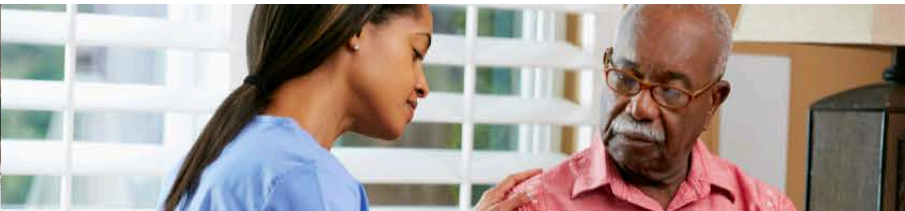
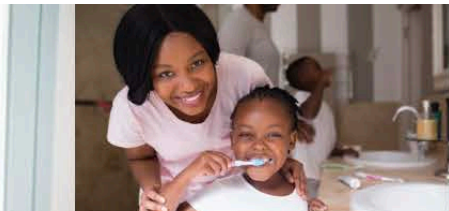
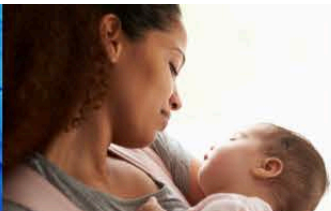


The Intersection of Brain Injury and Substance Use Disorders

Anastasia Edmonston MS CRC

For Public Health Administrators



Poll:

Question: “How many of you have worked with someone you know or you suspect may be living with a history of brain injury?”

Yes

No

Today's webinar will cover:

- Brain Injury 201 Quiz and Overview
- Being Brain Injury aware is being person centered: integrating best practices, assessment and intervention
- How can providers and programs support and accommodate individuals who have a documented or probable history of brain injury
- What are recommendations for aftercare when there is a history of brain injury
- Resources for professionals

Purpose

Why is it important for public health, behavioral health and other human service professionals to have a working understanding of Traumatic Brain Injury (TBI) and Acquired Brain Injury (ABI)?

- A history of TBI is often hidden among individuals living with behavioral health challenges (mental health and addiction), older adults, victims and perpetrators of intimate partner violence, the homeless and incarcerated individuals, adults and juveniles
- By understanding how traumatic and acquired brain injury impacts health and injury risks, changes can be made at the policy and clinical level to mitigate the impact of brain injury as well as prevent it

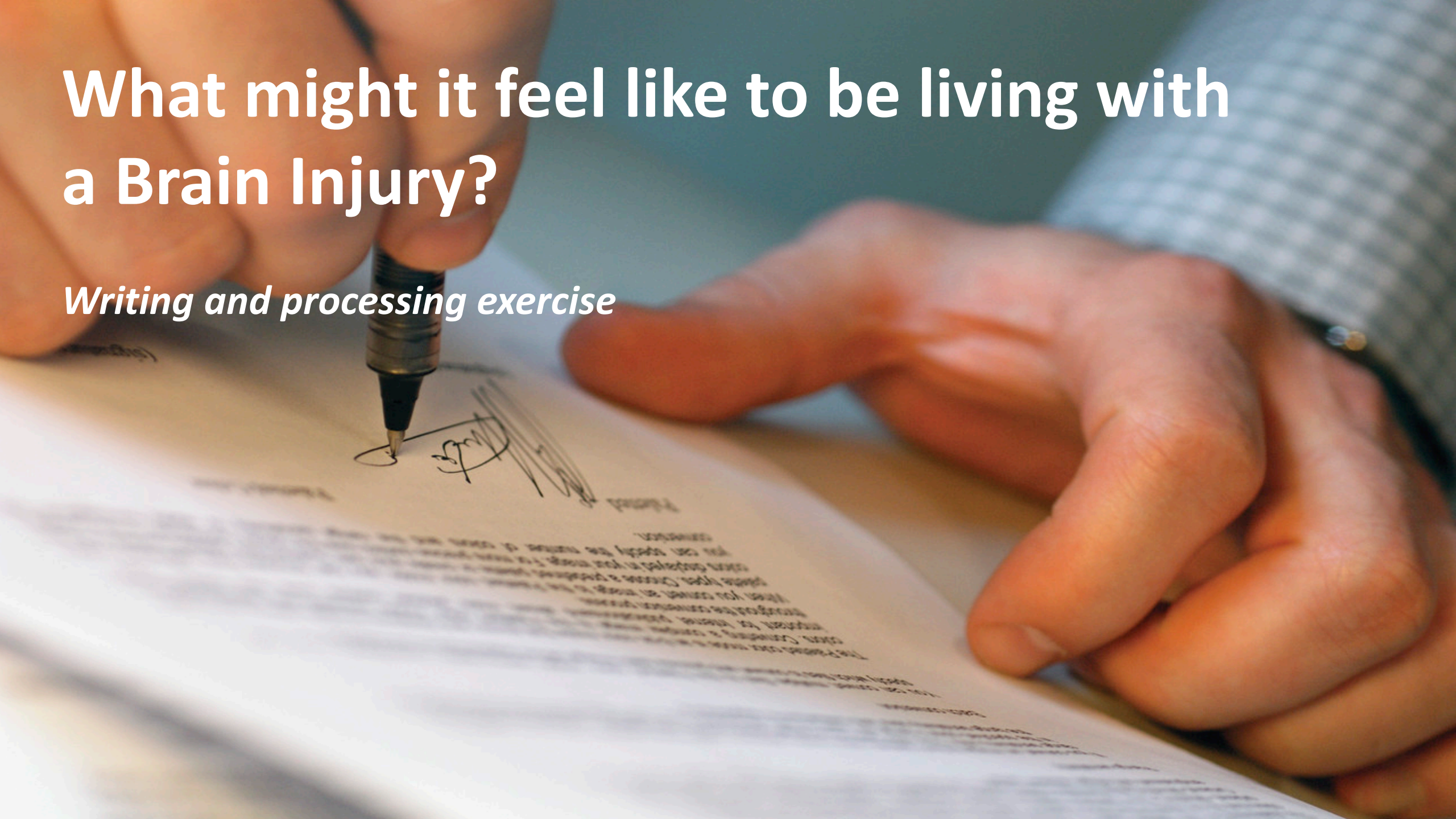
Purpose

(continued)

- Have the capacity to offer technical assistance to community providers and state and local behavioral health systems who are not familiar with brain injury and its consequences
- Be able to educate stakeholders, including those with lived experience, as to what a possible history of TBI might mean and provide education, recommendations for accommodations and resources

What might it feel like to be living with a Brain Injury?

Writing and processing exercise



Lightening round in Chat.....

- Did you put more effort into writing your name than usual?
- Does it look like your signature?
- How do you think you might feel over time, doing something that has been easy for you, but now is difficult?

Imagine you are at work, and imagine this simple exercise and the challenges it presents to your productivity, but you look “so good” — how do you think the reduction in your productivity is being perceived by your managers/co-workers?

What Does Brain Injury Look Like?

We are not going to show this now, we recommend you watch the first 7-10 minutes.

The impact of TBI on three people who served in Iraq:

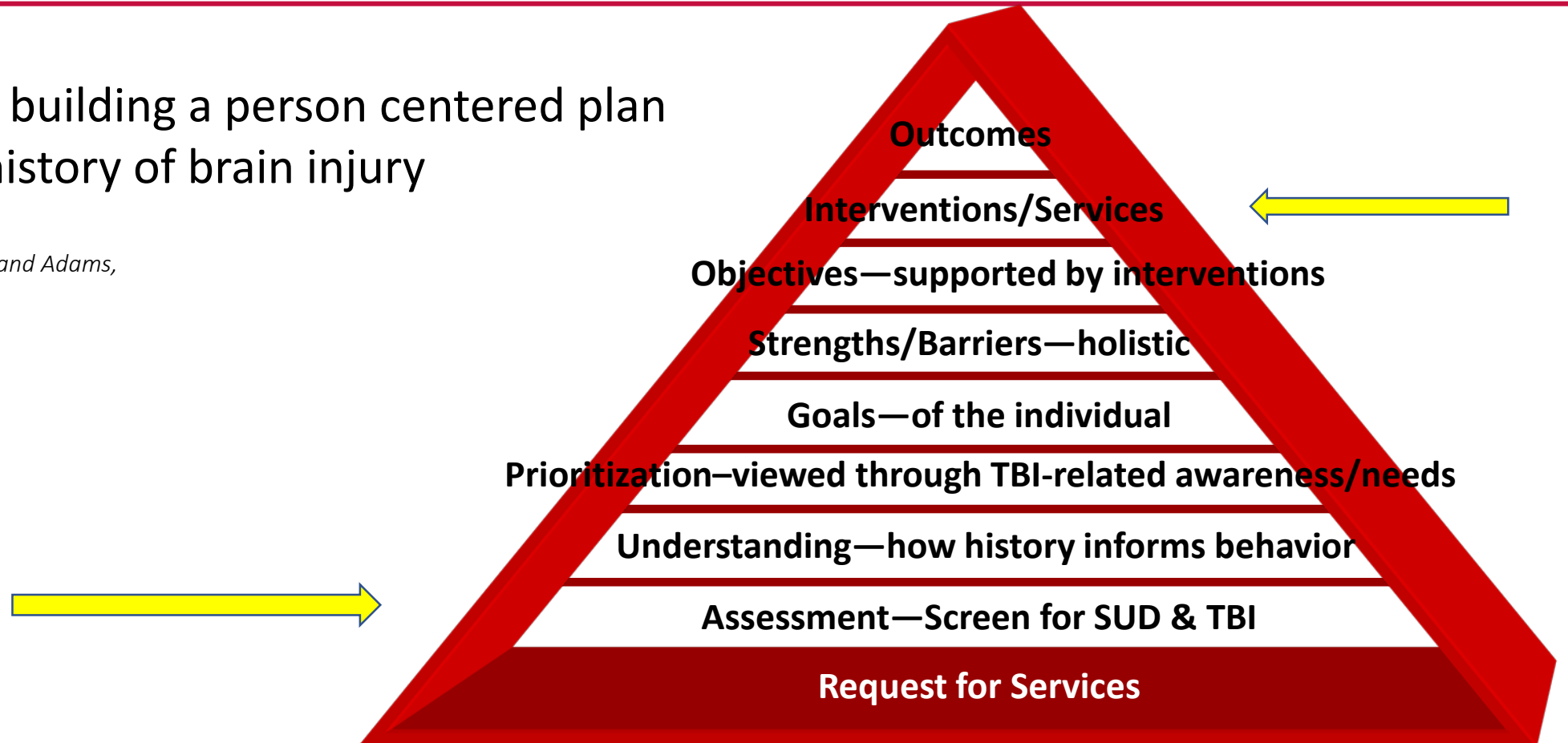
Beyond the Invisible narrated by Lee Woodruff

youtu.be/ePJgU2LFU-g, also found on BrainLine.org

Building an Individual Person Centered Plan through a Brain Injury Informed Lens: How can we be Brain Injury informed at a systems level?

A Logic Model for building a person centered plan accommodating history of brain injury

Source: Adapted from Grieder and Adams, 2005



TBI vs. ABI

TBI-Defined

TBI is an insult to the brain caused by an external physical force, such as a fall, motor vehicle accident, assault, sports-related incident, or Improvised Explosive Device (IED) exposure

ABI-Defined

Acquired Brain Injury (ABI) is an insult to the brain that has occurred after birth, such as TBI, stroke, near suffocation, infections in the brain, or anoxia **and opioid overdose(s)**

Both mechanisms of injury can result in a chronic disability that may get worse with age.

Opioid Overdose Impact

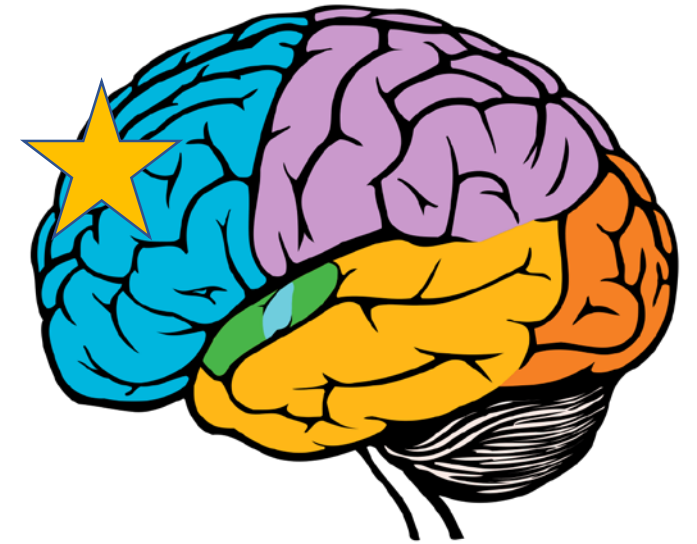
What is known and observed regarding the impact of opioid overdose and the brain:

- Sudden loss of oxygen to the brain has the greatest effect on parts of the brain that are high oxygen users such as the hippocampus, basal ganglia, and frontal region among others
- These areas of the brain are oxygen “hogs” and are critical to memory, learning and attending to new information, problem solving, and the ability to manage our emotions and impulses — in other words, they are responsible for our adult thinking skills

Source: Adapted from Ohio Brain Injury Program/John Corrigan PhD, 2017

Brain Hypoxia

- The frontal lobe is highly susceptible to brain hypoxia (reduced oxygen)
- Frontal lobe damage leads to potential loss of executive functions which are often required to participate, engage, and thrive in treatment
- As a result of frontal lobe damage, survivors of overdose may have issues with noncompliance, poor follow through, or a lack of engagement
- Decreased ability to participate and engage in treatment puts these individuals at increased risk for relapse



“Opioid Use among Individuals with TBI: a Perfect Storm?”

summary of the research

- Those who misused substances before their injuries are **considerably** more likely misuse substances after injury compared with prior non-users of drugs
- It is estimated that 10-20% of individuals develop new-onset substance misuse post injury
- TBI often results in headaches & orthopedic injuries leading to prescriptions for opioids:
70-80% of all patients with TBI are discharged with a prescription for opioids
- TBI Model Systems study indicated that individuals living with a history of TBI were 10x more likely to die from accidental poisoning, with 90% related to drug overdose (67% narcotics, 14% psychostimulants, 8% alcohol)

Sources: (2020) .Adapted from Adams, Rachael Sayko., Corrigan, John D., and Dams-O'Connor. *Neurotrauma*.37:211-216.

<https://acl.gov/sites/default/files/news%202018-05/20180502NIDILRRROpioidRFIFindings.pdf>

Case Review

Quick review of an individual who died by overdose, by our hour's end, you should have some answers to these questions:

- What barriers existed for this individual?
- What underlying issues may be present here?
 - Which “hidden” factors may indicate TBI?
- What opportunities for intervention can be identified?

Sample Case Review

Decedent: David Hunter, 35, White, Male

Resident Jurisdiction: Baltimore City

Incident Jurisdiction: Baltimore County

Date of Death: Jan. 15, 2018

Cause of Death: Heroin and Fentanyl Intoxication

Notes from the Scene: RN at MedStar Harbor Hospital called to report this death. The subject and girlfriend were snorting heroin last night, and this morning she found the subject unresponsive. Family is at the Hospital Emergency Department. No drugs or paraphernalia found on subject, no noted trauma. Per Baltimore City Police, the subject has a long history of heroin and cocaine use. Police have no concerns of foul play.

Sample Case Review

Prescription Drug Monitoring Program: Prescription for 30 oxycodone written by the Emergency Department physician 8/6/2016, 8/20/2016, 9/5/2016, 1/13/2017, 12/15/17

Hospital/Chesapeake Regional Information System for our Patients (CRISP): Motor vehicle accident in 2016, subsequent visits for pain

Law Enforcement: Assault charges (domestic), theft, and possession. Responded to two previous nonfatal overdoses (2017)

Social Services: As a child, subject of a neglect investigation, parental substance use, and domestic violence reported

Health Department: Two intakes completed, no follow-up by decedent

Detention Center: Short stays only, no long-term detentions

Local treatment provider: Discharged for noncompliance and conflict with other patients

Source: Laura Bartolomei-Hill

Overview

Brain Injury Overview

Annually, **2.8 million** Americans are treated in Emergency Departments (ED), hospitalized, or die as a result of a TBI

Source: CDC 2017

Lightening round in Chat.....

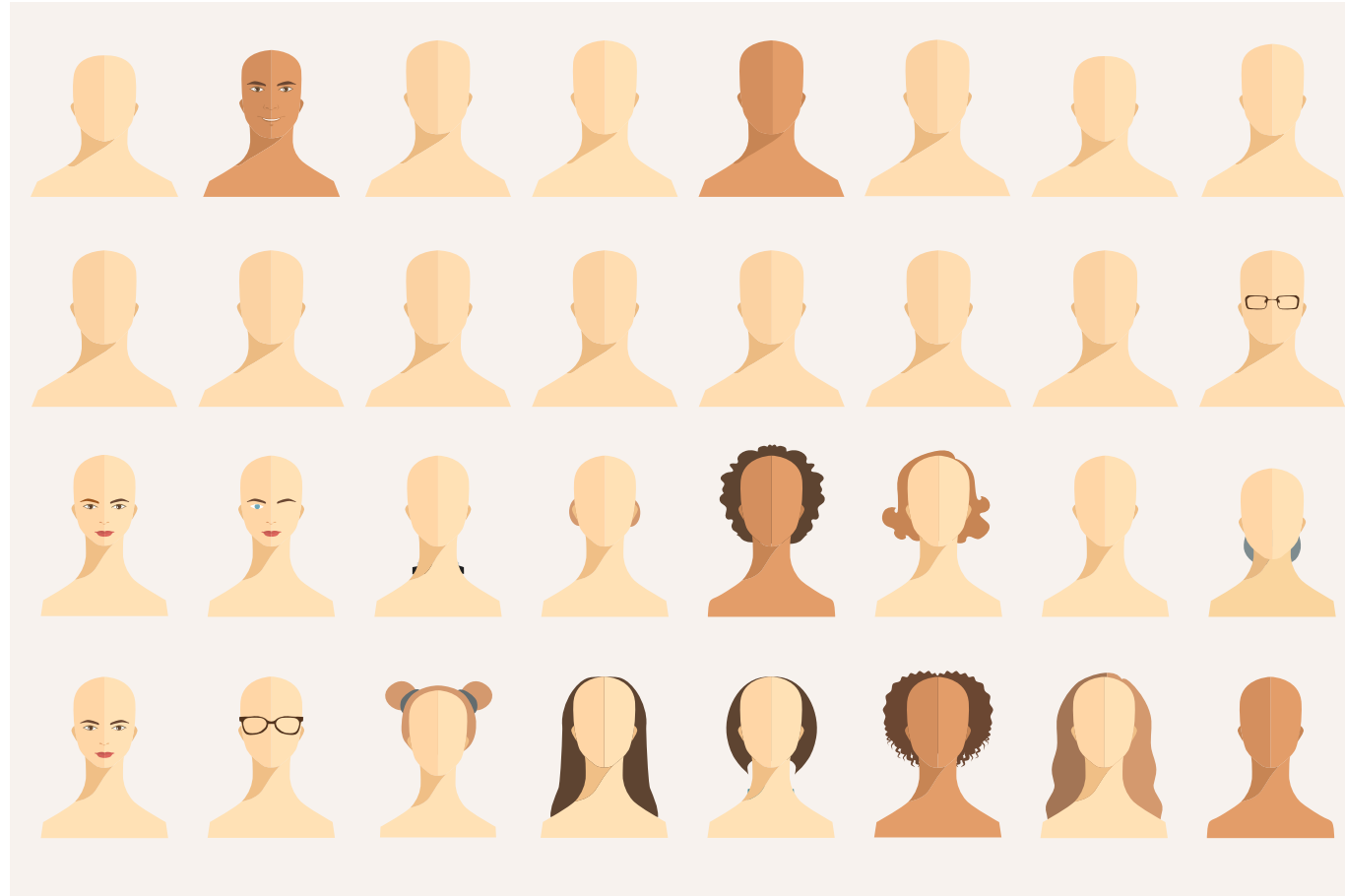
True or false:

- If a person accurately states their name and the date after a blow to the head, it is safe to assume they will be fine
- The impact of childhood TBI may not become apparent until years later
- Falls accounted for 47% of all TBI-related ED visits, hospitalization, and death in the US in 2014

Brain Injury Overview

The adult brain reaches biological maturity at around 25 years of age

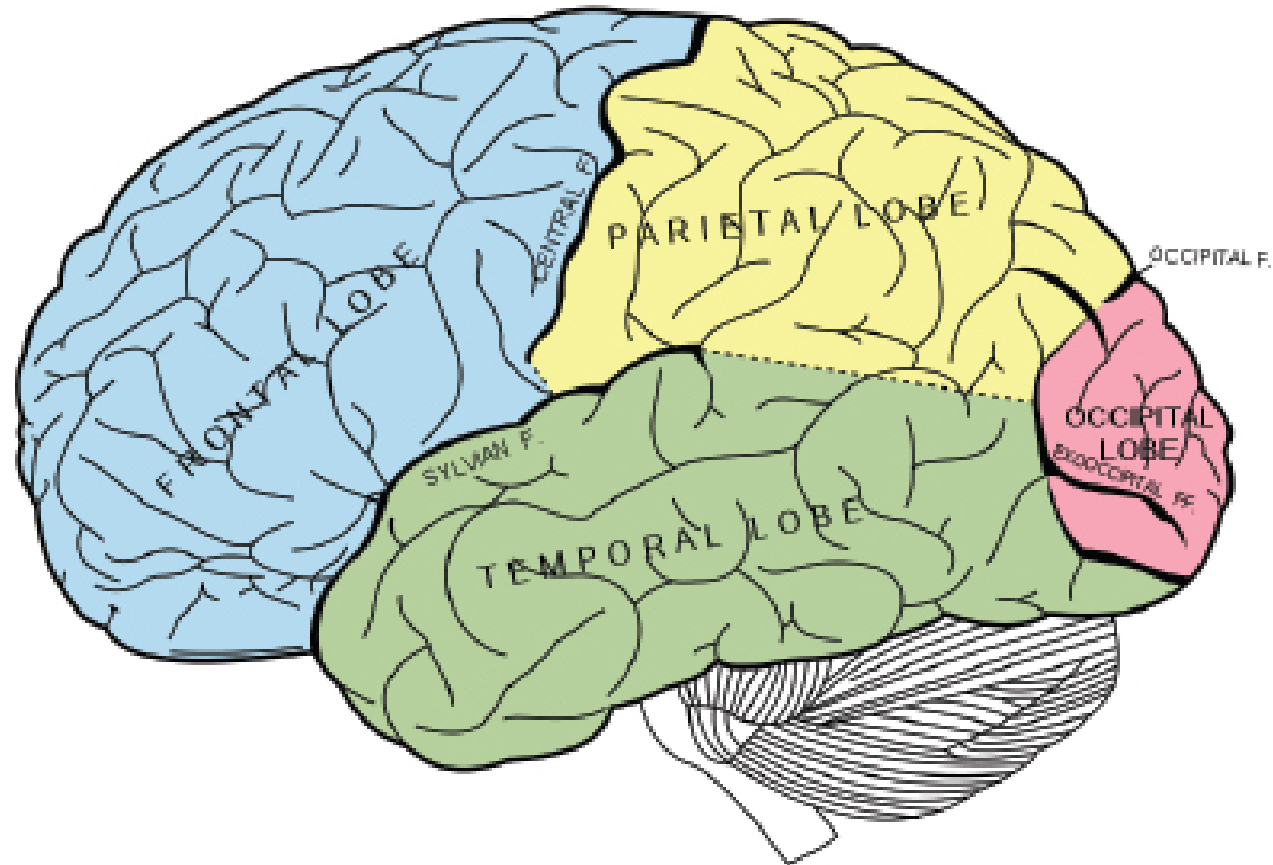
Biologically Speaking-Whose Frontal Lobe Matures earlier-males or females



Lightening round in Chat.....

What is the last part of the brain to mature?

- Frontal lobe
- Temporal lobe
- Parietal lobe

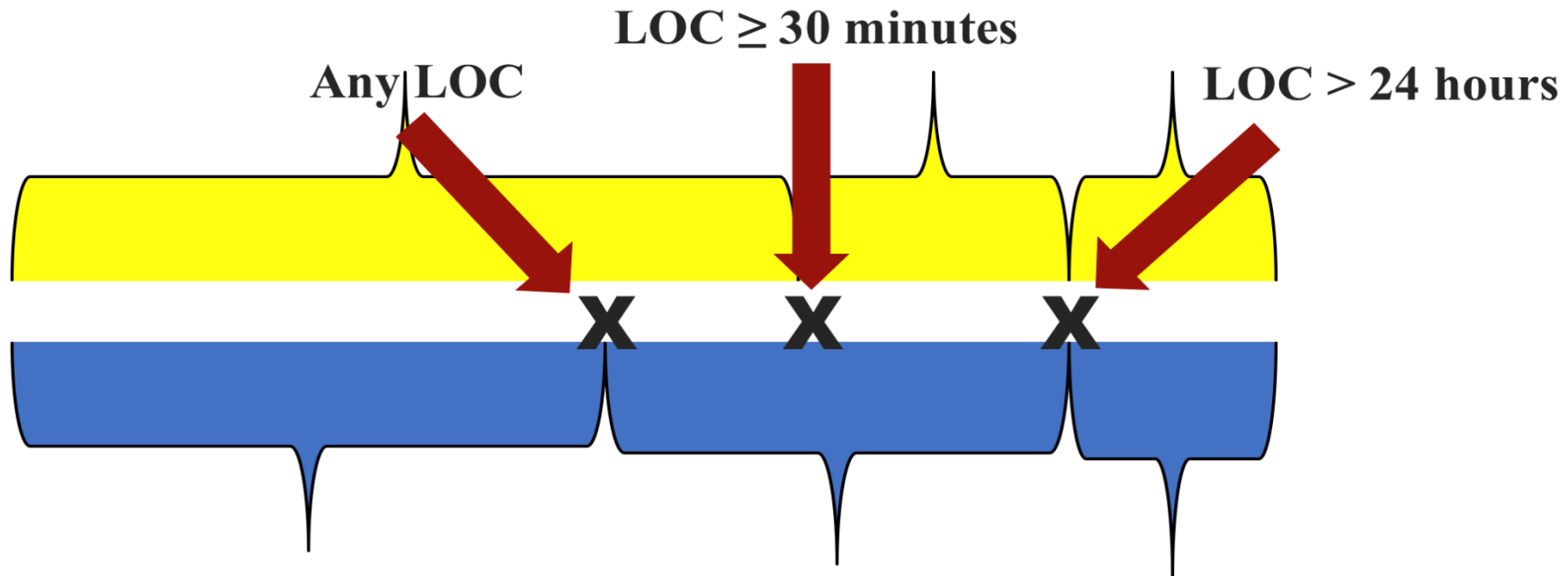


Source: [Reference Guide on Neuroscience](http://www.nap.edu/read/13163/page/R1#.Xq8c26lBqTo.link)

HENRY T. GREELY AND ANTHONY D. WAGNER, retrieved 5.3.20

<http://www.nap.edu/read/13163/page/R1#.Xq8c26lBqTo.link>

Continuum of Severity



Source: John Corrigan Ph.D., Ohio Valley Center 2014

Possible Physical Changes

Injury-related problem	How it may affect a person functionally
Coordination	Unsteady gait, poor eye-hand coordination, slow or slurred speech, tremors, paralysis
Visual Deficits	Staring or poor eye contact, blurred or double vision, inability to follow an object with their eyes
Additional Physical Challenges	Seizures, deaf or hard of hearing, fatigue

Possible Cognitive (thinking) Changes

Injury-related problem	How it may affect a person functionally
Memory	Trouble following directions, providing requested information, making appointments
Processing (receptive)	Understanding what is being said and read
Processing (expressive)	Trouble putting thoughts into words—tip of the tongue syndrome
Problem solving (related to frontal lobe and temporal tip injury)	Impulsive, easily frustrated, sexually disinhibited, verbally/physically combative, interpersonally inflexible, poorly organized

Possible Behavioral Changes

Injury related problem	How it may affect a person functionally
Depression	Flat affect, lack of initiation, sadness, irritability
Unawareness	Unable to take social cues from others
Confabulation	“Making up stories”
Perservation	Gets “stuck” on a topic of conversation or physical action
Anxiety	Can exacerbate other cognitive/behavioral problems

Levels of Awareness

- **Intellectual Awareness:** Individual is able to understand at some level, that a particular function or functions is impaired. A greater level of intellectual awareness is required to recognize some common thread in the activities in which they have difficulty
- **Emergent Awareness:** Individual is able to recognize a problem when it is actually happening. To do so, they must recognize a problem exists (intellectual awareness), and realize when it occurs
- **Anticipatory Awareness: individual** is able to anticipate a problem will occur and plan for the use of a particular strategy or compensation that will reduce the chances that a problem will occur, e.g., keep and refer to a calendar to support memory for daily schedule

Mental Health

A review of studies of individuals who were homeless, incarcerated, and at risk of or living with mental illness found a positive association between **adverse childhood experiences (ACES) and TBI:**

- Physical abuse
- Psychological abuse
- Household member incarceration
- Household member substance misuse

The authors of the review recommend, “Clinicians and researchers should inquire about adverse childhood experiences in all people with traumatic brain injury as pre-injury health conditions can affect recovery.”

Substance Misuse and TBI

“Studies of both brain structure and function indicate that substance misuse and TBI interact in an additive way, specifically, their co-occurrence results in more impairment than either one alone.”

“Substance misuse also limits outcomes from TBI by undermining environmental supports such as familial care or access to services.”

Data from a Finnish birth cohort study have “reported multiple risk factors associated with incurring a TBI, including that **if parents misused alcohol, there was a two-fold greater chance of childhood TBI.**” (possible reasons why??)

Source: Corrigan and Mysiw’s chapter “Substance Abuse Among Person’s with Traumatic Brain Injury” from Brain Injury Medicine, 2nd Edition 2012-Key Points

Substance Abuse

“When all factors are considered, it would appear reasonable to expect **half of the adults under age 65 receiving inpatient rehabilitation for a primary diagnosis of TBI to have prior histories of either alcohol misuse or illicit drug use.”**

Long term consequences: “Those who also misuse substances face additional complications, including they are less likely to be working, have lower subjective well-being, have an increased likelihood of suicide, and an increased likelihood of premature mortality due to any cause and are at greater risk for seizure.”

Source: Corrigan and Mysiw’s chapter “Substance Abuse Among Person’s with Traumatic Brain Injury”
from *Brain Injury Medicine, 2nd Edition 2012-Key Points*

Brain Injury

According to a Christchurch, New Zealand study:

- Early childhood TBI, even if mild, may pre-dispose people to later having **behavioral problems and/or involvement with law enforcement**
- People with an early childhood TBI, that resulted in at least one night in hospital, were found to be **three times more** likely as young adults to misuse drugs and/or alcohol

Source adapted from: *Corrigan 2014*

Substance Misuse

Persons engaged in treatment for substance misuse, who are also living with a history of TBI tend to have:

- First used at a younger age
- A more severe substance misuse history (heavier use and more prior treatments)
- Have more co-occurring mental health problems
- Have poorer prognosis for successful treatment outcome (more so earlier the age at first TBI?)

Source adapted from : *(Corrigan & Mysiow, 2012), courtesy of John Corrigan Ph.D.*

Recognizing Brain Injury

Civilian risk factors for TBI include:

- **Males 2:1** more than female
- **Very young and very old** due to falls
- **Adolescents and young adults** due to intentional injuries (e.g., falls, unintentional poisoning, self-harm, assault and moving vehicle crashes)

Source: John Corrigan Ph.D., Ohio Valley Center 2014

Recognizing Brain Injury

Civilian groups who have multiple mild TBIs include:

- Athletes — especially boxers, football players, and hockey players
- Victims of intimate partner violence and childhood physical abuse
- People who use drugs
- People who are homeless
- People living with mental illness
- People who are incarcerated
- People who are/have been members of the armed forces

Source: Adapted from John Corrigan Ph.D., Ohio Valley Center 2014

Recognizing Brain Injury

Greatest behavioral risk factors:

- **Violence-prone** or exposed to those who are
- **Misuse substances** or exposed to those who do
- More risk among **lower socio-economic** groups

Source: John Corrigan Ph.D., Ohio Valley Center 2014

Case Review: Thoughts?

- What opportunities for intervention can be identified?
- What barriers existed for this decedent?
- What are possible recommendations to prevent future deaths?
- What underlying issues may be present here?
 - Which “hidden” factors may indicate TBI?

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Health Department: Two intakes completed, no follow-up by decedent

Detention Center: Short stays only, no long-term detentions

Local treatment provider: Discharged for noncompliance and conflict with other patients

Assessment and Screening

Name: _____ Current Age: _____ Interviewer Initials: _____ Date: _____

Lifetime History of Traumatic Brain Injury (from the OSU TBI-ID) and other Acquired Brain Injuries

1. Please think about injuries you have had during your entire lifetime, especially those that affected your head or neck. It might help to remember times you went to the hospital or emergency department. Think about injuries you may have received from a car or motorcycle wreck, bicycle crash, being hit by something, falling down, being hit by someone, playing sports or an injury during military service.

a. Thinking about any injuries you have had in your lifetime, were you ever knocked out or did you lose consciousness?

Yes

No (IF NO, GO TO QUESTION 2)

b. What was the longest time you were knocked out or unconscious? (Choose just one; if you are not sure please make your best guess.)

knocked out or lost consciousness for less than 30 minutes

knocked out or lost consciousness between 30 minutes and 24 hours

knocked out or lost consciousness for 24 hours or longer

c. How old were you the first time you were knocked out or lost consciousness?

_____ years old

2. Have you ever had a period of time in which you experienced multiple, repeated impacts to your head (e.g., history of abuse, contact sports, military duty)?

Yes

No (IF NO, GO TO QUESTION 3)

a. How old were you when these repeated injuries began?

_____ years old

b. How old were you when these repeated injuries ended?

_____ years old

3. Have you ever lost consciousness from a drug overdose or being choked or strangled?

Yes

No (IF NO, GO TO QUESTION 4)

a. How many times from a drug overdose?

_____ overdose(s)

b. How many times from being choked?

_____ choked or strangled

c. What was the longest time you have been unconsciousness from an overdose, or incident of being choked or strangled? (If you are not sure please make your best guess.)

_____ minutes

4. Have you EVER been told by a doctor or other health professional that you had any of the following?

Epilepsy or seizures

A stroke, cerebral vascular disease or a transient ischemic attack

A tumor of the brain

Swelling of the brain (edema)

Toxic effects or poisoning by substances – like from lead poisoning, alcohol, prescription medications or recreational drugs

Infection like meningitis or encephalitis

A brain bleed or hemorrhage

Child or adult maltreatment syndrome

Loss of oxygen to the brain - like from a time when you stopped breathing, had a near drowning or experienced a strangulation

Encephalopathy due to endocrine, nutritional, renal or liver disorders

Interpreting Findings

The validity of this tool is not based on elicitation of a perfect accounting for a person's lifetime history of brain injury. Instead, it provides a means to estimate the likelihood that consequences have resulted from one's lifetime exposure. A person may be more likely to have ongoing problems if they have any of the following:

- **WORST:** one moderate or severe TBI
- **FIRST:** TBI with loss of consciousness before age 20
- **ANOXIC:** a single incident of prolonged loss of consciousness from an overdose or being choked or strangled.
- **MULTIPLE:** multiple instances of blows to the head or multiple overdoses or incidents of being choked or strangled.
- **OTHER SOURCES:** any ABI combined with another way their brain function has been impaired or any brain injury diagnosed by a doctor or other health professional.

Complete this screening to determine if a person may have had a brain injury. It is important to note that this screening does not result in a diagnosis, is not intended to be used for eligibility determination and DOES NOT replace a face-to-face evaluation and assessment with a trained professional. This information should be treated as Protected Health Information. Deidentified data may be analyzed for program evaluation.



Interpreting Findings

The validity of this tool is not based on elicitation of a perfect accounting for a person's lifetime history of brain injury. Instead, it provides a means to estimate the likelihood that consequences have resulted from one's lifetime exposure.

A person may be more likely to have ongoing problems if they have any of the following:

- WORST: one moderate or severe TBI
- FIRST: TBI with loss of consciousness before age 15
- OTHER SOURCES: any TBI combined with another way their brain function has been impaired

Source: © reserved 2018, The Ohio Valley Center for Brain Injury Prevention and Rehabilitation - Iowa ACBI approved September 13, 2019

Tips

Even if you *Know*, the person is living with a brain injury, still conduct the screening, why you ask?

- Maybe they are just aware of the last or most obvious injury, e.g. were in the hospital, have a diagnosis of a Traumatic or Acquired Brain Injury
- Earlier insults and injuries to the brain may have been forgotten or assumed to have been no big deal (“hey, everyone got their bell rung on my team”)
- Knowing that earlier injuries can contribute to functional difficulties and each injury can magnify the negative effect of the earlier one(s)

Tips

If the last, known injury looked to be “no big deal” to those around the individual as well to healthcare professionals, but the individual is having issues, thinking (trouble concentrating), physical (deep fatigue), and/or behavioral health issues (depression), those around them may either dismiss their concerns, or believe they are exaggerating their symptoms, or are solely experiencing mental health issues (and they may very well be experiencing mental health issues, especially if they are living with untreated, undertreated and or unrecognized brain injury or injuries).

Substance Use Screening Tools

- CAGE Questionnaire
- Brief Michigan Alcoholism Screening Test (BMAST)
- AUDIT
- The Tobacco, Alcohol, Prescription Medication, and other Substance use Tool (TAPS)

These instruments are recommended for use by brain injury professionals who specialize in treating individuals who also misuse substances as they are brief and concrete, these qualities are suggested when selecting a screening tool for opioid use disorder

Source adapted from:
Bombardier and Davis
2001

Techniques for change: Recommended for individuals with a history of brain injury

- **Stages of Change** The 5 Stages of Change *Prochaska and DiClemente cited by Corrigan 1999*
- **Motivational Interviewing** *Based on the work of W. R. Miller, adapted by Corrigan & Colleagues*
- **Harm Reduction Strategies** Syringe exchange, safe injection sites, Medical Assisted Treatment *and* brain injury informed supports and accommodations

<https://wexnermedical.osu.edu/neurological-institute/departments-and-centers/research-centers/ohio-valley-center-for-brain-injury-prevention-and-rehabilitation/for-professionals/substance-use-and-tbi>

Messages to Share, Substance Misuse Post Brain Injury

- People who use alcohol or drugs after TBI don't recover as fast as those who don't
- Any injury related problems in balance, walking or talking can be made worse by using drugs or alcohol
- People who have had a brain injury often say or do things without thinking first, a problem made worse by using alcohol or drugs
- Brain injuries cause problems with thinking, like concentration or memory, and alcohol makes these worse
- After a brain injury, alcohol and other drugs have a more powerful effect
- People who have had a brain injury are more likely to have times when they feel sad or depressed and drinking or using drugs can make these problems worse
- After a brain injury, drinking alcohol or taking drugs can increase the risk of seizure
- People who drink alcohol or use other drugs after a brain injury are more likely to have another brain injury

*Source: adapted from Bogner and Lamb-Hart
Ohio Valley Center*

Messages to Share

12 Steps adapted for people living with brain injury

- Admit that if you drink and/or use drugs your life will be out of control. Admit that the use of substances after having a TBI will make your life unmanageable
- You start to believe that someone can help you put your life in order. This someone could be God and AA/AN group, counselor, sponsors, etc.
- You decide to get help from others or God. You open yourself up
- You will make a complete list of the negative behaviors in your past and current behavior problems. You will also make a list of your positive behaviors
- Meet with someone you trust and discuss what you wrote above
- Become ready to sincerely try to change your negative behaviors

Source: *Peterson NHIF 1988*

12 Steps of Alcoholics Anonymous (AA)

- Ask God for the strength to be a responsible person with responsible behaviors
- Make a list of people your negative behaviors have affected. Be ready to apologize or make things right with them
- Contact these people. Apologize or make things right
- Continue to check yourself and your behaviors daily. Correct negative behaviors and improve them. If you hurt another person, apologize and make corrections
- Stop and think how you are behaving several times a day. Are my behaviors positive? Am I being responsible? If not, ask for help. Reward yourself when you are able to behave in a positive and responsible fashion
- If you try to work these Steps, you will start to feel much better about yourself. Now it's your turn to help others do the same. Helping others will make you feel even better. Continue to work these Steps on a daily basis

TBI Overview

Strategies and Accommodations

Strategies

Environmental and internal aides: Creative cognitive strategies will employ both kinds of aid depending on individual need.

Environmental strategy: Changing or modifying the environment to support and/or compensate for an injury imposed deficit.

- Example: labeling kitchen cabinets and drawers

Internal strategy: The strategy is “in your head.”

- Example: “I have to work the memory muscle by counting everything, like how many times I pedal when I am on a bike”

Source: Actor George Clooney discussing the use of internal memory strategies in The London Sunday Times 10.23.05

Hidden Brain Injury

Take 1

Brain Injury Symptoms can be very subtle. Watch this video of a gentleman in session with his therapist. What do you see and hear? How might his demeanor be interpreted?

youtu.be/pETaarPzTCg

Take 2

How did the therapist accommodate the individual's brain injury related communication and awareness issues?

youtu.be/D81TkQUAhrU

Source: *Accommodating the Symptoms of Traumatic Brain Injury* about-tbi.org/accommodating-tbi.html created by the Ohio Valley Center for Brain Injury Prevention and Rehabilitation at Ohio State University (all rights reserved). youtube.com/channel/UCJO4IOm6iMsSq08GdWO37Og

Accommodating Symptoms

Page 10 —

Reflective Recommendations

***“What helps you
with... ?”***

- Learning new material
- Remembering assignments
- Staying on track
- Figuring out how to do new things
- Making choices that keep you healthy and safe

Accommodating Symptoms

To enhance memory:

- Structure the environment
- Repetition of information, to promote procedural memory

Accommodating Symptoms

- Use of a journal/calendar
- Create a daily schedule
- Learn to break tasks into small, manageable steps
- Use of a digital recorders/smart phone
- Encourage use of rest and low activity periods — naps
- Work on accepting coaching from others
- Work on generalizing strategies into new situations

Accommodating Symptoms

- Use of a high lighter **(RED)**
- Alarms (on phone/watch) to move through the day
- Use of a template for routine tasks, on the job, at home, in the community
- Use of ear plugs to increase attention, screen out distractions (Parente and Herman 1996)
- Partitions/cubicles, at work, quiet space at home
- Model tasks such as turning on a computer and accessing email

Accommodating Symptoms

- Use of pictures for faces/names or basic information for step-by-step procedures such as making coffee
- Use of a timer to track breaks at work, the time minimum technique, allocated time to puzzle over a problem, or vent a frustration
- Audio books and movies. Keep the subtitles for processing content in the case of memory and comprehension problems *and* increase awareness of nonverbal cues/communication

Environmental Strategies: supportive to individuals with histories of TBI and/or Trauma

- Staff person welcomes verbally and there are “Welcome” signs
- Clear directions with graphics posted
- Scratch paper and pencils at hand for notes
- Necessary forms to be filled out at first appointments are available online or by mail
- Provide a template of a completed forms as a reference
- Area for children, toys, books, puzzles, child sized tables and chairs
- Waterfalls/fountains
- Plants
- Soothing music and smells
- Fish tanks
- Artwork, inspirational messages created by program participants
- Calming paint colors (blue/green, pink, white, violet, grey, yellow)
- Noninstitutional lighting
- Seating allows for personal space
- Reading and resource materials available in the waiting room
- Noncaffeinated beverages/water available

Source: adapted from Agency Environmental Components for Trauma Informed Care

https://www.integration.samhsa.gov/about-us/TIC_Environmental_Scan.pdf

If there is a History of TBI and/or Trauma: possible strategies

- Referral to specialized services/support group/12 step program
- Staff needs to be aware of the history and potential triggers and accommodate accordingly
 - Don't insist on sharing/participation right off the bat in groups
 - Allow for self determined breaks, stretches, sitting away from the group until comfortable
 - Pair new participant with an experienced participant

Accommodations and Strategies in Treatment Settings

- Link individuals to certified peer specialists
- Offer graphic organizers to structure group discussions
- Offer review sessions of larger group meetings
- Use “Change Plan” and Readiness Ruler worksheets
- Prepare for slip ups: “Emergency Plan” and “Personal Emergency Plan: Lapse”
- Develop a person centered plan with the individual, the treatment team and their natural supporters (see handout)

Sources: https://smartrecovery.org/wp-content/uploads/2017/03/Change_Plan_Worksheet-1.pdf, http://adultmeducation.com/downloads/Readiness-to-Change_TOOL.pdf

Enhancing the Accessibility of 12-Step Meetings and other Community Recovery Groups

- Share AA literature, brochures and if literacy level appropriate, the Big Book
- Attend an open meeting with a staff person or friend/supporter
- If the person wants to share, organize thoughts ahead of time, write up some notes on their phone/index cards
- Recommend movies/TV shows that depict people attending 12 step meetings
- Collaborate with the individual to create an “introduction to my future sponsor” that reviews common cognitive and emotional sequela of TBI and makes compensatory strategies suggestions that work for the person

“I Got One More High Left In Me....”

Bubbles attends a 12 Step Meeting

youtu.be/qAakzl6s7QI

For individuals living with a history of brain injury, it might be difficult to imagine what to expect at a 12 Step Meeting. This scene gives a good visual and also demonstrates different stages of change, Pre-contemplation, Contemplation, Action and Maintenance

Support and Aftercare for Individuals Living with Brain Injury who also Misuse Substances

“Because of the neurobehavioral effects of Brain Injury, it is essential to fortify insight, including:

1. Structured and systemic engagement of natural supports
2. Avoidance of environments that can cue relapse
3. Prolonged maintenance of supports
4. Expanded use of Medical Assisted Treatment (MAT)

In general, there is a paucity of research on whether SUD treatment interventions that are effective for the general population show comparable efficacy for persons with TBI. This question would seem to be particularly important with regard to MAT.”

Source Sources:

Adapted from :(2020) Adams, Rachael Sayko., Corrigan, John D., and Dams-O'Connor. J. Neurotrauma.37:211-216.

Feedback from Individuals in Recovery

The researchers at the Research and Training Center on Community Integration of Individuals with Traumatic Brain Injury at Mt. Sinai in New York asked individuals with TBI, what are the factors involved in “kicking the habit”?

Feedback from Individuals in Recovery...

- Early treatment for those living with a substance use disorder
- Pay attention to those whose use of substances is not disclosed/unknown to brain injury professionals (who do not consistently screen for or ask about a history of substance misuse)
- Challenge of redefining new self and life doubled with both TBI and substance misuse
- Hard to know where to find support, with the TBI community or the recovery community

What helps people work towards recovery?



“Find the right 12-step program, change “persons, places and things” that trigger use, spirituality, *pets.*”

Contact information

Please reach out with thoughts or questions!

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“This project was supported, in part by grant number 90TBSG0027-01-00 from the U.S. Administration for Community Living, Department of Health and Human Services, Washington, D.C. 20201. Grantees undertaking projects with government sponsorship are encouraged to express freely their findings and conclusions. Points of view or opinions do not, therefore, necessarily represent official ACL policy.”