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Commentary

Borrowing from tobacco control to curtail the overweight and obesity epidemic: Leveraging the U.S. Surgeon General's Report

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ABSTRACT

There is broad agreement that more needs to be done to curtail the U.S. overweight and obesity epidemic. Fifty years of regular Surgeon General's Reports on the health consequences of smoking appear to have been a highly effective contributor to the notable successes that have been made in reducing smoking prevalence. Comparing the rate of Surgeon General's Reports on smoking and obesity reveals striking differences, with more than a five-fold lower rate of reporting on the latter. Developing practices that more effectively leverage the power of the U.S. Surgeon General's Office in efforts to reduce obesity is a relatively straightforward but potentially powerful additional step that warrants consideration.

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January 11th, 2014 marked the 50th anniversary of the release of the 1st U.S. Surgeon General's Report on *Smoking and Health*, identifying smoking as a cause of lung cancer (US Department of Health and Education, 1964). That event has appropriately occasioned a celebration of the tremendous progress made in curtailing the smoking epidemic during the subsequent 50 years, including a themed issue of *JAMA* (2014).

In the way of context, it is helpful to recall that when that 1st Surgeon General's Report appeared in 1964 the U.S. had the highest rate of per capita tobacco consumption among developed countries but now ranks among the lowest (Organization for Economic Cooperation and Development, 2013). Among the 34 member countries in the Organization on Economic Cooperation and Development (OECD), for example, the U.S. is 2nd lowest on youth and 3rd on adult smoking prevalence, with <10% of 15 year olds reporting weekly or more frequent smoking (2009–10 statistics), and <15% of those ≥15 years reporting daily smoking (2011 statistics). While much more remains to be done, especially among economically disadvantaged and other vulnerable populations, the progress in reducing smoking that has transpired over the past 50 years is well deserving of its recognition as one of public health's great accomplishments.

In celebrating that accomplishment, it seems prudent to again raise the question of what can be gleaned from it that might be useful in efforts to curtail the overweight and obesity epidemic (Mercer et al., 2003). Cigarette smoking and overweight and obesity are the two leading causes of premature death and morbidity in the U.S. and other developed countries, and they share important determinants at the

neurobiological, behavioral, and social levels (Higgins, 2014; Mercer et al., 2003; Schroeder, 2007). As such, it seems reasonable to expect that factors that promote progress on one might inform efforts to curb the other.

When the same international comparisons with other OECD countries described above for tobacco are made regarding overweight and obesity, for example, there is considerable reason for alarm. The U.S. ranks higher than all but four of the 34 OECD countries on prevalence of childhood overweight and obesity (2010 or latest year statistics) and is highest on prevalence among adults (2011 or nearest year statistics) (Organization for Economic Cooperation and Development, 2013). Among U.S. children and adolescents ages 2–19 years, approximately 31.8% are overweight or obese and 16.9% obese (Ogden et al., 2012); among adults ≥20 years, approximately 68.8% are overweight or obese and 35.7% obese (Flegal et al., 2012).

Critical role of the U.S. Surgeon General's Reports

In reviewing key developments in accounting for progress in reducing prevalence of cigarette smoking, there is agreement among tobacco control experts regarding the important role of the U.S. Surgeon General's Reports (SGRs) (Alberg et al., 2014; Cole and Fiore, 2014), not just the landmark 1964 report, but also that report in concert with the 32 SGRs on smoking and health that followed, a report every 1.5 years. These reports summarized, synthesized, and critically evaluated the quality of emerging cross-disciplinary scientific evidence on the health consequences of smoking on an almost continuous basis. They also provided an opportunity to focus in greater depth on specific topics of importance to understanding the health consequences of smoking (e.g., impacts on women's health, impacts on specific smoking-related diseases). Several of those more focused reports have

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had transformative impacts, such as the 1986 report on *The Health Consequences of Involuntary Smoking* and the 1988 report on *The Health Consequences of Smoking: Nicotine Addiction* (Alberg et al., 2014; Cole and Fiore, 2014). The 1986 report demonstrated that passive smoke exposure increased risk for the same diseases as active smoking thereby laying the groundwork for legislation restricting smoking in public spaces. The 1988 report demonstrated that cigarettes were drug delivery devices, with nicotine being the constituent in tobacco smoke that drives repeated use and addiction largely via the same mechanisms through which cocaine and heroin act in promoting addiction. That information was key in catalyzing recognition of how tobacco manufacturers knowingly leveraged addiction for profit. The SGRs also underscored the critical importance of prevention and treatment research and related public health policy to comprehensive and effective tobacco control while also allowing for very public oversight of progress across the varied and complimentary aspects of this multidisciplinary effort.

What about SGRs in efforts to curtail the overweight and obesity epidemic? Using liberal inclusion criteria, there have been five such reports, dating from 1988 to September 2014, a report every 5.2 years (1988 report on *Nutrition and Health*, 1996 report on *Physical Activity and Health*, 2001 report *Call to Action to Prevent and Decrease Overweight and Obesity*, 2010 report *Vision for a Healthy and Fit Nation*, and 2011 report *Call to Action to Support Breastfeeding*) (see US Department of Health and Services, 2014a, 2014b). A more conservative view is that there has only been one SGR explicitly addressing the overweight and obesity epidemic (2001 report). Whether using liberal or conservative inclusion criteria, that is a far cry from the 33 reports on smoking and related topics at a rate of 1.5 reports/year.

What might account for this difference?

In trying to account for this striking difference, one factor stands out. A congressional mandate for annual reports on smoking and health established the pattern that continues today. Building on the momentum of the 1964 SGR, the Federal Cigarette Labeling and Advertising Act was passed in 1965 mandating that all cigarette packages include warning labels, and also mandating that the Secretary of the Department of Health, Education, and Welfare (now the Department of Health and Human Services, DHHS) submit annual reports on the health consequences of smoking, a mandate that the SGRs satisfied (Alberg et al., 2014; Cole and Fiore, 2014). Subsequent legislation kept this mandate in place through 1998 when still other legislation ended such congressional reporting mandates (Alberg et al., 2014). Underscoring the widely recognized value of these SGRs, DHHS has continued publishing them through the Office on Smoking and Health, the lead federal agency for comprehensive tobacco prevention and control that resides within the Centers for Disease Control and Prevention's (CDC) National Center for Chronic Disease Prevention and Health Promotion (Alberg et al., 2014; Centers for Disease Control and Prevention, 2014). What also continues is the Interagency Committee on Smoking and Health, which advises DHHS on "coordination of research, educational programs, and other activities within the Department that relate to the effect of smoking on human health" (Centers for Disease Control and Prevention, 2014). To my knowledge, there is no comparable history of congressional mandates for reporting on the overweight and obesity epidemic, nor any established practice of regular reporting that parallels federal practices around regular SGRs on the health consequences of smoking, or any comparable interagency advisory committee of the stature paralleling the advisory committee on smoking.

It seems like the necessary infrastructure already exists within the CDC to remedy this situation. The CDC's National Center for Chronic Disease Prevention and Health Promotion that is home to the Office on Smoking and Health, also includes a Division of Nutrition, Physical Activity, and Obesity (Centers for Disease Control and Prevention, 2014). This division is already carrying out many efforts important to

curtailing the overweight and obesity epidemic including regular updates on prevalence. Perhaps its mission could be broadened to include SG reporting responsibilities comparable to those of its sister division. Nothing in the current organizational description of the Division of Nutrition, Physical Activity, and Obesity identifies it as the lead federal agency for comprehensive obesity prevention and control paralleling the language used to describe the mission of the Office on Smoking and Health nor does there appear to be an interagency advisory committee associated with it as there is for smoking. Both may be important to effectively carry out the SGR mission over time. Certainly the long history and experience of the Office on Smoking and Health should provide all the guidance that may be needed to evaluate such matters.

Conclusions

In closing, it seems that there might be substantial value in establishing a practice of regular SGRs on the health consequences of overweight and obesity at a frequency, level of scientific breadth and depth, and informed by ongoing input from exemplary advisory committees, as has been so effective in efforts to curtail the smoking epidemic. Of course, the specific characteristics of such an effort would need to be aligned with the pace of development of new knowledge on overweight and obesity, which may differ from what occurred in the area of tobacco control. Overall, though, there is little question that more needs to be done to turn the tide on the US overweight and obesity epidemic. Developing practices that more effectively leverage the power of the U.S. Surgeon General's Office in this important effort is a relatively straightforward but potentially powerful additional step that warrants consideration.

Conflicts of interest

The author declares that there are no conflicts of interests.

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