Science and ideology

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More than 130 prominent Canadian physicians, scientists and public health professionals have endorsed this commentary. They are listed at:
http://www.gim.utoronto.ca/Research/Research/inner_city_health/Hwang_SW.htm

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Consider the following hypothetical scenario. An innovative new intervention for people with diabetes is developed. Health Canada provides funding to a highly accomplished group of academic health scientists, who have no financial conflicts of interest with respect to the new intervention, to conduct research on its effectiveness. Their work shows that the new intervention significantly reduces the incidence of a variety of diabetic complications. Despite a careful search for possible adverse effects of the intervention, none are detected. Over a three-year period, the group's research findings are published in leading medical journals, including the *New England Journal of Medicine*, *The Lancet* and *BMJ*.

In response, the federal government calls the research inconclusive and states its position that the only acceptable therapies for diabetes are those that either prevent or completely cure this condition. Two national organizations state their opposition to the intervention because they fear that the availability of an intervention that reduces the risk of diabetic complications will cause people with diabetes to eat more food and become more obese. The government indicates that, unless additional research can address its concerns within a year, it will likely move to ban the new intervention. Meanwhile, institutions other than the one at which the research was initially conducted are forbidden to provide the intervention.

Although this tale seems far-fetched and even Orwellian, it becomes true to life if one substitutes "drug addiction" for "diabetes," "drug-related harms" for "diabetic complications," and "supervised injection facility for injection drug users" for "new intervention." In a series of peer-reviewed research articles, the supervised injection facility in Vancouver has been shown to provide a number of benefits, including reduced needle sharing, decreased public drug use, fewer publicly discarded syringes, and more rapid entry into detoxification services by persons using the facility.[1-4] The opening of the facility was not associated with any increase in levels of crime, public disorder, or injection drug use.[5]

Despite this body of evidence, federal Health Minister Tony Clement released an official statement in September 2006 in which he claimed, "Right now the only thing the research to date has proven conclusively is drug addicts need more help to get off drugs."[6] This statement came on the heels of press releases by the Canadian Police Association and the Royal Canadian Mounted Police that asserted, in the absence of supporting data, that Vancouver's supervised injection site was contributing to increased crime.[7] It remains a distinct possibility that the federal government will not renew the current exemption that allows the supervised injection facility to operate legally, thus forcing the program to close in December 2007.[8] The fact that a highly promising intervention for the management of substance abuse appears to have been judged by an entirely different standard than interventions for other common chronic health conditions, such as diabetes, suggests that scientific evidence is about to be trumped by ideology.

We wish to affirm the vital importance of evidence-informed policy-making on issues related to substance use disorders, and to state our grave concern regarding the risks of pursuing health policies that disregard strong and credible scientific data. Of course, public policies arise through a complex process that is influenced not only by information and evidence such as that obtained through research. Other essential and legitimate factors that affect policy-making include ideologies (normative views regarding what ought to be), beliefs (convictions about the way things are or the likely effects of particular actions), and interests (who wins, who loses, and by how much).[9] However, the health of the nation is placed in peril if our leaders ignore crucial research findings simply because they run contrary to a rigid policy agenda driven by ideology or fixed beliefs.[10]

An example of the potentially deadly consequences of this kind of approach to drug policy is the ban on the use of federal funds in the United States to support needle exchange programs for injection drug users (Canada has no such restrictions). The US ban was

enacted in 1988 amid accusations that needle exchange programs encourage illegal drug use. Despite the subsequent accumulation of a large body of research evidence demonstrating that needle exchange programs reduce rates of HIV seroconversion among injection drug users[11] and a National Institutes of Health consensus statement concluding that such programs reduce needle sharing and do not increase drug use,[12] the ban on funding remains in effect to this day. Washington DC, the only American city where federal law barred both local and federal financing of needle exchange programs over the last 10 years, now has the highest rate of new AIDS cases in the United States (128 per 100,000 people per year).[13]

Efforts to misrepresent or suppress scientific findings for ideological purposes pose a similar threat to the public good. In two particularly egregious examples dating back to 2002, political pressures led to the removal of scientifically accurate statements from official US government websites.[14] In one instance, the US Centers for Disease Control and Prevention removed information about condoms from its HIV prevention website, with the elimination of statements such as, "Studies have shown that latex condoms are highly effective in preventing HIV transmission." In another instance, complaints from a conservative US congressman led the National Cancer Institute to remove a document on abortion and breast cancer from its website. The document in question affirmed the now widely accepted conclusion that "The current body of scientific evidence suggests that women who have had either induced or spontaneous abortion have the same risk as other women for developing breast cancer." Regardless of one's ideological convictions, such attempts to stifle the dissemination of sound scientific data are to be abhorred because they cripple both the ability of individuals to make informed personal choices and the ability of policy-makers to reach evidence-informed decisions using accurate information.

Policy-makers may legitimately decide on ethical, moral, political, or economic grounds to severely restrict or even prohibit the use of an intervention, such as Vancouver's supervised injection site, that careful scientific inquiry has shown to have significant health benefits. In these situations, however, policy-makers must provide cogent reasons for their decision and make the basis for their actions explicit and transparent. Such decisions must not be justified by resorting to deceptive claims that cast doubt on the effectiveness of the intervention, or that raise unsupported fears of harmful side effects.

At the same time, physicians, scientists, and public health professionals must be willing to speak out in the public arena when the accumulated body of research evidence clearly supports a health intervention that faces resistance because of entrenched beliefs. As stated in a declaration by Scientists and Engineers for America, a grassroots organization that counts 15 Nobel laureates among its board of advisors, "[t]he principal role of the science and technology community is to advance human understanding. But there are times when this is not enough. Scientists and engineers have a right, indeed an obligation, to enter the political debate when the nation's leaders systematically ignore scientific evidence and analysis, [or] put ideological interests ahead of scientific truths."[15]

We believe this is such an occasion. The data to date show that Vancouver's supervised injection facility is an intervention that reduces drug-related harm, with no discernable adverse consequences. If the federal government chooses to close this facility, then it must clearly specify the nature of its objections to an intervention whose effectiveness is supported by current research evidence.

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