Future Challenges to Health and Public Health Services in Canada

Dear Editor:

John Last's commentary, "Future Challenges to Health and Public Health Services in Canada"1 outlined in an interesting and sometimes passionate manner the public health implications of some problems facing Canadian society in the coming century. But I was disappointed that Dr. Last did not discuss the problem that Canada, and the rest of the world, will soon lose ready access to fossil fuels, our principal form of energy. Our society depends on abundant, cheap energy. But energy will soon be neither abundant nor cheap.

The reasons are: a) due to geologic, technical, financial and political factors, petroleum production will soon peak and begin to decline, likely within this decade;2 and b) in order to limit global warming to under 2°C, fossil fuel consumption must be sharply curtailed.3 (This does seem paradoxical, but such is life.) Even were we to neglect addressing climate change (as it would require an unlikely voluntary restriction in consumption), the decline of petroleum production is inevitable and involuntary. The other fossil fuels - coal and natural gas - will also peak and decline and by 2100 they will be largely depleted;4 the effects of shortage will be obvious much sooner. Alternative energy sources are unlikely to fill the void.5

The consequences are serious. We use fossil fuels for transportation, electricity and heat production, and as petrochemicals; these are all services and products critical to today's economy. When fossil fuels rise in cost (now happening) and production declines (we are using more than we find), our whole society will be affected, including population health and our ability to provide health care and to grow enough food, and the ability of the government to fund health care, research, education, and our social safety net. The need to explore future health care issues based on slow, no, or negative economic growth and severely diminished petroleum supply is critical. There is no time to spare.6 If we are to adapt successfully to a lower energy world, public health must be an active partner.

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Reply

Dear Editor:

Thank you for the opportunity to comment further on this important subject. The phenomenon Dr. Spady describes is often called 'Peak Oil' and is discussed in apocalyptic language suggesting that it will be the end of civilization as we know it. It is described as a crisis. I prefer to see it as an opportunity. It is true that peak oil means the end of cheap, readily portable, non-renewable fossil fuel energy. It is the inevitable denouement of squandering any non-renewable resource in the way that industrial nations have squandered petroleum fuels for the past 100 years or more. The days are over for sprawling ranch homes with multiple garage spaces (for his and her cars, boat, snowmobile, ATV, etc.) on an acre of manicured lawn in outer suburbs that were productive farmland a few years ago. No more solitary commuting in gas-guzzling cars along crowded freeways, no more frequent flights to unnecessary meetings and conferences - virtual meetings will take their place. No more gas-powered leaf-blowers – farewell to their noise and polluting fumes! Rakes, brooms and muscles will make a comeback. When petroleum supplies run low enough to price gasoline out of the range of affluent suburbanites, alternative lifestyles must be reinvented and alternative energy sources must be deployed. The process has begun. Necessity is the mother of invention, as this crisis is demonstrating. We have begun to deploy alternative energy sources, and use infill to build additional homes in inner city areas so commuting suburbanites can move downtown. I have great confidence in human ingenuity. If humans survive the conflicts that may arise towards the end of this era of petroleum, our descendents several millennia from now will look back with a mixture of compassion and incredulity at the folly of the generations in which humans mindlessly despoiled this beautiful planet, raped and disfigured it to extract the fossil fuels that provided cheap energy for the evanescent civilization of the 20th and early 21st centuries.

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