Commentary: Alcohol and Motor Vehicle–Related Crashes—Driver Attitudes Need Further Intervention

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severe. Thirty percent had observed a sobriety checkpoint in the past year. There was a preference that sobriety checkpoints be conducted weekly (40%) or monthly (35%). Of 8 intervention strategies to reduce impaired driving that were read to respondents, alcohol interlocks ranked first in the percentage of individuals who believed them very effective in reducing or preventing drunk driving (63%), followed by providing alternate ways for people who have had too much to drink to get home, suspending the license of drunk drivers, and impounding or seizing the vehicle of drunk drivers (all at 54%).

Copies of the 26-page report, “National Survey of Drinking and Driving Attitudes and Behaviors: 2008,” can be downloaded from http://www.nhtsa.gov/staticfiles/nti/pdf/811342. Questions about the information presented in this article can be directed to Cathy Gotschall at cathy.gotschall@dot.gov.

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COMMENTARY: ALCOHOL AND MOTOR VEHICLE–RELATED CRASHES—DRIVER ATTITUDES NEED FURTHER INTERVENTION


Every single weekend night, in nearly every emergency department (ED) in America, there is a patient injured by a drunk driver. Some of these people are fortunate and escape with only scrapes, bruises, and dents in their cars. Unfortunately, others are not so lucky. As we rush to put in the central lines, suture wounds, and splint broken bones, we have to shake our heads at the unnecessary carnage—in the fates of the intoxicated and their innocent victims are largely determined before the patients even arrive in our EDs; less than 4% of deaths from trauma are preventable in the hospital. Clearly, the most effective treatment we have for these events is prevention. People do not magically change their behavior after a public service announcement message, but only after they receive the same message over and over from multiple trustworthy sources. We believe that emergency physicians need to be one of these trustworthy sources and should become more involved in effectively preventing these crashes by intervening with patients daily. We have known about alcohol and trauma patients for a long time, and recent data have solidified our common knowledge. A blood alcohol level of 80 mg/dL increases risk for a motor vehicle crash 5-fold, whereas a level of 150 mg/dL increases the risk 25-fold. In 2008, 11,773 people were killed in alcohol-related motor vehicle crashes, or 32% of all motor vehicle deaths. Among these drivers, youth was a major risk factor; 34% of individuals were between 21 and 24 years of age, whereas another 31% were between ages 25 and 34 years. Alcohol contributes to almost 8% of all ED visits each year. These 7.6 million visits are projected to increase in the future. These statistics are the patients we treat every day.

Screening, brief intervention, and referral to treatment (SBIRT) is now required for major trauma patients by the American College of Surgeons as part of the verification process for Level I and II trauma centers. SBIRT is a World Health Organization–approved system, consisting of a screening protocol followed by a discussion about alcohol use, with resources and plans for decreasing use. SBIRT also is a cost-saving measure and at trauma centers has saved $3.81 for every dollar spent. However, it is still not a routine part of care in EDs.

A study of all Level I trauma centers found that only 39% of trauma patients were screened for alcohol use, and among
patients later determined to be problem drinkers, only 25% had been screened. Using SBIRT among these patients would have been an effective way to lower their alcohol intake. Among 699 patients, brief interventions at a trauma center not only reduced alcohol use at 3 months by 3.25 drinks per week but also decreased maximum drinks per occasion by 72% and led to an additional 9% decrease compared with use of written advice only. However, other studies have shown that a brief intervention makes no difference.

In 2000, NHTSA published an executive summary, “Addressing Alcohol-Impaired Driving: Training Physicians to Detect and Counsel Their Patients Who Drink Heavily,” about increasing awareness of alcohol screening and its effect on traumatic injury. This article provided some guidelines, but barriers still exist. Time, language, and training all affect whether a patient is properly screened. Hospitals with dedicated screening protocols likely screen more often than those without them, whereas a low-volume, predominantly English-speaking hospital has different barriers than a high-volume, multilingual urban center.

Screening patients means asking them about alcohol use. If time is short, the most important question to ask is if they have had more than 5 drinks containing alcohol on any single occasion during the past 3 months. This can accurately identify patients who meet Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition or National Institute on Alcoholism and Alcohol Abuse (NIAAA) guidelines for at-risk drinking. If there is more time, CAGE is also an effective screening tool; each letter in CAGE refers to a screening question and the letters are italicized. CAGE is considered positive with 2 “yes” answers, and the 4 questions are as follows: “Have you ever felt the need to cut down your drinking? Have people been annoyed by your drinking? Have you ever felt guilty about drinking? Have you ever needed an eye opener to get your day going?” The majority of patients (60% to 70%) will “screen out” very quickly. However, for those who receive a score as problematic alcohol users, it is time to try the intervention, something that emergency physicians often find difficult to do initially. We are used to telling our patients what to do (take this medication, clean the wound this way, follow up in so many days) rather than conversing with them and motivating them to change underlying behavior. The Substance Abuse and Mental Health Services Administration has many resources and facts about alcohol screening and prevention methods, as does the Centers for Disease Control and Prevention. These resources are a great place to start when looking for ways to begin a conversation and deliver digestible facts to patients.

One of the frequent excuses for not making SBIRT a routine part of caring for patients, particularly injured patients, is that it takes too long and is not reimbursed. That is no longer true. As of 2008, SBIRT is a reimbursable service with a designated Current Procedural Terminology code. Some insurers are paying a fee for documented interventions and can be billed with International Classification of Diseases, Ninth Revision codes: V82.9, V28.9, V65.40, VV65.42, and V65.49. The few questions mentioned above can be performed in a few minutes. But although accurate, they do not provide detailed information about actual alcohol use, and a few minutes per patient can add up during an entire shift.

Given many EDs’ high volumes and crowding, a simple and thorough screening and intervention method could help simplify the process. Computerized Alcohol Screening and Brief Intervention (CASI) is an automated method to screen and provide baseline interventions for all patients. Patients enjoy using these computerized tools, and it allows physicians an easy avenue to open conversation. More important, it can quickly perform complex, detailed questionnaires such as the Alcohol Use Disorder Identification Test (AUDIT), leaving the intervention to the physicians. A CASI system, implemented at the University of California–Irvine Medical Center, found that 47% of patients will drink below NIAAA guidelines at 6 months, and self-reported drunk driving decreases by more than 50%. The NIAAA Web site provides further information on alcohol screening in multiple settings, as well as the AUDIT score.

Every emergency physician already knows that the best way to save trauma patients is to prevent them from getting hurt at all; it should be a fact put into practice. We must participate in the process that changes our cultural and community norm from “driving after a couple of drinks is OK” to “buzzed driving is drunk driving, and it is not OK.”

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