Efficacy of Drug Treatment for Addiction

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How Effective Is the Drug Therapy for Addictions?

The answer is: it depends on the addiction. Let's take a look at drug therapy for addiction.

1. Drug addictions

A. Opioids

An estimated 15.3 million people aged 15 to 64 used illicit opioids. Opiate dependence involves addiction to opiate drugs such as heroin, opium and other opioids. Based on a review of scientific studies published in “Advances in Psychiatric Treatment,” methadone maintenance is effective for treating opiate addiction and drugs that are less effective but still helpful are lofexidine and naltrexone. Methadone prevents withdrawal symptoms in those addicted to opiates and more; it helps reduce the use of the drug that caused the addiction, criminality and viral infections (from sharing needles), less risk to get HIV infection as well as improvement in general health and social status.

B. Cannabis

Cannabis is the most common illicit drug used by an estimated 146.2 million users worldwide.

Medications used for cannabis addiction include bupropion (also used for smoking cessation), Divalproex, nefazodone, lofexidine, and dronabinol. Dronabinol is the most effective since it is a synthetic preparation of THC, the key component in cannabis. Used only for 6 days, dronabinol showed significant benefits in reducing cannabis craving, anxiety, misery, chills, self-reported sleep disturbances, anorexia and the weight loss associated with cannabis withdrawal, indicates a 2009 study published in “CNS drugs.”

C. Stimulant drugs

Stimulant drugs are used by 29.6 million people worldwide and in this class of drugs, we have illicit drugs such as amphetamine, cocaine and ecstasy. Common drugs used for this type of addiction include dexamphetamine, bupropion, methylphenidate and modafinil. Unfortunately, a review of scientific literature published in 2013 by the Cochrane Database shows no benefit; prescription drugs were not found more effective than placebos for stimulant drug addictions.

D. Cigarette/nicotine addiction

The most effective medications for smoking cessation include nicotine replacement, bupropion, and varenicline.

A Meta-analysis published in 2003 in BMJ of over 100 randomized trials indicates that nicotine replacement therapy approximately doubles long-term smoking cessation rates.

Bupropion SR treatment also showed efficacy in the prevention of relapse to smoking in those patients who have successfully quit, and re-treatment is effective in smokers who start smoking again after a previous course of bupropion SR. This drug also relieves the symptoms of craving and nicotine withdrawal, and decreases the weight gain that often occurs after smoking cessation, indicates a 2002 study featured in “Drugs.”

The newest drug used for smoking cessation is varenicline, and it appears to work even better than bupropion and nicotine replacement when used long-term, as suggested by a 2009 study from “Clinical Therapeutics”.

2. Alcohol addiction

Naltrexone reduces the risk of heavy drinking to 83% compared with placebo, as reported by the authors of a meta-analysis from the Cochrane Database (2010). A second therapeutic option would be Acamprosate, which also decreases the drinking relapse rate and the duration of abstinence. However, it appears to not work in heaving drinkers.

Disulfiram was commonly prescribed in the past for alcohol addiction. However, current studies are mixed and do not support its efficacy and its side effects lead to treatment non-compliance.

In conclusion: prescription drugs are quite effective for treating alcohol and nicotine addictions. For illicit drugs, they are also helpful for marijuana and opiate drugs while those addicted to stimulant drugs don’t get much benefit from pharmacotherapy.