Special Populations & Law Enforcement Response

Traumatic Brain Injury

1st Annual Maryland Crisis Team Intervention Conference

Anastasia Edmonston, Behavioral Health Administration
Joelle Ridgeway, Director of Aging and Disabilities Community Services Bureau and ADA Coordinator for Anne Arundel County

January 26, 2017
<table>
<thead>
<tr>
<th>TBI-Defined</th>
<th>ABI-Defined</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traumatic Brain Injury</strong> is an insult to the brain caused by an external physical force, for example; fall, MVA, assault, sport-related, IED exposure</td>
<td><strong>Acquired Brain Injury</strong> is an insult to the brain that has occurred after birth, for example; TBI, stroke, near suffocation, infections in the brain, anoxia</td>
</tr>
</tbody>
</table>

Both Mechanisms of Injury can result in chronic disability that may get worse with age.
How many Americans sustain a TBI annually?

• 231,840
• 1.7 million
• 1.2 million
At what age on average does the adult brain mature?

• 18
• 21
• 25
What is the last part of the brain to mature?

- Frontal lobe
- Temporal lobe
- Parietal lobe
True or False.....

The impact of childhood TBI may not become apparent until years later.
The “finger print” of TBI is damage to the frontal lobes and temporal tips- the parts of our brain that helps us make good decisions regarding how we act and interact with others and our environment.

The resulting erratic behavior translates to behavior and is very hard to understand unless it is viewed through a brain injury informed lens...for example a young man with a history of 3 TBI’s meant his ability to understand what an officer was saying to him was poor, however his stance and facial expressions appeared hostile and aggressive and were interpreted as such by the officer.
Individuals with a History of Brain Injury are Found Among:

- The Incarcerated
- The Homeless
- Among those living with a mental illness
- Among those who have served in the military
- Among those who misuse substances or are exposed to those who do
- Those who are prone to violence or are exposed to those who are
- Among victims AND perpetrators of domestic violence
What it Feels Like….

Writing and processing exercise
The frontal lobe is the area of the brain responsible for our “executive skills” - higher cognitive functions.

These include:

• Problem solving
• Spontaneity
• Memory
• Language
• Motivation
• Judgment
• Impulse control
• Social and sexual behavior.

adapted from Dr. Mary Pepping of the University of Idaho’s presentation *The Human Brain: Anatomy, Functions, and Injury*
The temporal lobe plays a role in emotions, and is also responsible for smelling, tasting, perception, memory, understanding music, aggressiveness, and sexual behavior.

The temporal lobe also contains the language area of the brain.

adapted from Dr. Mary Pepping of the University of Idaho’s presentation *The Human Brain: Anatomy, Functions, and Injury*
## Possible Physical Changes

<table>
<thead>
<tr>
<th>Injury related problem</th>
<th>How it may affect a person functionally….</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coordination</strong></td>
<td>Unsteady gait, poor eye-hand coordination, slow or slurred speech, tremors, paralysis</td>
</tr>
<tr>
<td><strong>Visual Deficits</strong></td>
<td>Staring or poor eye contact, blurred or double vision, inability to follow an object with their eyes</td>
</tr>
<tr>
<td><strong>Additional Physical Challenges:</strong></td>
<td>Seizures, deaf or hard of hearing, fatigue</td>
</tr>
</tbody>
</table>
### Possible Changes in Thinking, aka Cognitive Skills

<table>
<thead>
<tr>
<th>Injury related problem</th>
<th>How it may affect a person functionally…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>Trouble following directions, providing requested information, making appointments</td>
</tr>
<tr>
<td>Processing (receptive)</td>
<td>Understanding what being said, reading</td>
</tr>
<tr>
<td>Processing (expressive)</td>
<td>Trouble putting thoughts into words, tip of the tongue syndrome</td>
</tr>
<tr>
<td>Problem solving (related to frontal lobe &amp; temporal tip Injury)</td>
<td>Impulsive, easily frustrated, sexually disinhibited, verbally/physically combative, interpersonally inflexible, poorly organized</td>
</tr>
</tbody>
</table>
### Possible Changes in Personality & Behavior

<table>
<thead>
<tr>
<th>Injury related problem</th>
<th>How it may affect a person functionally….</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>Flat affect, lack of initiation, sadness, irritability</td>
</tr>
<tr>
<td>Unawareness</td>
<td>Unable to take social cues from others</td>
</tr>
<tr>
<td>Confabulation</td>
<td>“making up stories”</td>
</tr>
<tr>
<td>Perservation</td>
<td>Gets “stuck” on a topic of conversation or physical action</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Can exacerbate other cognitive/behavioral problems</td>
</tr>
</tbody>
</table>
Impulsivity!!!!

The tendency to speak and act without considering consequences is a hallmark of TBI and is VERY easily misinterpreted and can really get people living with TBI into trouble at home, work and in the community.

Heather Hotchkiss and Karen McAvoy of Colorado’s description of the functional burden of TBI.
Other clues an individual maybe living with brain injury

- You may observe scars on an individual’s forehead, neck, face
- The individual is using a cane, walker or wheelchair
- The individual has a limp or appears to drag one foot behind when walking
Simple Strategies For Officers

• Make and maintain eye contact during interactions
• Speak in short, simple sentences
• Speak in a neutral tone
• Ask the person to paraphrase what you have said frequently
• Give the individual time to process what is being said
• When possible, give the person a “heads up” regarding what to expect during your interaction
Simple Behavioral Strategies

• Behavior Specific Praise
  – Reinforce the positive behaviors you see
    “I like how you are sitting here talking to me”

• Redirection

• Choose Your Battles… Only focus on what matters

• Non-verbal cues (including tone of voice) will be interpreted first
Simple Behavioral Strategies

• Positive Prompting
  – Don’t give attention to the negative behavior and don’t sound authoritative
  – Examples:
    • Person becoming distracted- “We are almost finished here, thank you for sitting here talking to me”
    • Person is yelling at you or someone else- “Lower your voice please”
    • Person hitting fists on car/wall- “Let’s walk over here”
    • Person has something in their hands they could hurt you or themselves with- “Please put the bat over here”
    • Person grabs your arm- “Please keep your hands to yourself”
What can Individuals Living with Brain Injury and Their Families do Proactively?

• Wear a Medical Alert bracelet or necklace that is visible
• Review importance of what is considered personal space boundaries
• When in a car, keep an information card in the visor
• Keep a card with words and phases that can be used to describe disability in wallet
Office of Acquired Brain Injury

Brain Injury Survivor Wallet Card

A person with a brain injury can carry this wallet card to help avoid misunderstandings with law enforcement, first responders and others. The card includes contact information, common signs and symptoms of brain injury and a request to call a designated emergency contact if needed.

Instructions:
1. Download wallet card (PDF).
2. Print wallet card.
3. Write information on card.
4. Trim card along edges. Card may be laminated to make sturdier.

If you are having trouble printing the card or would like to have one or more in a heavier weight of...
RESOURCES

• Brain Injury Association of Maryland: 410-448-2924, www.biamd.org. Contact BIAMD for resources around the state

• Centers for Disease Control & Prevention (CDC)
  www.cdc.gov/traumaticbraininjury/ CDC has fact sheets and other information on TBI and Concussion

• MD Division of Rehabilitation Services:
  http://dors.maryland.gov/consumers/specialized/Pages/ABI.aspx  Contact DORS if you are in need of services after a brain injury and are interested in seeking employment

• Ohio Valley Center for Brain Injury Prevention and Rehabilitation, 614-293-3802, www.ohiovalley.org. Ohio Valley provides information on how to screen and support those with brain injury as well valuable information on the link between brain injury and addiction

• Brainline, www.brainline.org Brainline has a wealth of information on all aspects of civilian and military related brain injury

The 2007 movie *The Lookout* starring Joseph Gordon Levitt, is a realistic depiction of the subtle but life altering consequences of traumatic brain injury. Available on Netflix!
Anastasia Edmonston MS CRC
anastasia.edmonston@maryland.gov
410-402-8478
Joelle Ridgway, MS, CTRS, CBIS
agridg24@aacounty.org
410-222-4383

A product of the Maryland Behavioral Health Administration and the Frederick County Mental Health Management Agency
2017
Thank you!