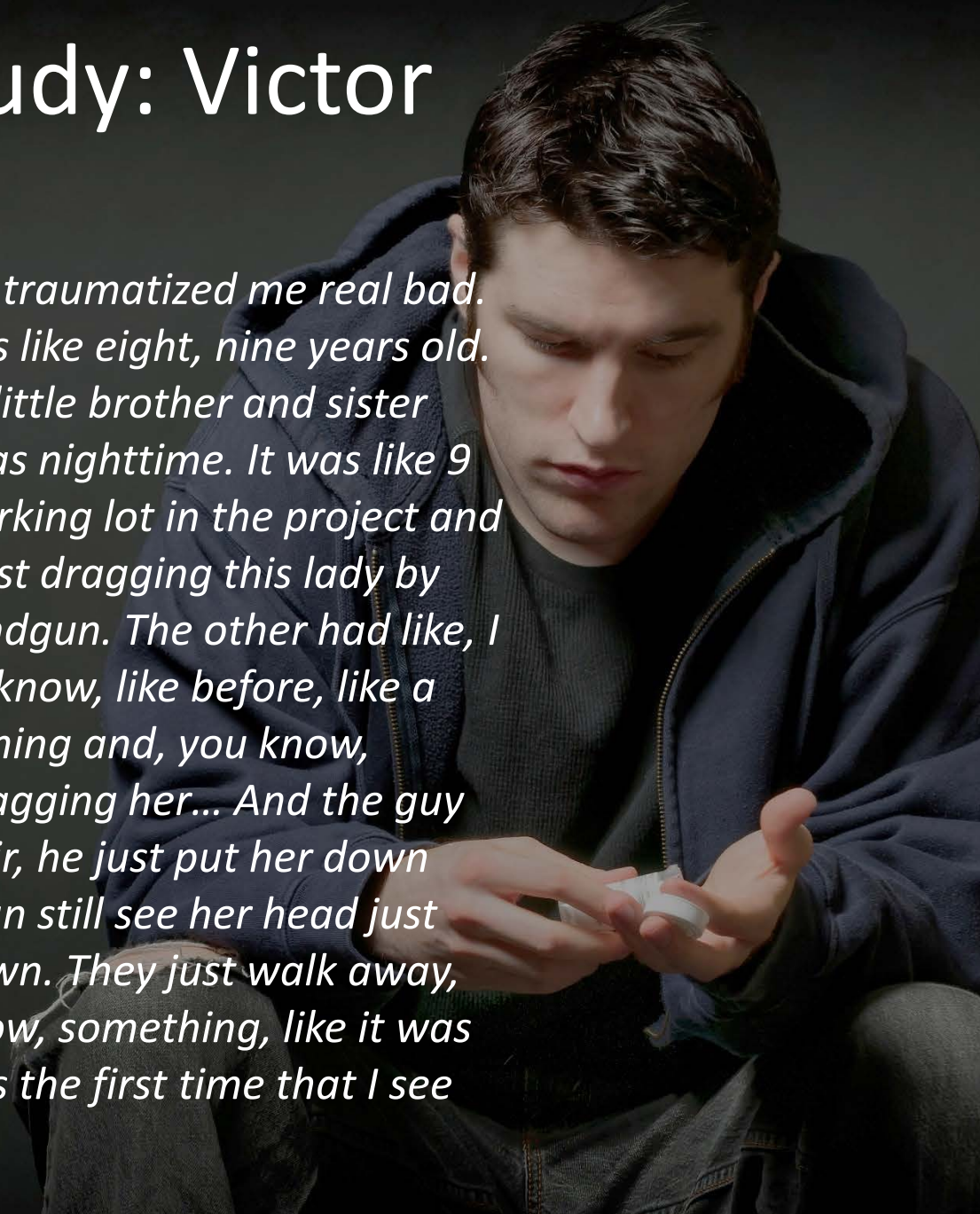
# PTSD-symptomatic by population



Data sources (from left to right): Kilpatrick et al., 2013; Scott et al., 2015; Ruzich et al., 2014; Reichert et al., in press; Fulton et al., 2013; Donley, et al., 2012; Reichert & Bostwick, 2010.

# Case study: Victor

*“The first one was -- I think this one traumatized me real bad. It was when I was a kid. I think I was like eight, nine years old. Me and my mom, my step-dad, my little brother and sister were coming from church. And it was nighttime. It was like 9 p.m. And we were parking in the parking lot in the project and I saw these guys from the project just dragging this lady by her hair. And one of them had a handgun. The other had like, I think it was like a MP1 on him, you know, like before, like a little machine gun. And she's screaming and, you know, fighting with them. But they just dragging her... And the guy that was holding the lady by her hair, he just put her down and boom, shot her in the head. I can still see her head just going like this and just dropping down. They just walk away, like they just killed a dog or, you know, something, like it was nothing for them. So yeah. That was the first time that I see somebody killed.”*





Research on trauma and PTSD in criminal justice populations

# RESEARCH IMPLICATIONS

**Screen**



**Assess**



**Specialized groups**

- **Closed**
- **Carefully Structured**
- **Evaluated**



# Recommendations

- Trauma-informed care should be the standard of care.
- PTSD services should be integrated into substance use disorder treatment.
  - Screening, evaluation, treatment, referrals
- Offer trauma interventions when able.

# Trauma Informed Care Vs. Trauma Intervention

Trauma-Informed Care--A program, organization, or system that incorporates evidence-based policies and interventions that:

- *Realize* the widespread impact of trauma and understands potential paths to recovery;
- *Recognize* the signs and symptoms of trauma in clients, families, staff, and others involved with the criminal justice system;
- *Respond* by fully integrating knowledge about trauma into policies, procedures, and practices; and
- *Seek to actively resist re-traumatization.* (SAMHSA)

Trauma Intervention--The delivery of an actual intervention to address trauma.

# Final Thoughts

- **People with substance use disorders and co-occurring PTSD have poorer treatment outcomes than those without PTSD, suggesting that treatment providers must be mindful of the effects of trauma on recovery.**
  - **Need to acquire skills and strategies to manage trauma symptoms to achieve & maintain sobriety**
- **Abrupt cessation of alcohol or drug use can exacerbate PTSD symptoms**

***Might [heroin's] psychoactive effects be the best coping device that an individual can find? Is intravenous drug use properly viewed as a personal solution to problems that are well concealed by social niceties and taboo? Is drug abuse self-destructive or is it a desperate attempt at self-healing...***

***~Vincent Feletti, MD, Adverse Childhood Experiences Study***



## Resources

- National Center for PTSD
- SAMHSA National Center for Trauma Informed Care
- National Institute of Mental Health
- National Alliance on Mental Illness
- RSAT Training Tool: Trauma-Informed Approaches in Correctional Settings
- Adverse Childhood Experiences Study

# References

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# Panel discussion: Research-based practices

*Elena Quintana, Adler University*

*Mark Kammerer, Cook County  
State's Attorney's Office*

*Jill Reich, Wells Center*

*Eddie Bocanegra, YMCA of Metro  
Chicago*

*Moderator: Becky Levin, Lurie Children's Hospital of Chicago*

# How many Veterans?

- 21.6 Million Veterans (10% Female)
- 2.6 Million deployed to combat zones in Iraq and Afghanistan since 2001
- 52,402 Wounded, as of 14 Jan 16
- 6,861 Killed (hostile and non-hostile) 14 Jan 16
- Operation Inherent Resolve (Iraq) and Freedom Sentinel (Afghanistan) replaced Operation New Dawn and Enduring Freedom

# Warrior Ethos

## Before

- Sense of Purpose
- Identity
- Morality
- Belonging
- Honor
- Sacrifice

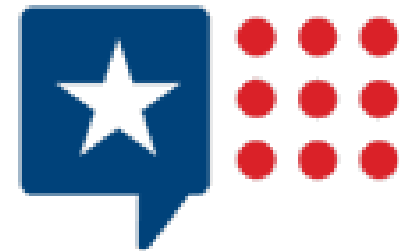
## During and After

- Prevent asking for help
- How does the Warrior become the Veteran
- Suffer in Silence
- Pride in “Embracing the Suck”

# Suicide

- Approximately 20% of all suicides are Veterans
- One study indicated that women Veterans are 2-3 times more likely to die by suicide than non-Veteran women
- 50% of enrolled Veterans in college, have contemplated suicide
- VA indicates 22 die by suicide each day. 8,030 per year!
- In 2013, 479 Active Duty, Reserves, and National Guard died from suicide

**Veterans  
Crisis Line**



**1-800-273-8255**  
**PRESS 1**

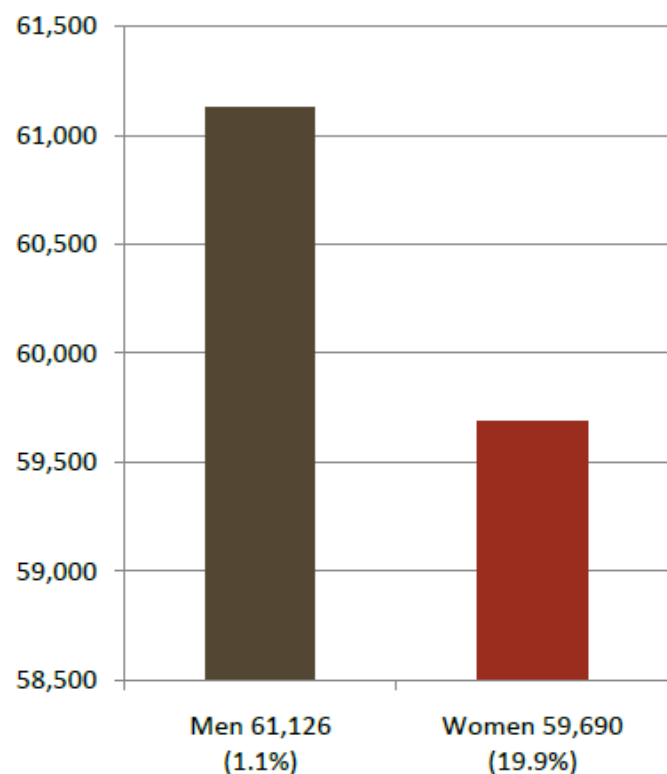
# How common is PTSD among Veterans?

- Vietnam War - 15% men/8% women (31%/27% est. lifetime prevalence)
- Operations Desert Shield/Desert Storm – 10%
- Operations Enduring Freedom & Iraqi Freedom (OEF/OIF) – 14%
  - Est. 300,000 suffering from PTSD or major depression (2010)
- Repeated deployments increase the likelihood of PTSD

# Military Sexual Trauma (MST)

- MST is sexual harassment and/or sexual assault that occurs in military settings
- 60% of women with Military Sexual Trauma also suffered from PTSD
- MST is not a diagnosis, but a type of trauma
- 1 in 5 women and 1 in 100 men report experiencing MST

Number of Positive MST Screens in VA  
(2002 – 2008) <sup>44</sup>





# **POSSIBLE RISK FACTORS RELATED TO MILITARY SERVICE**

- **- MULTIPLE DEPLOYMENTS**
- **- SUBSTANCE USE/ABUSE**
- **- PRESCRIPTION DRUG ABUSE**
- **- QUICK TURNAROUND TIME**
- **- NO “SAFE ZONE” AREAS**
- **- TRANSITION ISSUES RELATED TO TRANSITION FROM ACTIVE DUTY TO VETERAN STATUS INCLUDING MILITARY CULTURE/DAILY LIFE**

# **CURRENT TREATMENTS UTILIZED FOR TREATMENT OF PTSD WITH VETERANS**

- **EYE MOVEMENT DESENSITIZATION AND REPROCESSING**
- **DIALECTICAL BEHAVIOR THERAPY**
- **PROLONGED EXPOSURE THERAPY**
- **SEEKING SAFETY (FOR ALCOHOL AND PTSD)**
- **COGNITIVE BEHAVIORAL THERAPY**

# **COOK COUNTY VETERANS TREATMENT COURT SYSTEM**

**IMPLEMENTED IN 2009 – 730 ILCS 167/20**

- **SIX SEPARATE COURTS IN COOK COUNTY**
- **382 ADMISSIONS**
- **153 SUCCESSFUL GRADUATES (65%)**
- **14% FAILED PARTICIPANTS RESENTENCED TO IDOC**
- **CLOSE COLLABORATIVE EFFORT AMONG COOK COUNTY JUDICIARY, STATES ATTORNEY, PUBLIC DEFENDER, PROBATION, VETERANS ADMINISTRATION, TASC, JMLS VETERANS CLINIC**
- **IMPACT**
  - **ANNUAL COST SAVINGS: \$1.13MILLION**
  - **FELONY CONVICTIONS REDUCED BY 94%/79% (GRADUATES)**
  - **83% OF ALL PARTICIPANTS HAVE NO ARREST WHILE IN CCVTC**
  - **66% OF PARTICIPANTS HAVE NOT BEEN IN CUSTODY**

# Trauma and PTSD in Corrections

Jill Reich, MA, CADDC

Wells Center

Logan Correctional Center

# Trauma and PTSD

- Awareness
- Diagnosis of PTSD
- Education

# Curriculum for Trauma and PTSD

- Beyond Trauma by Stephanie S. Covington, Ph.D. (Hazelden)
- Seeking Safety by Lisa Najavits
- Co-Occurring Disorders Series: Understanding Post-Traumatic Stress Disorder and Addiction by Katie Evans, Ph.D. (Hazelden)

# Barriers To Treatment

- Environment
- Resources
- Amount of Staff
- Peer Conflict
- Lack of Education

# Barriers to Treatment

- Offenders reported
  - Environment
  - Waitlist
  - Staff
  - Movement
  - Group Space
  - Other offenders
  - Fear
  - Limited Counseling Sessions



# Characteristics in Counselors

- Understanding
- Respect
- Nonjudgmental
- Punctual
- Compassionate
- Trustworthy
- Kind
- Patience
- Honest
- Calm
- Educated
- Thoughtful
- Open-Minded

# Offenders Want

- “Coping Skills”
- “Having materials to read”
- “Feedback”
- “Individual therapy”
- “Group therapy”
- “Support Groups”
- “To be treated as an individual”
- “More counselors”
- “See a doctor regularly”
- “All [employees] to understand trauma and PTSD”
- “Smaller Groups”

# What Has Helped Offenders?

- Counselors
- Groups
- Packets
- Meditation
- Individual Sessions
- Seeking Safety
- Art Therapy
- Medication
- Prayer
- Exercise
- Talking to someone
- Family Support



# Panel discussion: Research-based practices

*Elena Quintana, Adler University*

*Mark Kammerer, Cook County  
State's Attorney's Office*

*Jill Reich, Wells Center*

*Eddie Bocanegra, YMCA of Metro  
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# Materials from today's research forum

Now available at:

[https://www.icjia.state.il.us/sites/  
trauma-and-ptsd](https://www.icjia.state.il.us/sites/trauma-and-ptsd)

## Webinar participants: Please take our surveys!

Research forum evaluation (only 4 questions)

[http://www.surveymoz.com/s3/2783440/b4ce2214d  
dd0](http://www.surveymoz.com/s3/2783440/b4ce2214d<br/>dd0)

Survey for feedback on ICJIA research and evaluation  
work (only 11 questions)

[http://www.surveymoz.com/s3/2783349/3f12773c93  
6d](http://www.surveymoz.com/s3/2783349/3f12773c93<br/>6d)