Asking One Question Can Reveal Alcohol Abuse

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As many as one-fourth of patients in primary care settings could be engaging in hazardous or harmful drinking, and discerning that through careful screening—especially in trauma cases—can lead to better care and more accurate flagging of those who abuse alcohol.

According to a study published online, 17.6 million adults abuse alcohol or are alcohol dependent, and 85,000 deaths may be attributable to alcohol each year.

"With brief interventions, primary care clinicians can help 40% of them (compared with 20% in control groups) reduce their drinking to safe levels," according to Andrea Canagasaby and Daniel C. Vinson, M.D., professor of family and community medicine at the University of Missouri–Columbia (Alcohol Alcohol. 2005;40:208-13).

In family practice or emergent care settings, physicians generally ask two screening questions: How often do you drink, and on those days, how much do you drink on average? But these have been shown to be somewhat inaccurate for identifying alcohol-use disorder, Dr. Vinson, lead author if the study, told FAMILY PRACTICE NEWS.

It's hard for people to say how much they drink on average when they might consume two drinks each weeknight but a six-pack on the weekend, he said. So physicians might miss some people who abuse alcohol by asking only about frequency and quantity.

Dr. Vinson found that asking, "When was the last time you had more than five drinks in 1 day [or four for a woman]?" flagged people who should be further queried.

The study comprised interviews with 1,537 patients presenting to the ED for an acute injury, 1,151 who came to the ED due to illness, and 1,112 persons randomly phoned in the community as controls.

They were first asked about tobacco use, and then about number of drinks consumed in a day. A yes to four or five drinks in the past 3 months was considered a positive screen. Those patients were then asked to review, day-by-day, their drinking behavior during the previous 28 days, and to answer questions about the quantity and frequency of alcohol use from the Diagnostic Interview Schedule (DIS).

Hazardous drinking was defined as drinking more than four drinks in 1 day or more than 14 in a week for men, and more than three in a day or seven in a week for women, according to National Institute on Alcohol Abuse and Alcoholism criteria.

The investigators calculated results by estimating the area under the receiver operating characteristic (ROC) curve with 95% confidence intervals. The area under the ROC curve is commonly used as a summary measure of diagnostic accuracy. They compared the ability to identify hazardous drinking or alcohol-use disorders for the three approaches: the single question developed by Dr. Vinson, the quantity–frequency responses to the DIS questions, and a question solely about average quantity consumed.

The ROC area for the quantity–frequency questions was slightly higher than for the single question devised by Dr. Vinson, which in turn was higher than the quantity question alone.

But, physicians in busy settings might not always have the time to go through the quantity–frequency questions, and these questions may not be sensitive enough to detect an alcohol-use disorder, Dr. Vinson told this newspaper. A threshold of three or more drinks per occasion has a sensitivity of 77%, but that declines when a threshold of four or more drinks is used. And the scores can be confusing: A quantity–frequency score of 6 could be derived from six drinks less than once a month, three drinks 1-3 days a month, or two drinks once or twice a week.

The single question could be used as a quicker, more efficient screen, although any of the approaches would be better than nothing, he said. One-third of all ED injuries are caused by people who have harmed themselves while drinking, and 10% of people seen in EDs have been harmed by others who were drinking, Dr. Vinson said in the interview.

Identification can lead to treatment and intervention, which inevitably are cost effective, he said. "We can reduce that person's risks for being reinjured just by talking to that person."

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