

Differential Diagnosis: Dependence vs. Abuse

Let's revisit our old question in alcohol treatment: is this truly Alcoholism? Is it Dependence? Is it alcohol Abuse? Is it just heavy drinking?

A useful diagnosis must be: clinically relevant, be reliable, predict course, have a biological basis, and implicate treatment. In this issue, we will examine the DSM-IV definition of Dependence as well as the ASAM definition, plus the DSM-IV definition of Abuse. In the DSM-IV, there are 7 Dependence and 4 Abuse items that cluster separately. Some tips to remember: Abuse does not always become Dependence. 70-80% with Dependence continue to have serious problems and 50-60% with Abuse, continue to have problems (in large part because of a return to active drinking/ or to alcoholic mental states, and incomplete treatment attempts). The course of illness is predictable and all items are reliable.

7 DSM-IV items for defining Dependence:

- Tolerance*;
- Withdrawal* (*= associated with physiological dependence, as compared with only psychological dependence);
- larger amounts and/or longer periods of drinking than intended;
- inability to or persistent desire to cut down or control drinking behavior;
- a great amount of time spent obtaining, using or recovering;
- important activities given up or reduced;
- use despite problems caused or exacerbated by use.

ASAM: The ASAM approach is less a medical diagnosis than a working framework for understanding the plight of the alcoholic, especially in recovery. The key element here is "loss of control". The underlying mechanism is thought of as a change in the brain (chemistry and function). Without active treatment, the alcoholic is seen as continuing in a chronic and life-long disorder, with a progressive nature (eg. it worsens over time). The patient is always "in recovery" (ie. recovering). And since some brain changes persist, it is seen as a chronic relapsing condition. The first step in recovery is to acknowledge ("admit") their powerlessness over alcohol.

Some of the hallmarks of the physiological adaptation of Dependence are: Marked Tolerance- where increased amounts of alcohol are needed to achieve intoxication; there is a markedly diminished effect with continued use of the same amount of alcohol.

Withdrawal- symptoms are the opposite of sedation and reflect autonomic nervous system hyperactivity, involving primarily GABA and Glutamate receptors, among others. And alcohol is frequently used to relieve or avoid withdrawal symptoms.

DSM-IV definition of Abuse: 4 items:

- Failure to fulfill major role obligations
- Use of alcohol in hazardous situations
- Legal problems
- Use of alcohol despite problems

Human use of alcohol (chemical= ethanol) produces a great deal of confusion because of its many different effects on all parts of the brain, on the many known neurotransmitter receptors and on the release of neurotransmitters in the brain and other parts of the body. There are also different effects at high dose vs. low dose and also with chronic use vs. occasional use.

Some brief examples of mechanisms of action: Activation (noradrenaline); euphoria (dopamine); ataxia (GABA); sedation/ amnesia (NMDA); nausea (serotonin); withdrawal (calcium ion channels). The most common organ damage is in brain and nervous system, GI and liver, vascular and immune systems. Psychiatric disorders and increased rate of suicide are additional complications.

Did you happen to see the article in the Boston Globe, Tuesday, April 19, 2005, about moderate drinking? (by Daniel Yee) We are reproducing the article intact; because "moderate drinking" is such an important and misunderstood topic, we'll examine it in greater detail in a future issue of "FAX-Sheet".

"The government today warned that a few drinks a day may not protect against strokes and heart attacks after all. Some studies in recent years have touted the health benefits of moderate drinking, with a portion of them indicating that up to four drinks a day can significantly reduce the risk of heart disease in people 40 and older.

But researchers at the Centers for Disease Control and Prevention analyzed data from 250,000 Americans who participated in a 2003 telephone survey. They found that the nondrinkers had many more risks for heart disease- such as being overweight, inactive, high blood pressure and diabetes- than the moderate drinkers. Based on those results, the agency could not say that moderate drinking was a factor in reducing the risk of heart disease. The findings were published in the May issue of the American Journal of Preventive Medicine.

'We're feeling the pendulum has swung way too far and Americans are getting sort of the wrong idea' on alcohol, said the study's lead author, Dr. Tim Naimi of the CDC's chronic disease division. 'The science around moderate drinking is very murky.'

Moderate drinkers tended to be in better health, better educated, wealthier, and more active than their nondrinking counterparts, and that probably influenced their lower risk of heart disease, the study said.

'It appears that moderate drinkers have many social and lifestyle characteristics that favor their survival over nondrinkers and few of these differences are likely due to alcohol consumption itself,' the study said.

The CDC has long worried about alcohol abuse in the United States.

Studies have shown that drinking excessively- five or more drinks daily- can increase the risk of heart disease. The CDC says that nearly 1 in 3 Americans drinks too much.

The agency said Americans should follow dietary guidelines that limit daily consumption to two drinks for men and a single drink for women.

Other groups, such as the American Heart Association, say drinking alcohol increase the dangers of alcoholism, high blood pressure, obesity, stroke, breast cancer, suicide and accidents.

Dr. Daniel Fisher, a cardiologist with New York University Medical Center, said the CDC's findings should also be treated with caution because the average person interviewed in the phone-based study may not be forthcoming about their alcohol consumption.

He added that a clinical trial is needed to determine whether alcohol drinking provides health benefits.

Alcohol is the nation's third leading cause of death, killing 75,00 Americans each year through related injuries or diseases, the CDC says."