

## National Council Certified Dementia Practitioners

### Overview: Alcohol-Related Brain Damage (ARBD) and Wernicke-Korsakoff Syndrome

#### Handout

Dementia tied to alcohol use disorder is categorized as alcohol-related dementia, or **ARBD**. Consuming large amounts of alcohol prevents neurons from regenerating, so they die. While it can begin in anyone who struggles with alcohol use disorder, this condition is becoming more common among middle-aged and older adults, since people ages 16-24 are drinking alcohol less and abusing different drugs instead. ARBD is more prevalent for middle-aged women, since alcohol affects women more strongly than men. This is due to differences in hormones, body fat composition, and height/weight ratio between genders. In spite of this, men still receive more diagnoses for ARBD than women, related to men drinking more alcohol than women throughout their lives, especially among elderly adults.

Like dementia, ARBD is still a somewhat broad term to describe alcohol induced brain damage that can affect a person later in life. A more specific condition, which is difficult to diagnose prior to death, is Wernicke-Korsakoff syndrome – a condition induced by thiamine (vitamin B1) deficiency. However, unlike Wernicke-Korsakoff, ARBD covers dementia that persists after the individual ends their dependence on alcohol.

The most prevalent form of alcohol-related dementia is a combination of two conditions: Wernicke's encephalopathy and Korsakoff's dementia. A person may develop one or the other of these conditions,

but they often occur together, as they are both caused by a thiamine (B1) deficiency. Alcohol prevents the body from properly processing this vitamin.

Korsakoff's dementia is the cluster of symptoms related to memory and cognitive difficulties. While Wernicke's encephalopathy causes stumbling, a loss of coordination, abnormal eye movements, and confusion due to a sudden lack of thiamine, Korsakoff's dementia is longer lasting. It may occur without Wernicke's encephalopathy being associated with it, although Wernicke's often occurs just before Korsakoff's. This form of dementia is characterized by gaps in long-term memory, confabulation to fill those gaps, and struggling to learn new information. It is possible for this form of dementia to clear up if a person stops drinking; however, it may become permanent, especially among people who are elderly who have struggled with alcohol use disorder for decades.