

VIEWPOINT

Science and Public Health on Trial

Warning Notices on Advertisements for Sugary Drinks

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In 2015, city supervisors in San Francisco passed an ordinance requiring billboards advertising sugar-sweetened beverages (SSBs) to include a notice: "Warning: drinking beverages with added sugar(s) contributes to obesity, diabetes, and tooth decay. This is a message from the city and county of San Francisco." The ordinance, originally scheduled to go into effect on July 25, 2016, represents the first such SSB warning notice law in the world. A clear, factual warning notice about health effects related to SSBs may be important in reducing disease rates among many people, including those with the lowest health literacy; low health literacy is associated with SSB consumption, contributing to a disparity in daily SSB consumption of about 240 calories.¹

Warning notices can influence consumer choices regarding SSBs.² Warnings could increase the public's awareness of the potential health risks of SSBs, providing a visible vehicle to advise people with (or at risk of) obesity, diabetes, and tooth decay. However, the

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beverage and billboard industries, in *American Beverage Association (ABA) et al v City & County of San Francisco*, sued for a temporary injunction to block implementation of the law. Industry claimed its First Amendment freedom of speech rights would be violated were the ordinance to go into effect. On April 7, 2016, Judge Edward M. Chen presided over a hearing in US District Court for the Northern District of California.

In the hearing and expert reports submitted by industry,³ the focus was on the scientific veracity of the warning. Industry argued that it is unconstitutional for commercial speech to be infringed or "chilled" by compelled, noncommercial speech (eg, a warning), particularly when the compelled speech is misleading, false, or a subject of scientific controversy.³ Industry also claimed that consumers are likely to infer that SSBs are uniquely harmful, a conclusion they contended is not supported by science, and therefore is unconstitutional.³ The city responded that the warning is factually true and that causal relationships are supported by strong science.

The basis of the plaintiffs' argument was that SSBs do not cause obesity, diabetes, and tooth decay. To

delegitimize causal inferences from epidemiologic studies on the associations between SSBs and chronic disease and to counter growing evidence from prospective feeding trials,⁴ the SSB industry misappropriated the methods, logic, and language of science to create doubt to support its arguments.^{4,5} Industry relied on several strategies, such as financing research, manipulating scientific communications, applying scientific reductionism, dismissing behavioral and economic studies, and demanding perfect scientific evidence (Supplement).

On May 17, 2016, Judge Chen issued his decision.⁶ The court denied industry's motion, stating that "[p]laintiffs are not likely to succeed on the merits of their First Amendment claim, and it is unlikely that they would suffer irreparable harm if the ordinance were to go into effect...[The] balancing of hardships does not tip sharply in their favor."⁶ Judge Chen relied on the precedent *Zauderer v Office of Disciplinary Council of Supreme Court*, in which the court "recognize[d] that unjustified or unduly burdensome disclosure requirements might offend the First Amendment by chilling protected commercial speech. But we hold that an advertiser's rights are adequately protected as long as disclosure requirements are reasonably related to the State's interest in preventing deception of consumers."⁷

Judge Chen reaffirmed analyses from *CTIA v City of Berkeley* that "compelled disclosure must convey a fact rather than an opinion and that, generally speaking, it must be accurate."⁶ He underscored this point by invoking *Discount Tobacco City & Lottery, Inc v United States*, which determined that "whether a disclosure is scrutinized under *Zauderer v Office of Disciplinary Council of Supreme Court* turns on whether disclosure conveys factual information or an opinion, not on whether the disclosure emotionally affects its audience or incites controversy."⁸

He continued that the factual requirement should not "'be so easily manipulated that it would effectively bar any compelled disclosure by the government,' particularly 'where public health and safety are at issue.'"⁶ He concurred with the *CTIA v City of Berkeley* decision that "[a] 'controversy' cannot automatically be deemed created any time there is a disagreement about the science behind a warning because science is almost always debatable at some level."⁶ He concluded that the SSB warning required by the ordinance likely passes the factual and accurate requirement.

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The scientific endeavor combines unbiased experimentation with objective observations of the natural world to accumulate knowledge so as to approximate truth. In misappropriating scientific methods to reject science, the SSB industry, whose objectives are to sell products (even if those products, in the amounts consumed by millions of Americans, could promote illness), demonstrated the vulnerabilities, to which science can be subjected (Supplement). As science is increasingly being used to advocate for or against public policy decisions that affect industry (eg, reducing carbon emissions, eliminating antibiotics in animal agriculture, regulating electronic cigarettes), public health leaders, legal advocates, and decision makers need to be aware of these vulnerabilities, and become agile in countering misleading messages that find their way into public discourse. In the San Francisco case, the defense's expert scientific reports⁹ needed to highlight and rebut many of those strategies.

After Judge Chen denied the preliminary injunction to block implementation of the ordinance in May 2016, the plaintiffs, in June 2016, asked him to stay the implementation of the ordinance pending the conclusion of the lawsuit. He denied that motion because, under the applicable legal standards as he understands them, plaintiffs are not likely to succeed in the case. Plaintiffs then asked him to stay the implementation just while they appealed that ruling (ie, for however many months it takes the Ninth Circuit to resolve the appeal of the order denying the preliminary injunction). He granted that second motion because he said there is some uncertainty about what the legal standards are related to the acceptable size of warning notices.

Nonetheless, San Francisco's ordinance and the court's denial of the preliminary injunction, assuming that the appellate court upholds them, represent a potential watershed victory in public health efforts to counteract obesity, diabetes, and tooth decay. Although the decision required a careful analysis of the SSB warning ordinance and relevant legal precedents, the balance of the case rested on the elucidation of scientific and legal understandings of the uncertainties inherent to factual evidence. Plaintiffs attempted to leverage vulnerabilities implicit to the conduct and dissemination of science to create controversy that questioned the accuracy of the warning and any inferences that the public might make. The defense described to the court many of the strategies industry uses to leverage science and countered by revealing the weaknesses in those arguments and presenting more compelling evidence in support of the warning's accuracy. The outcome of this case demonstrates that the public health duty to warn can be reconciled with constitutional protections, without jeopardizing scientific integrity.

Implementing such policies could benefit all US residents, but could especially benefit socioeconomically vulnerable populations, including children, some of whom are exposed to a disproportionate volume of SSB advertising and often purchase these products at high rates¹⁰ and experience the greatest risk of chronic diseases. The decision in *American Beverage Association (ABA) et al v City & County of San Francisco*, if upheld by the appellate court, provides a pivotal legal precedent that could influence public health policy at local, state, and national levels related to communicating the health risks inherent to SSBs and other products.

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