Problem Drinkers: Find Them, Keep Them, Don't Lose Them—Treat Them

The impact of problem drinking and alcohol use disorders on the health of our patients has been well established. Research has demonstrated that even relatively “modest” levels of “at-risk” or “hazardous” drinking, for example greater than 14 drinks per week in men and greater than 7 drinks per week in women, is associated with increased risk of adverse health outcomes including psychosocial and medical morbidity. Of course, even more data exist to support the notion that in general, the more one drinks, the less healthy one becomes. These health problems, or the risk thereof, bring general internists front and center to the care of patients who drink too much.¹

Over the past few decades, increasing emphasis has been placed on identifying at-risk drinking and alcohol use disorders in patients seen in health care settings and providing targeted interventions to change drinking behaviors. Primary care settings in particular have been a major focus of these efforts, as patients with problem drinking or alcohol use disorders are much more likely to show up in general medical settings than they are in more specialized settings, and alcohol and drug dependence are most appropriately treated like other chronic illnesses.² The body of evidence from studies of screening and counseling interventions in primary care settings supporting the efficacy of these approaches is quite compelling.

Three articles published in this issue of *Journal of General Internal Medicine* provide important new information concerning the screening and intervention strategies for patients with problem drinking and the impact of problem drinking on health. Each of these articles is particularly relevant to the practice of general internal medicine and should be of special interest to readers of *JGIM*.

Concerning screening, the article by Cook et al. focuses on a unique population of patients—young individuals (15–24 years old) seen in a sexually transmitted disease clinic.³ Clearly it makes sense to focus screening in young individuals early in the course of their drinking careers, as complications come quickly and prevention can be critical.⁴ The authors compare three brief alcohol screens (AUDIT, CRAFFT, and CAGE) to examine their utility as screening tools when compared to a “gold standard” interview using DSM-IV criteria for alcohol use disorders. While the CAGE has been widely accepted as a useful screening tool among general medical adult populations,⁵ its utility in younger individuals has been questioned. Thus, comparing the CAGE to other relatively brief instruments, the AUDIT (which has also been used widely in adult populations) and the CRAFFT (which has been designed more specifically for younger individuals) makes good sense. Obviously, if we are going to encourage individuals who provide care to this population to screen for problem drinking, we need to be sure we give them the right tool.

Cook et al. found that the AUDIT and the CRAFFT both performed quite well in this population although the CAGE appeared to suffer by comparison, especially in terms of sensitivity. Thus, while the CAGE questionnaire may be a good choice for screening adults more generally, the AUDIT and the CRAFFT seem to be a better choice for the adolescents and

young adults studied. The authors go on to note that the AUDIT, which contains 10 items, is relatively lengthy in comparison to the 6-item CRAFFT questionnaire. The CRAFFT may also have better “face validity” for these younger individuals by its focus on social phenomena such as riding in a car driven by someone who had been drinking and getting into trouble while using alcohol. Thus, many clinicians may find this instrument more useful for young individuals. On the other hand, because the AUDIT seems to have good test characteristics in these younger individuals as well as older adults,⁵ perhaps knowing and using one instrument such as the AUDIT consistently might be a better strategy—as long as you are able to keep track of the 10 AUDIT questions. From the perspective of general internists, along with the somewhat narrow and perhaps atypical (for some practices) age range of the study population, the major limitation of this study was the fact that it was not performed in a “typical” general medicine setting and thus the results may have limited applicability for their own patients. Nonetheless, these results are useful and point, in particular, to the limitations of the CAGE questionnaire in younger patients.

The second article in this issue, by Reiff-Hekking et al. builds nicely upon the first paper by Cook et al. by considering what may happen in medical practice after some problem drinkers are identified through screening for alcohol problems.⁶ Specifically, this second paper addresses the question “Now that I’ve identified these patients, what do I do next?”⁷ The answer to this question turns out to be the use of counseling in the form of a “brief intervention.” Brief interventions are exactly what they say they are—brief. This approach involves a variety of simple counseling techniques with which physicians provide advice to their patients concerning their drinking behaviors. There is currently a large, diverse, and rather convincing body of literature that brief interventions can, at least modestly, improve drinking behaviors in patients who drink too much.^{8–11} Among the largest brief intervention studies was one done in 17 community-based primary care practices in Wisconsin, Project TrEAT.¹² In this study, the intervention included two 15-minute physician visits followed by two telephone calls from the nurse. At 1-year follow-up, substantial improvements were observed in a variety of drinking behaviors of those receiving the “active” treatment. Despite this, relatively few of the brief intervention studies were formed and focused specifically on primary care patients.¹¹ Thus, the publication in the current issue by Reiff-Hekking et al. is a welcome addition to the literature.

In this article, the authors follow up a prior study¹³ and provide 6- and 12-month follow-up data from a cohort of over 400 high-risk drinkers cared for in a group of academically affiliated primary care internal medicine practices. Over 40 attending physicians and nurse practitioners participated along with a small number of internal medicine residents. The brief intervention in this study was administered by providers who received 2.5 hours of training in patient-centered alcohol counseling. This counseling was supplemented by an

office support system which provided reminders concerning drinking behaviors. As with the previous report published by this group, subjects in the "special intervention" arm had significantly improved outcomes compared to those who received "usual care," as measured by changes in weekly alcohol intake and the proportion of individuals who change to "safe" drinking levels. While the improvements seen were modest, the consistency of findings across the outcome variables is sufficiently compelling to further recommend brief intervention counseling for all of our patients who drink excessively.

Despite this and numerous other studies, a number of questions remain about the efficacy of brief intervention approaches. Which components of the intervention are the "active ingredients"—the counseling? The reminders? Are brief interventions useful in alcohol-dependent patients who are usually excluded from studies of these approaches? Are they effective in different sociodemographic subgroups? Are repeated or "booster" sessions necessary and, if so, how often? What are the long-term effects on morbidity and mortality of these interventions? No doubt many of these and other questions will be answered in primary care patient populations by investigators who are general internists.

The third article in this month's *JGIM* "triad" focuses on the health effects of alcohol consumption and the interrelation between drinking and smoking and their effects on coronary heart disease (CHD) mortality and cancer incidence.¹⁴ Patients frequently inquire about the potential health benefits of "moderate" alcohol consumption,^{15,16} although the degree to which these "benefits" exist is controversial.¹⁷ In this issue of *JGIM*, Ebbert et al. report data from a population-based sample in Iowa which examines the effect of alcohol on CHD, cancer incidence, and cancer mortality in smokers and nonsmokers to explore the interactions of alcohol and smoking on these outcomes. Alcohol consumption was categorized in a manner which identified individuals who are either abstainers (consumed less than one drink per day), or who consumed at least one drink per day. Although not surprising, perhaps the most unique finding in this study was that smoking effectively negates the potential benefits of moderate alcohol consumption in protecting against CHD. Thus, those patients who thought they were "saving their heart" by consuming moderate amounts of alcohol should know that this benefit, if it exists, is effectively "wiped out" if they smoke. In addition, and also not surprisingly, these researchers demonstrated that alcohol consumption was associated with increased cancer incidence in particular in those who were former or current smokers.

This study is an excellent example of how epidemiologic data can be used to counsel specific subsets of patients regarding their behaviors. These investigators confirm the general association between alcohol consumption and smoking and provide extra "ammunition" for clinicians who want to counsel their patients around the impact of their alcohol consumption and smoking behaviors.

Perhaps the beauty of these three studies as a group for general internists is the fact that they cover a wide spectrum of clinical interactions between physicians and their patients. One study supports the concept that screening is effective for identifying alcohol use disorders and demonstrates which specific instruments are most effective in younger patients. The second study tackles the issue of how to effectively manage our "problem drinkers" once we identify them through screening, using relatively simple techniques that are easily applied by

general internists. The third study addresses the issues of "moderate" drinking, the interaction between drinking and smoking, and alcohol-related comorbidities. All three represent "bread and butter" general internal medicine.

These three studies point to the ever increasing role of generalist physicians in the care of patients with alcohol problems.¹⁸ Each study has practical implications for how general internists care for their patients today and could be applied "at the bedside" immediately. Hopefully, successful efforts such as these will encourage positive changes in clinical practice and further invigorate efforts to investigate how to most effectively approach patients with alcohol problems. General internal medicine should remain at the forefront of these clinical and research efforts. —**Patrick G. O'Connor, MD, MPH, Section of General Internal Medicine, Yale University School of Medicine, New Haven, CT.**

REFERENCES

1. O'Connor PG, Schottenfeld RS. Patients with alcohol problems. *N Engl J Med*. 1998;338:592-602.
2. McLellan AT, Lewis DC, O'Brien CP, Kleber HD. Drug dependence, a chronic medical illness: implications for treatment, insurance, and outcomes evaluation. *JAMA*. 2000;284:1689-95.
3. Cook RL, Chung T, Kelly T, Clark DB. Alcohol screening in young persons attending a sexually transmitted disease clinic: comparison of AUDIT, CRAFT, and CAGE instruments. *J Gen Intern Med*. 2005;20:1-6.
4. Rohde P, Lewinsohn PM, Kahler CW, Seeley JR, Brown RA. Natural course of alcohol use disorders from adolescence to young adulthood. *J Am Acad Child Adolesc Psychiatry*. 2001;40:83-90.
5. Fiellin DA, Reid MC, O'Connor PG. Screening for alcohol problems in primary care: a systematic review. *Arch Intern Med*. 2000;160:1977-89.
6. Reiff-Hekking S, Ockene J, Hurley TG, Reed GW. Brief physician and nurse practitioner-delivered counseling for high-risk drinking: results of a 12-month follow-up. *J Gen Intern Med*. 2005;20:7-13.
7. Samet JH, Rollnick S, Barnes H. Beyond CAGE. A brief clinical approach after detection of substance abuse. *Arch Intern Med*. 1996;156:2287-93.
8. Poikolainen K. Effectiveness of brief interventions to reduce alcohol intake in primary health care populations: a meta-analysis. *Prev Med*. 1999;28:503-9.
9. Fleming M, Manwell LB. Brief intervention in primary care settings. A primary treatment method for at-risk, problem, and dependent drinkers. *Alcohol Res Health*. 1999;23:128-37.
10. Wilk AI, Jensen NM, Havighurst TC. Meta-analysis of randomized control trials addressing brief interventions in heavy alcohol drinkers. *J Gen Intern Med*. 1997;12:274-83.
11. Fiellin DA, Reid MC, O'Connor PG. New therapies for alcohol problems: application to primary care. *Am J Med*. 2000;108:227-37.
12. Fleming MF, Barry KL, Manwell LB, Johnson K, London R. Brief physician advice for problem alcohol drinkers. A randomized controlled trial in community-based primary care practices. *JAMA*. 1997;277:1039-45.
13. Ockene JK, Adams A, Hurley TG, Wheeler EV, Hebert JR. Brief physician- and nurse practitioner-delivered counseling for high-risk drinkers: does it work? *Arch Intern Med*. 1999;159:2198-205.
14. Ebbert JO, Janney CA, Sellers TA, Folsom AR, Cerhan JR. The Association of alcohol consumption with coronary heart disease mortality and cancer incidence varies by smoking history. *J Gen Intern Med*. 2005;20:14-20.
15. Mukamal KJ, Conigrave KM, Mittleman MA, et al. Roles of drinking pattern and type of alcohol consumed in coronary heart disease in men. *N Engl J Med*. 2003;348:109-18.
16. Gaziano JM, Gaziano TA, Glynn RJ, et al. Light-to-moderate alcohol consumption and mortality in the Physicians' Health Study enrollment cohort. *J Am Coll Cardiol*. 2000;35:96-105.
17. Hart CL, Smith GD, Hole DJ, Hawthorne VM. Alcohol consumption and mortality from all causes, coronary heart disease, and stroke: results from a prospective cohort study of Scottish men with 21 years of follow up. *BMJ*. 1999;318:1725-9.
18. O'Connor PG, Samet JH. Substance abuse: the expanding role of general internal medicine. *J Gen Intern Med*. 2002;17:398-9.