Module VI. Brain Injury and Substance Abuse

"The Twisted Sister - A Look Through The Bottle"
Instructions to This Module:

- You are encouraged to call a substance treatment center to receive more information on this subject.

Objectives of This Module:

a) Understand that Brain Injury and Substance Abuse is a dangerous mixture.

b) Understand what can be done with individuals who have Brain Injury and abuse substances.
What is Substance Abuse?

Substance Use is the use of any psychoactive substance.

Substance Abuse, for the purpose of this module, is the problematic use of alcohol and street drugs; it also includes the problematic use of prescribed drugs.

Substance Abuse and Brain Injury often go hand in hand:

- Approximately one-third of (traumatic) Brain Injury survivors have a history of substance abuse prior to their injury.
- Alcohol or other drugs are directly involved in more than one-third of incidents that cause Brain Injury.
- Twenty percent of people who do not have a Substance Abuse problem become vulnerable to Substance Abuse after a Brain Injury.

Why do clients with this co-occurring condition fall through the cracks?

- Providers are trained to identify and treat either Brain Injury or Substance Abuse, not both.
- Clients with this co-occurring condition often lack insight and may not realize the seriousness of the problem.
- Substance Abuse programs may screen out clients identified as having a Brain Injury.
- Symptoms of Brain Injury and Substance Abuse can present in similar ways and may go unidentified.
- The effects of a Brain Injury can be invisible but they may prevent clients from successfully following a Substance Abuse program.
- Clients with Brain Injuries may lack the motivation necessary to begin Substance Abuse programs.

Brain Injury and Substance Use can be a dangerous mix:

- Alcohol and drugs are neurotoxins that negatively affect recovery after a Brain Injury by interfering with the ability of nerve endings to reconnect.
- Alcohol and drugs have a more intense effect after a Brain Injury.
- Substance Abuse can increase cognitive impairment, depression, seizures and disinhibition; and can cause problems with balance, walking and talking.
- Substances interact with prescribed medication.
- Substance Abuse can lead to another Brain Injury.
- Each subsequent Brain Injury requires less force to do more damage.
How Substance Abuse emerges:

As long as client is in hospital or in rehabilitation, Substance Abuse may not be a problem. It can begin or return to previous levels within two years of discharge and can accelerate two to five years after discharge.

Symptoms that may be common to both Brain Injury and Substance Abuse:

- short-term memory loss
- impaired thinking
- difficulty with balance and co-ordination
- impulsivity
- mood disturbances (diminished emotional control)
- personality changes
- diminished judgment
- fatigue
- depression
- sleep problems
- decreased frustration tolerance

Symptoms of Brain Injury that are NOT associated with Substance Abuse:

- problems with learning, attention and memory (inability to focus, concentrate and remain on task; decreased ability to process information or read; decreased comprehension; decreased ability to follow);
- difficulty with problem-solving;
- initiation problems (difficulty getting started, following through, being motivated);
- word-finding difficulty;
- perseveration (repetition of an idea or action);
- disorganization (poor time-management, misplacing items);
- tangential remarks (going off topic);
- sequencing difficulties (inability to do tasks in order or follow steps);
- inappropriate social behavior;
- headaches, dizziness or poor balance;
- disorientation (becoming lost or having trouble locating addresses, remembering landmarks);
- lack of insight (inability to recognize one’s own deficits);
- inability to appreciate the consequences of own behaviors; low self-awareness);
• difficulty generalizing learning from one situation to another

Please refer to the list of contacts and references at the back of this module for more information on these issues.

Information for Brain Injury Providers:

Red flags: indicators that increase risk of use:

• prior history of Substance Abuse;
• a social isolation (estrangement from friends, family and co-workers);
• strained family/marital relations and lack of support;
• boredom (not working, no activities);
• difficulty in adjusting to changed circumstances (client may be angry, depressed, anxious);
• self-medicating to feel “normal” (to deal with chronic pain, grief and sense of loss)

Signs that your consumer may be using:

• deterioration in functioning;
• increased irritability and agitation;
• decreased self-care/change in physical appearance;
• increased erratic behavior;
• missed appointments;
• physical evidence of alcohol: smell/red eyes;
• physical evidence of street drugs: dilated pupils

Progression of Substance Use:

Substance Use often proceeds through the following five stages.

• Use: social or recreational use
• Misuse: occasional bouts of problematic use
• Abuse: repeated occasions of misuse
• Dependency: using as a coping strategy
• Addiction: physiological dependence on the substance leading to withdrawal if use is discontinued

What Brain Injury Providers can do about Substance Abuse:

• Educate client and family about the risks of clients with Brain Injuries using substances.
• Engage family/social network in actively supporting the client to address the issue.
• Take a history of client’s prior and current use. Be specific —ask, “What’s the most you’ve used? The least?”
• Ask client about his/her family history of Substance Use.
• Ask what effect use is having on client’s life (social, family, job, legal).
• Use CAGE Questionnaire (to be found in this module) and Weighing the Pros and Cons of Use (to be found in this module) to engage client with the issue.
• Gain an understanding of the Model for Change (to be found in this module). It may help to move the consumer through the stages.
• Assess stressors and risk factors that might cause client to begin using (isolation, boredom, depression, job loss, etc).
• Help client find meaningful substance-free activities.
• Provide support for behavioral changes before, during and after the Substance Abuse program to build motivation and reinforce new behaviors.
• Establish ongoing contact with professionals in Substance Abuse programs to exchange information and make sure the Substance Abuse program is meeting the client’s learning needs.

CAGE Questionnaire to screen for a possible drinking problem
(Ewing J.A., Detecting Alcoholism. The CAGE Questionnaire. JAMA 1984; 252; 1907):

1. Have you ever felt you ought to cut down on your drinking?
2. Have people annoyed you by criticizing your drinking?
3. Have you ever felt bad or Guilty about your drinking?
4. Have you ever had a drink first thing in the morning (Eye-opener) to stop your nerves or get rid of a hangover?

Two or more affirmative answers indicate probable alcoholism. Any single affirmative answer deserves further evaluation.

Make Contact
Make contact with Substance Abuse providers to help identify potential Substance Use and move client into appropriate Substance Abuse program. Maintain ongoing contact with Substance Abuse provider to help individualize program changes and monitor client’s progress.

Weighing the Pros and Cons of Change:

Make copies of the following questionnaire for your consumers. It may help you approach the topic of Substance Abuse in a non-confrontational way. Its purpose is to help consumers reach a clear decision about whether they want to change their behavior. (Miller, W.R, & Rollnick, S. (1991). Motivational Interviewing. New York: Guilford)
### Quitting Drinking / Drug Use

**PROS**

(what's good about quitting)

- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________

**CONS**

(what's not good about quitting)

- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________

### Continuing to Drink / Use Drugs

**PROS**

(what's good about continuing)

- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________

**CONS**

(what's not good about cont')

- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
Model for Stages of Change and Tasks of Substance Abuse Treatment

This “Stages of Change Model” can be applied to most behavioral changes. (Prochaska, J.O., DiClemente, C.C, & Norcross, J.C., 1992). It is presented here to give Brain Injury providers a framework they might adapt for addressing Substance Abuse issues.

STAGE 1: Pre-contemplation
Although others can see a problem with substances, the client is not aware of one.

Tasks of provider
- Give personal and factual information to client and the family.
- Factual information could include the dangers of Substance Abuse after a Brain Injury.
- Personal information could include a description of problems that could occur in the household when client abuses substances.
- Ask for the family’s support.
- Discuss the problems in a general way, e.g., “What would have to happen to show you that you had a problem with substances?”

STAGE 2: Contemplation
The client is thinking about whether or not there is a problem. This stage is characterized by ambivalence, fear of change, wishful thinking.

Tasks of provider
Move client one step further by looking at the pros and cons of using/not using.
- Have client continue to think about what would have to happen to lead to change.
- Maintain a neutral role as a facilitator without becoming confrontational.

**STAGE 3: Preparation**
At this point client is ready to engage in some kind of change rather than simply contemplate it for some time in the future.

**Task of provider**
- Gather information on Substance Abuse programs in client’s area.
- Decide which programs are best suited to client’s cognitive functioning.
- Get telephone numbers, make initial contacts.
- Talk with Substance Abuse providers about client’s cognitive difficulties and decide what modifications could occur in the program to suit client’s learning needs.
- Keep in mind that Alcoholics Anonymous or other 12-step programs are sometimes the best option for clients with Brain Injuries as they operate on a one-day-at-a-time basis.

**STAGE 4: Action**
Client stops using. S/he may enter a program, detoxification centre or 12-step group.

**Task of provider**
- As lack of motivation and short-term memory loss are common in clients with Brain Injuries, it’s a good idea to have provider or family/support system attend sessions with client.
- Provider should talk with Substance Abuse program leaders to discuss what modifications would help client follow through.

**STAGE 5: Maintenance**
Client consolidates and internalizes changes with practice and support.

**Tasks of provider**
- Keep in contact with client, family and Substance Abuse providers to monitor progress of client and make further modifications to program as necessary.
- Continue reinforcing behavioral changes.

**STAGE 6: Lapse/Relapse**
Often people in Substance Abuse recovery return to initial use.

**Tasks of provider**
- Return to previous stage and tasks.
- Consider new strategies to consolidate learning for client.
- Assess or get assessed the possible need for detoxification.
• Make relapse prevention plans with client and help him/her revise or re-adapt these plans.

What to keep in mind:
The consumer may not follow a linear progression of stages. Returning to using is often part of a normal recovery. Providers should continue with support.

Paths of Substance Abuse treatment:

1. Client recognizes that s/he has a problem and seeks a formal program.
2. Client is interviewed, assessed, accepted or referred to a program.
3. Client attends treatment, which may range from individual counseling to an intensive residential program. (Most intensive programs are three weeks in duration with sessions on stress reduction, self-esteem, ways to reduce cravings, preventing relapses, identifying triggers. Additional support is offered in "recovery homes", which have longer-duration supportive housing.)
4. Client may be introduced to Alcoholics Anonymous or other program and encouraged to attend. (Some programs incorporate a 12-step approach in their structure.)
5. Client continues with support and regular meetings for a period of time that varies with programs.

Alcoholics Anonymous or other 12-step programs may be attended instead of or in addition to formal treatment. These programs may be most effective for clients with Brain Injuries.

Information for Substance Abuse Providers:

Brain Injury rehabilitation — what’s done:

• Therapy for physical deficits (mobility, co-ordination, balance, pain reduction and strength).
• Cognitive retraining (strategies to improve memory, problem solving, attention, comprehension, language skills).
• Education for client and family about Brain Injury.
• Behavior management (control inappropriate behaviors).
• Help with activities of daily living (time management, establishing routines).
• Counseling client and family to adjust to changed circumstances.
• Connecting client to multiple programs and advocating on his/her behalf with various systems (legal, fiscal, housing, vocational).

Brain Injury rehabilitation — who does it?
Because the effects of Brain Injuries are so wide-ranging, rehabilitation involves a multi-disciplinary team approach that may use some or all of the following professionals during the course of treatment.

- physiotherapist
- occupational therapist
- speech-language therapist
- behavior therapist
- rehabilitation worker
- social worker
- psychiatrist (rehabilitation physician)
- neuro-psychologist
- neuro-psychiatrist
- nurse

Some ways to identify clients with Brain Injuries in intake or any time you suspect a Brain Injury

Look for these signs:

- Physical signs like scars or irregularities of the face and head.
- Problems with balance, speech and/or co-ordination.
- Problems with thought processes a tangential thinking

Ask these questions:

- Have you ever been involved in a crash? (motor vehicle, fall, sports activity)
- Have you ever had a stroke?
- Have you ever fallen or been hit on the head? How often? When?
- Have you ever had periods of unconsciousness?
- Have you ever been hospitalized? Be specific. When? How many times?
- Was surgery done? When? Where?
- Are you on any seizure medication?
- Are you on any other medication? (Medication could be masking or exacerbating symptoms. This question will also rule out additional medical conditions)

How clients with Brain Injuries may present themselves in the program

They may:

- miss sessions
- not identify with group
- miss information, misunderstand what’s said and fall behind
- ask about material already covered
- get stuck on one word or topic
- talk too much or go off on a tangent
- have difficulty keeping up with the conversation
- have poor follow-through on homework and assignments
• not pick up on social cues
• make socially inappropriate remarks (overly personal/blunt)
• become easily frustrated, irritable, impatient and overly emotional
• be unable to remember new information although historical memory is sound

How to modify your approach for consumers with Brain Injuries

• Simplify your language.
• Offer information in small bites.
• Give client extra time or individual time.
• Repeat information using short, simple phrases.
• Encourage note-taking or hand out printed notes.
• Anticipate a higher frequency of off-topic remarks.
• Keep instructions brief and clear.
• Get feedback — ask “Do you understand?”
• Summarize ideas and points.
• Redirect consumer when s/he goes off topic, talks excessively or behaves inappropriately.

What to keep in mind

• Client may lack insight as a result of the injury and may not recognize his/her cognitive deficits.
• Avoid confrontation over inappropriate behaviors. This will only escalate the situation. Instead, redirect client and roll with resistance. Be flexible, but make clear what’s acceptable.
• Don’t assume that non-compliance arises from lack of motivation or resistance. Check it out with client.

Please refer to the list of contacts and references at the back of this module for more information.

Contributor to this Module is:
Heather Chisvin ph: 416 967-1578 email: heather@chisvin.com (Research, Writing, Script writing, Manual writing; Patricio Davila email: reddesign@sympatico.ca (Manual Design); Ed Wilkinson-Latham (Photography); “Brain Injury and Substance Abuse: The Cross-Training Advantage.” Silverhammer Productions Inc. 
Web Site address: http://www.abinetwork.ca/bisamanual.htm 
ONF 2001”Please feel free to copy for educational purposes”

Contacts
Addiction Clinical Consultation Service: 1-888-720-2227
When you need professional advice to help your client with an alcohol or drug problem.
Canadian Association for Mental Health: 1-800-463-6273
Centre for Addiction and Mental Health: 1-800-463-6273
Website: www.camh.net
Drug and Alcohol Registry of Treatment (DART)
Website: www.dart.on.ca
Drug and Alcohol Treatment Info Line: 1-800-565-8603
Help Is Just a Call Away.
Metro Addiction Assessment Referral Service: 416-599-1448
Ohio Valley Center for Brain Injury Prevention and Rehabilitation: 614-293-3802
Website: www.ohiovalley.org (Ask about their Substance Abuse Information Series)
Ontario Brain Injury Association: 1-800-263-5404
Website: www.obia.on.ca
(for information on Brain Injury and contacts for local associations)
Regional Assessment Referral Service
For nearest location and contact information call DART
Toronto Acquired Brain Injury Network: 416-597-3057
Website: www.torontoabinetwork.ca email: abi.network@torontorehab.on.ca

References

Books / Reports

Journal Articles


Acknowledgements
This manual and video were funded by the Ontario Neurotrauma Foundation with input from the Centre for Addiction and Mental Health, the Toronto Acquired Brain Injury Network and the Toronto Area Addiction Service Coalition.

We would like to thank the providers and clients in both Brain Injury and Substance Abuse fields who looked through the material, provided their input and help.

Special thanks and appreciation to Heather Chisvin without whose patience, dedication and professionalism this training manual and video tape would not have been possible.

Production Credits
Research, Writing, Script writing, Manual writing:
Heather Chisvin ph: 416 967-1578 email: heather@chisvin.com

Production:
Silverhammer Productions Inc.
Dreamcatchers
Manual Design:
Patricio Davila email: reddesign@sympatico.ca
Photography:
Ed Wilkinson-Latham

ONF 2001“Please feel free to copy for educational purposes”