Domestic Violence & Traumatic Brain Injury

A Professional's Guide



Introduction

What is the problem?

Compared to brain injuries resulting from professional football or military service, little attention has been given to brain injuries caused by domestic violence. However, brain injury can result from common methods of abuse including being hit, slammed, shaken, or strangled. It is estimated that as many as 31,500,000 women in the United States live with a brain injury caused by intimate partner violence, and 21,000,000 of these women have likely sustained multiple brain injuries (Valera et al., 2019).

Why does this matter?

Multiple blows to the head increase the likelihood someone may experience a brain injury that changes their cognition, sensation, behavior, and motor function. There are often no physical signs that a brain injury has occurred, making it difficult to recognize. Common symptoms of brain injury are similar to those experienced from mental health disorders, which makes diagnosis important to ensure an individual is receiving the most appropriate care (Campbell et al, 2018; Kwako et al., 2011). Additionally, untreated brain injuries can lead to further injury and health complications.

What is the purpose of this packet?

This packet is intended to give domestic and sexual violence providers and advocates information related to the intersection between brain injury and domestic violence. Specifically, section I of this packet contains background information about brain injury as well as a list of online resources that can be accessed if you wish to learn more. Section II describes the importance of brain injury screening and provides information on screening tools that have been used with survivors of domestic violence. Lastly, section III includes referral information and resources that can be shared with clients.

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Basic Information about Brain Injury

The brain is an amazing organ; it makes our heart beat, our eyes blink and our skin shiver; it enables us to think, laugh, and love. The brain is what observes and understands the world around us. It has the consistency of Jell-O or congealed oatmeal, and weighs about 2 lbs. at birth and 3 lbs. in an adult.

Brain injury can be called by different names, like concussion, shaken baby syndrome, and head injury to name a few. The brain can be hurt in many different ways; injuries to the brain are classified as non-traumatic or traumatic.

- Non-Traumatic injuries occur as a result of strokes, lack of oxygen, infection, brain tumors, and exposure to toxic substances. The challenges someone with a non-traumatic injury faces can be different but are often very similar to those faced by someone with a traumatic injury.
- Traumatic injuries fall into two categories:
 - Open head injuries are those in which the skull is crushed or seriously fractured.
 Open head injuries also happen when the skull is penetrated, as in a gunshot wound.
 - *Closed* head injuries, in which the skull is not damaged, occur much more often, usually because of a car accident or fall.

Several things happen to the brain during traumatic injuries. The effects of some of these can go on for quite some time after the actual accident.

- The brain bounces around in the skull and rubs against the bony ridges on the inside of the skull; *this is known as a coup/contra-coup injury*. It can cause bleeding and swelling within the brain; because the brain sits in a tightly enclosed space, there is no way to accommodate the increased swelling and pressure.
- The microscopic pathways that send messages through the brain and out to the body are damaged; *this is known as diffuse axonal injury.*
- The chemicals that help the brain work are disturbed, and instead of helping, begin to hurt the brain; *this is known as the neurochemical cascade*.

The brain is divided into different parts called *lobes* and *hemispheres*. While the whole brain works together to get things done, its different parts are responsible for different jobs.



The Cerebellum (just above the brain stem) controls balance and coordination.

The Brain Stem (the bottom of the brain) is responsible for basic life functions like heartbeat, breathing, and blood pressure.

The Occipital lobe (at the back of the head) controls vision.

The Temporal lobes (on the sides of the head) manage speech, language, memory, and hearing.

The Parietal lobes (on the top of the head) interpret sensations and the position of our body and other objects.

The Frontal lobe (at the front of the head) helps us control our emotions and impulses, motivates us, and helps us plan and make good decisions.

The left and right sides of the brain are called hemispheres; they have different strengths.

The left side of the brain is associated with	The right side of the brain is the creative and
verbal, logical, and analytical thinking. It is very	curious side of the brain and allows us to be
good at naming and categorizing things,	flexible and think about the future. It is good at
reading, writing, arithmetic. It likes to think	visual and intuitive information; it thinks quickly
about things logically and in order. It controls	and looks at the whole picture. It controls the left
the right side of the body.	side of the body.

The changes seen after a brain injury depends on a number of factors including: the severity of the injury, where and how the damage was sustained, how quickly the person was diagnosed and treated, their general health and age at the time of injury.

- **Common physical changes** include difficulty walking, trouble with balance, falling or bumping into things, dizziness, spasticity (very tight muscles), poor coordination, difficulty grasping objects, headaches, nausea, fatigue, and seizures.
- Common sensory changes include vision, hearing, smell and taste disturbances.
- Common cognitive problems include trouble with memory, concentration and attention, following directions, finding the right word, problem solving, abstract thinking, organization, planning, social judgment, decision making, self-monitoring, and initiating tasks.
- Common behavioral/emotional changes include irritability, mood swings, acting without thinking, difficulty accepting someone else's point of view, sadness, low energy, low self-esteem, hostility, depression, and anxiety.

Although the physical, sensory, cognitive and psychological changes may improve with treatment and time, they may not go away completely. The key for most survivors and caregivers is learning how to recognize the difficulties that have been caused by their brain injury and how to manage them. The best way to do that is through the use of compensatory strategies, which involves using different ways to accomplish a task that is more difficult since the injury.

Compensatory strategies focus on a person's intact skills and strengths to help them be successful with overcoming challenges in the areas of self-care, attention, memory, behavior. We all use some of these methods. These strategies can be simple, like writing things down in notebooks, posting notes on the refrigerator, or carrying a pocket calendar; some can be more complex, like smart phones, medication alarms, or emergency response systems. Compensatory strategies do not fix the underlying problem; it takes more time, energy, and attention to make them work, but when used consistently, they can dramatically improve function.

Deficit **Problems Arising Management Strategies** The person may... You can... Take longer to complete tasks • Make allowances and give the **Speed of Information** Take longer to answer questions person extra time Be unable to keep track of Present only one thing at a • lengthy conversations time Not interrupt or answer for the • person Verify that the person is keeping up with the conversation Tire quickly (physically & Encourage the person to take • Fatigue mentally) breaks Have reduced tolerance and Schedule more demanding or ability to cope essential tasks when the Become irritable person is at their best Have other problems exacerbated Have difficulty following Keep activities short and • **Mental Tracking** instructions uncomplicated Lose track of what they are • Ask specific or direct questions • thinking or doing Provide reminders of the next Get information confused ٠ step or task Have difficulty learning new Repeat information as • Memory things necessary Be forgetful Encourage use of external • Lose things memory aids (journals, Have difficulty recalling what calendars, time tables) they've learned Maintain 'special places' for belongings Give reminders and prompts

Brain Injury Deficit Management Strategies

to assist recall

Attention	 Appear not to listen Miss details Forget what people have said Have difficulties concentrating Be unable to cope with more than one thing at a time Be easily distracted Change the subject often Get bored easily 	 Shorten instructions/ activities so they can be completed Write down instructions accurately and in a way that can be easily understood later Encourage the person to engage in only one activity at a time Reduce external distractions Bring the person's focus back to the current task
Problem Solving	 Have difficulty working out solutions to problems Be unable to generate new ideas Have a disordered approach to problem solving 	 Help identify an achievable outcome for the task, ensure there is a purpose Avoid giving open-ended tasks Assist the person to break a task down into smaller components Reduce demands made upon the person (one thing at a time)
Communication	 Have trouble initiating conversation Have trouble understanding non-verbal communication/ body language; take statements literally 	 Encourage participation by asking "What do you think about that?" and use openended statements like "Tell me about" Give verbal cues to communicate intent of conversation Use simple and direct language and avoid talking in abstract terms; avoid the use of sarcasm
Planning & Organizing	 Have difficulty preparing for a task Be unable to work out the steps involving a task Have problems with organizing their own thoughts and explaining things to others 	 Provide a written structure or guideline outlining the steps in order Help develop a timetable (weekly, daily) to establish a routine of activities Encourage the person to take time to think before they speak

Reasoning	 Have a rigid and concrete thinking style Be resistant to change Have a simplistic understanding of emotions Show poor judgement and poor decision making skills 	 Explain changes in routine in advance, giving reasons Avoid using emotional undertones Provide real life examples when offering explanations
Self-Monitoring	 Show poor adherence to rules Not realize they have made errors 'Hog' conversations; be verbose and keep talking when others are no longer interested Have lower tolerance for frustrating situations 	 Provide feedback promptly and in a respectful manner when errors occur Create and use signals to let them know they are talking too much Encourage turn-taking in conversations Gently redirect behavior to a different topic or activity

Brain Injury Education Resource List

These online resources provide additional information about brain injury and the relationship between brain injury and domestic violence.

1. Supporting Survivors of Abuse with Disabilities

https://sites.google.com/vcu.edu/abusesurvivorswithdisabilities/home_

The I-CAN! Accessibility Project, a collaboration between the Virginia Commonwealth University School of Social Work and the Partnership for People with Disabilities, created these online modules for domestic violence and sexual assault service providers. These five modules cover content related to various disabilities and the connection to abuse, and module four focuses specifically on brain injury.

2. Traumatic Brain Injury as a Result of Domestic Violence

http://www.ncdsv.org/images/PCADV_TBIasaResultOfDVParticipant'sGuide_2011.pdf

This manual was designed by the Pennsylvania Coalition Against Domestic Violence for domestic violence programs and advocates. It includes seven modules that cover content including traumatic brain injury, the intersection between traumatic brain injury and domestic violence, screening techniques, advocating for this population, and safety planning.

3. Invisible Injuries: When Your Head is Hurt

https://www.odvn.org/wp-

content/uploads/2020/04/ODVN_Resource_InvisibleInjuries_web.pdf

This packet, created by the Ohio Domestic Violence Network, provides basic information related to head injury. It includes information on head injury causes, warning signs, and common problems with ways to address those problems. Additionally, there is a sheet provided which allows a client to log their symptoms and write in important safety planning information.

4. Domestic Violence and Brain Injury: YouTube Recording

https://www.youtube.com/watch?v=YfyO3jVXAss&t=2094s

This is a recording of a live webinar presented in 2018 by Peg Ogea-Ginsburg from the Nebraska Department of Health and Human Services and Peggy Reisher from the Brain Injury Alliance of Nebraska. They provide background information on brain injury, the intersection between brain injury and domestic violence, and discuss a project conducted in collaboration with domestic violence shelters.

5. Model Systems Knowledge Translation Center: Living with Traumatic Brain Injury https://msktc.org/tbi

This website is funded by the National Institute on Disability and Rehabilitation Research. It provides evidence-based materials on topics relevant to individuals with brain injury including changes in memory, cognitive problems, fatigue, and more.

6. Abused and Brain Injured: Understanding the Intersection of Intimate Partner Violence and Traumatic Brain Injury

https://www.abitoolkit.ca/

This website was created by The Acquired Brain Injury Research Lab, which is led by Dr. Angela Colantonio. It provides an overview of brain injury, summarizes research on brain injury and intimate partner violence, has a case study of a survivor, and includes information specific to service providers. While the statistics and resources are Canadian focused, the information is universal.

7. Traumatic Brain Injury and Domestic Violence: Quick Guide

https://www.biav.net/wp-content/uploads/2018/05/Domestic-Violence-Fact-Sheet-lb.pdf This quick guide, created by the Brain Injury Association of Virginia, provides an overview of the intersection between brain injury and domestic violence. The information is in an easyto-read format and can be printed for quick reference.

Brain Injury Screening Overview

What is it?

Screenings are a way to identify individuals who may have a brain injury. It is important to understand that screening for brain injury is not the same as diagnosing someone with a brain injury. Results from a screening can help you decide who would benefit from a referral for further testing done by a medical professional.

Why should it be done?

Individuals who experience domestic violence might not consider the possibility they have a brain injury; or they might attribute their symptoms to other causes. Screening for brain injury among individuals who experience domestic violence could help prevent invisible injuries from going undiagnosed, delaying recovery, and causing further damage.

What screening tools are available?

While there is no universally accepted brain injury screening tool for survivors of domestic violence, two that have been used are the HELPS Brain Injury Screening (HELPS) and the Ohio State University Traumatic Brain Injury Identification Method (OSU TBI-ID). Both of these tools are quick to administer and are used to identify events and experiences indicative of possible brain injury. The questions in either the HELPS or the OSU TBI-ID take approximately 5-10 minutes to administer and can be incorporated into a conversation during the typical intake process. The following page provides more information about these two screening tools, as well an additional identification tool, the CHATS.

Brain Injury Screening Tools

HELPS

- The HELPS is a brief interview created for use with the general brain injury population by individuals who are not brain injury professionals.
- You can access the HELPS here:
 - https://www.biav.net/wp-content/uploads/2020/08/HELPS-Brain-Injury-Screening-Tool.pdf

CHATS

- The CHATS was developed by the Ohio Domestic Violence Network and is a modified version of the HELPS. It is an identification tool created to meet the specific needs within the domestic violence population.
- You can access the CHATS here:
 - o https://www.odvn.org/wp-content/uploads/2020/05/CHATSAdvocateGuide.pdf

OSU TBI-ID

- The OSU TBI-ID is a brief interview intended for use with the general brain injury population.
- You can access the OSU TBI-ID here:
 - https://wexnermedical.osu.edu/-/media/files/wexnermedical/patientcare/healthcare-services/neurological-institute/departments-andcenters/research-centers/ohio-valley/osu_tbiform_july2013.pdf
- You can access the online training module here:
 - https://www.brainline.org/multimedia/presentations/OSU/includes/storyline/stor y_html5.html

Brain Injury Referral: Next Steps

After screening a client for brain injury, what are the next steps? This section of the packet provides information about how to support your client and how BIAV is here to help.

Discuss Screening Results

Help your client understand what the results mean and what they don't mean. A positive brain injury screen is not a medical diagnosis. However, it indicates the individual is displaying symptoms consistent with those of brain injury and that they could benefit from further assessment by a medical professional. Brain injury symptoms may not appear until days later, so it is important to ask about any changes your client is experiencing and re-screen as appropriate.

Share Options

- Refer them to a doctor for further assessment to explore symptoms and needs
- Open up a discussion on their symptoms and ways you can support them while working with them (see brain injury symptom management strategies for suggestions)
- Have them speak with a BIAV resource specialist to learn more or ask questions

Brain Injury Association of Virginia

The Brain Injury Association of Virginia provides free and confidential services across Virginia to individuals with brain injury, their caregivers and family members, and professionals. Resource specialists are available between 9am and 5pm to provide brain injury education, discuss referral information and state and national resources, or address any questions. Additional information can be found on the BIAV website, including our community resource directory which may help you locate brain injury services in your area, and Quick Guides on specific topics about brain injury.

Phone: 1-800-444-6443 (toll-free)

Email: info@biav.net

Website: biav.net

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