



Brain Injury Information Network *of Maine*

Brain Injury and Substance Abuse

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WHY is everyone so different



Definitions

Acquired Brain Injury-ABI

Is an injury to the brain that occurs following birth, is not progressive and can be classified as traumatic or non-traumatic

Traumatic Brain injury-TBI

Is caused by a blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain
CDC 2008

Loss of Consciousness

Normal CT or MRI

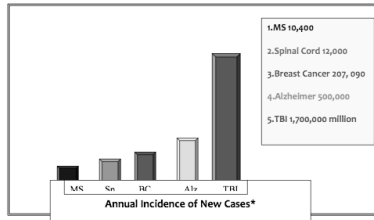
Dazed

Fatigue

Balance

Sensitivity to light

Sensitivity to noise

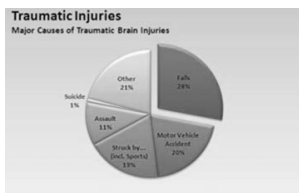


* 2009 data CDC, NIH, MS Society

Silent Epidemic = Public Health Issue

Brain injuries are often unnoticed or misdiagnosed

- Often are no outward signs
- May have no conclusive measures
- Person looks the same
- Individuals often told they would be fine



Who experiences TBI?

Anyone can get a TBI !

Yet some are more at risk than others.

- — Highest risk **0-4** years, **15-24**, and **75** years and older.
- — Males are 1.5 times more likely than females to experience TBI.
- — Individuals who have already sustained one or more concussions and has already had a BI.

What about substance abuse and brain injury

- ✓ As many as 50%- 75% involved alcohol and drugs.
- ✓ Poorer recovery from the brain injury has been documented when injury occurs when high.
- ✓ Continued during early recovery interferes with the brain's natural healing process.
- ✓ Individuals with BI and SA typically have even higher rates of re-injury and medical complications

Twenty two percent of people who do not have a substance abuse are at risk after a brain injury

After more severe BI there is a temporary reduction of substance use for approx. 2 years

- Providers are trained to treat either or but not both.
- Treatment programs(BI and SA) will often screen out
- Lack of insight of individual
- Hard to diagnose
- Have multiple diagnoses and treatment failures

Comparison of Disability Prevalence Rates

- 400,00 with spinal cord injuries
- 500,000 with cerebral palsy
- 2 million Americans with Epilepsy
- 3 millions with disability due to strokes
- 4,5 million with Alzheimer's disease
- 5 million with persistent mental illness
- 6.2 million with traumatic brain injury
- 7.3 million with Developmental Disability

Brain injury is the number 1 killer and disabler of children

- ❖ Why kids are under identified?
- ❖ Most concussions go unnoticed
- ❖ There maybe no follow up
- ❖ Developmentally kids grow into problems related to brain injury.
- ❖ No connection is made between a blow to the head and school records.

What difference does it make?

- ✓ School personnel are not trained to identify brain injury
- ✓ This results in a high rate of misdiagnosis and the wrong intervention. ADHD, LD, Behavior
- ✓ Failure

Cognitive

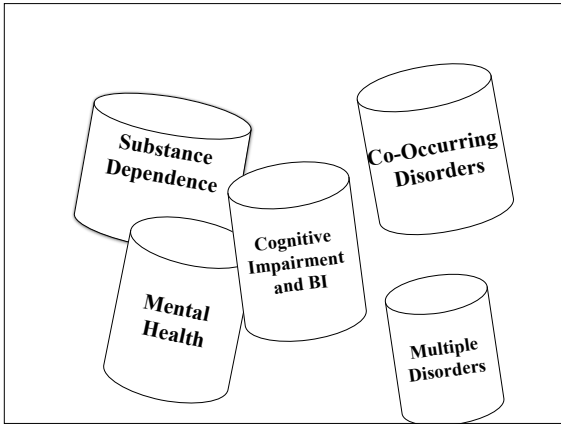
- ☐ Attention
- ☐ Memory
- ☐ Concentration
- ☐ Speed of processing
- ☐ Language visual and auditory delays
- ☐ Planning
- ☐ Organization
- ☐ Sequencing
- ☐ Problem solving
- ☐ Ability to inhibit

Emotions/Behaviors

Confusion	Social signals crossed
Physical Space	Depression
Overstimulation	Anxiety
Labiality	Disinhibition
Violence	Aggression
Poor judgment	Irritability
Mood Disorders	Lack of self awareness

Long term Consequences of poor identification and recognition

- ☐ More likely to have psychiatric diagnoses
- ☐ Increased suicidality
- ☐ Increased risk of additional brain injuries
- ☐ Increased risk of poor relationships
- ☐ Increased risk of school and or job failure
- ☐ Increased risk of criminal history
- ☐ Increased risk of substance abuse



How does it get so messy

- ✓Memory Loss
- ✓Difficulty Concentrating, Planning, Making Decisions
- ✓Traumatic Brain Injury
- ✓Serious Emotional Trauma
- ✓Serious Learning Disabilities
- ✓Serious Anxiety Disorders

Cognitive problems Include

- Memory problems
- Problems learning new information
- Problems recalling previously learned information
- Problems with language, movement, or recognizing things
- Problems with planning, organizing and sequencing.

These conditions often involve hidden disabilities

- Confusion
- Poor memory
- Inability to organize and plan
- Inability to learn new information
- Impulsivity and poor decision making
- “Simple” tasks producing high levels of anxiety

What does it feel like

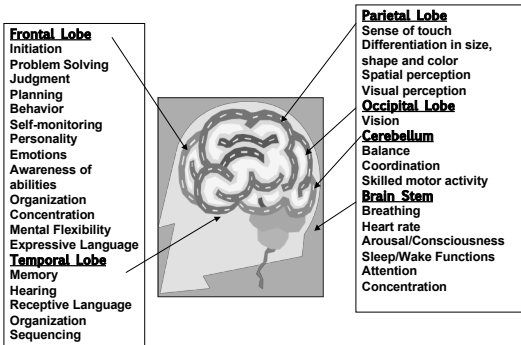
• Experiencing Illiteracy

它是真正地好今天谈话与您。
我希望我们可以很快聚会和谈论新产品

It was really nice talking with you today. I hope we can get together soon and discuss new products.



if you find the man in the coffee beans in 3 seconds, the right half of your brain is better developed than most people. If you find the man between 3 seconds and 1 minute, the right half of the brain is developed normally.. If you find the man between 1 minute and 3 minutes, then the right half of your brain is functioning slowly



Have you ever had a brain injury

1. He stated he had been in "fights all my life"
2. How many times were you in a car accident?
3. Have you ever had a stroke Or heart attack? Have you ever had surgery?
4. Do you ski -play sports?
5. Seizure?
6. Lyme disease, high fevers, major infections?
7. Exposure to toxins such paints, solvents, insecticides glue or fuels?
8. Violence, child abuse , domestic violence?
9. Military experience?

*Ask about and document
education experience*

- How many times were you sent to the principal's office?
- How often did you get into fights?
- What kinds of special testing did you do?
- What kinds of special classes did you attend?
- Were you the class clown?

*Working with Cognitively
Impaired Individuals*

- **Show, Don't Tell**
- Never "show and tell" at the same time
- Sort out BI symptoms from SA
- Lack of awareness: denial v bi
- Medication warning

Expect “Understanding Jams”

Effective Communication

- Get the person's attention before asking a question or giving information.
- Maintain the person's attention while communicating
- Be specific and concrete
- Use simple language
- Limit instructions based on ability.
- Make your non-verbal communication agree with verbal.
- **Verify active listening skills**

Strategies

- ☐ Determine learning styles
- ☐ Avoid jargon
- ☐ Be Concrete
- ☐ Repeat
- ☐ Take extra time
- ☐ Control environment
- ☐ Fatigue
- ☐ Redirect

SA and BI treatment

- ✓ Absenteeism
- ✓ Admissions criteria:
 - Medication exceptions
 - Motivation v Initiation
- ✓ Memory /fatigue/attention
- ✓ Address problem social behaviors quickly when individual is calm- be black and white but gentle.
- ✓ Don't assume understanding of situation or the ability to empathize.

The problem with SA treatment

12 steps

Too abstract- make it concrete

"Admit that you if use drugs or alcohol, you end with more problems or getting into trouble"

What step ?

Memory- Attention- Sequencing- Integrating learning -Ability to generalize

Stress Need to learn new strategies
Repetition

Blue	Red	Green
Yellow	Pink	Orange
Brown	Gray	Yellow
Green	Tan	White

The Stroop Effect: Say the color that each word is printed in. Do not say what the word says. For example, for the word RED, say "Blue." How fast can you do it?

Impossible

Working together

BI creates difficulties in generalizing information learned in a program to everyday life.

Working with a BI treatment program, SA program and mental health and VR all together.

Success is difficult the more friends or family involved if possible the better the longer term the follow.

Be willing to start over again

The key to success is understanding each individual their strengths is developing programs that address their life not ours and never put limitations on anyone.
