Commentary on "Naltrexone reduces alcohol drinking in young adults: A double-blind, randomized clinical trial of efficacy and safety."

Title: Naltrexone reduces heavy drinking in problem drinkers across the spectrum of dependence

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**Background**

Drinking lies on a continuum like hypertension. One’s drinking and consequences can range from risky to hazardous to physically dependent at the extreme end of the spectrum. Heavy drinking is defined by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) as 5 or more standard drinks for men or 4 or more for women within two hours on one occasion. So how prevalent is heavy drinking? Currently, 43% of men and 29% of adult women have drunk heavily at least once in the last 12 months (NIAAA, 2013).

Similarly, health related problems associated with drinking can range from mild to severe with corresponding healthcare costs. Taken as a whole, heavy drinking causes significant negative consequences both to patients and to society in the form of healthcare costs.

One often overlooked aspect of this picture is that there are 4 times as many heavy drinkers who are not dependent as there are dependent drinkers (Institute of Medicine, 1990). And while the prevalence of dependent drinkers is declining, the prevalence of heavy drinkers who are not dependent is increasing (Figure 1, NIAAA, 2004).

This population of non-dependent drinkers does not come to the attention of healthcare providers unless there are screening and interventions for them in place in primary care settings. And they usually do not go to abstinence-oriented treatment programs unless compelled to by the judicial system. Consequently, they are an underserved patient population associated with significant and growing healthcare costs.

**Interventions for Less Dependent Heavy Drinkers**

While empirically-supported interventions (e.g., brief motivational interventions) and moderate drinking programs (e.g., [www.moderatedrinking.com](http://www.moderatedrinking.com)) are effective interventions for less dependent drinkers, barriers to their widespread utilization persist. For example, traditional alcohol treatment programs in the U.S. typically treat drinkers at the most severe end of the dependence spectrum. And for these more dependent...
patients, abstinence is usually prescribed and the most appropriate goal of change. Less dependent heavy drinkers on the other hand, will usually choose a goal of moderation when they decide to change. And moderation is an achievable goal for less dependent drinkers (Hester, et al., 2011). This mismatch in goals results in less dependent drinkers not receiving the help they could use in reducing their heavy drinking.

It is in this context that O'Malley and colleagues’ paper is most welcome. Their paper is the first randomized clinical trial to demonstrate what many of us who work with less dependent heavy drinkers have suspected for years now: naltrexone can help non-dependent heavy drinkers moderate their consumption. It is also consistent with some of Sinclair's work (unpublished) in which he found that naltrexone reduced drinking in study participants whose drinking spanned the spectrum of dependence (J.D. Sinclair, Personal Communication, July 1, 2014).

From the very beginning of naltrexone trials, the primary outcome with dependent drinkers has been a reduction in heavy drinking. And this has been a consistent finding in the randomized clinical trials of naltrexone. And now O'Malley has demonstrated naltrexone’s effectiveness in reducing heavy drinking in young adults, many of whom did not meet alcohol dependence criteria. And while the differences are modest, I suspect that is, in large part, because her control group received three interventions known to reduce heavy drinking in young adults: a brief motivational intervention, medication management that included harm reduction oriented discussions during bi-weekly follow-ups, and extensive assessment at baseline, daily during the trial, and at 4 and 8-week follow-ups. That combined intervention for the control group makes the significant differences between the naltrexone group and the placebo group even that much more clinically meaningful.

Clinical Implications
Clearly the outcomes of this study support the use of naltrexone with heavy drinking young adults. But it goes beyond that. These data provide support for physicians who could offer it to their heavy drinking patients regardless of where their drinking lies on the spectrum of dependence. The more options we have to address heavy drinking in non-dependent populations, the more likely we are to have a positive impact on both those patients but also the public health.

References
