Science and Ideology

Stephen W. Hwang, MD, MPH

Affiliation: Dr. Hwang is a research scientist at the Centre for Research on Inner City Health, the

Keenan Research Centre in the Li Ka Shing Knowledge Institute of St. Michael's Hospital,

Toronto, Ontario; and an associate professor of medicine in the Division of General Internal

Medicine, Department of Medicine, University of Toronto.

Contact Information:

Dr. Stephen W. Hwang, Centre for Research on Inner City Health,

St. Michael's Hospital, 30 Bond Street, Toronto, Ontario M5B 1W8, Canada.

Email: <a href="mailto:hwangs@smh.toronto.on.ca">hwangs@smh.toronto.on.ca</a>

Phone: 416-864-5991

Fax: 416-864-5485

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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 3 year period, the group's research findings are published in leading medical journals, including the *New England Journal of Medicine, the Lancet,* and the *British Medical Journal*.

In response, the federal government calls the research inconclusive, and states its position that the only acceptable therapies for diabetes are ones 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 the "new intervention" is a supervised injection facility for injection drug users. 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.<sup>1 2 3 4</sup> The opening of the facility was not associated with any increase in levels of crime, public disorder, or injection drug use. Error: Reference source not found <sup>5</sup>

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." This statement came on the heels of press releases by the Canadian Police Association and the Royal Canadian Mounted Police which asserted, in the absence of supporting data, that Vancouver's supervised injection site was contributing to increased crime. 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. 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).<sup>9</sup> However, the health of the nation is placed in peril if our leaders ignore or discount crucial research findings simply because they run contrary to a rigid policy agenda driven by ideology or fixed beliefs.<sup>10</sup>

An example of the potentially deadly consequences of this kind of approach to drug policy is the U.S. ban on the use of federal funds to support needle exchange programs for injection drug users (Canada has no such restrictions). The U.S. 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 HIV seroconversion among injection drug users<sup>11</sup> and a National Institutes of Health consensus statement concluding that such programs reduce needle sharing and do not increase drug use,<sup>12</sup> the ban on funding remains in effect to this day. Washington, D.C., the only U.S. 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 America (128 per 100,000 people per year).<sup>13</sup>

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 that make the basis for their actions explicit and transparent. Such decisions must not be justified by resorting to deceptive claims that cast doubt upon 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 due to 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…"<sup>14</sup>

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.

The following Canadian physicians, scientists, and public health professionals have endorsed this commentary. Institutional affiliations are provided for identification purposes only; no endorsement by any of these institutions is intended or should be inferred.

- 1. Barry Adam, PhD, University of Windsor
- 2. Alix Adrien, MD, CM, MSc, Direction de santé publique de Montréal
- 3. Michel Alary, MD, PhD, Université Laval
- 4. Nelson Ames, MD, MHSc, Interior Health, BC
- 5. Jonathan Angel, MD, University of Ottawa
- 6. Nelson Arruda, MSc, Direction de santé publique de Montréal
- 7. Mark Asbridge, PhD, Dalhousie University
- 8. Greta Bauer, PhD, MPH, University of Western Ontario
- 9. Ahmed Bayoumi, MD, MSc, University of Toronto
- 10. Hallgrimur Benediktsson, MD, University of Calgary
- 11. Cecilia Benoit, PhD, University of Victoria
- 12. Philip Berger, MD, University of Toronto
- 13. Barry Beyerstein, PhD, Simon Fraser University
- 14. John Blatherwick, CM, CD, MD, Vancouver Coastal Health, BC
- 15. Neil Boyd, LLB, LLM, Simon Fraser University
- 16. Susan Boyd, PhD, University of Victoria
- 17. Serge Brochu, PhD, Université de Montréal
- 18. Julie Bruneau, MD, MSc, Université de Montréal

- 19. Robert C. Brunham, MD, University of British Columbia
- 20. Jane Buxton, MBBS, MHSc, University of British Columbia
- 21. Roy Cain, PhD, McMaster University
- 22. Bill Cameron, MD, University of Ottawa
- 23. John Carsley, MD, MSc, McGill University
- 24. Isabelle Casavant, RN, Direction de santé publique de Montréal
- 25. Mélanie Charron, RN, Direction de santé publique de Montréal
- 26. Éric A. Cohen, PhD, Institut de Recherches Cliniques de Montréal.
- 27. Evan Collins, MD, University of Toronto
- 28. Curtis Cooper, MD, University of Ottawa
- 29. Trevor Corneil, MD, MHSc, Vancouver Coastal Health, BC
- André Corriveau, MD, MBA, Department of Health & Social Services, Government of the Northwest Territories
- 31. François Coutlée, MD, Université de Montréal
- 32. Joseph Cox, MD, Direction de santé publique de Montréal
- 33. Patricia Daly, MD, University of British Columbia
- 34. Harold Dion, MD, Clinique médicale l'Actuel, Montréal
- 35. Peter Dodek, MD, MHSc, University of British Columbia
- 36. James R. Dunn, PhD, University of Toronto
- 37. Brian P. Emerson, MD, British Columbia Ministry of Health
- 38. Gilbert Émond, PhD, Université Concordia
- 39. Patricia G. Erickson, PhD, University of Toronto
- 40. Mylène Fernet, PhD, Université du Québec à Montréal

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- 45. James Frankish, PhD, University of British Columbia
- 46. Jacqueline Gahagan, PhD, Dalhousie University
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- 48. Kevin Gough, MD, MEd, University of Toronto
- 49. Jason Grebely, PhD, University of British Columbia
- 50. Reka Gustafson, MD, University of British Columbia
- 51. Nathalia Gutierrez, MSc, Direction de santé publique de Montréal
- 52. Helga Hallgrimsdottir, PhD, University of Victoria
- 53. Michael Hayes, PhD, Simon Fraser University
- 54. Clyde Hertzman, MD, MSc, University of British Columbia
- 55. Nikolaus Heveker, PhD, Université de Montréal
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- 57. Marian Hutcheon, MD, MHSc, Interior Health, BC
- 58. Lois A. Jackson, PhD, Dalhousie University
- 59. Patti Janssen, PhD, University of British Columbia
- 60. Mikael Jansson, PhD, University of Victoria
- 61. Prabhat Jha, MD, DPhil, University of Toronto
- 62. Klaus Jochem, MD, Direction de santé publique de Montréal
- 63. Mira Johri, PhD, MPH, Université de Montréal

- 64. Amy Kaler, PhD, University of Alberta
- 65. Jeff Karabanow, PhD, Dalhousie University
- 66. Ken Kasper, MD, University of Manitoba
- 67. Rupert Kaul, MD, PhD, University of Toronto
- 68. Perry Kendall, MBBS, MSc, Provincial Health Officer, British Columbia, and University of British Columbia
- 69. Susan Kirkland, PhD, Dalhousie University
- 70. Marina Klein, MD, CM, MSc, McGill University
- 71. Murray D. Krahn, MD, MSc, University of Toronto
- 72. Richard G. Lalonde, MD, McGill University
- 73. Gilles Lambert, MD, Direction de santé publique de Montréal
- 74. Michel Landry, PhD, Centre Dollard-Cormier, Montréal
- 75. John N. Lavis, MD, PhD, McMaster University
- 76. Pascale Leclerc, MSc, Direction de santé publique de Montréal
- 77. Lynne Leonard, PhD, University of Ottawa
- 78. Francesco Leri, PhD, University of Guelph
- 79. Richard Lessard, MD, Agence de santé et de services sociaux de Montréal
- 80. Danièle Longpré, MD, Clinique médicale l'Actuel, Montréal
- 81. Mona Loutfy, MD, MPH, University of Toronto
- 82. Jo-Ann MacDonald, RN, PhD(cand.), University of Prince Edward Island
- 83. Nimâ Machouf, PhD, Clinique médicale l'Actuel, Montréal
- 84. Bruce MacLaurin, MSW, PhD(cand.), University of Calgary
- 85. Joan MacNeil, PhD, RN, University of Victoria

- 86. David C. Marsh, MD, University of British Columbia
- 87. Richard Mathias, MD, University of British Columbia
- 88. Lorna Medd, MD, Northern Health, BC
- 89. Edward Mills, PhD, MSc, LLM, Simon Fraser University
- 90. Carole Morissette, MD, Direction de santé publique de Montréal
- 91. Stephen Moses, MD, MPH, University of Manitoba
- 92. Gerry Mugford, PhD, CMH, Memorial University of Newfoundland
- 93. Shree Mulay, PhD, McGill University
- 94. Stephanie Nixon, PhD, University of Toronto
- 95. Brian O'Connor, MD, MHSc, Vancouver Coastal Health, BC
- 96. James Orbinski, MD, University of Toronto
- 97. Mario Ostrowski, MD, University of Toronto
- 98. Anita Palepu, MD, MPH, University of British Columbia
- 99. Nathalie Paquette, RN, Direction de santé publique de Montréal
- 100. Gilles Paradis, MD, McGill University
- 101. Bernadette M. Pauly, RN, PhD, University of Victoria
- 102. Hélène Poliquin, RN, Direction de santé publique de Montréal
- 103. Martin Potter, MD, McGill University
- 104. Janet Raboud, PhD, University of Toronto
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- 106. Michel Roger, MD, PhD, Université de Montréal
- 107. Eric A. Roth, PhD, University of Victoria
- 108. Sean B. Rourke, PhD, University of Toronto

- 109. Jean-Pierre Routy, MD, McGill University
- 110. David J. Roy, STL, PhL, DrTheol, Institut de recherches cliniques de Montréal, and Université de Montréal
- 111. Élise Roy, MD, MSc, Université de Sherbrooke
- 112. Elizabeth M. Saewyc, PhD, RN, University of British Columbia
- 113. Chandrakant P. Shah, MD, University of Toronto
- 114. Naglaa Shoukry, PhD, Université de Montreal
- 115. Jean Shoveller, PhD, University of British Columbia
- 116. Fiona Smaill, MB, ChB, McMaster University
- 117. Marek Smieja, MD, PhD, McMaster University
- 118. Hugo Soudeyns, PhD, Centre de recherche du CHU Sainte-Justine
- 119. Richard Stanwick, MD, MSc, Vancouver Island Health Authority, BC
- 120. Steffanie A. Strathdee, PhD, University of California San Diego
- 121. Carol Strike, PhD, University of Toronto
- 122. Terry-Nan Tannenbaum, MD, Direction de santé publique de Montréal
- 123. Réjean Thomas, MD, Clinique médicale l'Actuel, Montréal
- 124. Sally Thorne, PhD, RN, University of British Columbia
- 125. Robb Travers, PhD, Ontario HIV Treatment Network
- 126. Joël Tremblay, PhD, Centre de réadaptation Ubald-Villeneuve, Beauport, QC
- 127. Jeffrey Turnbull, MD, University of Ottawa
- 128. Mark Wainberg, PhD, McGill University
- 129. John Walsh, PhD, R.Psych, University of Victoria
- 130. Franklin White, MD, CM, MSc, Pacific Health & Development Sciences, Victoria, BC

- 131.T. Cameron Wild, PhD, University of Alberta
- 132. Robert F. Woollard, MD, University of British Columbia
- 133. Catherine Worthington, PhD, RSW, University of Calgary
- 134. David Zakus, MES, MSc, PhD, University of Toronto

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