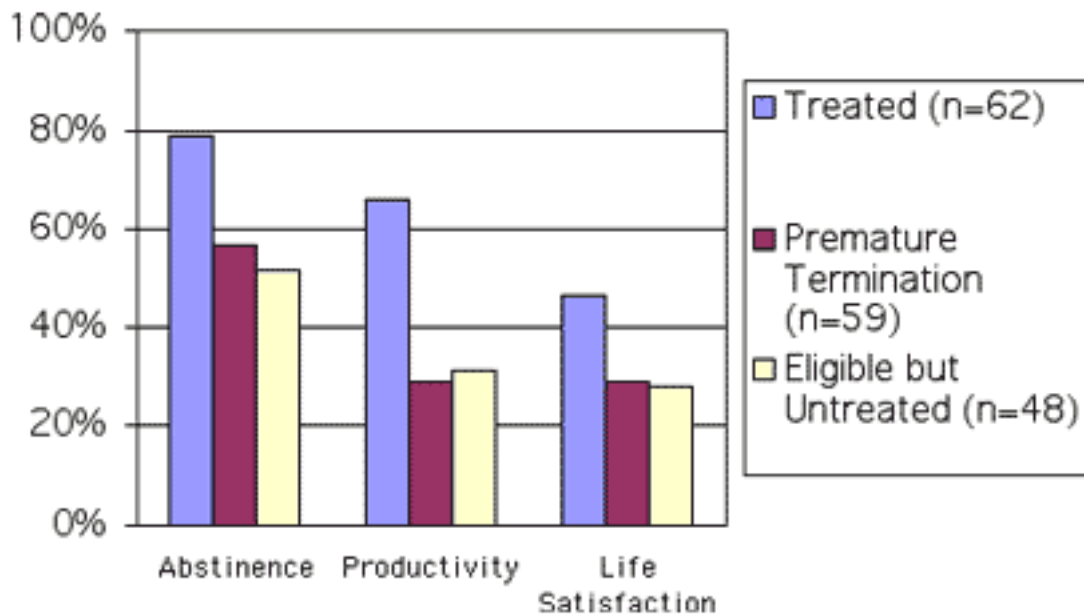


Treatment for Substance Use With TBI

1. Are there treatment approaches that have been proven effective for people with traumatic brain injury?

Clinicians and researchers have repeatedly observed that cognitive and emotional impairments caused by brain injury present unique problems when addressing co-existing substance use disorders (Langley, 1991; Center for Substance Abuse Treatment, 1998; Corrigan, Bogner et al., 1999). While several models of how substance abuse treatment can be adapted to traumatic brain injury rehabilitation were proposed in the past (Blackerby & Baumgartner, 1990; Langley, 1991), most presumed protracted inpatient or residential treatment that is no longer available to most persons with traumatic brain injury. Bombardier and colleagues have recommended brief interventions based on motivational interviewing techniques for use during acute rehabilitation (Bombardier, Ehde & Kilmer, 1997; Bombardier & Rimmel, 1999). Cox, Heinemann, et al. (2003) found some support for Structured Motivational Counseling in a study using a non-random comparison group.

A community-based model for treatment of substance abuse and traumatic brain injury was proposed by Corrigan and colleagues (Corrigan, Lamb-Hart & Rust, 1995; Bogner, Corrigan, Spafford & Lamb-Hart, 1997; Heinemann, Corrigan & Moore, 2004). The model uses consumer and professional education, intensive case management, and inter-professional consultation to address substance use disorders in adults with traumatic brain injury. Program evaluation data suggest significant differences in outcomes depending on whether discharge occurred before an eligible client could be engaged in treatment (eligible but untreated), after initiation of treatment but before treatment goals were met (premature termination) or upon mutual agreement with staff that goals had been met (treated). The Network's three programmatic outcomes (abstinence, return to work or school, and subjective well-being) assessed three months post-discharge are shown below. The median length of stay for those discharged successfully is 2 years. As might be expected, drop-out is a significant problem in this model. Retrospective analysis of 1,000 consecutive referrals indicated that 66% of those eligible for treatment either are not engaged initially or drop out prematurely.



2. How can existing substance abuse services be adapted for people with traumatic brain injury?

There should be a very high priority placed on doing research about the effectiveness of current substance abuse treatments for persons with traumatic brain injury. However, until more is known, current treatments and services need to be adapted to accommodate disability arising from traumatic brain injury. The Ohio Valley Center for Brain Injury Prevention and Rehabilitation have made a number of suggestions for substance abuse treatment providers, shown below.

The substance abuse provider should determine a person's unique communication and learning styles.

- Ask how well the person reads and writes; or evaluate via samples.
- Evaluate whether the individual is able to comprehend both written and spoken language.
- If someone is not able to speak (or speak easily), inquire as to alternate methods of expression (e.g., writing or gestures).

- Both ask about and observe a person's attention span; be attuned to whether attention seems to change in busy versus quiet environments.
- Both ask about and observe a person's capacity for new learning; inquire as to strengths and weaknesses or seek consultation to determine optimum approaches.

The substance abuse provider should assist the individual to compensate for a unique learning style.

- Modify written material to make it concise and to the point.
- Paraphrase concepts, use concrete examples, incorporate visual aids, or otherwise present an idea in more than one way.
- If it helps, allow the individual to take notes or at least write down key points for later review and recall.
- Encourage the use of a calendar or planner; if the treatment program includes a daily schedule, make sure a "pocket version" is kept for easy reference.
- Make sure homework assignments are written down.
- After group sessions, meet individually to review main points.
- Provide assistance with homework or worksheets; allow more time and take into account reading or writing abilities.
- Enlist family, friends or other service providers to reinforce goals.
- Do not take for granted that something learned in one situation will be generalized to another.
- Repeat, review, rehearse, repeat, review, rehearse.

The substance abuse provider should provide direct feedback regarding inappropriate behaviors.

- Let a person know a behavior is inappropriate; do not assume the individual knows and is choosing to do so anyway.
- Provide straightforward feedback about when and where behaviors are appropriate.
- Redirect tangential or excessive speech, including a predetermined method of signals for use in groups.

The substance abuse provider should be cautious when making inferences about motivation based on observed behaviors.

- Do not presume that non-compliance arises from lack of motivation or resistance, check it out.
- Be aware that unawareness of deficits can arise as a result of specific damage to the brain and may not always be due to denial.
- Confrontation shuts down thinking and elicits rigidity; roll with resistance.
- Do not just discharge for non-compliance; follow-up and find out why someone has no-showed or otherwise not followed through.