

REVIEW: HIGH ALCOHOL INTAKE INCREASES MORTALITY IN BOTH MEN AND WOMEN

Dr. Shekelle's commentary (1) on the article "Alcohol dosing and total mortality in men and women: an updated meta-analysis of 34 prospective studies" in the March/April issue was disappointing and full of the bias that one does not expect to find in a journal that prides itself on letting the evidence do the talking. The chosen title of the commentary, "Review: high alcohol intake increases mortality in both men and women," exposes Dr. Shekelle's insistence on seeing the glass 1/10 empty rather than 9/10 full. Despite the prospective nature of the cohort studies and the overwhelming support for mild-to-moderate alcohol consumption, Dr. Shekelle refuses to acknowledge that there could be a true mortality benefit, instead choosing to state only that "when measured this way, there is a J-shaped association."

The author's 2 criticisms of the study methods are curious: He impugns the practice of measuring self-reported alcohol consumption, despite validation of this technique and proven correlations between self-reported consumption and other markers of alcohol use, such as biochemical markers and patient injuries (2–4). Indeed, the accepted assumption is that self-report may underestimate, rather than overestimate, actual intake. If this is the case, then the mortality benefit may actually extend to relatively higher, rather than lower, amounts of alcohol consumption. Dr. Shekelle's other point, that alcohol consumption may be a marker for other healthy lifestyle behaviors, is an unsupported conjecture that seems far-fetched at best.

In all, Dr. Shekelle's personal bias against any alcohol use impairs his ability to interpret strong data in a way that should honestly and meaningfully alter patient care.

*Joshua Blum, MD
Denver Health and Hospital Authority
University of Colorado Health Sciences Center
Colorado, Denver, USA*

References

1. Shekelle P. Commentary on Review: High alcohol intake increases mortality in both men and women. *ACP Journal Club*. 2007 Mar-Apr;146:48. Comment on: Di Castelnuovo A, Costanzo S, Bagnardi V, et al. *Arch Intern Med*. 2006;166:2437-45.
2. Carlsson S, Hammar N, Hakala P, et al. *Eur J Epidemiol*. 2003;18:493-501.
3. Mukamal KJ, Mittleman MA, Longstreth WT Jr, et al. *J Am Geriatr Soc*. 2004;52:1174-9.
4. Sommers MS, Dyehouse JM, Howe SR, et al. *Alcohol Clin Exp Res*. 2000;24:1406-13.

REPLY

I sympathize with Dr. Blum's conclusion that moderate alcohol intake decreases mortality. These data seem consistent and compelling. Why not recommend it? My hesitancy comes from that fact that I have read this story before—too many times, in fact. Vitamin E, hormone replacement therapy, β -carotene, folate: all have been promoted as healthful based on strong, consistent epidemiologic data and a strong, plausible biological rationale. Yet when subjected to the scrutiny of a randomized clinical trial, all of these substances have shown no evidence for the benefits claimed for them, and in some cases, have been shown to actually cause harm (1–4). These findings have made me more skeptical than ever of observational studies of association. I

believe that before we can make broad policy conclusions recommending patients take such substances to prevent conditions for which they currently show no evidence of having—particularly substances known to also cause harm (like alcohol)—we simply must have better evidence than that of observational studies. I don't tell patients to stop who, like myself, enjoy a glass of wine with dinner. But I certainly would not tell an abstemious patient that he or she should start drinking in order to prolong their life.

*Paul Shekelle, MD, PhD
Greater Los Angeles Veterans Affairs Healthcare System
Santa Monica, California, USA*

References

1. The Alpha-Tocopherol, Beta Carotene Cancer Prevention Study Group. *N Engl J Med*. 1994;330:1029-35.
2. Heart Protection Study Collaborative Group. *Lancet*. 2002;360:23-33.
3. Rossouw JE, Anderson GL, Prentice RL, et al. *JAMA*. 2002;288:321-33.
4. HOPE-2 Investigators. *N Engl J Med*. 2006;354:1578-88.

THE EVOLVING SCIENCE OF TRANSLATING RESEARCH EVIDENCE INTO CLINICAL PRACTICE

Dr. Scott has provided a nice summary of the barriers to implementing research guidelines (1), although it seems to me he misses 1 important point: The psychology of skepticism, and how skepticism is learned by practitioners. I'll illustrate what I mean by this in the field of new drugs. I think we can agree that the literature about new drugs and their use makes up a considerable proportion of any issue of a major medical journal or continuing education conference. New drugs are extensively studied, and information about their importance and potential benefits is widely disseminated to practitioners. Skepticism is often learned by doctors after the drugs have been released and lauded: Vioxx, Rezulin, Baycol, Avandia, the bisphosphonates: All wonder drugs on release; a couple of years later, you wonder—how did this occur?

Research guidelines are tainted in many practitioners' minds, by association. Drug studies and well-meaning guidelines are often published side-by-side in the same journals. If so many brilliant scientists, so many well-meaning professors, get things so very wrong on p. 1000, how can we tell that the article on p. 1010 is indisputably right? How did the system of health care research blend into the machinery of health promotion, and how does that lead to error? The problem, it seems to me, is in the promotion. Doctors look at guidelines and their promotion as an industry not unlike the drug industry. I think we practicing physicians often ask ourselves, "For my patients, wouldn't it be safer to wait a year or two, to see if the impact of that which is being promoted matches its promise? These patients are, after all, in my care." Fortunately, "caution" is a byword of the way many doctors practice.

*Donald Venes, MD
Sutter Coast Health Center at Brookings Harbor
Brookings, Oregon, USA*

Reference

1. Scott IA. The evolving science of translating research evidence into clinical practice [Editorial]. *ACP Journal Club*. 2007 May-Jun;146:A8.