

nary tract symptoms, pointing out that finasteride reduced the risk of prostate cancer by 25% in the Prostate Cancer Prevention Trial.¹ However, the results of this trial were not really that unequivocal.²

The prevalence of prostate cancer in this trial was indeed significantly lower in the finasteride group than in the placebo group. Among men with a diagnosis of prostate cancer, however, high-grade prostate cancer occurred significantly more often in the finasteride group than in the placebo group (37.0% v. 22.2%). When one looks at the entire study population included in the trial's final analysis, the rate of high-grade prostate cancer was also higher in the finasteride group than in the placebo group (6.4% v. 5.1%).

The commentary that accompanied the trial report advises caution.³ The trial results have also been disturbing enough to raise concerns about the prescription of finasteride for baldness in young men.⁴ To my knowledge there have not been any new studies to dispel these concerns. Thus, I do not think finasteride can be recommended unequivocally.

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Ideology and the Canadian health care system

I disagree with Matthew Stanbrook and colleagues when they discount ideology as a driving force in the Canadian

health care system.¹ If one frames the health care debate in terms of equitable access and human rights rather than in terms of the public versus private provision of health care, there are real and substantially different ideologies at work. For instance, the Canada Health Act exempts workers compensation plans from its mandate and does not include the provision of drugs.² As a result, different populations in Canada have substantially different access to health care.

Canada is a signatory to the United Nations Declaration of Human Rights and International Covenant on Economic, Social and Cultural Rights,³ which mandates equal access to health care for everyone: "By virtue of article 2.2 and article 3, the Covenant proscribes any discrimination in access to health care and underlying determinants of health, as well as to means and entitlements for their procurement, on the grounds of race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, physical or mental disability, health status (including HIV/AIDS), sexual orientation and civil, political, social or other status, which has the intention or effect of nullifying or impairing the equal enjoyment or exercise of the right to health."⁴

I suggest that we should first affirm the principle that health is a human right, honour an international treaty our country has signed and expand the scope of the Canada Health Act. We can then decide how to allocate the increased funding our health care system needs.

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Noninvasive positive-pressure ventilation

In their in-depth review of noninvasive positive-pressure ventilation in acute respiratory failure,¹ Oscar Peñuelas and colleagues did not discuss the use of this treatment in patients with infections that are transmitted through aerosols. The efficacy of noninvasive positive-pressure ventilation in such patients has not been adequately tested, but anecdotal reports and observational studies have shown that this treatment can be successfully used in patients with acute respiratory failure resulting from human-adapted avian influenza, aspergillosis and varicella.²⁻⁴ The use of noninvasive positive-pressure ventilation eliminated the need for intubation in most patients with severe acute respiratory syndrome.^{5,6} When critical care resources are overstretched, such as during an influenza pandemic, noninvasive positive-pressure ventilation may be of value as an alternative to invasive ventilation or it may at least buy clinicians some time until invasive ventilation is available for their patient.

The available data on the risk to health care workers of acquiring infectious diseases through aerosols while they are performing noninvasive positive-pressure ventilation are conflicting and often methodologically flawed.^{5,6} Indeed, in a recent set of World Health Organization guidelines this procedure was included as one of the aerosol-generating procedures for which the risk of pathogen transmission is still controversial or possible but not documented.⁶ Nevertheless, experience in the field mostly shows the use of noninvasive positive-pressure ventilation to be safe, if appropriate precautions are taken^{5,6}; infected patients should be placed in appropriate

facilities and personal protective equipment should be worn. To further reduce the risk of pathogen diffusion, an exhalation port that generates round-the-tube airflow and a viral-bacterial filter interposed between the mask and the exhalation port should be used.⁶

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Abolishing the law of gravity

I read with interest the cost-utility analysis of abolishing the law of gravity by Claude Cyr and Luc Lanthier.¹ Their conclusion that microgravity might be the solution to the health care crisis in Canada is intriguing.

As the International Space Station moves us closer to the possibility of colonizing space, it is becoming increas-

ingly important to understand the effects of altered gravity on mammalian reproductive physiology. There is evidence that hypo- and hyper-gravity induce changes in male and female reproductive processes.² Findings from studies using a variety of experimental conditions to simulate hypogravity raise questions about whether reproduction is possible when gravity is reduced.

Studies using the Holton hindlimb suspension model, which provides a practical way to simulate the major physiologic effects of hypogravity, are providing evidence that hypogravity might exert pronounced effects on male reproductive processes and reduce the rate of implantation during early pregnancy in rats. Moreover, the cardiovascular deconditioning, bone demineralization and decrease in red blood cell concentration associated with hypogravity might affect the ability of female rats to sustain their pregnancies. Similar findings from experiments during space flights raise questions about whether early pregnancy can be sustained in humans when gravity is reduced.² Additional research is needed to fill in the gaps in our knowledge about reproductive physiology under conditions of hypo- and micro-gravity.

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I read with interest the article by Claude Cyr and Luc Lanthier on the beneficial

effects of abolishing the law of gravity.¹ However, I see one small problem with the plan. Although abolishing gravity might prolong life, it will certainly not prevent death. If people die before 3 am or after 7 am (i.e., when the microgravity environment is in place) their bodies will start to deteriorate. Methane gas, which is lighter than air, will form and the bodies will eventually start to float. If they float high enough, the stratosphere will eventually become clogged with bodies, which will obliterate the sun. The lack of sunlight will affect the corn and barley crops, driving up the price of good whiskey. This would be economically disastrous. In addition, it would be difficult to bury a floating body, as it would tend to float out of the grave and drift off, especially if the burial was not held for a couple of days after death. Failure to correct for this variable might destroy the entire plan, good as it is.

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Correction

The phrase “which began to study risk factors for breast cancer among women in 1989” should have been omitted from the abstract of a Research article in the Jan. 29 issue.¹

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