

Correspondance

Child hunger in Canada

Lynn McIntyre and colleagues have analyzed data from the National Longitudinal Survey of Children and Youth and reported on child hunger in Canada.<sup>1</sup> Unfortunately, their methodology does not permit them to extend their conclusions beyond the sample they analyzed to the population of Canada. The sample in the National Longitudinal Survey of Children and Youth is not a random sample of Canadian children. It becomes representative of the population of Canada only when analysts take into account the sampling weights provided by Statistics Canada. It is more complicated to take into account the complex survey design and to correctly compute confidence intervals. This is generally now done by using bootstrap methodology.

McIntyre and colleagues state that they did not use Statistics Canada's sampling weights because they were not generating population estimates. Although their results might provide some information about child hunger in Canada, there is no guarantee that they are representative of the country as a whole. The article should thus have been entitled "Child hunger in a sample of Canadian families."

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Reference

1. McIntyre L, Connor SK, Warren J. Child hunger in Canada: results of the 1994 National Longitudinal Survey of Children and Youth. *CMAJ* 2000;163(8):961-5.

The recent article by Lynn McIntyre and colleagues<sup>1</sup> provides overlooked evidence supporting the precept presented to the board of directors of the Philip Morris Companies Inc. that "the cigarette will preempt even food in time of scarcity on the smokers' priority list."<sup>2</sup> In fact, McIntyre and colleagues show that Canada's hungry children are more than twice as

likely as other children to have a primary caregiver who smokes daily.

Canada's frequently hungry children are up to 6 times more likely than other children to have a parent who smokes daily, if occasional smokers represent a small proportion of the primary caregivers who smoke and who have frequently hungry children. Caregivers who smoke daily may have less money to feed their dependent children than caregivers who smoke occasionally, and they may be more likely to become disabled and lose the ability to earn income.<sup>3</sup>

If the above associations are causal, daily smoking (and thus the tobacco industry and its political and commercial supporters) may be responsible for 24% of all, and up to 56% of frequent, child hunger in Canada, assuming a 25% prevalence of daily smoking among Canada's primary caregivers.

McIntyre and colleagues could evaluate whether comprehensive tobacco control programs might reduce child hunger by entering occasional and daily smoking into their analyses as candidate preventable causes of occasional and frequent child hunger. In their analyses they should consider that smoking may contribute to child hunger through smoking-attributable caregiver depression,<sup>4</sup> ill health and death of caregivers<sup>5</sup> and ill health of children. Smoking may also contribute to child hunger through divorce,<sup>6</sup> job hunting (involuntary job loss<sup>7</sup>) and the need for social assistance owing to disability<sup>3</sup> or job loss.<sup>7</sup>

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[The authors respond:]

Murray Finkelstein raises issues similar to those raised by peer reviewers for Human Resources Development Canada and *CMAJ*. We persuaded them that weighting was inappropriate for the comparison of hungry subgroups and for the comparison of hungry and nonhungry groups because we were not presenting population estimates.<sup>1</sup> We did originally run all of our results from the 1994 National Longitudinal Survey of Children and Youth (NLSCY) using weighted estimates, and many more analyses were significant. Weighting would have overstated the power of our tests, whose results were mainly determined by the groups with the smallest degrees of freedom.

The issue of weighting data when comparing subgroups that together comprise the whole sample is contentious. Weighting is designed to correct for inequities in the whole sample, not segments of it. We could have weighted each segment separately so as not to exceed the actual sample size, but the gain would have been marginal. When we compare subgroups that together are only a portion of the whole sample (e.g., occasional v. frequent hunger), there is much less call for weighting. Given the disturbing nature of our results, we felt it prudent to err on the side of underreporting associations rather than to report all positive results using weighted analyses.

In the second cycle of the NLSCY, collected in 1996, circumstances required a large proportion of the sample to be dropped; because of this change,

we employed both sample and longitudinal weights for the analyses in this cycle. However, only cross-sectional and longitudinal weights are calculated in the NLSCY file; bootstrap methodology is not used. In a forthcoming follow-up study of hunger in NLSCY families we compared adjusted prevalence rates of hunger in 1994 and 1996. The population estimates of child hunger in Canada using weights were 1.4% (53 995 children) and 1.6% (75 615 children) for 1994 and 1996 respectively.

Bruce Leistikow's argument is based on the presumption that the associations observed are causal; of course, such a relationship cannot be inferred from cross-sectional data. We offer another analysis: smoking in the primary caregiver is associated with hunger in the primary caregiver. Smoking is a coping mechanism for the physical and psychological stress of hunger.<sup>2</sup> That being said, high tobacco taxes can be viewed as regressive taxes that target the tobacco-addicted poor,<sup>3</sup> reducing family resources for food and other essentials. We can all agree on one thing: sensitive supports for tobacco cessation must be offered to low-income caregivers who smoke. Cessation will improve health and reduce the financial stress on households.

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## The environmental impact of war

Although the principles mentioned in the *CMAJ* editorial commemorating Remembrance Day are certainly commendable,<sup>1</sup> the article in the same issue by Jennifer Leaning reads like an apology for the real instigators of the miseries inflicted on the world since 1939.<sup>2</sup>

Leaning writes about the death toll resulting from the bombing of Tokyo and various German cities without a word about the slaughter of the civilian populations in London, Coventry, Portsmouth and other areas by the Nazis, who started this abominable escalation, and the list of references leans heavily toward pro-Soviet apologists.

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#### References

1. Remembrance of things present [editorial]. *CMAJ* 2000;163(9):1121.
2. Leaning J. Environment and health: 5. Impact of war. *CMAJ* 2000;163(9):1157-61.

#### [The author responds:]

By nature of its focus, a review of the most serious recent impacts of war on environment and health will deal with a very particular set of concerns. Many of the worst atrocities of recent wars have not been associated with specific environmental effects or specific environmental causes. Hence the topics I covered in my article did not include gross human rights abuses or violations of international law (such as torture, rape and mass killing of civilians, or even genocide) where environmental destruction was not also at issue.<sup>1</sup>

A review of the impacts of war on environment and health must cross all political boundaries to follow environmental consequences rather than seek ideological motivation. During World War II, the death toll and physical damage resulting from aerial bombardment in urban areas were on a scale of magnitude greater for bombardments

launched by the Allied forces than for those launched by other forces. In my article I sought to search for greatest impact, not to assign blame.

Finally a review of the recent impacts of war on environment and health must work with the evidence that has been compiled. Countries that have more open political systems and more competent record keeping and that offer greater latitude to diligent investigators will have more information available about the environmental effects of their military production and testing enterprise. In my article I pointed out that the effects I cited are about the United States because we know more about the US system than the Soviet one.

I wrote my review for a medical and public health audience, for whom issues are traditionally raised in terms of available data on health impacts rather than analyzed in terms of political alignments or lingering nation-state enmities. I could certainly have written the article with greater attention to these sensitivities but I thought that not only unnecessary but significantly off the point. In my view, the readers of *CMAJ*, and health professionals everywhere, must face the fact that even the countries they love and would fight for have contributed mightily to the environmental calamities we all must now address.

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#### Reference

1. Leaning J. Environment and health: 5. Impact of war. *CMAJ* 2000;163(9):1157-61.

## Cisapride and patient information leaflets

To measure the quality and usefulness of patient information leaflets distributed in Canadian pharmacies, we compared the information contained in 3 leaflets distributed in Canada for cisapride monohydrate (Prepulsid in Canada, Propulsid in the United States)