ALCOHOLIC'S CURSE: CAN'T QUIT AFTER "TWO DRINKS"
Medication Assisted Treatment to the Rescue

Understanding the Brain Science Behind the Can't Quit Compulsion and New, Effective Interventions

A simple definition of alcohol dependence is *our can't stop, can't quick* experience.

- Can't Stop: We intend to drink two drinks and end up drinking many more.
- Can't Quit: We swear off alcohol in the morning only to find ourselves drinking later in the evening:

The good news is that we now understand how the brain's reactions to alcohol leads to the *Can't Quit after two drinks* phenomena. And more importantly, how the medications Cyproheptadine and Prazosin help severe alcoholics significantly reduce their intake and improve their lives.

In this blog I am reporting on the brain science behind why alcoholics don't limit their drinking and the new medications now helping them do so. Ordinarily this would be breakthrough news welcome by all in the addiction field. Unfortunately, treatment centers and AA advocates promoting abstention as the only way to recover are both vocal and influential in opposing these medications.

- Accordingly, one purpose in explaining how these medications work is to counter anticipated opposition from these groups.
- A second is to emphasize the effectiveness of science proven approaches in combatting *can't quit/can't stop* compulsive behaviors.

As the Treatment Reform Movement gains momentum, lets spread the news that medication advances can really help our long-suffering heavy drinkers.

A. Why we can't stop at the proverbial "two drinks: Introducing the *Noradrenergic and Serotonergic brain Systems:*

The first bind we face as drinkers is going to the bar intending to stop at the proverbial "two drinks" only to find ourselves at beverage five or six and wondering if we are going to make it home. This loss of control over drinking is extremely frustrating as we try to figure out why we can't stop at our intended limit.

- Why? Why? WHY? I asked myself.

<u>Evidenced Based Brain Studies (and medication) to the rescue!!!</u>

A recent study reviewed by the Recovery Research Institute (RRI) explains the brain science behind this can't stop experience **and** two medications shown to substantially reduce alcohol use in heavy drinkers.

Testing a New Combination of Medications for Alcohol Use Disorder[1]

Yes, this is a WOW discovery for our chronic alcohol dependent population, but before we discuss medications, let's look at the answer to the why – Why I could not stop drinking when I wanted to!

Two Critical Brain Systems

- Noradrenergic: Fight or Flight - The Sympathetic Nervous System
- Serotonergic: Reward System – Mood, Sleep, Appetite and Social Behavior

Normally, these two systems work together to regulate mood, impulse control and stress responses. However, for people with alcohol use disorder, these two systems become less coordinated - "decoupled".

<u>The Decoupling Experience – Behavioral Sensitization (aka craving)</u>

Alcoholics are more sensitive than normal people regarding the effects of alcohol on their brains. As noted in the RRI study, this increased reactivity results in two distinct challenges:

First, during alcohol consumption continued drinking is driven by a subtle sense of discomfort comparable to thirst that compels individuals to seek relief usually through continued alcohol use.

Second, the ability to control impulsive behavior becomes impaired making it harder to make healthy decisions.

That's it in a "nutshell" – pick up a drink and we want to drink more at the same time our judgement's falling apart. The scientific explanation is that serotonin receptors and adrenalin receptors in our brain are activated by alcohol.

Recoupling the Flight/Fight and Reward systems Through Medications

The research question for heavy drinkers was whether medications known to bind to serotonin and adrenal receptors would reduce their drinking over a three-month period. The two drugs used are

- **Cyproheptadine** – an antihistamine for serotonin receptors, and
- **Prazosin** – used to treat hypertension and UTI's for adrenal receptors

Heavy drinkers meet the DMS-5 criteria for serve alcohol use disorder and high-risk drinking criteria. The idea was to see if these two drugs would essentially replace alcohol in receptors, thereby reducing cravings and impaired judgement and behaviors.

[1] https://www.recoveryanswers.org/research-post/testing-new-combination-medications-alcohol-use-disorder/

This would then begin to reunite the fight/flight and reward systems to reassert control over using.

End Result: Significant reduction in drinks per day and adverse incidents

- 42% of high dose group had a 2-level reduction in WHO risk level
- Most adverse events were mild, with no serious adverse events reported for the high dose group.

This is a big deal for anyone with a friend or relative drinking a quart plus per day with the accompanying verbal abuse and physical deterioration. For these drinkers, it is much easier to talk about cutting back to feel better versus quitting. And what about our detox centers – time to provide medications to repeat customers who routinely check in for a bed and a meal before going back out. Game Changer!

I say let's pursue what works to improve the health of individuals and decrease costs to society. For families, having a heavy drinker in the house is no fun and these medications seem to be effective. As is Ozempic, which anecdotally seems to reduce cravings and is not associated with weight gain accompanying the two drugs used in this research study[2]

Say Yes to Harm Reduction Strategies Like Medications

Cutting back on alcohol use to limit damage to self, family and society is a "harm reduction" strategy disliked by many people in AA. These are controversial because of the stigma associated with chronic alcoholics and the influence of abstinent only proponents.

- Of course, the idea is if people start to feel better by drinking less, they may be encouraged to consider how better they would feel by quitting altogether.

This is the treatment reform movement in action – how we can help our suffering friends and relatives feel better, with less depression and more compassion in understanding their trauma.

B. Can't Quit (Revisited)

The solution to the can't quit problem has been around ever since I read about the high success rates for the doctor/pilot program in a 1998 Hazelden Bulletin.[3] However, given the continued predominance of the traditional system, a reminder is in order as parents are still falling for the "tough love" approach that so harmful. So here it is:

[2] The Breakthrough Drug to Conquer Addiction: Ozempic?, Maia Szalavitz, NYT 10/27/24

[3] Airline Pilots Soar to Recovery, Voice Hazelden Winter 1998.

The second bind we alcoholics face when we wake up in the morning and swear off booze is we can't quit, even when determined to do so early in the day. Why? Physical dependence leads us back to the bottle as our body begins to crave alcohol. Same with emotional dependence and the feeling we can't live without our drink. By evening, we are looking for that bottle we threw away earlier in the day. This is the familiar Drink, Remorse, Crave, Seek cycle.

Physical dependence can be so acute, we often need to be detoxed in a clinical setting with medications given to prevent seizures. And we need to learn new ways of responding to emotions telling us we need that drink. This is one reason why a stay in a detox center or in-patient treatment is valuable in addressing our *can't quit* experience. In a protective setting, we reduce our physical dependence and stabilize our immediate urges to drink using cognitive behavioral and similar therapeutic approaches

Once through the acute phase, we, along with our family members, work with trained professionals to identify and address the underlying drivers of addiction to avoid relapse. We also adopt the evidence-based protocols of the very successful Physicians and Pilots recovery programs as we learn to manage life without alcohol. Their programs use contingency management, drug testing, support agreements, and positive reinforcement to encourage on-going commitment to recovery.[4]

The above is an admittedly superficial summary of my experience with the *can't quit* - problem, evidence-based practices and helping clients achieve long term recovery.

- What is new are the medications addressing the *Can't Stop at Two Drinks* problem.

Having experienced the immense frustration and shame over my inability to control my drinking, I find it fascinating (and relieving) to gain insight into how my brain responded to that first drink. And how we can help people with severe use disorders who are not ready to stop but may be willing to cut back.

William Messinger

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[4] *The New Paradigm for Recovery. Making Recovery – and Not Relapse – the Expected Outcome of Addiction Treatment* **Institute for Behavior and Health, March** 2014