Despite Benefit, Physicians Slow to Offer Brief Advice on Harmful Alcohol Use

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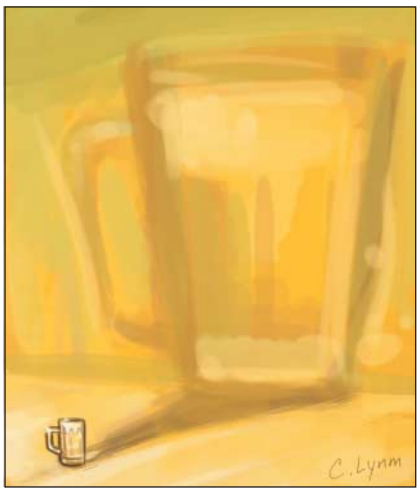
A QUARTER-CENTURY AGO, THE World Health Organization (WHO) launched an international effort to develop validated screening and brief intervention protocols for excessive alcohol use in primary care. Since then, an extensive body of literature has grown in support of clinicians screening patients for harmful alcohol use and offering structured advice to those identified. Yet physicians have been slow to adopt these effective and cost-saving 5- to 10-minute interventions.

As this 25-year anniversary milestone passes, experts hope recent studies and analyses may help overcome this reluctance by demonstrating that such brief interventions are both feasible and successful in a variety of real-life settings. A Cochrane Collaboration review of 21 randomized controlled trials published in April 2007 found that primary care patients who receive brief interventions for excessive alcohol use substantially reduce their alcohol intake compared with controls. The WHO also completed the fourth and final phase of its Collaborative Project on Detection and Management of Alcohol-Related Problems in Primary Health Care. Efforts to make it easier for physicians to bill for these services may help as well.

TARGETING RISKY DRINKING

Growing recognition of the broad spectrum of alcohol use problems has spurred public heath efforts targeting individuals who are not physically dependent on alcohol, but whose drinking habits put their health or safety at risk.

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) classifies moderate drinking as no more than 1 drink per day for women and 2 drinks per day for men. Individuals who drink more than that in a week and those who periodically drink heavily (defined as at least 3 drinks in a sitting for women and 4 or more drinks for men) may face negative health and safety consequences. For example, heavy drinking may lead individuals to engage in risky behaviors such as unprotected sex or fighting. Excessive drinking may exacerbate health conditions such as high blood pressure or gastritis.



Brief interventions by physicians can help patients who are not physically dependent on alcohol realize that their drinking habits may be putting their health and safety at risk.

Screening and brief intervention protocols are designed to identify individuals whose drinking puts them at risk, draw their attention to these risks, and encourage them to reduce their drinking. Protocols may vary from several 30-minute sessions to a single 5-minute session, said Mark L. Willenbring, MD, director of the Treatment and Recovery Division of NIAAA, in an interview. Such interventions can be administered by physicians, nurses, social workers, or other clinicians in a range of settings, including primary care, emergency departments, and general mental health care, where many patients have comorbid alcohol use problems and mental illness.

Many studies over the past 25 years have provided data supporting the efficacy of these interventions, particularly in primary care settings. Yet physicians have expressed concern that the studies do not reflect the realities of practice, said Eileen F. S. Kaner, MSc, PhD, chair of public health research at University of Newcastle upon Tyne in the United Kingdom, in an interview. To address these concerns, she and her colleagues conducted a review of the literature, focusing on trials that are applicable to real-world settings (Kaner EF et al. *Cochrane Database Syst Rev*. 2007;[2]:CD004148).

Kaner's team found that at-risk drinkers who received a brief intervention reduced their consumption of alcohol by an average of 41 g (roughly 3 drinks) per week more than controls and that these results were consistent across all the trials, suggesting they are widely applicable. Kaner and colleagues did identify one weakness in the trials when they broke out results by sex: they found that the positive effects were more robust in men than women. Kaner attributed this to the fact that fewer studies have tested these interventions in women and that in the control groups, women were more likely than men to reduce their consumption of alcohol.

Although more studies in women are needed, the results for both sexes are still strong enough to recommend wide-

Alcohol Interventions in the ED

Some studies suggest that emergency departments (EDs) provide a venue where identifying and counseling individuals who drink in excess may improve outcomes.

Adding weight to the evidence is a recent 14-center clinical trial in which ED staff administered the Screening, Brief Intervention, and Referral to Alcohol Treatment protocol. The results suggest these steps could be successful in a range of EDs (Academic ED SBIRT Research Collaborative. *Ann Emerg Med.* 2007;50[6]:699-710).

The trial included 1132 adults who were identified during an ED visit as exceeding National Institute on Alcohol Abuse and Alcoholism recommended limits for moderate drinking and who consented to participate. The control group of 581 individuals received a handout on low-risk drinking and a list of referrals for treatment, and another 551 individuals received a brief intervention. Three months later, a follow-up telephone survey, completed by 62% of the participants, found that individuals who received the intervention reported consuming 3.25 fewer drinks per week than controls and that the maximum number of drinks consumed in a sitting was three-quarters of a drink less in the intervention group. In fact, at follow-up, 37.2% of the intervention group no longer met criteria for at-risk drinking compared with 18.6% of controls. Patients who met screening criteria for alcohol dependence were less likely to benefit from the intervention than those who were not dependent.

Gail D'Onofrio, MD, chief of emergency medicine at Yale University in New Haven, Conn, and coauthor of the study, noted in an interview that the trial included a variety of EDs serving diverse patient populations and that a range of providers—including physicians, nurses, nurse practitioners, physician assistants, social workers, and peer educators—administered the intervention. She said these factors make it more likely that similar results can be achieved in other EDs.

The nature of the brief intervention, which takes about 10 minutes, was also a key factor in these positive results, said Edward Bernstein, MD, coauthor and vice chair of academic affairs in the department of emergency medicine at Boston University School of Medicine. He described the intervention as "a conversation between emergency care providers and patients that involves listening rather than telling, and guiding rather than directing. It is designed to review the patient's current drinking patterns, assess their readiness to change, offer advice about the low-risk guidelines and the next steps to pursue, and negotiate a written prescription for change or a drinking agreement with the patient."—B.M.K.

spread use of the interventions, said Kaner. "As little as 5 minutes can make a difference," she said. "You don't need a lot of time. Often patients aren't aware they are drinking too much or that it is having an impact on them."

OVERCOMING OBSTACLES

Yet 5 minutes is a lot to ask of overstretched primary care providers, acknowledged Willenbring. He noted that the US Preventive Services Task Force rates screening and brief interventions as a B-level recommendation, meaning it is less important, less effective, or backed by less scientific support than A-level recommendations. Physicians, he said, simply do not have enough time to address patients' existing conditions and also to implement all the recommendations, so they must prioritize.

He added that in general, the US medical system is geared toward treating acute illness and that facilitating the provision of preventive care—including interventions for harmful alcohol use—will require major shifts in the way care is delivered. "We haven't yet figured out how to deliver behavioral health care," he said.

Ultimately, Willenbring said, delivering these types of services will require primary care to move toward a team model, in which nurses, social workers, or other clinicians work more closely with physicians and administer behavioral interventions. Additionally, practices will have to make better use of technology, perhaps by administering screening and brief interventions over the phone or by using computer-based screening and counseling programs that walk patients through the process. Willenbring said the NIAAA is supporting and conducting research on such innovations.

New AMA billing codes, which went into effect in January and have won the endorsement of the Centers for Medicare & Medicaid Services, will make it easier for physicians to bill for screening and advising patients about risky alcohol use, overcoming another practical obstacle to wider implementation of these approaches.

For some physicians, personal or cultural reasons may underlie the hesitation to embrace the use of brief interventions for alcohol use, said Kaner, who participated in the WHO's collaborative project, which included identifying such obstacles. She explained that physicians who themselves drink alcohol may be uncomfortable addressing the issue. Studies have found that physicians and nurses are more comfortable broaching the topic with male patients, those who are younger, and those in manual professions; they find it more difficult to raise the issue with patients who are female, older, or in white-collar fields.

Physicians may also hesitate to screen patients for alcohol use problems because they fear they will identify patients with severe problems who require more than just structured advice about treatment, Willenbring said. However, he noted that in addition to referring these patients to specialist care, primary care physicians may draw on a growing arsenal of tools to treat alcoholism. The NIAAA Web site (http://www.niaaa.nih.gov/) offers resources to guide primary care alcoholism treatment.

Finally, governments and health agencies must be more aware of the full im-

pact that alcohol use has on society and develop and promote policies accordingly, Kaner said. The final report of the WHO collaborative project outlines strategies for development and validation of countrywide implementation of screening and brief alcohol interventions in primary care (http://www.who.int/substance_abuse/publications/identification_management_alcoholproblems_phaseiv.pdf). The case for such an effort, she said, is clear: "It's simple, effective, and cheap." □

Additional Resources

Helping Patients Who Drink Too Much: A Clinician's Guide, from the National Institute on Alcohol Abuse and Alcoholism, http://pubs.niaaa.nih.gov/publications/Practitioner/CliniciansGuide2005/guide.pdf

The Brief Negotiated Interview and Active Referral to Treatment Institute, http://www.ed.bmc.org/sbirt/

A collection of screening and brief intervention materials created by Newcastle University's Eileen F. S. Kaner, MSc, PhD, and colleagues from Gateshead Primary Care Trust and Northumbria University, http://www.ncl.ac.uk/ihs/news/item/?brief-interventions-alcohol-and-health-improvement

Vitamin D Deficits May Affect Heart Health

Mike Mitka

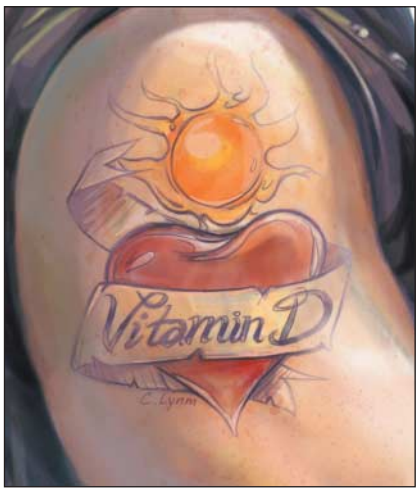
VITAMIN D DEFICIENCY IS ASSOCIated with a greater risk of developing cardiovascular disease for those with hypertension, according to new findings from researchers with the Framingham Heart Study (Wang TJ et al. *Circulation*. doi: 10.1161/CIRCULATIONAHA.107.706127 [published online ahead of print January 7, 2008]).

The study's findings, the latest to suggest that vitamin D deficiency may increase risk for cardiovascular disease, add to a growing body of evidence linking inadequate levels of the vitamin to a variety of disorders.

A COMMON DEFICIENCY

Concerns about the link between vitamin D and health is fueled by recognition that vitamin D deficiency is common, affecting an estimated 1 billion people worldwide. Because this vitamin is generally obtained primarily through exposure to sunlight, certain populations are particularly affected, such as those with dark skin, people living farther away from the equator, and older adults—especially those with functional disabilities that prevent them from going outdoors. Some studies imply that up to half of all otherwise healthy middle-aged and older adults are vitamin D deficient.

Emerging evidence suggests that the vitamin plays a role in just about every aspect of health, including calcium, phosphorus, and bone metabolism. Observational studies have found associations between vitamin D deficiency and osteoporosis and bone fracture, weaker muscles, cancer, autoimmune disease, diabetes, schizophrenia, depression, lung dysfunction, and cardiovascular disease.



Sun exposure or foods and supplements containing vitamin D can help prevent vitamin D deficiency, which has been linked to an increased risk for cardiovascular disease.

In the new findings, the Framingham researchers followed up 1739 participants from the Framingham Offspring Study for an average of 5.4 years and compared those with and without vitamin D deficiency, which is defined as having a level of 25-dihydroxyvitamin D (the serum marker for vitamin D) below 15 ng/mL. They found that deficiency increased the risk of developing a first cardiovascular event by 62% for patients with hypertension (those with a systolic pressure exceeding 139 mm Hg and a diastolic pressure exceeding 89 mm Hg or who were receiving antihypertensive therapy).

Thomas J. Wang, MD, lead author of this study and an assistant professor of medicine at the Harvard Medical School in Boston, called his team's results "quite intriguing." But Wang is also quick to note that his study found an association between vitamin D deficiency and cardiovascular disease but was not designed to uncover cause and effect.

"We did not look at whether supplementation is associated with lower cardiovascular risk," Wang noted. "We cannot automatically assume that raising the level of vitamin D will lower the cardiovascular disease risk."

Proving a causal connection may be difficult. Vitamin D research involves mostly observational studies or laboratory or animal research, and there are no plans on the horizon for researchers to conduct rigorous randomized controlled trials that could create definitive findings.