Moving beyond the "Health Halo" of Alcohol: What Will it Take to Achieve Population Awareness of the Cancer Risks of Alcohol?

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ABSTRACT

We discuss the implications of Seidenberg and colleagues' report confirming low levels of accurate awareness of the cancer harms associated with alcohol use, including wine, beer, and liquor consumption. The authors propose that academic and lay messaging describing consumption of wine and other forms of alcohol as reducing heart disease risk has created generalized beliefs about the health benefits of drinking alcohol. This "health halo" surrounding alcohol consumption leads the public to overgeneralize alcohol health benefits to other diseases, including cancer. We discuss the need to address high levels of perceived risk uncertainty to help the public distinguish between the impact of alcohol on heart disease versus cancer, and to overcome other barriers to including alcohol use reduction as a cancer prevention strategy. Given recent increases in U.S. population drinking rates, as well as morbidity and mortality associated with alcohol use, the time is right to marshal multilevel efforts to educate the public regarding the fact that alcohol is carcinogenic. If successful, these efforts will have multiple downstream benefits, including the ability of the lay public to use the most up-to-date scientific evidence to make informed decisions about whether, and how much, to engage in a risky behavior.

See related article by Seidenberg et al., p. 46

In November 1991, 60 Minutes host Morley Safer took a deep dive into the "French Paradox," publicizing a line of research (1) addressing why people residing in France live longer than people residing in the United States, despite the rich, calorie-laden, high-cholesterol food regularly consumed by those in France. The answer, according to Safer, was that red wine consumption protected them from developing coronary heart disease. On the basis of this television segment, which reached 22 million viewers, as well as subsequent mass media amplification, wine developed a widespread reputation as heart-healthy—a perception that has largely persisted (2). In the current issue of CEBP, Seidenberg and colleagues (3) elucidate the continued impact of this messaging more than 30 years later. Indeed, large segments of the U.S. general population believe that, to some extent, the supposed health effects of wine extend to other forms of alcohol, and that the protective health effects on cardiac function extend to the cancer setting. However, in reality, alcohol is responsible for 6% of U.S. cancer cases (only outpaced by tobacco and excess body weight) (4) and is considered a Group 1 carcinogen, the highest level of risk (5). Unfortunately, alcohol's perceived "health halo" has likely played a role in impeding broad public recognition that alcohol increases the risk of developing cancer.

Seidenberg and colleagues (3) examine beliefs about cancer and heart disease risk associated with drinking different types of alcohol (wine, beer, liquor). Data were collected in 2020 from in a nationally representative sample of 3,865 adults residing in the United States. Importantly, the majority of survey participants (>50%) reported uncertainty about the link between alcohol and cancer risk; that is, they said they did not know whether any type of alcohol affected cancer risk. Beyond this substantial uncertainty, the perceived "health halo" for wine was clearly evident. For wine, as opposed to beer or liquor, significantly more people reported that wine decreased cancer risk, and significantly fewer people reporting that wine increased cancer risk. Both drinkers and nondrinkers were equally unaware of the alcohol-cancer risk link.

Another consequence of the health halo was that beliefs about the impact of alcohol use on heart disease risk were consistently associated with beliefs about the impact of alcohol use on cancer risk. Participants who thought that alcohol decreased, had no effect, or were uncertain about the impact of alcohol on heart disease risk all had lower accurate awareness of the alcohol-cancer link. In short, even in 2020, alcohol's "health halo" continues, extending to the setting of cancer risk. Identifying and overcoming these and other attitudinal barriers is urgently needed to increase the abysmally low U.S. public awareness of the cancer harms of using alcohol (6).

Seidenberg and colleagues (3) add to previous work (7, 8) providing evidence of the need to increase awareness of the link between alcohol consumption and cancer risk, whether that means providing clear and accurate information to people who are uncertain about the link between alcohol and cancer risk, or providing corrective information to people who misunderstand the relationship. Achieving the goal of reducing the cancer burden posed by alcohol requires such awareness because of mechanisms at multiple levels of influence. For example, health behavior theory outlines the importance of risk awareness as a necessary early step in enhancing motivation for, and adoption of, protective health behaviors (9). Indeed, heightened awareness of the cancer risk related to alcohol consumption is associated with higher intentions to reduce alcohol consumption (10). In addition to this direct effect on individual behavior, increasing public awareness of the link between alcohol and cancer could have additional important downstream effects including, for example, increasing physician and

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patient prioritization for physician alcohol counseling, which is currently underutilized (11), increasing family discussions about the harms of alcohol use, and increasing support for alcohol control policies that effectively curb consumption (12). Relatedly, proactive and deliberate public communication of cancer risks of alcohol will be necessary to counteract inaccuracies, confusion, and misinformation proliferating in social media and as promulgated by the alcohol industry (13), as it continues to be required in the context of tobacco (14). This includes counteracting alcohol marketing that actively suppresses alcohol health risks and falsely identifies alcohol consumption as a cancer prevention strategy ["pinkwashing" (15)].

Even with full information regarding the cancer harms of drinking, many will certainly continue to imbibe. Nevertheless, increased awareness could result in people making more informed decisions about their alcohol consumption. For example, lighter drinkers might avoid increasing their consumption, former drinkers might avoid resuming, and heavier drinkers might use evidence-based interventions to reduce their consumption. Families with stronger cancer histories may also use this information in important ways to manage their family cancer risks. In all cases, and for all members of the public regardless of the magnitude of their alcohol consumption, informed decision making about drinking cannot happen without full awareness of the health harms of alcohol.

Seidenberg and colleagues (3) recommend several strategies that behavioral scientists, health communication experts, and epidemiologists could use to increase awareness of the alcohol-cancer link in the United States. When asked whether consuming alcohol is associated with cancer risk, the most common response from participants was, "I don't know." (The authors should be commended for including this response option, which eliminated the need for participants with low awareness to select an inaccurate response.) Although the high proportion of utilization of this option is dismaying because it indicates a considerable gap in knowledge, it also may represent a low-lying fruit for intervention. Our team (16) and others (17) have found that individuals who report higher personal risk uncertainty ("I don't know my risk") tend to have low health literacy, educational attainment, and/or socioeconomic status (18), and may also defensively avoid cancer information or have pessimistic cancer risk attitudes, all of which may obstruct cancer risk awareness (19). However, these sociodemographic and psychosocial factors also provide guidance for developing health messaging that is uniquely targeted and/or tailored to address these potential key points of leverage.

Second, it is likely that alcohol-cancer risk messaging must directly target incorrect or misleading beliefs about the health impacts of alcohol consumption. Messaging for the 10% of respondents who reported that wine decreases cancer risk, and the nearly 20% who thought that beer or liquor have no effect on cancer risk, will likely require an approach to messaging focused on persuading people to change their beliefs. These messages will likely be different from those intended for people who are uncertain about the health harms of alcohol. In addition, messages must acknowledge the distinctions of alcohol's effect on cancer compared with heart disease risk, including the current epidemiologic clarity we have regarding alcohol's direct and dose–response effect on cancer risk. In the case of heart disease, where the evidence may be less clear, strategies must directly address established uncertainties around disease risk (20).

Third, we need to pause and consider. As a cancer prevention and control field, have we been giving alcohol a "pass"? Has the high social acceptability and ubiquitous presence of alcohol in our lives led us to prioritize investigation of other cancer risk factors and cancer prevention intervention strategies? Alcohol has many positive affective associations, as it is associated with celebrations, bonding with family and friends, and unwinding at the end of the day, and people may think we are expecting them to give that up. As cancer prevention researchers, we have been here before—with tobacco, diet, and UV exposure among other cancer risks—where we might have difficulty imagining that our efforts to communicate would be met with anything other than rejection and push-back.

Yet there is room for optimism. The social and cultural associations of tobacco have changed dramatically over the course of the second half of the 20th century, after the publication of the 1964 Surgeon General's Report on Smoking and Tobacco (21), whereby reductions in tobacco use and changes in social norms were mutually reinforcing over time. Increasing tobacco policy restrictions and other coordinated efforts also played a role. Indeed, a small but developing movement toward drinking less alcohol, particularly among young people, may be gaining ground (22). We believe these positive developments can enhance efforts to address the cancer prevention potential of alcohol-cancer risk awareness, arming the public to make fully informed and more careful decisions about their drinking to reduce their cancer risk.

As noted in a recent New England Journal of Medicine perspective piece proposing updated cancer messaging for alcohol, "Alcohol consumption and its harms are reaching a crisis point in the United States." (23) Alcohol use and associated harms, as well as alcohol-related mortality, have increased dramatically over the course of the COVID-19 pandemic (24, 25). Given this, the timing is right for cancer prevention researchers to put forward substantial effort to dispel any remaining incorrect perceptions of a "health halo" of drinking in the context of cancer, to educate the public and encourage multiple directions of influence, including those focused on the individual, family, community, and regulation, with the common goal of addressing cancer-related harms associated with alcohol use.

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