# Intersections of brain injury

## Substance use

Brain injury (BI) and substance use are intricately linked. BI can heighten the risk of substance use disorders, and pre-existing substance use can complicate the recovery from a BI. Understanding this connection is an important step to developing targeted interventions involving health care professionals, paving the way for informed and comprehensive recovery strategies.

Prevalence & Impact

* 40-60% of traumatic brain injuries (TBIs) presenting to ER are associated with substance use.
* Alcohol consumption has been shown to increase significantly 1-6 months after BI. Intervention within this window is critical for improving recovery outcomes.
* Substance use following acquired BI can increase risk of neurological impairments and reduce recovery rate.
* About 20% of people who survive a TBI will develop a new problem with substance use.
* Age of first BI is associated with earlier age of problematic substance use.

How can a brain injury trigger problematic substance use?

* Injury to brain areas responsible for executive functions, emotional regulation, and decision-making can elevate the risk of engaging in risky or addictive behaviors.
* Cellular processes triggered by BI lead to structural harm of the brain tissue, heightening vulnerability to addiction.
* Sustaining a BI early in life can increase risk of substance abuse and addiction later in life.

Steps forward

* Counselling
* Residential Rehabilitation Facilities
* Self-Help Groups

To effectively address the diverse requirements of those seeking help for problematic substance use, it's crucial that we tailor programs and facilities accordingly. Proactive measures must be implemented to establish adequate services and support systems. This approach aims to eliminate the need for alcohol or drugs as coping mechanisms, addressing the root of the issue and fostering healthier, more resilient communities.

For more info, visit braininjurycanada.ca