

Pills, Pot & Alcohol

Reducing the Risk of DUI

John Fitzgerald, PhD, LPC, CAS

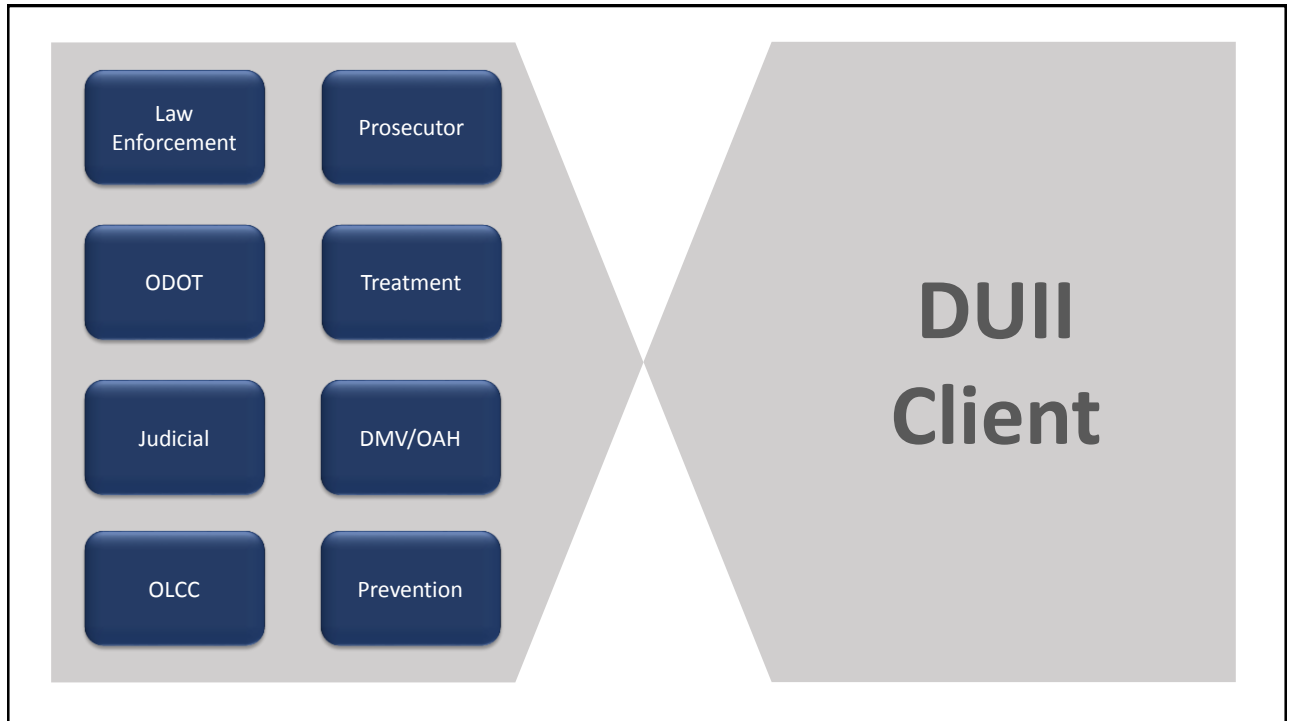


6,699 DUI in 2013

**105 Alcohol-impaired
driving fatalities**

77.3% BAC was above .15

FBI Uniform Crime Report



Origins of Addiction



90% ≤ 20 years-old

Substance Use Disorders Begin in Adolescence and Last for Decades

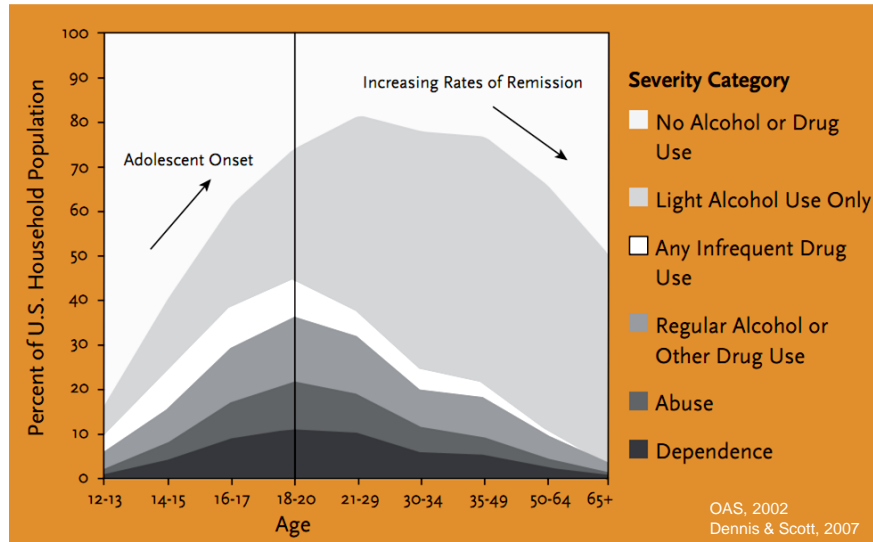
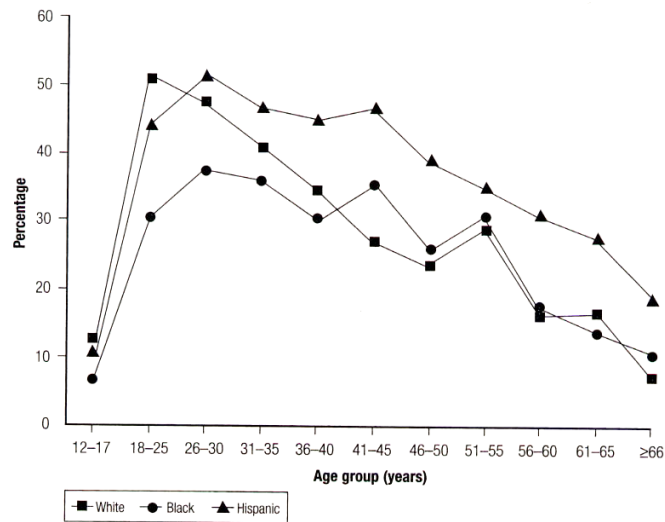
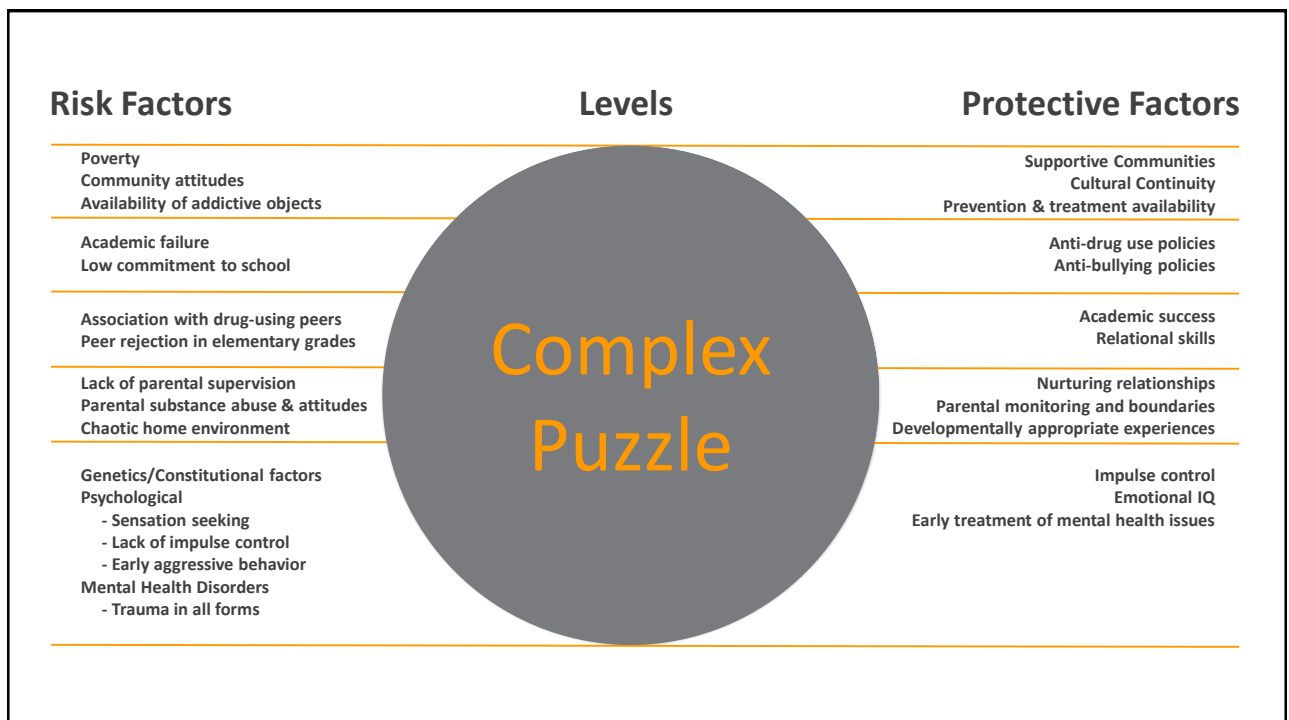
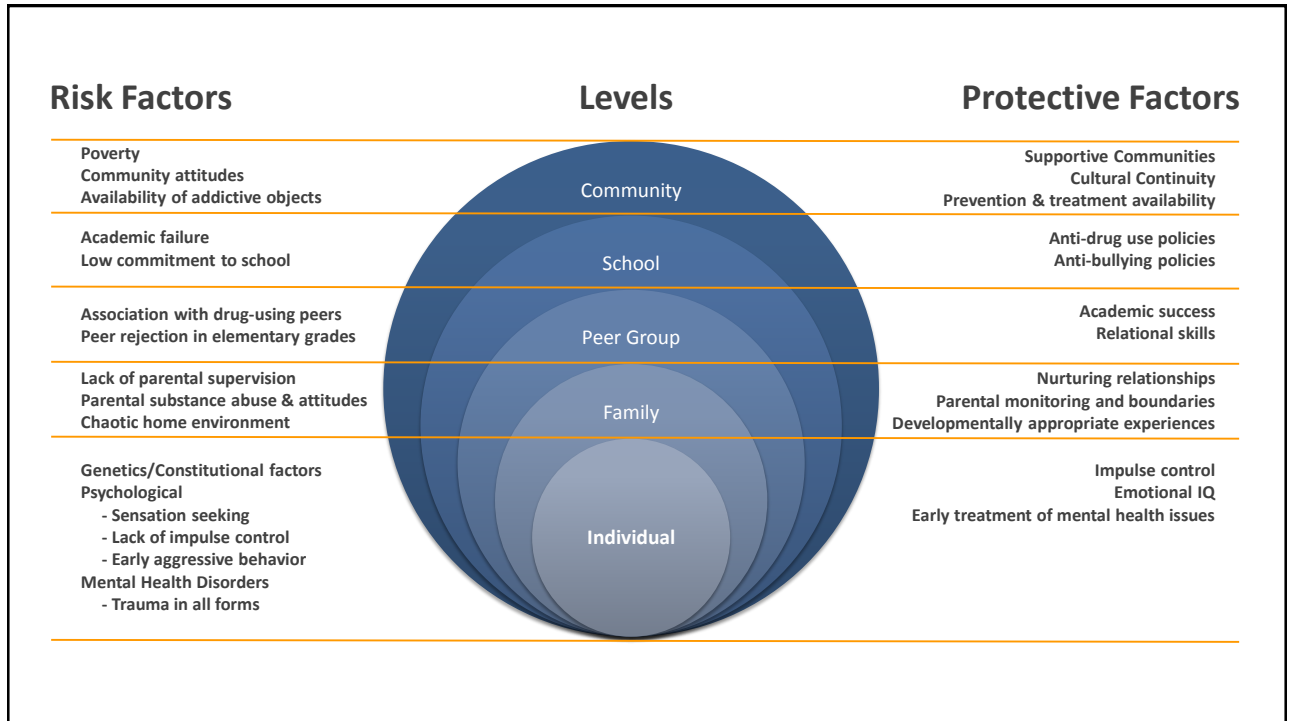


Figure 1: Percentage of males reporting having four or more drinks on any single day in past 30 days, by age group and race/ethnicity, United States



Source: Jackson et al. 1998.



Risk Factors

Levels

Protective Factors

Genes X Environment

Heritable Influences on Addiction

Substance/Behavior	Heritability Estimates
Nicotine	33-71%
Alcohol	48-66%
Marijuana	51-59%
Cocaine	42-79%
Opioid	23-54%
Gambling	49%

Source: Agrawal, A. et al. (2012)

Adverse Childhood Experiences (ACEs)



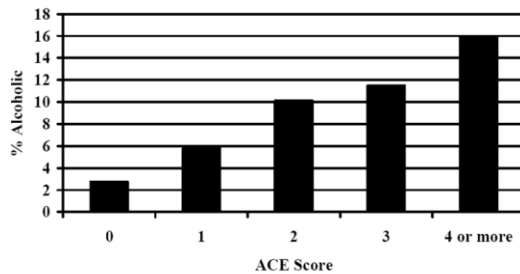
ACE STUDY

- San Diego, CA
- Kaiser Permanente Study
- Begin in Obesity Clinic
- Data collected 1995-1997
- 17,000+ participants

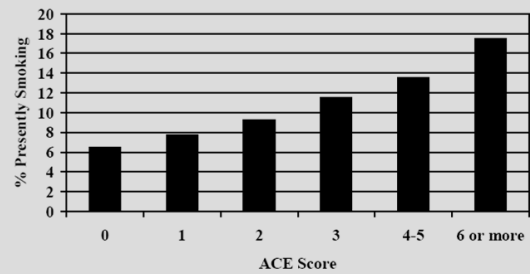
Abuse	Household
Psychological (by parents)	Substance Abuse
Physical (by parents)	Mental Illness
Sexual (anyone)	Parental Separation/Divorce
Emotional neglect	Battered Mother
Physical neglect	Criminal Behavior

ACE Score	Women	Men	Total
0	31.3	34.2	32.7
1	24.2	27.3	25.6
2	14.8	16.4	15.5
3	10.4	9.3	9.9
4	6.8	4.8	5.9
5 or more	12.5	8.0	10.5

ACE Score & Alcoholism



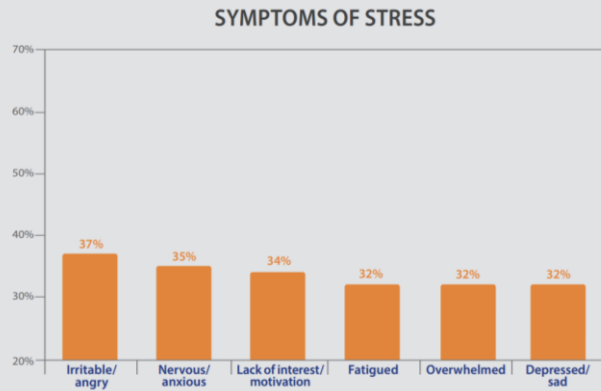
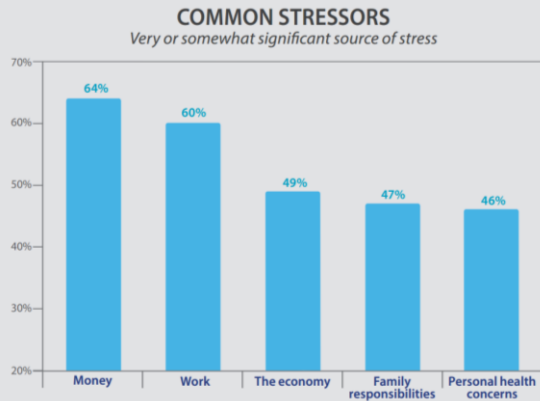
ACE Score & Smoking



“Addiction **is not a brain disease**, nor is it caused by chemical imbalances or genetics. Addiction is best viewed as an understandable, unconscious, compulsive use of psychoactive materials in response to abnormal prior life experiences, most of which are concealed by **shame, secrecy, and social taboo**.”

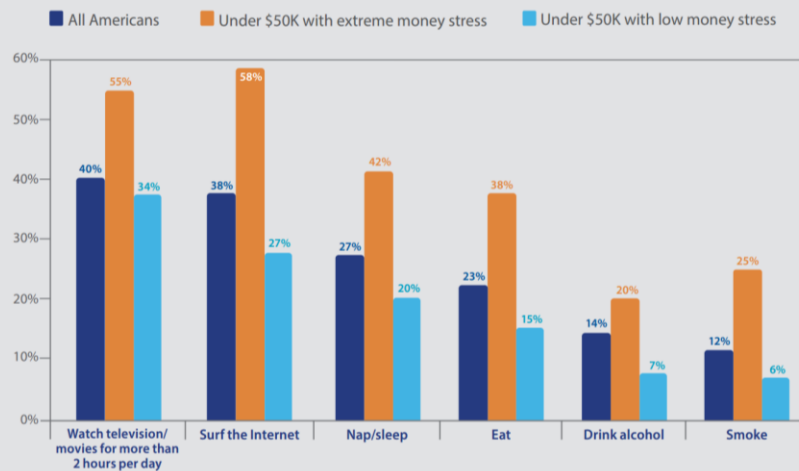
Vincent J. Felitti, MD
Principle Investigator, Kaiser Permanente

Present-day Stress



APA, www.stressinamerica.org, 2014

Coping Responses



APA, www.stressinamerica.org, 2014

Disease: Ebola**Terror: ISIS****Public Killing: Holmes & Rodger****School Killing: Adam Lanza****Suicide: Hoffman & Williams****War: Israel & Palestine**

15 to 18 percent of working officers in the United States have undiagnosed symptoms of post-traumatic stress disorder.

John Violanti, U. of Buffalo

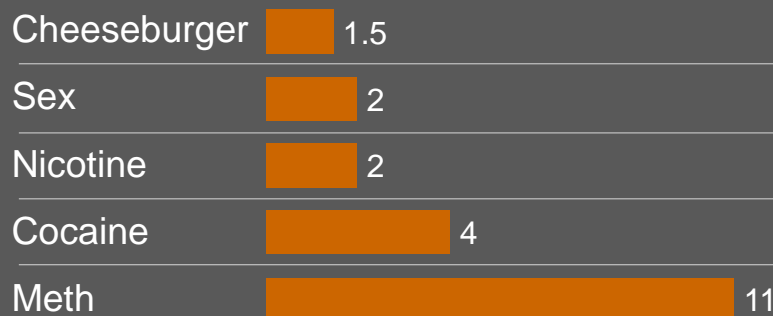


Varieties of Addiction Experience



Why Addiction? Feel Good or Feel Better

Dopamine Index



Source: UCLA Integrated Substance Abuse Programs

Broad Universe of Addictive Experience

SEX	FOOD	GAMBLING	ALCOHOL	ILLICIT DRUGS	LICIT DRUGS
Fantasy sex	Pizza	Internet	Undistilled	Marijuana	Nicotine
Seductive role	Chocolate	Video keno	Beer	Cocaine	Bath salts
Anonymous	Chips	Horse & Dog	Wine	Heroin	Inhalants
Prostitution	Cookie	Stocks	Sake	PCP	Rx Drugs
Trading sex	Ice Cream	Dice games	Chicha	MDMA	Snuff
Voyeurism	French Fries	Casino games	Distilled	Amphetamine	eCigarettes
Exhibitionism	Cheeseburger	Sports cards	Rum	LSD	Coffee
Intrusive sex	Non-diet Soda	Games of skill	Vodka	K2/Spice	Cough syrup
Pain exchange	Cake	Bingo	Whiskey	Club drugs	Mushrooms
Object sex	Cheese	Sports	Brandy	Rx Drugs	Diet pills
Minor sex	Bacon	Lottery	Powdered	Steroids	Marijuana

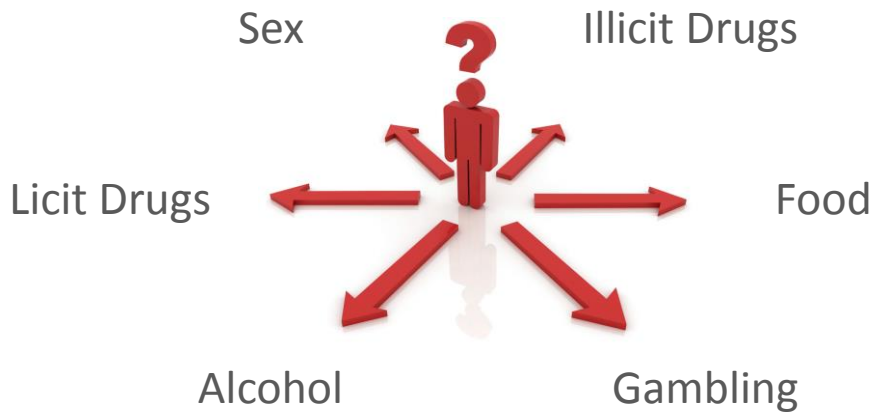
Other: Internet, exercise, relationships, working...

Broad Universe of Addictive Experience

SEX	FOOD	GAMBLING	ALCOHOL	ILLICIT DRUGS	LICIT DRUGS
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Behavioral

Substance



More **experimenting**
at an earlier age

Figure 3. Number of Substances of Abuse Reported at Treatment Entry, by Age at Substance Use Initiation, among Treatment Admissions Aged 18 to 30: 2011

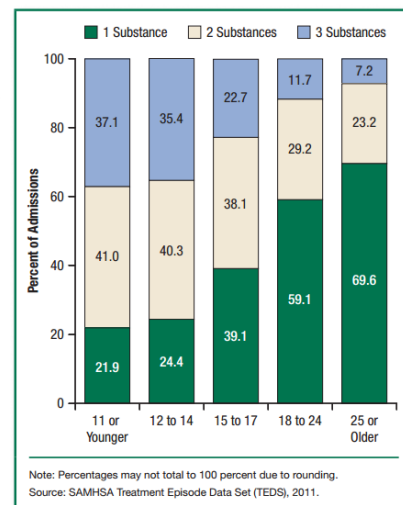
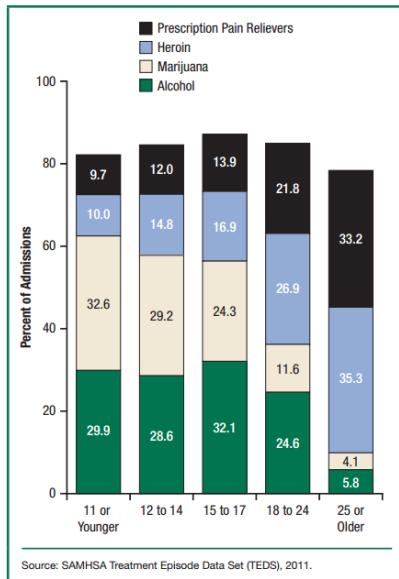


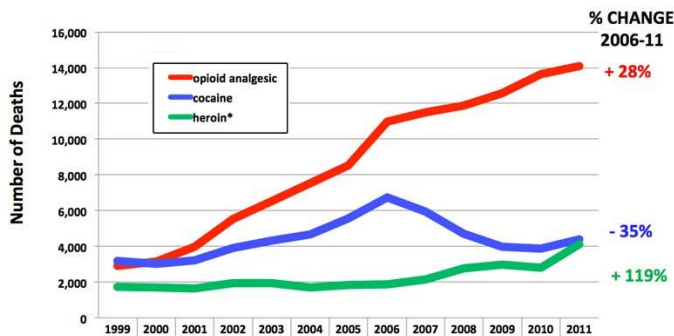
Figure 4. Primary Substance of Abuse, by Age at Substance Use Initiation, among Treatment Admissions Aged 18 to 30: 2011



Shift from alcohol and marijuana to **opiates** as age increases

Prescription **Opioid** Analgesics (pain medicines)

Unintentional Drug Poisoning Deaths Involving Opioid Analgesics, Cocaine and Heroin: United States, 1999–2011



Falling

26,852 deaths

Guns

31,672 deaths

Traffic Accidents

33,687 deaths

Drug Overdoses

38,329 deaths *

Source: CDC WONDER 2010 data

* 30,006 unintentional deaths



Level of Confidence in the Evidence for Adverse Effects of Marijuana on Health and Well-Being

Effect	Evidence
Symptoms of chronic bronchitis	High
Motor vehicle accidents	High
Addiction to marijuana and other drugs	High
Diminished lifetime achievement	High
Abnormal brain development	Medium
Progression to abuse of other drugs	Medium
Schizophrenia	Medium
Depression or anxiety	Medium
Lung cancer	Low

Volkow et al., 2014

TEENS

- Interferes with brain development
- Relationship problems
- Poor academic performance
- Increased risk of accidents
- Health/mental health problems
- High risk sexual behavior
- Gateway to other drugs

6.5% daily abusers



When considering legalization... policymakers need to:

- Prevent **easy access** to marijuana by teens
- Increase access and funding for **adolescent treatment**
- Consider **regulating** levels of tetrahydrocannabinol (THC)

1980s – 4%

2012 – 15%



Surveillance of Abuse and Addiction

Government

Drug Trends

- National Survey on Drug Use and Health (**NSDUH**)
- Monitoring the Future (**MTF**)
- National Forensic Laboratory Information System (**NFLIS**)

Treatment Trends

- Treatment Episode Data Set (**TEDS**)
- National Survey of Substance Abuse Treatment Services (**N-SSATS**)

Behavioral Risk Trends

- Behavioral Risk Factor Surveillance System (**BRFSS**)

Private

Drug Trends

- The Research Abuse, Diversion and Addiction-Related Surveillance (**RADARS®**) System
- Street RX
- National Addictions Vigilance Intervention and Prevention Program (**NAVIPPRO**)

Consequences



“Drug addiction is a **brain disease**.”

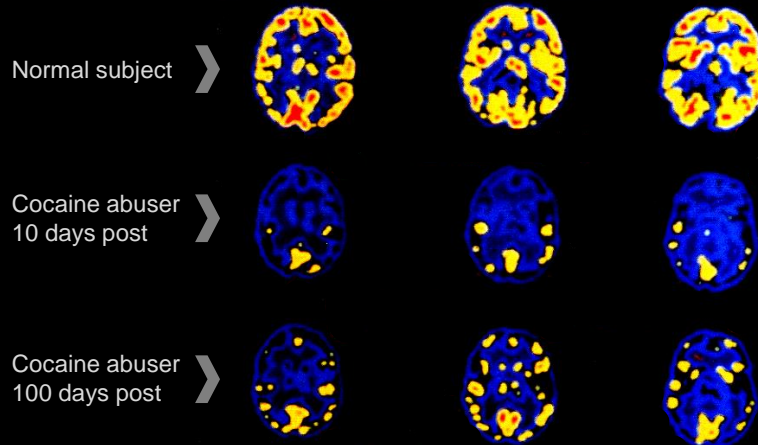
Nora Volkow, MD
Director, National Institute on Drug Abuse

Molecular
Addiction
Switch





Cocaine Abuse and Brain Glucose Metabolism



Percentage Who Relapse

Type I Diabetes

30 to 50%

Drug Addiction

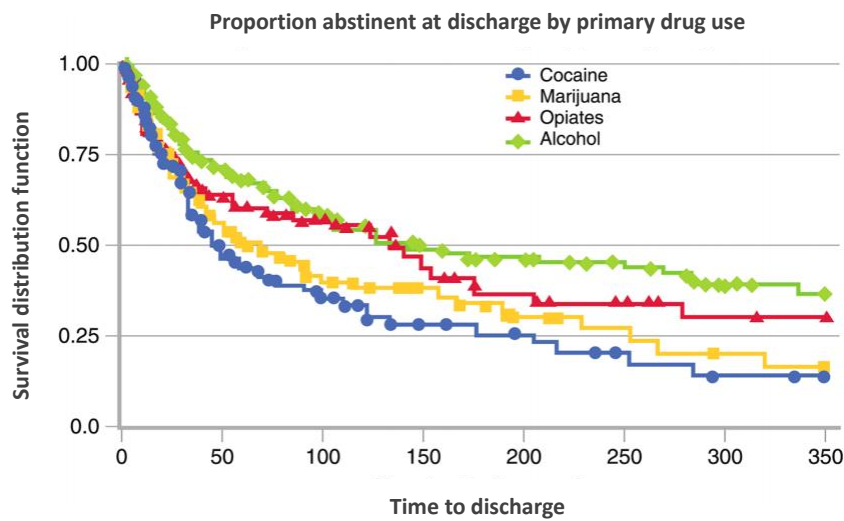
40 to 60%

Hypertension

50 to 70%

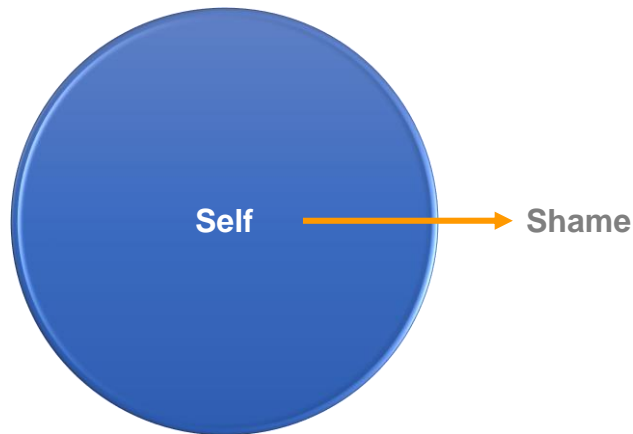
Asthma

50 to 70%



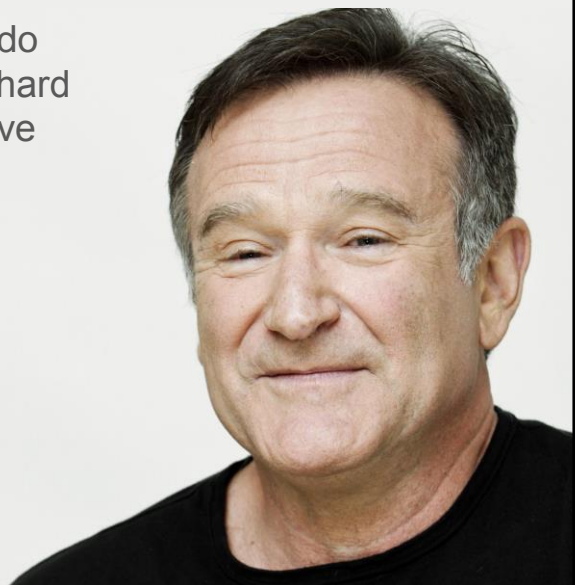
Sinha, R. (2011)

Addiction Affects Relationships

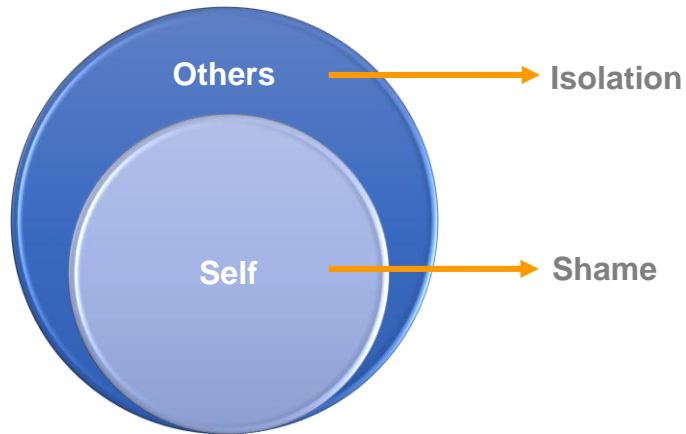


You know, I was **shameful**, and you do stuff that causes disgust, and that's hard to recover from. You can say, 'I forgive you' and all that stuff, but it's not the same as recovering from it. It's not coming back.

Robin Williams
Interview with The Guardian, 2010

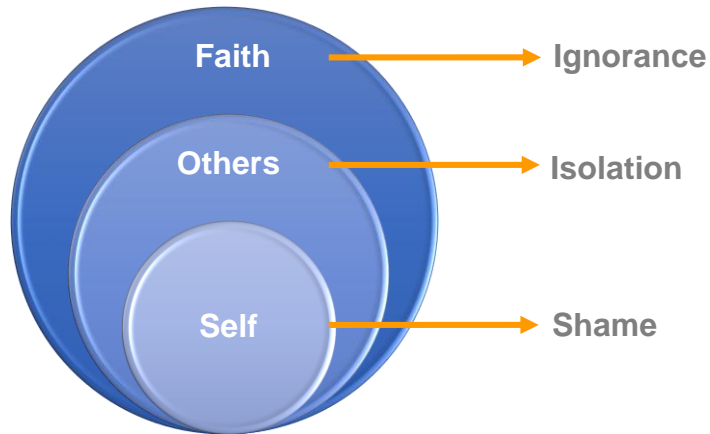


Addiction Affects Relationships



Developmental Stuckness

Addiction Affects Relationships



We live **two lives**

Inner life (Eye Closed)

Pure consciousness
Timeless/changeless
Being
Collective (one) mind



Outer life (Eye Open)

Physical reality
Time/change
Doing/action
Individual (ego) mind

We live **two** lives

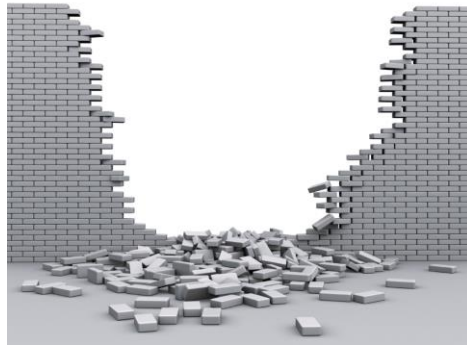
Inner life (Eye Closed)

Pure consciousness

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Collective (one) mind



Outer life (Eye Open)

Physical reality

Time/change

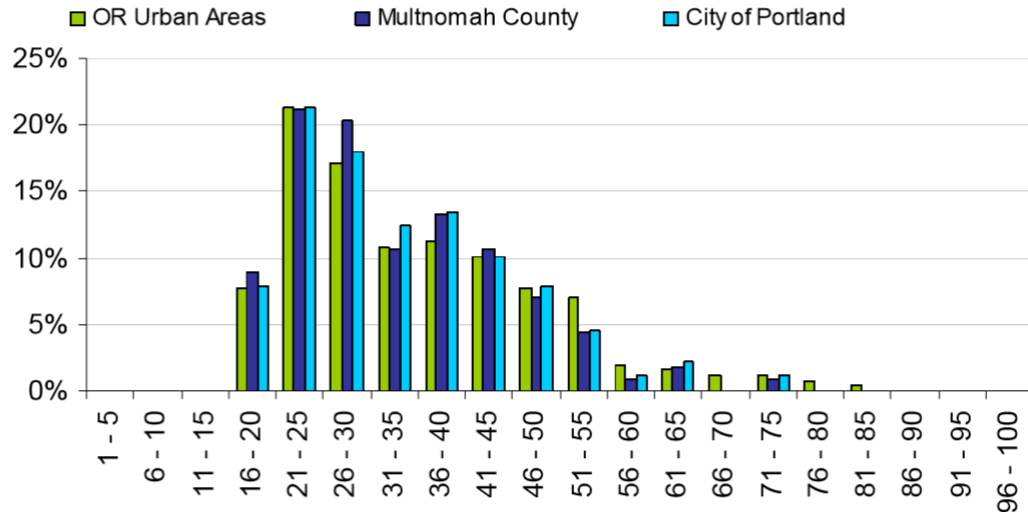
Doing/action

Individual (ego) mind

Risk Reduction



Percentage of Impaired Drivers in Fatal Alcohol-Involved Crash, 1995-2004



Repeat offenders and **chronic** drunk drivers make up about **1%** of all drivers on weekend nights, but account for **50%** of all fatal crashes.

National Council on Alcoholism and Drug Dependence, 2006

Intervention

Pre-Drinking

PREVENTION

- Targeted education/media campaigns
- Controlling access of alcohol
- Alternative transportation
- Zero-tolerance for minors
- Primary care screening/BI

During Drinking

ENFORCEMENT

- Traffic enforcement
- Checkpoints
- Ignition interlock
- Minor Decoy/Cops in Shops

Post Drinking

ADJUDICATION

- Sanctions: jail, diversion, fines, DISP
- **Treatment**

Outpatient

90% of patients in care
82% of facilities

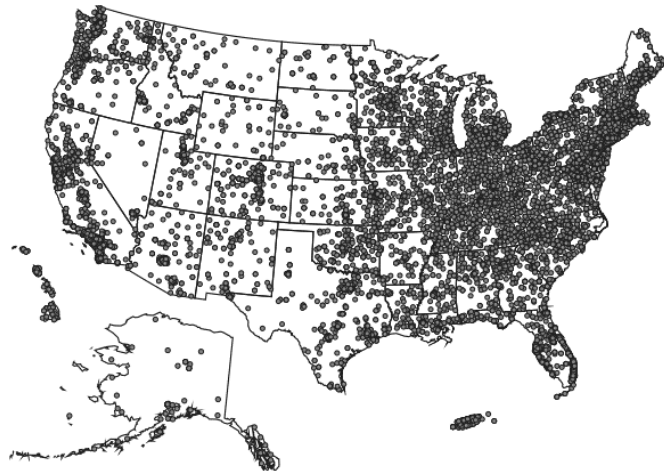
Residential

9% of patients
24% of facilities

Hospital

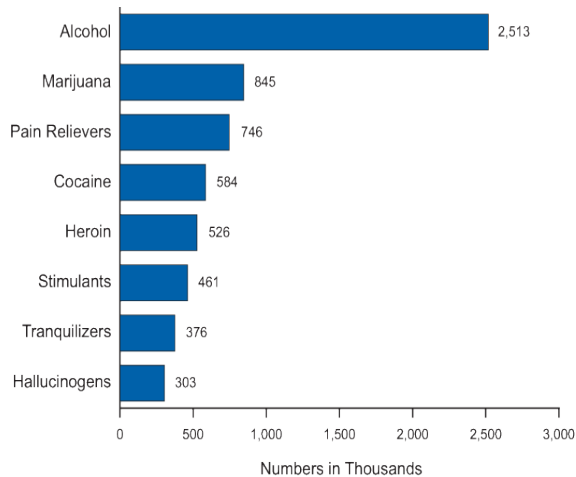
1% of patients
5% of facilities

14,148 facilities



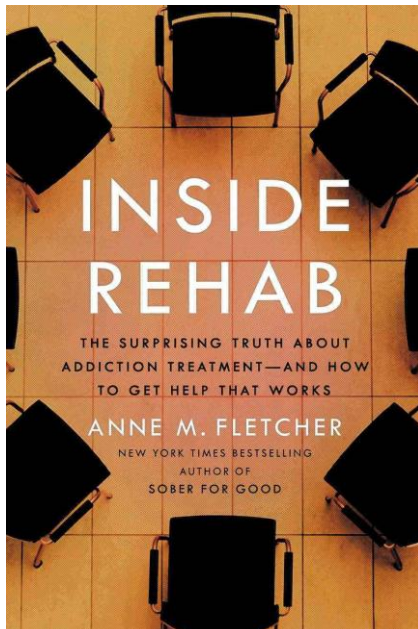
Source: N-SSATS 2013

1,249,629 clients in substance abuse treatment on **March 29, 2013**



9.9%

of those in need
receive treatment

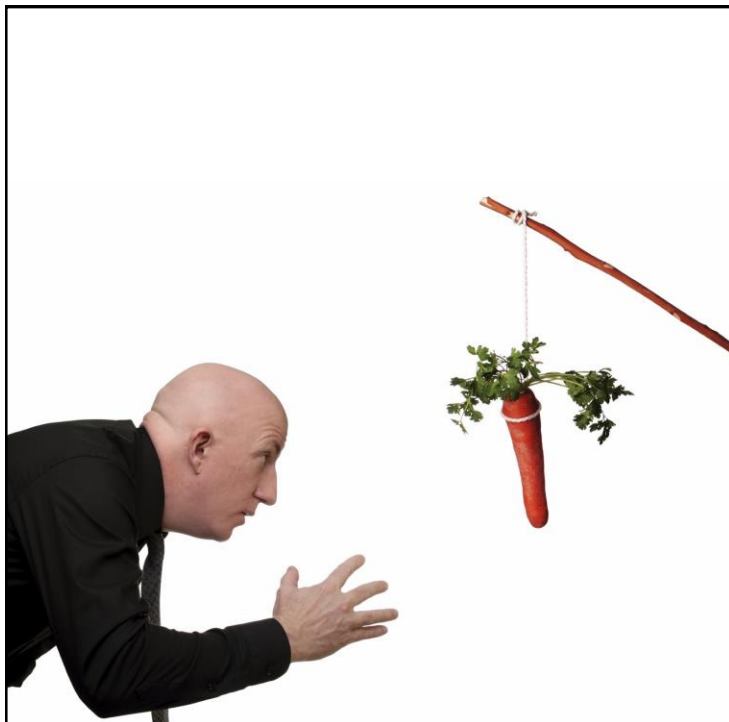


- 35 billion industry
- Unlicensed and non-credentialed staff
- Turnover of staff higher than in the fast-food industry
- Short-term (< 90 days)

What is **effective** treatment?

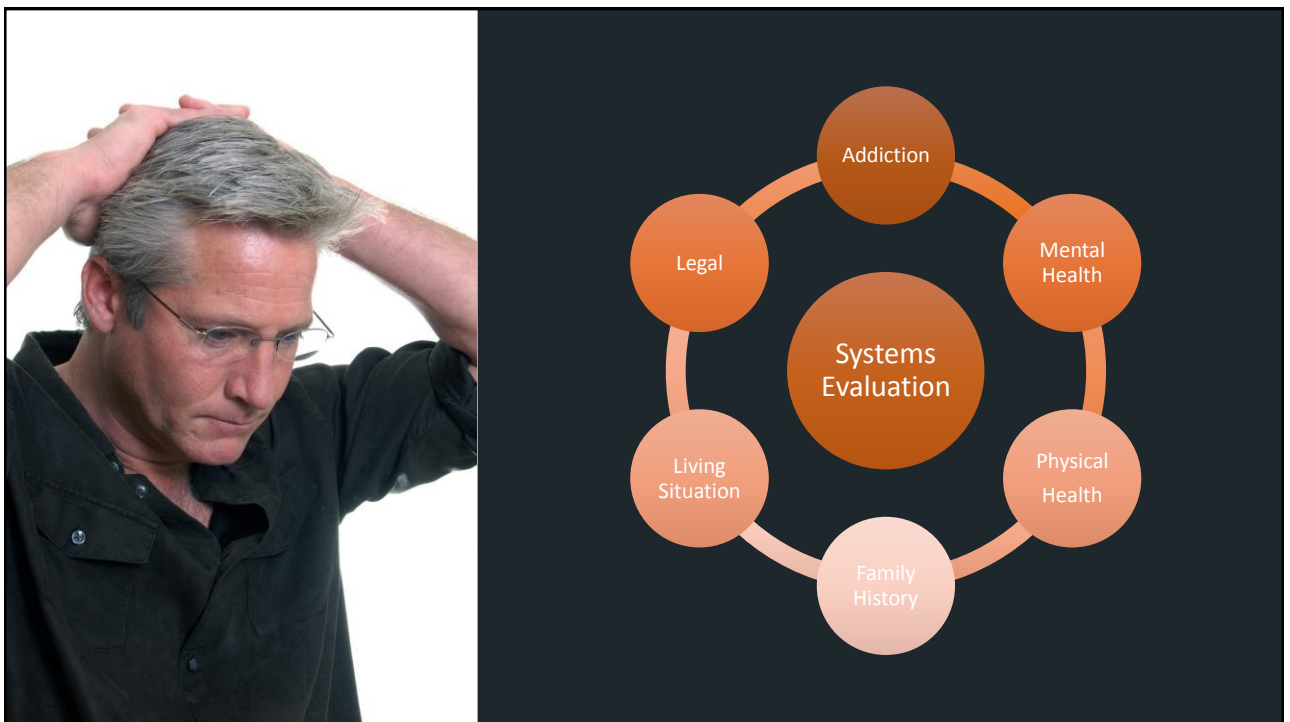
Addiction is a **pathological disorder**, a disease that requires expert treatment.

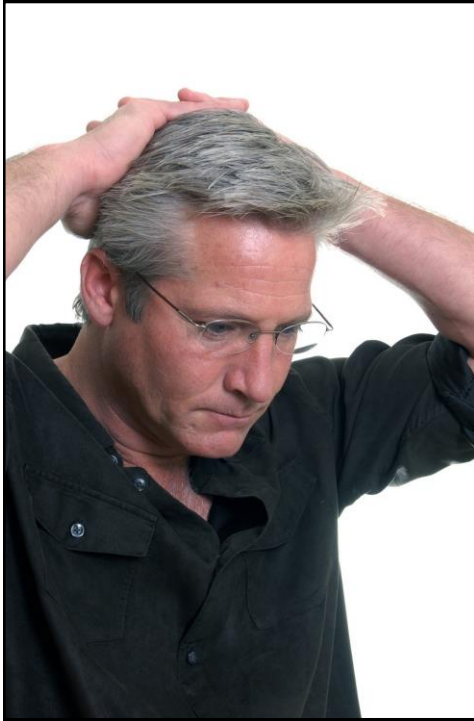
Addiction is an **adaptive response** to biology and trauma over time, and may benefit from expert treatment.



How **motivated...**

to stop doing what
has allowed life to
be tolerable?





Acute

- Suicidal
- Homeless
- Intoxicated
- Psychoses
- Medical
- Developmental
- Legal

Chronic

- Addiction
- ACEs
- Medical
- Stress
- Relationships
- Lifestyle (Time/\$)
- Health (Diet)




5 Actions

Motivate	Motivational Interviewing Contingency Management	CRAFT Goal Setting
Evaluate	Ongoing Systems Evaluation / Outcome Measures	
Resolve	Cognitive-Behavioral Medications	Relapse Prevention Trauma Therapies (e.g. EMDR)
Manage	Developmental Case Management	Brief Interventions 12-step Facilitation
Create	Humanistic Existential	Hope Therapy Well-being Therapy

5 Actions

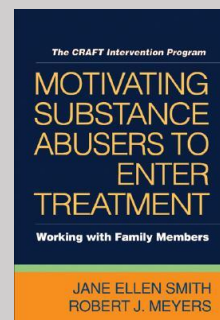
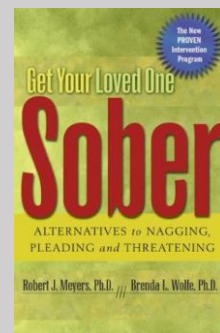
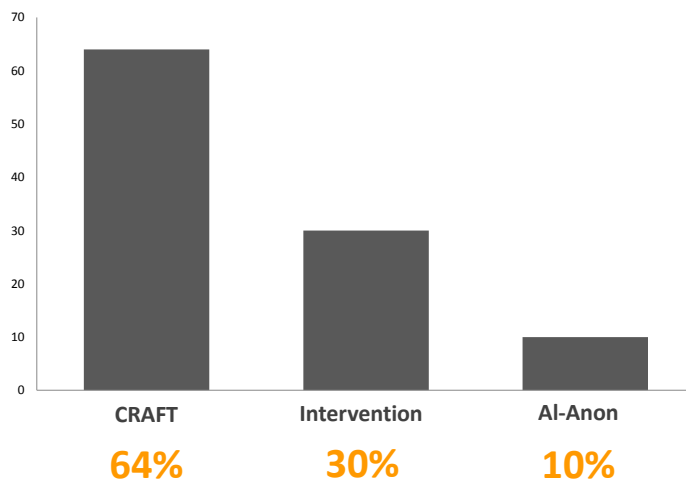
Motivate	<p>Right Intervention(s)</p> <p>Right Time</p> <p>Right Dose</p>
Evaluate	
Resolve	
Manage	
Create	



Internal
Hope
Consequences
Feeling

External
MI
Mandates
CRAFT

CRAFT: Helping Families



1 Get Past Records



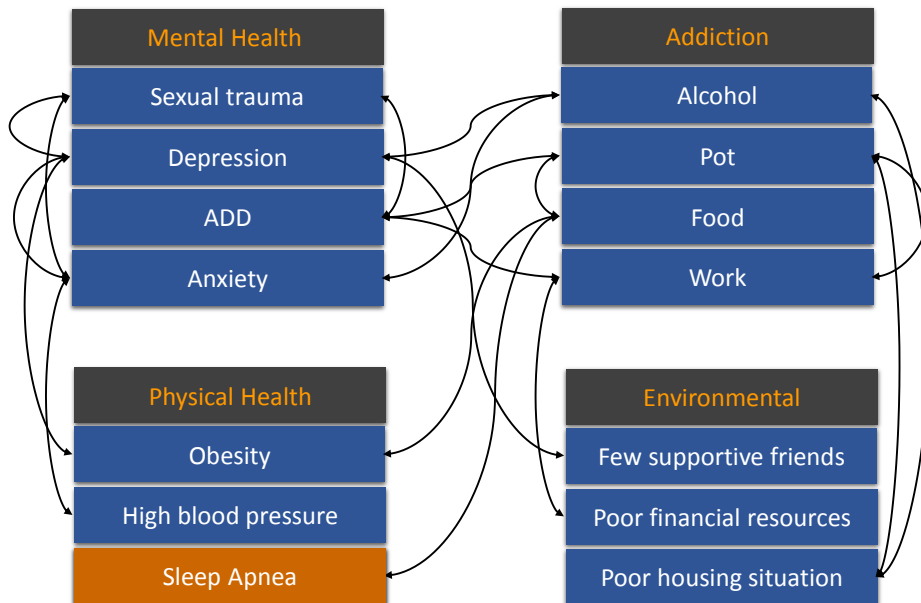
2 Study

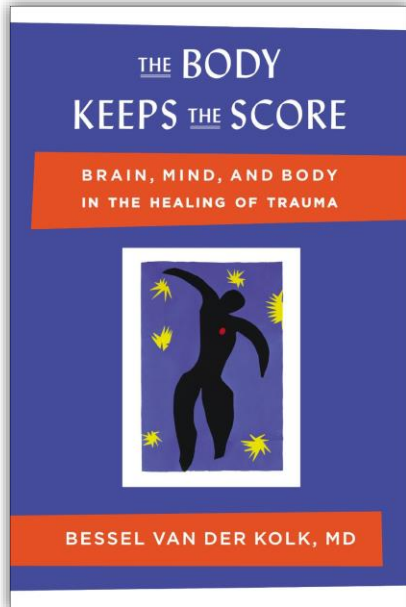


3 Get Evaluated



**CONNECT
THE DOTS**





“The challenge of [trauma] recovery is to reestablish ownership of your body and your mind.”

- Find a way to be **calm and focused**, even during times where you are reminded of the past
- Find a way to be fully alive in the **present** and engaged with the people around you
- Not having to keep **secrets** from yourself, including secrets about the ways you have managed to survive



Mindfulness Practice

Mindfulness is not thinking, interpreting, or evaluating; it is an awareness of perception. It is a nonjudgmental quality of mind which does not anticipate the future or reflect back on the past. Any activity can be done with mindfulness.

Source: www.contemplativemind.org



Mindfulness Practice

Meditation

- Vipassana
- Zen
- Chakra
- Deep breathing
- Visualization
- Walking
- Sitting
- Eating
- Creative

Yoga

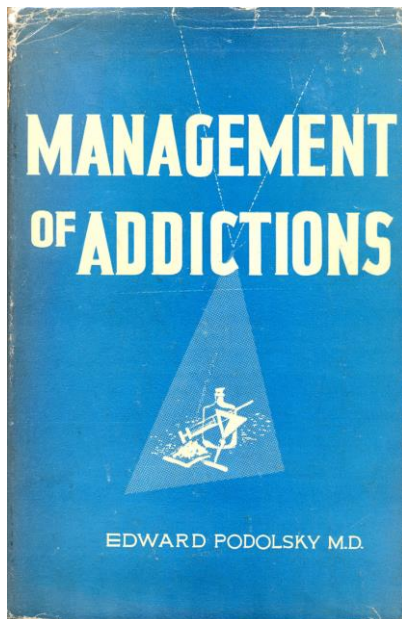
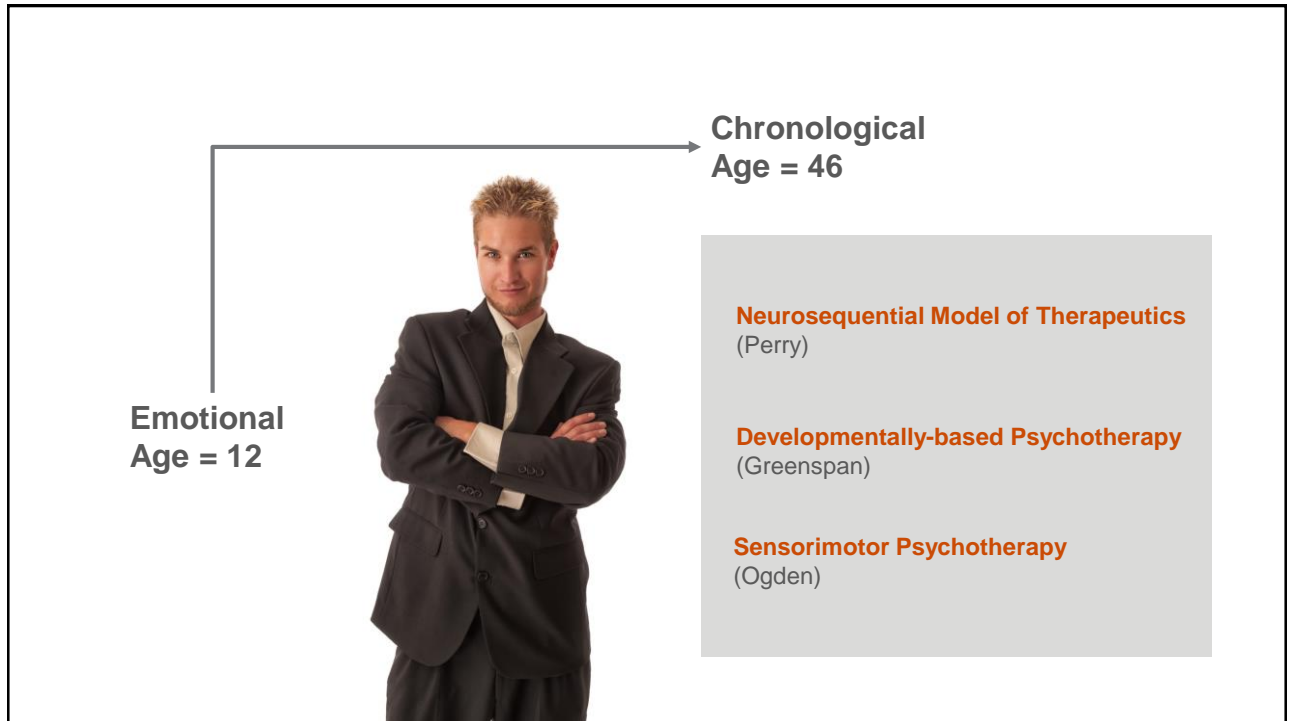
- Ananda
- Ashtanga
- Bikram
- Hatha
- Iyengar
- Kripalu
- Power
- Vinyasa
- Yin

Source: www.contemplativemind.org

Developmental Catch-up

**Emotional
Age = 12**



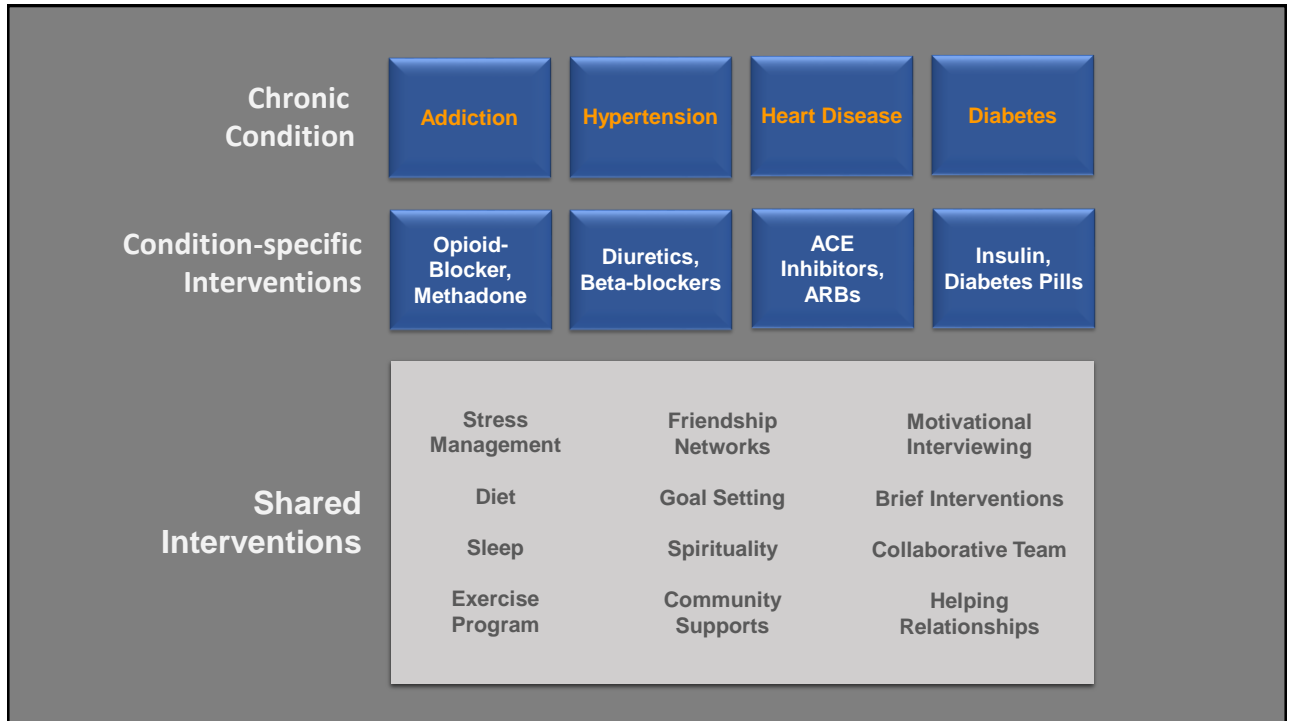


Three Leverage Points

Time (outpatient vs. res)

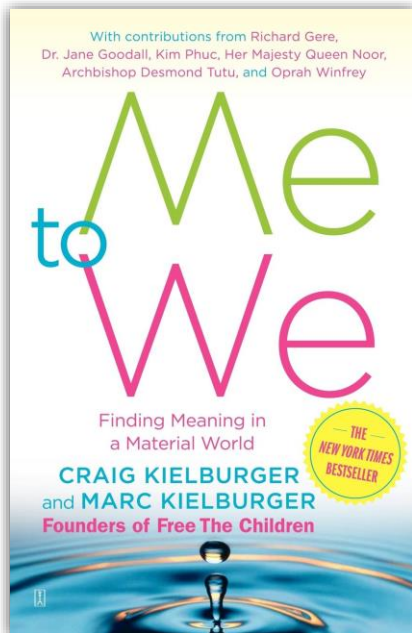
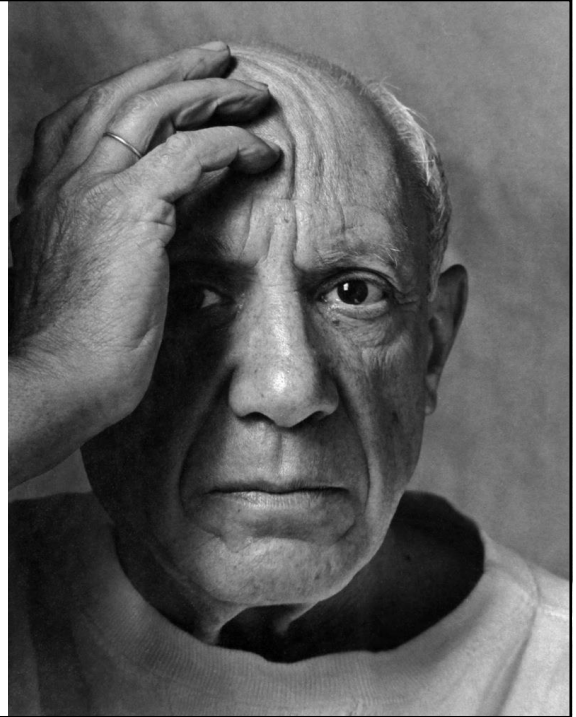
EBP (addiction medications)

Coordinated (chronic) Services



All children are artists.
The problem is how to
remain an artist once he
grows up.

Picasso



What to Create?



Learn more at www.addictionmanagement.com

drjohnfitz@gmail.com