Sobering Perspectives on the Treatment of Alcohol Use Disorder

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Alcohol misuse is a leading cause of preventable suffering globally. Each year in the United States, alcohol misuse contributes to 140,000 deaths and nearly 3.6 million years of potential life lost.\(^1,2\) Economic losses and health costs are staggering because alcohol can contribute to death and disability early in life. In 2010, the economic burden of alcohol misuse in the United States was estimated at a quarter of a trillion dollars, which is equivalent to $807 per person, or $2.05 per drink.\(^3\)

Treatment options for the 30 million individuals with alcohol use disorder (AUD)\(^4\) in the US include behavioral interventions and pharmacotherapy. Naltrexone, acamprosate, and disulfiram are 3 approved drugs for treating AUD. Since disulfiram works only through aversive effects, with no impact on the desire to drink, it tends to work best in supervised settings and with highly motivated patients with strong social supports.\(^5\) A recent systematic review suggested the number-needed-to-treat to prevent 1 person from returning to drinking was 11 for acamprosate and 18 for oral naltrexone.\(^1\) Naltrexone use, in addition, was associated with a substantial decrease in heavy drinking.\(^1\) Moreover, these drugs are well tolerated by patients with minimal side effects.

Despite these clear benefits, medications for AUD (MAUD) remain underused. In 2021, only 2% of Americans who reported AUD received pharmacotherapy.\(^4\) Starting MAUD is especially infrequent during or after hospitalization. A study of nearly 30,000 Medicare beneficiaries with alcohol-related hospitalizations in 2016 showed that only approximately 1% received MAUD within a month of hospital discharge.\(^6\) Hospitalization, therefore, represents an important missed opportunity for engaging patients in treatment.

In this population-based study, Bernstein et al\(^7\) report on MAUD prescribing to Medicare patients with alcohol-related hospitalizations.\(^7\) In a propensity score–matched analysis, receipt of a prescription for either naltrexone, acamprosate, or disulfiram was associated with a 42% lower risk of all-cause mortality or hospital readmission within the next month.\(^7\) Roughly 6 patients would need to fill a prescription for MAUD to prevent 1 repeat emergency visit or hospital admission within a month. The substantial effect size was primarily driven by reductions in all-cause rehospitalization.

This study provides an estimate of the effect of prescribing MAUD to patients following an alcohol-related hospitalization. The results also reaffirm the underuse of MAUD: among the nearly 10,000 admitted patients eligible for study inclusion, only 1 in 50 filled a discharge prescription.\(^7\) This low rate of use is consistent with past studies.\(^6,8\) However, the infrequency of prescriptions raises questions about the external generalizability and the extent to which the dramatic reduction in subsequent use of acute care services reflects the effects of MAUD alone. Readers are left wondering in what ways the 2% of patients who filled a discharge prescription for MAUD are different from the 98% who did not.

Propensity score methods, such as those used in this study, are popular for addressing baseline differences between treatment groups in observational studies. This approach, whether by matching or inverse probability weighting, attempts to mimic the symmetry achieved in a randomized trial. However, an important distinction is that only measured factors are balanced when applying propensity score methods. In the study reported by Bernstein and colleagues,\(^7\) we know little about potentially important patient characteristics, such as the severity of alcohol use and motivation for treatment. Such unmeasured confounding can lead to a misleading effect size or a difference in outcomes that is falsely attributed to treatment.\(^9\)

Prescribing medications in a thoughtful manner based on clinical indications can also contribute to confounding by indication. For instance, clinicians may have preferentially prescribed MAUD to...
patients whom they regarded as more likely to adhere following hospital discharge. In a sensitivity analysis restricted to patients who filled any drug prescription following discharge (reflecting some degree of health consciousness), Bernstein et al. showed an attenuation of the treatment effect size. Thus, the results may be partially confounded by a healthy adherer effect.10

An important question is how the results of this study should influence clinical practice. Despite its methodological shortcomings, this study by Bernstein et al.7 highlights the benefits of prescribing MAUD at hospital discharge—benefits consistent with those seen in clinical trials. In addition, the study provides a compelling argument for clinicians to offer MAUD to all hospitalized patients with AUD.7 During a hospitalization, patients experience health vulnerability which may drive behavior change. Clinicians should take advantage of these opportunities to offer MAUD to patients who meet criteria to maximize treatment for those who might benefit. Greater engagement of inpatient addictions services might also help promote use of MAUD.6,11

Addressing this treatment gap also requires an understanding of system-level barriers to MAUD prescribing. A recent mixed-methods study highlighted barriers to starting MAUD in inpatient settings.12 Several themes emerged. First, prescribers reported limited knowledge and training with MAUD.12 Despite the safety of these medications, prescribers overestimated the risks associated with their use. Second, there were concerns regarding discharge follow-up plan and a preference to initiate MAUD in the outpatient setting.12 Third, alcohol-related stigma hindered clinicians from offering treatment to patients.12 Clinicians expressed an expectation for a commitment to abstinence before starting MAUD.

Clinicians can also learn from prior successful quality improvement initiatives that have improved MAUD uptake. In 2013, clinical pharmacy specialists were sent to 2 western Department of Veterans Affairs networks to educate clinicians on the consequences of alcohol misuse and facilitate consideration of drug treatment for AUD. This comprehensive campaign was associated with increasing MAUD prescribing in a vulnerable patient population from 4.9% to 8.3%.13 Moreover, structural changes, such as protocolizing MAUD prescribing at discharge, have also proven successful in other settings. Implementation of a discharge pathway (including a MAUD prescribing protocol) for patients with AUD on internal medicine wards was associated with substantially increased prescribing.14

At present, most patients with AUD do not receive evidence-based treatment. An important first step might be reframing our mindset to considering AUD as a chronic disease. We should ask ourselves: would we accept the status quo if only 2% of our patients with diabetes were prescribed evidence-based therapy? Designing initiatives to address structural barriers and increase MAUD prescribing will improve the care of patients living with AUD. The insufficient use of MAUD is sobering and is also an enormous opportunity to do better for our patients.

**ARTICLE INFORMATION**

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