THE CARLAT REPORT
ADDICTION TREATMENT

A CE/CME Publication

CURRENT COVERAGE OF TOPICS IN ADDICTION MEDICINE

Daniel Carlat, MD
Editor-in-Chief

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IN THIS ISSUE

Focus of the Month:
Integrating Therapy and Medications for Alcoholism

Learning objectives for this issue:
1. Describe the medications that are used to treat alcoholism.
2. Summarize some of the ways that positive psychology techniques can be used to help treat people with addictions.
3. Evaluate some of the current research regarding addiction.

Pharmacotherapy for Alcohol Dependence

Chances are good that we undermedicate alcoholics. According to one estimate, only 10% of alcoholics receive medications as part of their treatment (Jonas DE et al, *JAMA* 2014;311(18):1889–1900). That's too bad, because these medications work.

In the interview in this issue, we learn from Amy R. Krentzman, MSW, PhD, about techniques from positive psychology that may help treat addiction (see "Using Positive Psychology to Help People with Addictions" below), and in prior issues of *CATR* we have covered Alcoholics Anonymous,

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Summary

- Despite the evidence that medications work, about 90% of alcoholics don't receive them as part of their treatment.
- FDA-approved meds include naltrexone, acamprosate, and disulfiram.
- Good off-label options include topiramate, gabapentin, and baclofen.

Q&A With the Expert

Using Positive Psychology to Help People with Addictions

Amy R. Krentzman, MSW, PhD

Assistant Professor, University of Minnesota School of Social Work
St. Paul, MN

Dr. Krentzman has disclosed that she has no relevant financial or other interests in any commercial companies pertaining to this educational activity.

CATR: Dr. Krentzman, you are a pioneer in the relatively new effort to apply the findings of positive psychology to addiction treatment. Why did you get interested in this topic?

Dr. Krentzman: I had been doing research on spirituality and recovery, and as I read more about positive psychology there seemed to be implications for helping people with addictions. Both substance abuse counselors and patients in treatment have told me the same thing: when people are in treatment their thinking is dominated by negative thoughts, and their mood state is dominated by negative mood. Negative mood tends to drive people to drink—even people who do not have an alcohol disorder. So working with the techniques of positive psychology seemed like a natural potential treatment.

CATR: Positive psychology has been around for a while now—I'm surprised that it hadn't been applied to addictions.

Dr. Krentzman: Yes, it is surprising. Much of the positive psychology research has been on healthy people—for example, those who have read psychologist Martin Seligman's books and have gone to his website and participated in web-based research studies (Positive Psychology Center at the University of Pennsylvania, http://bit.ly/1HxEre3). There has also been some research on positive psychology in depression, and randomized controlled trials have shown that if people do these exercises

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motivational interviewing, and other non-drug approaches. In this article, we focus strictly on medications that appear to be effective, both those approved by the US Food and Drug Administration (FDA) and those that are commonly used off-label.

How do we define an effective medication for alcohol dependence? While complete abstinence is often the goal, many studies are more realistic and settle for decreasing the frequency of heavy drinking (defined as more than five drinks per day for men and four for women) (Dawson DA, *J Subst Abuse* 2000;12(1–2):79–91).

Every doctor has his or her own approach to using these meds. Some swear by Antabuse—others find it nearly useless. Some prescribe Vivitrol, while others prefer the oral version of naltrexone. And there are many acamprosate lovers out there as well. We'll go through the evidence so that you can fine-tune your own personal prescribing algorithm.

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FDA-Approved Medications:

Naltrexone

Naltrexone (ReVia, Vivitrol) is an opioid blocker, but oddly it is much more effective as a treatment for alcoholism than for narcotic abuse. In fact, you should consider it a first-line option for most patients. It's safe to take if the patient is still drinking (unlike Antabuse) but it should be avoided in people with liver disease or those taking opioids. Several meta-analyses have reported that naltrexone decreases any drinking, but also heavy drinking, more than placebo (Jonas DE et al, *op.cit*; Rosner S et al, *Cochrane Database Syst Rev* 2010;(12):CD001867). The Cochrane meta-analysis included 50 randomized studies with almost 7,800 patients with alcohol dependence and found the risk of heavy drinking was decreased by 83% compared to the placebo patients. The dose most often used is 50 mg/day but some trials have used 100 mg/day.

Patients taking naltrexone will most often complain about nausea, headache, and dizziness but these tend to go away after continued treatment. Liver enzymes were elevated by five-fold in about 1.8% of naltrexone patients in one study, but returned to normal after it was discontinued; so checking liver enzymes should be part of the treatment with naltrexone.

For patients who have trouble sticking with their meds, a monthly injectable form of naltrexone (Vivitrol) can be an option. It's not clear whether the injectable form is as effective as the oral since they haven't been compared head-to-head. A large study with the intramuscular (IM) form showed a 25% decrease in heavy drinking compared to placebo, a less robust difference than seen with the oral formation (Garbutt JC et al, *JAMA* 2005;293(13):1617–1625). It's usually given as a 380 mg IM to the gluteal muscles every four weeks. Patients may still have nausea with the IM version and some patients may also have injection site reactions, some of them serious (eg, induration, cellulitis, hematoma, abscess, necrosis).

Acamprosate

Acamprosate (Campral) is a good option for patients with liver failure, acute hepatitis, or liver enzymes that are elevated more than three to five times normal levels. Its efficacy evidence is a bit mixed and the research suggests that it may be a better choice for patients who are already abstinent, in order to maintain sobriety by reducing craving.

One meta-analysis of acamprosate treatment combined nearly 7,000 patients from 24 trials and found that the drug reduced relapse rates vs. placebo. In a population of alcohol-dependent patients, acamprosate would be expected to prevent drinking after detox in one out of nine patients who would otherwise have relapsed (Rosner S et al, *Cochrane Database Syst Rev* 2010;(9):CD004332). Another meta-analysis of more than 4,000 patients from 17 European studies found that six-month abstinence rates were significantly higher with acamprosate than with placebo—36% vs. 23% (Mann K et al, *Alcohol Clin Exp Res* 2004;28(1):51–63). On the other hand, three studies from the US and Australia found no benefit of acamprosate over placebo in abstinence rates or time to relapse. One of these, the COMBINE study, compared both acamprosate and naltrexone to placebo and found acamprosate was no better than placebo while naltrexone was significantly better (Anton RF et al, *JAMA* 2006;295(17):2003–2017).

It's likely that differences in studies and patients contributed at least in part to these conflicting findings but, for now, acamprosate can be thought of as an effective option for some patients, particularly those who can't take naltrexone because of liver issues. It's a bit less convenient than the once daily naltrexone because it's taken three times a day in doses of 666 mg each. It's pretty well tolerated, with diarrhea and fatigue, as the most common complaints.

Disulfiram

Disulfiram (Antabuse) is really only for those who are highly motivated to

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maintain abstinence, have good medication adherence, or will be taking it in a supervised way. It inhibits aldehyde dehydrogenase, which is the enzyme needed to break down alcohol's main metabolite, acetaldehyde. Drinking while taking disulfiram will cause unpleasant effects such as sweating, headache, flushing, shortness of breath, a drop in blood pressure, racing heart, nausea, and vomiting. The patient knows there may be severe and potentially serious effects so this hopefully motivates them to not drink. How well does it work?

There are fewer studies, but a recent meta-analysis of two trials with almost 500 patients found that disulfiram was no better than placebo on any measure of drinking or relapse (Jonas DE et al, *op. cit*). Another large, year-long study of 605 US veterans also found it to be no better than placebo for abstinence or time to relapse, but it did reduce drinking days in those who did drink (Fuller RK et al, *JAMA* 1986;256(11):1449–1455).

These poor results may have to do with subjects' poor compliance with disulfiram. When patients' use of the drug is supervised, they do better. For example, one such study compared naltrexone, acamprosate, and disulfiram, combined with psychological interventions, over 52 weeks in 243 patients in Finland. Unlike many studies, the disulfiram patients in this study were required to give the name of a person responsible for supervising them when they take their medicine (Laaksonen E et al, *Alcohol Alcohol* 2008;43(1):53–61). Disulfiram fared better than both naltrexone and acamprosate in the first 12 weeks on all outcome measures—time to first drink, number of heavy drinking days, average weekly alcohol consumed, and number of abstinent days. For the rest of the year-long study, the other two drugs caught up with disulfiram on all outcome measures except number of abstinent days, for which disulfiram was the ultimate winner.

When starting disulfiram, patients must have not had a drink for at least 12 hours. The usual dose is 250 mg/day. Some patients may tell you they had a drink on this dose without feeling any part of the "Antabuse reaction." In these patients, you should titrate the dose up to 500 mg/day. Side effects are generally mild with headache, drowsiness, or fatigue most common. An important thing to tell patients is that they could have the "Antabuse reaction" with hidden forms of ethanol (eg, mouthwash, cold medicines, aftershave, or perfume, etc.) and that the reaction may still occur up to 14 days after stopping disulfiram.

Non-FDA Approved Options:

Topiramate

Topiramate (Topamax), an anticonvulsant, is commonly used off-label for alcoholism, and with good reason. All four placebo-controlled studies reported a significant decrease in alcohol use with topiramate compared to placebo. In one 14-week study, for example, the percent of heavy drinking days was 44% in topiramate patients compared to 52% in placebo patients (Johnson BA et al, *JAMA* 2007;298(14):1641–1651). The topiramate group also did better on abstinent days, number of drinks per day, and plasma gamma glutamyl transferase (GGT), a marker for alcohol intake. There have also been three studies comparing naltrexone to topiramate suggesting topiramate is as effective as naltrexone—unfortunately, the studies were small, only 12 weeks long and two were not controlled.

The dose of topiramate used in most studies was about 200 mg/day (divided twice a day) and side effects were considerable, especially at higher doses. The most common were cognitive impairment (eg, word-finding difficulties), numbness or tingling, weight loss, headache, fatigue, dizziness, and depression. Titrating the dose slowly and using the lowest effective dose might help patients tolerate this drug better.

Baclofen, Gabapentin and SSRIs

Baclofen (Lioresal), a muscle relaxant, at 30 mg/day has shown mixed efficacy compared to placebo. In two studies with a total of 123 patients, it showed higher rates of abstinence but in a third study of 80 patients, it was no better than placebo on any measure (Muzyk AJ et al, *CNS Drugs* 2012;26(1):69–78). Some have suggested a higher dose of 60 mg/day may be more effective but this needs to be studied and such high doses might lead to baclofen abuse.

There have been a few studies suggesting decreased drinking with 900 mg–1800 mg/day of gabapentin (Neurontin), an anticonvulsant, but the studies weren't rigorously designed and had small numbers of patients, so it's hard to make any comparisons with other options (Furieri FA & Nakamura-Palacios EM, *J Clin Psychiatry* 2007;68(11):1691–1700).

A meta-analysis of seven studies using selective serotonin reuptake inhibitors (SSRIs) didn't find them to be effective in alcohol dependence unless patients also had a co-occurring depression, in which case patients did drink less overall (Nunes EV & Levin FR, *JAMA* 2004;291(15):1887–1896).

DR. CARLAT'S VERDICT: Naltrexone is likely the most effective medication for most patients, but there are several other options.

Medication Options for Alcohol Dependence

Generic name (Brand name)	Usual daily dose
FDA Approved	
Acamprosate (Campral)	666 mg TID
Disulfiram (Antabuse)	250–500 mg QPM
Naltrexone (ReVia)	50 mg QD
Naltrexone (Vivitrol)	380 mg intramuscular (IM) Q 4 weeks
Non-FDA Approved	
Baclofen (Lioresal)	10 mg TID
Gabapentin (Neurontin)	300–600 mg TID
Topiramate (Topamax)	100 mg BID

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they experience decreases in depression and increases in positive mood or measures of happiness (Bolier L et al, *BMC Public Health* 2013;13(1):119–139; Sin NL & Lyubomirksy S, *J Clin Psychol* 2009;65(5);467–487). I was intrigued by the techniques, and did a literature review on the topic and I found there had been very little work done in applying positive psychology to addiction (Krentzman AR, *Psychol Addict Behav* 2013;27(1):151–165).

CATR: So how did you proceed in studying the topic further?

Dr. Krentzman: I decided that a good next step was to explore what substance abuse counselors in the field think of the interventions from positive psychology and to what degree they are already using them. In a qualitative study, I interviewed nine substance abuse counselors about their use of a half dozen positive psychology interventions from the research literature. In most cases they were already doing a version of the positive psychology intervention, though they didn't identify it as such.

CATR: What kinds of interventions are we talking about?

Dr. Krentzman: One is a set of interventions around gratitude, such as making a gratitude list, which is simply a list of things the person feels grateful for. A related intervention is the "Gratitude Letter." You think of someone in your life who has done something significant for you: they've gone out of their way for you and believed in you, and you actually compose a letter thanking them. In an optional step, you find that person and you read the letter to them.

Patients said that the gratitude exercise specifically helped them reaffirm the importance of sobriety.

Amy R. Krentzman, MSW, PhD

CATR: Are there exercises that focus on other elements besides gratitude?

Dr. Krentzman: Yes. Another positive psychology intervention is "You at Your Best." You think about a time in the past when you were functioning optimally; when you were really at your best and then talk about that time. What was it like then? What was going on? What strengths did you have at that time and can those strengths be used now to face what you are currently facing? Another is "Acts of Kindness," where a person performs five acts of kindness for others over the week.

CATR: What sorts of acts of kindness do patients do and how does this lead to improvement in their mental state?

Dr. Krentzman: The counselors I interviewed said they recommended their clients volunteer in the detox unit of their facility. It maps to the idea in Twelve Step programs of doing service, such as making coffee, setting up the chairs, leading the meeting, or helping another alcoholic. This leads to a shift away from perseverating on your own thoughts and problems and you replace that with thoughts of someone else. This helps people realize that they have the ability to make someone happy. They have it within themselves to lighten someone else's burden, and that can be a very powerful message to someone in addiction treatment who is used to hearing over and over again how much they've been a disappointment to everyone else and how they are a source of pain and suffering for everyone in their family. But here they are learning, "I can do something and I can actually bring something positive," and that cultivates a sense of improved self-esteem as well as teaching them that, "Hey this is something I can do: if I feel bad I can do some service. I can go into the detox, help other people, and that changes my mood; that makes me feel better. That is a skill that I can employ when I don't feel well."

CATR: These sound like great, easy-to-use techniques that we can offer our patients. What else?

Dr. Krentzman: Another exercise is "Best Future Self," a related technique used in motivational interviewing and solution-focused therapy. The idea is to imagine your ideal self; imagine yourself in the future. What is the future that you wish for yourself? How would you like to be ideally? Paint a picture of what that looks like. Then the person starts to imagine it and think about it and feel more positive about the future. It can help with goal setting because it can be broken down into real concrete steps.

CATR: So you found that addiction counselors were already using many of these techniques?

Dr. Krentzman: Yes, and then I asked them what they believed were the operative principles of the techniques—that is, why did they think these techniques led to clinical improvement in their patients?

CATR: What did they come up with?

Dr. Krentzman: There were several therapeutic pathways that they identified, and I broke them down into six essential principles:

1. *Increasing hope and optimism.* Counselors really thought that helping clients feel more hopeful about the future was very important and something that needed to be done right away.
2. *Improving relationships.* Exercises such as doing acts of kindness toward family members or writing the gratitude letter can improve relationships.
3. *Elevating self-esteem.* Identifying their strengths and thinking of a time in the past when they had been functioning better, can bring to mind the idea that this could happen again for them.
4. *Increasing confidence in their ability to solve problems and work toward goals.* Doing acts of kindness helps people understand that they are capable of helping others and bringing something positive to other people.

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News of Note

How Deadly is Alcohol Poisoning? Very.

Drinking too much alcohol in a short period of time is proving deadly for many Americans.

In a report released in January, the US Centers for Disease Control and Prevention (CDC) said alcohol poisoning kills six people in the US each day. And perhaps surprisingly, most deaths are occurring among middle-aged adults.

Alcohol poisoning is caused by drinking large quantities of alcohol in a short period—otherwise known as binge drinking. Death occurs because high levels of alcohol in the body can shutdown critical areas of the brain that control breathing, heart rate, and body temperature.

According to the CDC Vital Signs report, more than 2,200 people died from alcohol poisoning each year in the US from 2010 to 2012, (http://1.usa.gov/1xOz4ad). While it can occur at any age, three in four alcohol poisoning deaths involve adults ages 35 to 64, with most deaths among men (about 76%) and non-Hispanic whites. The study was reported in the CDC's January 9 *Morbidity and Mortality Weekly Report.*

More than 38 million adults in the US report binge drinking an average of four times per month and consume an average of eight drinks per episode. Binge drinking is defined as consuming four or more drinks for women and five or more drinks for men during a single occasion. The more people drink, the greater risk of death, the CDC said. Binge drinking at high intensity can exceed the body's physiologic capacity to process alcohol, so the blood alcohol concentration rises.

Signs and symptoms of alcohol intoxication are progressive, but can lead to a reduced level of consciousness and cognitive function, resulting in coma and death.

CDC scientists analyzed deaths reported from alcohol poisoning among people aged 15 years and older, using data from the National Vital Statistics System for 2010 to 2012. They found a link with alcohol dependence (alcoholism), which was identified as a contributing factor in 30% of the deaths. Combining drinking with other drugs was also a risk factor in about 3% of the deaths.

The CDC said the study reveals alcohol poisoning deaths are a bigger problem than previously thought, but is still likely to be an underestimate. The study reveals these deaths are not just a problem among young people and points to the need to reduce binge drinking, said co-author Robert Brewer, MD, MSPH.

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Expert Interview

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5. *Moving away from black-and-white thinking.* Gratitude exercises help people move away from black-and-white thinking and realize that even though things are challenging right now, there are still some good things going on. It helps them get out of that downward spiral of thinking everything is terrible.
6. *The interventions are substitutes for drinking and drug use.* Positive psychology-type of interventions can suggest ways to spend time other than drinking and using drugs.

CATR: This sounds like a very useful exploratory study. You then went on to test one of these interventions in a clinical sample.

Dr. Krentzman: Yes, I did a pilot study testing a gratitude intervention, using an exercise called "The Three Good Things Exercise," which was created by Martin Seligman. The idea is that at the end of the day you look back and identify three good things that happened, and for each good thing that happened you think about why it happened (Krentzman AR, *J Posit Psychol* 2015;10(4)).

CATR: How was the study conducted?

Dr. Krentzman: We recruited 22 people with primary alcohol addiction who were in an outpatient treatment program, and were in various stages of recovery—it could have been two weeks or four years since their last drink. They were randomly assigned to either doing the daily three good things exercise for 14 days or answering a set of six placebo questions daily related to sleep hygiene.

CATR: What were the results?

Dr. Krentzman: Over time the people in the gratitude condition experienced decreases in negative mood. We also tested two forms of positive mood: activated and unactivated. Activated positive mood is feeling excited, energetic, stimulated. An unactivated positive mood is feeling calm, at ease, and serene. People in the gratitude group had increases in unactivated positive mood, so they felt more calm and serene over time, but there was no difference or change in activated positive mood—feeling excited and stimulated—over time. The placebo group did not show any changes. This was a small sample, but the results suggest something interesting is going on here. It is worth repeating the study with a larger sample.

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Research Updates

CANNABIS

High Potency Cannabis Increases Risk of First Episode Psychosis

A recent study out of London found that users of high potency cannabis (also known as "skunk" weed) are three times more likely to experience a psychotic episode than those who never use cannabis; and those who use it daily are at a fivefold increased risk.

This finding is clinically important for psychiatrists for two reasons—the potency of cannabis has been increasing consistently over the years and patients have much easier access to cannabis products now due to its legalization in some states.

This was a case control study where the researchers compared 410 adults, who had experienced a first episode of psychosis between 2005 and 2011, to 370 people from the same area of south London who had never had psychosis. The controls were matched so that ethnicity, education, and employment status were similar in both groups. There were significantly more cigarette smokers in the group with psychosis, but the groups were otherwise similar in terms of lifetime history of other substance abuse, including how much alcohol they drank. The researchers collected information about cannabis use from everyone in both groups—lifetime history of use, how often they used, and what type they most often used.

Both groups had similar rates of having ever used cannabis (about two-thirds in both groups had). The people who mostly used low potency cannabis (traditional "hash"), whether occasionally, on weekends, or daily, had a similar risk of psychosis as those who never used cannabis. However, those who mostly used high potency cannabis ("skunk") were about twice as likely to experience psychosis if they used it less than once weekly, almost three times as likely if they used it on weekends, and more than five times as likely if they used it every day. In general, high potency cannabis contains a concentration of tetrahydrocannabinol (THC) greater than 15%. Those who started using before the age of 15 had a significantly increased risk (by about 1.5 times) of psychotic episode compared to those who never used (DiForti M et al, *Lancet Psychiatry* 2015;2(3):233–238).

CATR's Take: Using high potency cannabis increases the risk of having a first episode psychosis compared to using low potency cannabis. People who use it every day face an even greater risk. This reminds us that we should not only be asking patients if they use marijuana, but what type and how often.

Expert Interview

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CATR: In addition to testing quantitative outcomes such as ratings of mood, you had a qualitative part of the study in which you interviewed participants about how they benefited from the exercise. What did they say?

Dr. Krentzman: People reported improvements in mood and also reported that their thoughts were more positive. They also said that the gratitude exercise specifically helped them reaffirm the importance of sobriety. The reason for this was that when they asked themselves why the three good things happened, the answer was often, "Because I am sober."

CATR: Did these positive effects last longer than the two weeks while they were doing the exercises?

Dr. Krentzman: Unfortunately, we found that the good effects that we saw in those two weeks disappeared by the six-week follow-up, and that most people were not doing the exercise any more. So this is another really important finding from the study: when people had positive reinforcement for doing it every day, they experienced benefit as a result. But when the study ended, they stopped doing the exercise. This is true in the positive psychology literature in general: that the people who get the long-term benefits do these exercises more often and work harder at it.

CATR: So we should encourage patients to be consistent about it?

Dr. Krentzman: Yes, in order to get the benefit it is important to do it consistently. It would be helpful to weave in some kind of positive reinforcement for doing it on a regular basis. For example, we could have the client call up and leave their three good things onto a voice mail or use a web-based app. What I think made a difference for these people is that they knew we were going to read what they put in. One person even said, "I knew you'd be reading it; I knew you'd be paying attention so I tried harder than I normally would. I wrote more. I was more descriptive and that made a difference."

CATR: What were the main types of things that the participants felt grateful for?

Dr. Krentzman: The largest category was family and friends. For example, their sister had a baby or their spouse got a promotion at work. The second category was doing something for themselves; in other words engaging in activities that one finds relaxing, fulfilling, and/or fun. Maybe it was that their favorite sports team won or they got to participate in a hobby that they really love and enjoy. The next category was career and providing for oneself. They were glad to have a job or have a roof over their head. And the fourth most popular category was recovery itself. The good thing that happened was related in some way to recovery, such as

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CE/CME Post-Test

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Below are the questions for this month's CE/CME post-test. This page is intended as a study guide. Please complete the test online at www.carlataddictiontreatment.com. Note: Learning objectives are listed on page 1.

1. How many medications have been approved by the US Food and Drug Administration (FDA) for the treatment of alcoholism (Learning Objective #1)?
   - [ ] a) One
   - [ ] b) Two
   - [ ] c) Three
   - [ ] d) Four

2. Which of the following medications can result in severe and potentially serious side effects if someone taking it consumes alcohol (LO #1)?
   - [ ] a) Naltrexone (ReVia, Vivitrol)
   - [ ] b) Acamprosate (Campral)
   - [ ] c) Topiramate (Topamax)
   - [ ] d) Disulfiram (Antabuse)

3. When addiction counselors were interviewed about their use of positive psychology techniques, which of the following was true (LO #2)?
   - [ ] a) Most were unaware of positive psychology techniques
   - [ ] b) Only two counselors used one of the techniques
   - [ ] c) The counselors did not find the techniques helpful
   - [ ] d) Most were already using many of the techniques in treating patients

4. A pilot study testing a gratitude intervention where patients recovering from alcohol addiction described "three good things" each day, found which of the following was true (LO #2)?
   - [ ] a) Patients who participated in the gratitude exercise had no change in mood compared to those in a placebo group
   - [ ] b) Patients who participated in the gratitude exercise experienced decreases in negative mood compared to those in a placebo group
   - [ ] c) Patients who participated in the gratitude exercise continued to experience positive mood at a six-week follow-up
   - [ ] d) Participants said the gratitude exercise did not help reaffirm the importance of sobriety

5. A London study found which of the following is true about the use of high potency cannabis, also known as "skunk" weed (LO #3)?
   - [ ] a) Users of high potency cannabis are three times more likely to experience a psychotic episode than those who never use cannabis
   - [ ] b) The risk of a psychotic episode was no different if patients used high or low potency cannabis
   - [ ] c) The risk of a psychotic episode was no greater if patients used high potency cannabis daily
   - [ ] d) Users of high potency cannabis are less likely to experience a psychotic episode than those who never use cannabis

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Integrating Therapy and Medications for Alcoholism

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helping someone else with recovery, learning something about recovery, receiving support for recovery, or continuing on in recovery.

CATR: You are still completing your analysis of the data, but what would you recommend to clinicians?

Dr. Krentzman: The theme that emerged from these studies is that clients in treatment are really burdened by negative thoughts and feelings. I'm reminded of one person who said, "I've never done anything like this before. I am not used to sitting down and thinking about what happened today that was good." On some days, some of those in the study could not think of three good things. My hunch is that the key piece of coaching is to help people to appreciate small things that they normally would take for granted. For example, the nice weather, the presence of family members, or having shelter, a job, or a good meal.

CATR: Thank you, Dr. Krentzman.

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