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Screening for Unhealthy Alcohol Use

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In this issue of *JAMA*, the US Preventive Services Task Force (USPSTF) presents a recommendation statement¹ and an accompanying evidence review² on screening and behavioral counseling interventions for unhealthy alcohol use. “Un healthy alcohol use” refers to a spectrum from use of alcohol that increases the risk for health consequences (ie, risky or hazardous drinking) to the diagnosis of alcohol use disorder (AUD). In this update of its 2013 recommendation,³ the USPSTF “recommends screening for unhealthy alcohol use in primary care settings in adults 18 years or older, including pregnant women, and providing persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce unhealthy alcohol use (B recommendation).”¹ The USPSTF also concludes “that the current evidence is insufficient to assess the balance of benefits and harms of screening and brief behavioral counseling interventions for alcohol use in primary care settings in adolescents aged 12 to 17 years (I statement).”¹

The USPSTF has recommended screening and brief counseling for adults since 1996,⁴ and before that, in 1989, recommended asking patients to describe their use.⁵ Yet implementation of screening and brief intervention still remains quite low, despite the high prevalence of unhealthy alcohol use, its association with death and disability, evidence for screening and brief intervention efficacy, substantial government funding, practice guidelines, and quality measures and incentives. For example, in the United States, 1 in 6 patients reports having discussed alcohol with their physician; rates in Europe are similarly low.^{6,7} Even when screening is performed, validated questionnaires are infrequently used.

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Reasons for low uptake may include challenges related to implementation, perceptions of alcohol use, and clinicians' perceptions of their roles.

Randomized trials have demonstrated the efficacy of screening and brief counseling in reducing drinking in adults, without differences by sex, race, or ethnicity. Importantly, outcome assessments in studies of behavioral counseling interventions have relied on self-reported use,⁸ which may be subject to social desirability bias. In other words, patients assigned to advice to drink less later report, in part to please the researcher, that they have been drinking less; such a reporting bias results in favor of finding effects of the brief intervention. Systematic reviews find no effects of screening and brief counseling on objective measures of alcohol consumption (eg, blood biomarkers) or health outcomes (eg, injuries, alcohol-related illnesses, hospitalizations).^{1,8} Since the best evidence for efficacy is from self-reported reductions in alcohol use in clinical trials in which patients are advised to drink less, the evidence base is uncertain. Nevertheless, the USPSTF recommendation is reasonable, based on the "extended precautionary principle."⁹ Brief interventions are unlikely to cause harm (unless done poorly or if confidentiality is breached), and consequences of unhealthy alcohol use range from injuries and suicide, to cancers and many chronic illnesses.¹⁰ Even small behavior changes could improve population-level health outcomes.

The USPSTF included adolescents along with adults in the 1989 and 1996 recommendations. But in the current recommendation (as in the 2013 recommendation³), adolescents receive separate consideration (I statement). Despite repeated recognition of the need for more research among youth, evidence is lacking in this population, although some trials do suggest efficacy.¹¹ It is particularly important to reduce drinking among youth because risk taking is common, alcohol-related injury is a leading cause of death among adolescents and young adults, and age of first drink is strongly associated with development of AUD. Further, it is likely that screening and brief counseling for adolescents could be as efficacious—if not more—than among adults, because drinking patterns among adolescents have yet to be established and the potential to prevent a lifetime of risky exposures and consequences is significant.

Evidence limitations, however, do not necessarily explain the suboptimal implementation of screening and brief counseling for unhealthy drinking; even clear-cut evidence is not always sufficient to change practice. The often-cited reasons for poor implementation and dissemination include limited time during clinical visits, a culture of medical care that does not effectively incorporate standardized previsit questionnaires into practice, potential sensitivity surrounding the topic, low confidence in clinical skills, and perceptions that addressing drinking is outside of the physician's role. Yet the public generally supports clinician alcohol screening, and patients who are screened and counseled report having received higher-quality primary care.^{12,13} With limited training in medical school and residency programs regarding identification and management of unhealthy alcohol use and few specialist role models, low confidence in clinical skills is a real concern. Similarly, physicians may be concerned that, if they identify AUD, they will be unable to manage it or will have difficulty accessing referrals to effective care. These challenges are consistent with the USPSTF's findings that there is no evidence that screening leads to prevention of AUD

or to completed referrals among individuals with AUD. These concerns all contribute to physicians' perceptions that screening and brief counseling are beyond their purview.

Experience with other clinical preventive services may provide some explanations for the poor implementation of screening and brief counseling for unhealthy alcohol use and identify some possible solutions. Preventing the consequences of unhealthy alcohol use often requires more comprehensive approaches than prevention initiatives involving relatively simple clinical screening and follow-up steps. Strategies that rely on simple physical assessments (eg, routine checking of blood pressure at medical visits) or orders for simple procedures or testing (eg, minimally controversial vaccinations, mammography, measurement of serum cholesterol levels) are implemented more often.¹⁴ Prostate cancer screening by blood testing was widely implemented despite evidence-based practice guidelines advising against it, even among patients at low risk.¹⁴ Addressing unhealthy drinking may be more difficult for several reasons.

First, screening may be met with reluctance if unhealthy alcohol use is viewed as less "medical" than other conditions. The stigma surrounding heavy alcohol use and blame that may be placed on patients make this challenge difficult to address, possibly requiring a shift in thinking, additional training, and acceptance of broader, more contemporary views of disease and prevention. Vaccination for human papilloma virus, publicly controversial and stigmatizing, has encountered similar challenges.

Second, brief counseling may be insufficient for changing normative behaviors that are viewed as acceptable daily activities. Most adults drink alcohol, more than half of those who drink exceed risky limits, and low amounts of alcohol consumption have been touted (likely falsely) as beneficial.¹⁵ Alcohol screening may be more similar to prevention strategies for obesity—while valid screening tools exist, changing behaviors entrenched in everyday life and social norms may require more intensive, repeated counseling rather than brief interactions. Depression screening may offer some lessons. Screening with validated tools is becoming the norm, and many patients receive medications for depression (even if doses may be inadequate and the full range of psychosocial treatments are not used). A combination of clinician perception that depression is in their purview, reduced stigma, and seemingly straightforward interventions likely have a role in wide implementation of screening

Third, addressing unhealthy alcohol use requires recognition of the normalization of drinking in society and structural factors that facilitate unhealthy drinking in the population. Alcohol availability and advertising are ubiquitous, and preparing patients to cope with numerous, daily cues to drinking will require strategies that extend beyond brief behavioral counseling. Substantial evidence supports the population-level effects of interventions regulating alcohol availability, restricting advertising, and increasing prices (through taxes and minimum pricing) on reduced alcohol consumption.¹⁰ Such interventions could help boost the effects of screening and brief counseling on individual behaviors by altering societal contexts and preventing clinician advice from being drowned out by advertisements and norms.

Screening and brief counseling for unhealthy drinking should be implemented universally for adults and likely for youth as well. The recommendations from the USPSTF, World Health Organization,¹⁶ and the American Academy of Pediatrics (AAP)¹⁷ all support screening and brief counseling for unhealthy drinking in adults, and the AAP supports them for youth. Stronger clinical trial evidence, including interventions to prevent youth from initiating drinking, and studies finding effects on clinical outcomes, will be needed to support broader and more definitive recommendations. The opioid epidemic and establishment of addiction medicine as a medical specialty will likely help improve physician training, but more will be needed to implement universal screening. Physicians need skills, interdisciplinary colleagues, and systems (eg, electronic records and decision support) to facilitate screening and counseling, as well as resources to care for patients identified as having AUD in general health settings. The societal context must change, as recommended by the World Health Organization, to limit the influence of the alcohol industry¹⁸ and make the message unequivocal that less use of a toxin and carcinogen (even at very low levels) is better for health.

Patients expect a drinking checkup, and it is time for clinicians, with support, to provide it.

REFERENCES

1. US Preventive Services Task Force. Screening and behavioral counseling interventions to reduce unhealthy alcohol use in adolescents and adults: US Preventive Services Task Force recommendation statement [published November 13, 2018]. *JAMA*. doi:10.1001/jama.2018.16789
2. O'Connor EA, Perdue LA, Senger CA, et al. Screening and behavioral counseling interventions to reduce unhealthy alcohol use in adolescents and adults: updated evidence report and systematic review for the US Preventive Services Task Force [published November 13, 2018]. *JAMA*. doi: 10.1001/jama.2018.12086
3. Moyer VA; U.S. Preventive Services Task Force. Screening and behavioral counseling interventions in primary care to reduce alcohol misuse: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med*. 2013;159(3):210–218. [PubMed: 23698791]
4. US Preventive Services Task Force. Guide to Clinical Preventive Services: Report of the US Preventive Services Task Force, 2nd Edition: Screening for Problem Drinking. National Center for Biotechnology Information website. <https://www.ncbi.nlm.nih.gov/books/NBK15434/>. Updated 1996. Accessed September 19, 2018.
5. Centers for Disease Control and Prevention (CDC). Guide to Clinical Preventive Services: an assessment of the effectiveness of 169 interventions: screening for alcohol and other drug abuse. CDC website. <https://wonder.cdc.gov/wonder/prevguid/p0000109/p0000109.asp#head052000000000000>. Updated January 27, 2016. Accessed September 19, 2018.
6. Anderson P, Bendtsen P, Spak F, et al. Improving the delivery of brief interventions for heavy drinking in primary health care: outcome results of the Optimizing Delivery of Health Care Intervention (ODHIN) five-country cluster randomized factorial trial. *Addiction*. 2016;111(11): 1935–1945. doi:10.1111/add.13476 [PubMed: 27237081]
7. van Beurden I, Anderson P, Akkermans RP, Grol RP, Wensing M, Laurant MG. Involvement of general practitioners in managing alcohol problems: a randomized controlled trial of a tailored improvement programme. *Addiction*. 2012;107(9): 1601–1611. doi:10.1111/j.1360-0443.2012.03868.x [PubMed: 22372573]
8. Jonas DE, Garbutt JC, Amick HR, et al. Behavioral counseling after screening for alcohol misuse in primary care: a systematic review and meta-analysis for the U.S. Preventive Services Task Force. *Ann Intern Med*. 2012;157(9):645–654. doi:10.7326/0003-4819-157-9-201211060-00544 [PubMed: 23007881]

9. Heather N Spreading alcohol brief interventions from health care to non-health care settings: is it justified? *Drugs Educ Prev Policy*. 2016;23(5):359–364. doi:10.1080/09687637.2016.1187113
10. World Health Organization (WHO). Global Status Report on Alcohol and Health 2018. WHO website. http://www.who.int/substance_abuse/publications/global_alcohol_report/gsr_2018/en. Accessed October 1, 2018.
11. Tanner-Smith EE, Lipsey MW. Brief alcohol interventions for adolescents and young adults: a systematic review and meta-analysis. *J Subst Abuse Treat*. 2015;51:1–18. doi:10.1016/j.jsat.2014.09.001 [PubMed: 25300577]
12. Saitz R, Horton NJ, Cheng DM, Samet JH. Alcohol counseling reflects higher quality of primary care. *J Gen Intern Med*. 2008;23(9):1482–1486. doi:10.1007/s11606-008-0574-4 [PubMed: 18618204]
13. Rush BR, Urbanoski KA, Allen BA. Physicians' enquiries into their patients' alcohol use: public views and recalled experiences. *Addiction*. 2003;98(7):895–900. doi:10.1046/j.1360-0443.2003.00410.x [PubMed: 12814495]
14. Royce TJ, Hendrix LH, Stokes WA, Allen IM, Chen RC. Cancer screening rates in individuals with different life expectancies. *JAMA Intern Med*. 2014;174(10):1558–1565. doi:10.1001/jamainternmed.2014.3895 [PubMed: 25133746]
15. Stockwell T, Zhao J, Naimi T, Chikritzhs T. Response: moderate use of an “intoxicating carcinogen” has no net mortality benefit—is this true and why does it matter? *J Stud Alcohol Drugs*. 2016;77(2):205–207. doi:10.15288/jsad.2016.77.205
16. World Health Organization (WHO). Facilitate access to screening, brief interventions and treatment. WHO website. http://www.who.int/substance_abuse/safer/f/en/. Updated 2018. Accessed October 1, 2018.
17. Committee on Substance Use and Prevention. Substance use screening, brief intervention, and referral to treatment. *Pediatrics*. 2016;138(1): e20161210. doi:10.1542/peds.2016-1210 [PubMed: 27325638]
18. World Health Organization (WHO). SAFER: Preventing and Reducing Alcohol-Related Harms. WHO website. http://www.who.int/substance_abuse/safer/msb_safer_framework.pdf?ua=1. Accessed October 1, 2018.