

ALCOHOL RELATED BRAIN INJURY AND SUBSTANCE MISUSE RELATED DEMENTIA

What is Dementia?

Dementia is the umbrella term for a number of diseases and causes of problems with thinking and memory that are severe enough to make managing day to day life more difficult to achieve. Signs and Symptoms can vary considerably but may include memory loss, poor concentration, difficulties with planning and organising, and disorientation problems.

What is Alcohol Related Brain Injury?

- Alcohol Related Brain Injury (ARBI) is damage that occurs to the brain as a result of regular consumption of higher-than-normal amounts of alcohol over many years.
- Low Risk Drinking Advice NZ states that a low-risk amount of alcohol is:
 - 2 standard drinks/ day or 10/week for a female
 - 3 standard drinks/ day or 15/week for a male
- A standard drink contains 10gm of pure alcohol – any amount above this is considered a higher-than-normal amount. It is considered that there is no safe level for drinking alcohol.
- Alcohol Related Brain Injury causes damage to the brain which can affect memory, thinking, personality, learning, mood and social skills.
- Alcohol Related Brain Injury includes Wernicke's Encephalopathy, Korsakoff's syndrome, and Wernicke – Korsakoff Syndrome.
 - Long before a person with a history of alcohol misuse develops Alcohol Related Brain Injury, their brain cells are already operating at sub optimal levels because of poor levels of thiamine and high levels of alcohol.
 - Wernicke's Encephalopathy is intense swelling of the brain. It is considered a medical emergency and is characterised by confusion, staggering poor co-ordination and unusual eye movements. It occurs when the body does not absorb enough Thiamine (VitB1). Thiamine cannot be absorbed into the body and used properly if a person drinks too much alcohol, as it disrupts the absorption process. Instead of thiamine being used by the body it is excreted in urine.
 - Although Korsakoff's syndrome can occur without a previous Wernicke's Encephalopathy, it is generally considered that Wernicke's Encephalopathy is a precursor to Korsakoff's syndrome, if not treated promptly.
 - Korsakoff's syndrome is a chronic condition that affects the brain. It is generally thought to be caused by alcohol misuse that leads to thiamine deficiency – However Korsakoff's syndrome may also be the result of repeated intoxication episodes, The toxic effect of alcohol on the brain, and head injuries that are the result of intoxication.
 - Korsakoff's syndrome is a form of dementia that may see an improvement if the person follows medical advice, i.e. stops drinking and increases thiamine intake.

What you might see in Alcohol Related Brain Injury?

- Cognitive problems including increased confusion, poor focus/ concentration, problems with poor visual spatial relations and memory loss.
- Confabulation may occur when gaps in memory are filled with made up events. The person with Alcohol Related Brain Injury will believe that the situation is real. This is quite common in the early stages of the illness. It is essential to recognise that confabulations are caused by a deficit in memory, they are not telling lies.
- Increased disorientation.
- Difficulty taking in new information or learning new skills.

- Difficulties with planning or making decisions and inability to be flexible with changing tasks, or multi-tasking.
- Communication problems such as slower processing of conversations, difficulty understanding the message and responding to it, forgetting words or having word finding difficulties, and making grammatical errors.
- Changes in social behaviour/ personality may occur, especially disinhibition and poor control of emotions.
- Untidiness or lack of interest in personal hygiene.
- Lack of insight as to how their condition affects both them and others, and an inability to appreciate any consequences of their behaviour.
- There may also be issues associated with long-term alcohol misuse:
 - **Social issues:** Negative consequence in family relationships, poor performance at work which could lead to unemployment, financial issues, and homelessness,
 - **Physical issues:** Liver or heart / blood vessel damage, changes in metabolism and changes in absorption of vitamins and minerals such as thiamine, poor nutrition and an increased risk of falls/ poor mobility.
 - **Psychological issues:** Delusions and hallucinations, anxiety and depression.

Substance Misuse

- Although the chronic use of both illicit drugs and prescription medicines can increase the risk of cognitive problems such as cognitive impairment and dementia, further research is required to understand the relationship more. Results linking these to dementia are mixed.
- Recent studies indicate that drug, tobacco and substance abuse can lead to dementia.
- Although there is little evidence that dementia leads to substance abuse, people with dementia may be prescribed drugs for co- morbidities and psychological symptoms that can lead to interactions and adverse reactions.
- **We do know:**
 - **A harmful substance** is a non-prescription drug that causes detrimental changes to the way the brain works. It can cause changes in mood, thoughts, feelings, behaviours, and insight and can lead to an increased risk of developing dementia.
 - **Marijuana**, if used over a long term is associated with learning deficits and poor ability to retain and retrieve memories.
 - **Tobacco**, smoking tobacco increases your risk of developing many diseases, including dementia. There is no safe level for smoking tobacco.
 - **Many prescription medications** can have side effects that alter cognitive function and may be linked to the development of dementia. Medications that may cause cognitive issues include:

- Drugs for incontinence	- Muscle relaxants
- Narcotic pain killers	- Anti-convulsant drugs
- Parkinson's medications	- Tricyclic antidepressants
- Anti-psychotic drugs	- Older allergy medications
- Sleep medications	

Things you can do that might help

- **Watch your language:**
 - Be prepared to spend time listening.
 - Avoid arguing or reacting.
 - Avoid being bossy or controlling.
 - Offer reassurance when required.
- **Watch your body language:**
 - Avoid taking a defensive posture.
 - Be aware of your body language.
 - Focus on the person.

- **Dealing with behaviour:**
 - Set good boundaries.
 - Be consistent.
 - Ignore behaviour if it is not harmful or hurtful to themselves or others.
 - Be calm.
- **Make sure your GP is involved is involved with the care:**
 - Having regular health assessments is important, especially as there may be several physical aspects involved.
 - A doctor can be especially helpful throughout the detoxification process and for treating any physical conditions that arise from the misuse of alcohol or substances
- **Contact your Local Dementia NZ affiliate for support.** The team at Dementia New Zealand are always happy to help with a listening ear and support.
- **Assist with daily routines** if required to mitigate feelings of anxiety, stress or inability to cope.
 - Work at building routines into daily activities such as household chores, washing and dressing, shopping, social activities and appointments.
 - Plan well ahead and allow plenty of time for discussions if required.
 - Help to set realistic goals and appropriate planning – especially factoring their condition into the situation.
- **Employ memory aids:**
 - Write lists
 - Use a diary, calendar, or white board
 - Set alarms as a reminder.
 - Use written reminders
 - Have set places where items belong.

Responding to hallucinations - hearing, seeing, smelling, and feeling things that are not there.

- Check the environment and make changes as necessary. e.g. if the lighting causes shadows that trigger a hallucination, change the lighting.
- Maintain routines so that there are not too many surprises.
- Be Truthful.
- Don't deny their experience – it is very real to them.
- If the hallucination is happy, it's OK to ignore it.
- If the hallucination is distressing the person may be agitated so exercise caution. Write down what happened so that you can discuss this with the doctor. It is helpful to be able to tell the doctor if here are any triggers, what the person is seeing and how they respond to that, also duration and frequency.
- Validate any feelings they may have about what they are experiencing.
- Offer reassurance.
- Divert to something else.

Responding to delusional thinking - Strongly held false beliefs that the person with dementia thinks are real. Paranoia is a type of delusion where the person feels that others are out to harm them in some way.

- It's not easy – but try not to take offence if you are accused of something that is false.
- It's not helpful to argue or try and convince the person.
- Listen to what is troubling them. Let them know that you care.
- Check things out whether the beliefs are true or false- don't just assume.
- Validate any feelings that are brought out due to the false thinking.
- Consider that the person with dementia may have confused the past with the present. It may have occurred in the past.
- Keep to a regular routine as much as possible.
- Look for the reason behind the delusion. E.g. Accusations that someone has stolen something are likely

- because they have lost it. Check that things haven't been misplaced. On that front – have regular places for things that get easily lost such as wallets & keys.
- Offer reassurance.
- Divert to another activity – move to a different room, go into the garden, or go for a walk.
- Turn off the TV if the programme is violent or upsetting.
- Explain to others that the delusional thinking is occurring because of their dementia.
- **Ensure good nutritional intake.**

Acknowledgements / Other Useful Websites

Alcohol.org.nz - Standard drinks and legal limits

[Alcohol-related brain damage \(ARBD\): what is it and who gets it? | Alzheimer's Society \(alzheimers.org.uk\)](http://Alzheimer's Society (alzheimers.org.uk))

[Alcohol & Drug Helpline \(alcoholdrughelp.org.nz\)](http://alcoholdrughelp.org.nz)

[Alcohol related brain impairment - Better Health Channel](#)

[Alcohol related brain damage - Dementia UK](#)

[Alcohol-related brain injury \(ARBI\) | Dementia Australia](#)

[Alcohol, tobacco and other drugs | Dementia Australia](#)

<https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/alcohol-related-brain-impairment>

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