Uncovering invisible disability: Brain injury, mental health and addiction

A Guide for Ontario Health Teams

More than 40,000 Ontarians experience a brain injury each year, and almost half a million live with an acquired brain injury (ABI).[1] Many will experience mental health and addiction issues and require various types of life-long supports. ABI is often an invisible disability that makes getting care to address mental health and addictions much more difficult. By screening for brain injury and making simple accommodations, providers can improve access to care, as well as improve outcomes in the people they serve.

Relationship between brain injury, mental health & addiction

Brain injury, mental health and addiction are often interrelated.

What is ABI? An acquired brain injury is damage to the brain that occurs after birth and can be traumatic (e.g., fall, motor vehicle collision, assault) or non-traumatic (e.g., anoxia, meningitis).[2] The effects of a brain injury are varied, complex and life-long, and the challenges that result impact the person with a brain injury and their families or caregiver(s).[3,4,5,6]

Why does a history of ABI make a difference? People with brain injury often have concurrent problems related to mental health or addictions.[7,8,9,10] These co-morbidities can result in lack of insight and an inability to provide an accurate medical history.[11] If clinicians are unaware of the presence of an ABI, they may think a person's inability to see the need for treatment or difficulty understanding and remembering recommendations is willful non-compliance. This can make it difficult to provide appropriate, effective and compassionate care.

- ***Mental health and brain injury***
    - In Ontario, one in six adults and one in five students report a history of traumatic brain injury.[7] A recent study of high school students found that those who reported a history of brain injury were at least 52% more likely to report psychological distress, 100% more likely to use cannabis, 93% more likely to experience suicidal ideation and 239% more likely to have attempted suicide compared to those without a history of brain injury.[7]
    - The most common mental health difficulties after brain injury are depression, anxiety and post-traumatic stress disorder, and more than half of all survivors experience these issues at some point in their recovery.[7,12,13] Persons with brain injury and depression may also experience apathy, blunted or labile affect, changes in appetite, sleep disturbance, fatigue and cognitive impairment.[14]

- ***Addiction and brain injury***
    - 20% of people without an addiction issue before their brain injury become vulnerable to one after the injury. [8,15]
    - 25-30% of people who sustain a brain injury are intoxicated, and addictions significantly increase the chances of a second brain injury.[8] Of people with traumatic brain injury who present to the ER, 40-60% are associated with substance use.[15]
    - Individuals with a history of addiction tend to return to pre-injury levels of use post-injury.[12,16]
- ***Mental health, addiction and brain injury***
    - Care for brain injury, mental health conditions and addictions occurs in siloes; greater integration can improve care and outcomes.[7,9]
- ***Brain injury and other social issues***
    - Brain injury is also prevalent in survivors of domestic violence, those experiencing homelessness and those involved with the justice sector. [11,17,24]
        - » Domestic/spousal/intimate partner violence is the primary cause of physical injury in women aged 15-44, leaving them vulnerable to traumatic brain injury.[17]
        - » A study of people experiencing homelessness in Toronto found that 53% had at least one traumatic brain injury and 70% sustained their first injury prior to becoming homeless.[18]
        - » Individuals with a history of traumatic brain injury are 1.5 times more likely to have a corrections/criminal justice record.[24]

What this means for Ontario Health Teams

SCREEN FOR AND RECOGNIZE BRAIN INJURY SYMPTOMS

- **Ensure staff have adequate knowledge about brain injury and how it intersects with mental health and addictions.**

  Service providers should be able to recognize when behaviours are due to neurological challenges, know how to screen for a brain injury, and know how to provide basic accommodations for someone with a brain injury.[14,19] Ensuring staff have basic knowledge about brain injury will prevent incorrect assumptions regarding prognosis and reduce hesitation about engaging and/or admitting a client with brain injury, mental health and addictions issues to a service.

    - » Screening tools:
        - HELPS brain injury screening tool
        - Ohio State University (OSU) TBI Identification Method

ACCOMMODATE FOR COMPLEXITY

- **View complexity as a rule and make programs more accommodating.**

  Service providers should be aware that a brain injury will impact active participation and recovery; strategies to address this can include outreach efforts and program adaptations.[10,14,20,21] It is important to recognize that what may present as poor motivation (e.g., missed appointments, disinterest, lack of empathy) may be due to cognitive impairment.[14,20,21] To address this, accommodate for cognitive impairment by reducing cognitive load (e.g., creating routines, setting goals, removing distractions, breaking down tasks, creating reminders, slowing down) and making programming modifications (e.g., low-barrier intake process, small groups, access to case management).[14,20,21]

  » Training modules for professionals to learn more about neurobehavioural impairment and how to accommodate for symptoms after a brain injury:

  - Ohio State University: Web-based TBI training in modules for professionals
  - Ohio Valley Center for Brain Injury Prevention and Rehab: Accommodating the symptoms of TBI

SHARED AND INTERCONNECTED CARE

- **Integrated care is needed across the continuum and across sectors to better support people with mental health and addictions who may also have a brain injury.[9,10]**

  Community supports are particularly important because brain injury is a chronic health condition with lifelong effects, and improvements can occur years post-injury.[4,6,10,13,22] OHTs and their partner organizations should take steps to increase staff knowledge of relevant ABI community-based services and how to access them. Services such as case management, counselling, and vocational rehabilitation (to assist with return to work or school) can support reintegration and adaptation.[4,6,22,23] Gaps in care should be addressed through flexible admission criteria for treatment and support programs to meet people's needs and foster innovation in care.[10]

  » To connect with specialized brain injury services in Toronto and GTA, reach out to the Toronto ABI Network at 416-597-3057 or info@abinetwork.ca

  » To connect with specialized brain injury services in other areas of Ontario, connect with the ABI provincial Navigator in your area.

- **Community partnerships are critical to providing care for this population.**

  Potential community partners include those providing services, support and advocacy in the areas of mental health and addictions, supportive housing, homelessness, justice issues and domestic violence. OHTs should create strategies to address the barriers that prevent individuals with a brain injury, mental health and addictions from accessing the care and support they need.

Toronto ABI Network: Specialized ABI knowledge and services in Toronto/GTA

The Toronto ABI Network is made up of health care and social services organizations that provide publicly funded rehabilitation and community services for people with ABI.

The Network provides a single point of entry for referrals to all community-based services for people with ABI in Toronto and the GTA. The Network also helps providers, individuals and families find and coordinate services for people with complex needs, including mental health and substance use issues.

Information on ABI programs and services is available on the Network's website and by calling 416-597-3057.

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