

Partner-Inflicted Brain Injury (PIBI): The Intersection of Domestic Violence, Traumatic Brain Injury, and Strangulation

Presented by:

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Partner-inflicted brain injury (PIBI) is the traumatic and/or oxygen-deprivation brain damage experienced by a survivor of *intentional, often repetitive, violence* by an intimate partner and includes the negative psychological effects of such violence. It describes a nuanced understanding of physical, physiologic, chemical, and psychological impacts on survivors of intimate partner violence (IPV).

About Partner-Inflicted Brain Injury:

- **PIBI includes different types of brain injury.** PIBI includes both traumatic brain injury and oxygen-deprivation injury.
- **Traumatic brain injury (TBI or concussion)** is often the result of a survivor's head or neck being physically assaulted by the perpetrator. Causes can include but are not limited to punches, being hit in the head with something, being thrown to the ground, and severe shaking.
- **Oxygen-deprivation injury** results from suffocation and/or **strangulation** by the abuser, decreasing or eliminating the amount of oxygen available for the brain to function. Oxygen deprivation can occur by lack of blood flow to the brain or lack of air entering the lungs.
- **The hallmark experience of brain injury is a loss or change in consciousness following the exposure.** "I blacked out" or "Everything seems foggy" or "I'm not sure what happened" are common phrases survivors use that should alert the provider of possible brain injury.
- **PIBI and psychological trauma are interconnected.** The traumatic circumstances that cause PIBI play a significant role in long term impacts of brain injury. Separating brain injury from the psychological trauma caused by these assaults is currently not possible.
- **PIBI is incredibly common.** An Ohio study showed over 80% of survivors of IPV accessing domestic violence programs had experienced both direct hits to the head and strangulation. Almost 50% of these survivors also reported being hit in the head and strangulated in a single assault.¹ Most had experienced repeated head trauma, and few had received any medical treatment or ever been diagnosed with a concussion or brain injury.

- **PIBI is rarely identified.** PIBI is rarely identified by both survivors of domestic violence/IPV and professionals who work with them. This lack of identification and accommodations for brain injury contribute to significant health problems, a decrease in quality of life, and barriers to accessing and benefitting from services.

Recognizing Partner-Inflicted Brain Injury (PIBI): What people may feel (symptoms) and what professionals may see (signs)

- **There are often no visible signs of PIBI.** This is especially true in oxygen-deprivation injuries such as strangulation.
- **Signs and symptoms vary widely.** When signs and symptoms occur, they can be subtle, nondescript, and have significant overlap with other health issues that survivors may be experiencing. **Assessing for visible signs and asking about alterations or loss of consciousness is important.**
- **Signs of violence that could cause a brain injury:**
 - Cuts, abrasions, marks, or scabs on the head, neck and/or face
 - Bruises, discoloration, and/or petechiae on the head, neck and/or face, specifically around the eyes
 - Redness or deformation of the skin of the neck
 - Strangulation-specific signs such as a raspy voice or trouble breathing.
- **Acute symptoms indicating a recent brain injury:**
 - Headache or “pressure” in head.
 - Nausea or vomiting.
 - Balance problems or dizziness, or double or blurry vision.
 - Bothered by light or noise.
 - Feeling sluggish, hazy, foggy, or groggy.
 - Confusion, or concentration or memory problems.
 - Just not “feeling right,” or “feeling down”
 - Any change in or loss of consciousness.³
- **Chronic or long-term symptoms of brain injury:**
 - Personality changes
 - New or worsening sleep problems
 - Changes in how people feel: Physical health problems, exacerbated mental health problems, or increased anxiety and/or depression
 - Changes in how people think: Problems with executive functions, other cognitive issues, and challenges with working memory
 - Changes in how people act: Saying or do things without thinking, problems controlling emotions, appearing to be “unmotivated” or “non-compliant”
 - Difficulties with activities of daily living (ADLs): Caring for themselves and others, finding and keeping jobs, securing, and maintaining housing, safety planning and escaping abusive relationships.

- **Signs and symptoms of PIBI are often attributed to other issues:** Both survivors and professionals often attribute signs or symptoms of PIBI to other causes, such as substance use, mental health, or psychological trauma, resulting in brain injury related needs going unaddressed.

Addressing Partner-Inflicted Brain Injury: The CARE (Connect, Acknowledge, Respond, Evaluation) Developed by The Ohio Domestic Violence Network and Ohio State University

- CARE is an evidence-based brain injury, trauma-informed advocacy framework that gives professionals working with domestic violence survivors the knowledge, tools, and awareness to best assist survivors of domestic violence dealing with brain injury.²
- CARE holistically incorporates the individual needs and experiences of survivors with suspected brain injuries into the advocacy and service provision processes.
- CARE has been evaluated by The Ohio State University to increase trauma-informed practices at domestic violence agencies as well as ability to support survivor empowerment.
- [CARE Brain Injury tools and resources](#) are available at no cost.

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References

1. Nemeth, JM., Mengo, C., Kulow, E., Brown, A., & Ramirez, R. (2019). Provider perceptions and domestic violence (DV) survivor experiences of traumatic and anoxic-hypoxic brain injury: Implications for DV advocacy service provision. *Journal of Aggression, Maltreatment & Trauma*, 28(6),744-763. doi:10.1080/10926771.2019.1591562
2. Kemble, H., Sucaldito, A., Kulow, E., Ramirez, R., Hinton, A., Glasser, A., Wermert, A., & Nemeth, JM. (2022). How CARE Tools Are Being Used to Address Brain Injury and Mental Health Struggles with Survivors of Domestic Violence. *Journal of Head Trauma Rehabilitation*, 37(1), 39-E47. doi:10.1097/HTR.0000000000000745

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