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## RESPONSE: AN INSIDIOUS DEPENDENCE

Dana Mackin, M.A.; Christopher Martin, M.D.; and Jill K. McGavin, Ph.D.

*Jill McGavin:* What struck me most in the article (Budney et al., 2007) was the reference to the rise in treatment admissions for primary marijuana dependence in the last 10 years. An increase from 7 to 16 percent of treatment admissions is dramatic. It makes me wonder what the next 10 or 15 years will bring. I'm anxious to go back and review the numbers in our treatment admissions for the past couple of years to see if we've already started a shift that has gone undetected.

*Dana Mackin:* I was relieved to see that Dr. Budney and his coauthors addressed the uniqueness of marijuana addiction. When I first started reading their article, I was resistant to the idea that marijuana causes dependence, because when we think of addiction we think of the extreme and striking consequences of methamphetamine or alcohol abuse. On the other hand, we see the occasional person who has no problem dropping alcohol or methamphetamine, but cannot stop smoking pot.

*McGavin:* Marijuana dependence is usually a co-occurring addiction and usually not

the more dramatic one. I work primarily with veterans. On average, they are in their 50s. About a third are primarily alcohol-dependent, a third primarily cocaine-dependent, and a third primarily heroin- or opioid-dependent. In only a few cases is marijuana a primary dependency.

*Christopher Martin:* My experience is similar. However, I do see a fair number of patients for whom marijuana abuse is a primary issue. Many of them are young adults who are involved in daily cannabis abuse and are not functioning well. They haven't moved out of their parents' homes and are spending a lot of their time alone, playing video games and sitting around the house.

*Mackin:* Marijuana dependence is definitely an issue in our clients' lives. Someone in recovery who has a heroin or methamphetamine addiction is much more likely to relapse after using pot or taking a drink. A client of mine said, "You don't relapse on your drug of choice; you relapse with pot. Smoke a joint, and 3 days later, you'll have a needle in your arm." In short, once you cut out your executive decision-making abil-

ity, relapse is right around the corner.

*Martin:* That's consistent with studies with animal models, which have shown that drugs have cross-priming properties. Animals addicted to one substance, when exposed to another reinforcing drug, will relapse to use of the original substance. All of these drugs have similar effects on the mesolimbic dopamine system and the reward circuitry, and it's not surprising that one positively reinforcing substance can make it difficult to stay away from another.

*McGavin:* Also, if you're hanging on the corner, you're more likely to be passed something you shouldn't be using.

*Mackin:* Right. It puts you back into the environment, and you don't learn to deal with anxiety or craving for your primary drug without the aid of an external substance. You're repeating the same behavior with a different substance.

Benign reputation, debilitating effects  
*Mackin:* Marijuana's worst feature is that it is perceived as benign. Marijuana issues have

to be addressed very gently, because people do not accept the idea that pot is a problem for them. In fact, they often think pot helps them. They say they use it to relieve depression, anxiety, chronic pain, insomnia—any of a number of things.

*Martin:* Marijuana users can be difficult to work with and tend to have little desire to change. The young people we see with primary marijuana dependence often have been coerced to come to the clinic by their parents. That poses challenges for us.

*Mackin:* My program has a 90-day abstinence requirement. I'll say to my clients, "You can go back to smoking pot; you just have to wait 90 days." They don't see the benefits of quitting at first, only the drawbacks. Once they experience abstinence for, say, 30 or 60 days, I can say, "What differences do you notice?" Some say, "I have much more energy," or "I'm not forgetting things all of the time," or "I'm doing better at work." Others say, "I'm white-knuckling it and having trouble sleeping, but it's great to know I can do it." I can think of only one or two clients who hated abstaining after a month or 2 without marijuana. However, they had real trauma issues. Without those dual diagnosis issues, almost invariably, clients feel a lot better once they've been off pot for 2 or 3 months.

*Martin:* I see that, too. We occasionally hear, after a patient has been abstinent from marijuana for a while, that he or she feels better in terms of energy and mood. When that happens, it makes an impression on them.

*McGavin:* I see more subtle realizations in our patients. The bottom line motivator in the Veterans Administration treatment setting is access to resources. Most of the resources we offer veterans—like housing and jobs—are contingent upon completely clean drug screens. Patients may not perceive direct benefits from marijuana abstinence, but indirectly, they see that they've

been able to get housing and a job. As they work toward their vocational goals and go out on job interviews, they get real-life feedback: "Oops, I can't have this job because I'm going to test positive." They recognize that their marijuana use is preventing them from having things they want very much.

#### Treatment efficacy and strategy

*Martin:* I was struck by the modesty of the effects of the treatments for marijuana abuse and dependence. It's disheartening, but it makes me look toward further advances and, I hope, some pharmacological treatments to help with cannabis abuse, like those we have for other types of drug abuse.

*Mackin:* Treatment success rates may reflect the fact that patients' lives change less dramatically when they abstain from marijuana than when they quit other drugs. A lot of my clients' lives are messy, and they don't become that much less messy when they stop smoking pot—as opposed to when they stop abusing methamphetamine, for instance. With marijuana, half of the people aren't able to stick with treatment, and half of those who do stick with treatment relapse within a year.

*Martin:* In our work with our patients, we use elements of cognitive-behavioral therapy (CBT), as well as motivational enhancement therapy (MET) and a 12-step model. Also, as part of treatment, I try to find something to agree upon with my patients—something about where they are in their lives and where they'd like to go. I try to get them to talk about some goals they have—for instance, to go to school or to have a job. We may be able to form an alliance based on these goals; then we can look at what's getting in their way and try to build some insight and motivation. Sometimes we make progress that way.

*Mackin:* We focus on alcohol and methamphetamine issues, and marijuana comes along for the ride. We base a lot of our treat-

ment models on motivational interviewing and motivational enhancement. We use CBT, MET, and contingency management. We also use the Matrix Model, which is a methamphetamine treatment program.

*McGavin:* The early intervention, secondary prevention, and check-up programs the authors discuss are very clever. We've used similar interventions in our primary care medical clinics with people who are ambivalent about their alcohol use. In this type of intervention, you can give basic feedback about laboratory values, average numbers of drinks, and risks—similar to the check-up intervention described in the article. It might appeal especially to youth. It's interactive and could even be presented online.

*Martin:* I agree. It's a soft-sell approach that allows us to step out of the power struggle with patients. They're the ones calling. They're the ones inquiring. We just provide them with the information we have, and they decide what to do with it.

*Mackin:* Check-up style interventions also help with retention. With our low socioeconomic status clients, and maybe criminally oriented ones, anything we can do to keep them coming to treatment is important.

*Martin:* We also take advantage of the effect patients can have on their peers. We have about 24 inpatients. They often have similar problems, but are at different stages of motivation for change or of recovery. Confrontation by their peers, or an ability to relate to their peers or identify with them, can help move patients along. Sometimes, I think that's more helpful than anything I do for them.

*Mackin:* Peer pressure is always more effective than anything that I can say. Clients look at me as "the Man" and "the government." If they really have their shields up,

they're not going to believe a word I say. However, a peer turning to them and saying, "I have gone through the same thing, and here's how it's changed me," hits home.

*McGavin:* I agree. Peers who are further into recovery can provide some hope and say, "I've been there and done that, and it worked out for me. You just have to give it some time."

*Mackin:* Clients fill out a self-assessment when they come into my program. They're all very resistant and say, "I don't have a problem." However, 10 or 12 weeks into treatment, they fill out a second self-assessment. Presumably, they've been learning, getting insight, and going to Alcoholics Anonymous or Narcotics Anonymous meetings. As part of that second self-assessment, they must talk with the group about what they've

learned and any differences they've noticed while they've been clean. The group gives feedback. I try to be quiet and let them interact with each other.

To strengthen this approach, I would like to see some qualitative research investigating former marijuana abusers' perceptions about what treatment features made the difference for them and what improvements they saw in their lives. Armed with such a study, I could talk to clients, and instead of stating something anecdotally, I could refer to this large-scale study.

*McGavin:* Over and over, contingency management is shown to be robust in the research literature. It's something we should all be doing. But where do you get the money? It's foreign to our medical model to pay patients to come to treatment. Could someone, somewhere, bill insurance for contingency man-

agement? It would make sense in the long run, from a prosocial perspective.

*Mackin:* We get a lot of government money, and we run into the same old political arguments: "You're rewarding clients for things that they're supposed to do anyway." Despite its efficacy, contingency management is hard to sell.

*McGavin:* I imagine any move to give patients  $\Delta^9$ -tetrahydrocannabinol (THC) to treat their marijuana cravings, as discussed in the article, would meet with massive resistance from most of the treatment community unless this intervention had been well validated in solidly designed, large-scale studies. Even in such a case, I predict that administering THC as a part of a recovery program would gain acceptance only very slowly.

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