THE FACT OF THE MATTER

Evidence-based practices in traumatic brain injury

A Publication of the Center on Brain Injury Research and Training ~ Teaching Research Institute ~ Western Oregon University

TBI

Research Brief No. 9

TBI, Alcohol, and Other Drugs: An Overview

The misuse of alcohol and/or other drugs (substance misuse) is frequently associated with TBI and significantly complicates rehabilitation and community integration post-injury. The combination of substance misuse and TBI results in more impairment than either condition alone. This brief provides a basic overview of TBI and substance misuse as well as treatment considerations.

Who is at risk for TBI and substance misuse?

- At least 50% or more of adults who require acute rehabilitation for TBI have a history of substance misuse.
- Young, single males with TBI who have a prior history of substance misuse are at the highest risk for substance misuse post-injury.
- Childhood TBI is linked with a high frequency of substance misuse later in life.
- TBI and substance misuse can also occur with mental health disorders such as depression or anxiety.
- Individuals intoxicated at the time of injury generally receive the most scrutiny of their substance misuse. However, a pattern of substance misuse prior to and/or after TBI leads to more long-term functional impairment.

What is the impact of TBI and substance misuse combined?

- Substance misuse post-injury lowers seizure thresholds, interferes with brain recovery, and makes all symptoms worse, including weaknesses a person may have walking, talking, and/or thinking.
- Substance misuse interacts with prescription medications and can lead to additional brain damage.
- Substance misuse prior to and/or after TBI leads to more long-term functional impairment than intoxication at the time of injury.
- Substance misuse undermines access to support systems, including family and rehabilitation services.
- Persons who misuse substances and have TBI are less likely to be working, have a lower sense of well-being, and report thoughts of suicide.

This Brief, supported by grant #H21MC06769 from the HHS, HRSA, MCHB is the sole responsibility of the authors and does not necessarily represent the official views of HHS. This is in the public domain.

CENTER ON BRAIN INJURY RESEARCH AND TRAINING ~ 99 West 10th Ave., Eugene, OR 97401

What are some key treatment considerations?

Abundant research has evaluated treatments for substance misuse and TBI when they occur separately. Treatment approaches for substance misuse include cognitive-behavioral therapy, pharmacological interventions, and self-help groups. Treatment approaches for TBI include physical therapy, cognitive rehabilitation, and vocational rehabilitation. However, research evaluating interventions for these conditions in combination is in its early stages.

General treatment considerations include the following:

- Screening and education regarding substance misuse should be provided for all clients who have had a recent TBI, as well as their families.
- TBI-related cognitive impairments can interfere with treatment for substance misuse. Difficulty with memory or impulse control, for example, might cause clients with TBI to act inappropriately during treatment sessions or to not follow through with treatment recommendations.
- Likewise, substance misuse can interfere with TBI-related treatments. If a client with TBI is
 misusing alcohol or drugs while receiving cognitive rehabilitation services, for example, then
 progress is slowed or completely halted.
- It is important for professionals working with this population to determine each client's unique communication and learning style and assist in compensating for physical and cognitive impairments post-injury. Concrete, short-term rewards, such as financial incentive programs, might also prove helpful to increase treatment compliance.
- Treatment programs developed for other populations, such as persons with co-occurring mental illness and substance misuse, might also benefit those with TBI who misuse alcohol and other drugs.

Regardless of pre-injury use of alcohol and other drugs, the three most important recommendations for a person post-TBI is that s/he:

- Not drink alcohol,
- Not use illegal drugs, and
- Not take prescription medications in greater quantities than prescribed.

Where can I find more information?

- * Corrigan J.D. & Mysiw W.J. (in press). Substance abuse among persons with TBI. In: N.D. Zasler, D.I. Katz, & R.D. Zafonte (Eds), *Brain Injury Medicine: Principles and Practice,* Second Edition. New York, NY: Demos Medical Publishing.
- * Corrigan J.D. & Bogner J. (2007). Interventions to promote retention in substance abuse treatment. *Brain Injury, 21*(4), 343–56.
- * Corrigan, J.D., & Lamb-Hart, G.L. (2004). *Substance abuse issues after traumatic brain injury. Living with Brain Injury.* A publication of the Brain Injury Association of America.
- * *TBI and Substance Abuse.* Ohio Valley Center for Brain Injury Prevention and Rehabilitation—www. ohiovalley.org/informationeducation/materials
- * The Fact of the Matter Research Briefs—www.cbirt.org/publications-products/

To contact us or receive notificattion of new Fact of the Matter Briefs, email us: mch@wou.edu

The Fact of the Matter

