Tobacco Industry Links to Faculties of Medicine in Canada

Pamela E. Kaufman, PhD^{1,2}

Joanna E. Cohen, PhD^{1,2}

Mary Jane Ashley, MD^{1,2}

Roberta Ferrence, PhD¹⁻³

Alison L. Halyk, MLIS^{1*}

Fernand Turcotte, MD⁴

Kenneth L. Kyle, MSc⁵

Donna E. Stewart, MD^{6,7}

ABSTRACT

Background: The tobacco industry uses various strategies to promote itself as a socially responsible, ethical industry, including establishing links with health institutions and medical research. The purpose of this study was to identify the relationships between the tobacco industry and Canadian faculties of medicine, specifically research funding and donations from tobacco industry sources, and faculty-specific policies regarding the acceptance of tobacco industry funds.

Methods: Information about policies and practices regarding research funding and donations from 1996-1999 was requested from the 16 Canadian faculties of medicine and their parent universities, as part of a larger cross-sectional survey-centred study that examined links between the tobacco industry and Canadian universities.

Results: All 16 faculties of medicine (100%) reported on research funding and 11/16 (70%) reported on donations from the tobacco industry. Twenty-five percent (4/16) of the faculties received research funding from the tobacco industry and 27% (3/11) received donations. No Canadian medical school had a policy that banned tobacco industry research funding or donations.

Interpretation: The tobacco industry have made donations and given research funding to faculties of medicine in Canada. This may present major conflicts of interest that undermine public health and have implications for the scientific integrity of the medical research enterprise. Faculties of medicine should consider developing policies that prohibit tobacco industry research funding and donations, with the intent of preventing conflicts and precluding ethical dilemmas arising from links with the tobacco industry. They should also encourage parent universities to establish similar policies at an institutional level.

La traduction du résumé se trouve à la fin de l'article.

1. Ontario Tobacco Research Unit, University of Toronto, Toronto, Ontario

2. Department of Public Health Sciences, University of Toronto

3. Centre for Addiction and Mental Health, Toronto

4. Département de Médecine Sociale et Préventive, Université Laval, Laval, Québec

5. Canadian Cancer Society, Ottawa, Ontario

6. University Health Network, Toronto

7. Department of Psychiatry, University of Toronto

* Note: Alison Halyk is now with the Ministry of Management Services, Government of British Columbia.

Correspondence and reprint requests: Dr. Pamela Kaufman, Ontario Tobacco Research Unit, 33 Russell Street, T5, Toronto, ON M5S 2S1, Tel: 416-535-8501, ext. 6029, Fax: 416-595-6068, E-mail: p.kaufman@utoronto.ca

Acknowledgements: This study was supported by the National Cancer Institute of Canada with funds from the Canadian Cancer Society (Grant #011045). Pilot work for this study was supported by the Canadian Tobacco Control Research Initiative with funds from the National Cancer Institute of Canada, the Social Sciences and Humanities Research Council of Canada and Health Canada (Grant #010630). We thank Chantal Levesque and Mary Richardson for their help with data collection from Francophone universities.

The tobacco industry plays a key role in the global tobacco epidemic. Not only does the industry produce and promote products that caused 4.9 million deaths worldwide in 2000,¹ but it also systematically attempts to block effective tobacco control efforts by contributing to the campaigns of legislators,² sponsoring sports, cultural and community groups,³ pressuring pharmaceutical and other companies,^{4,5} creating front groups to promote its interests,^{6,7} coordinating efforts to undermine the findings of medical research about the health damage caused by smoking,⁸ infiltrating and obstructing the tobacco control activities of the World Health Organization,⁹ and establishing links with academic institutions, including medical schools.¹⁰ Through these varied efforts, the tobacco industry acquires influence, creates confusion about scientific evidence, and promotes itself as a socially responsible, ethical industry.

The tobacco industry links itself with medical schools by giving grants and contracts to researchers, donating directly to medical schools and their parent institutions, and providing scholarships and endowed professorships.¹¹ Individual faculty members also act as consultants to the tobacco industry, as expert witnesses for the industry in legal proceedings, and as reviewers for tobacco industry funding agencies. In addition, tobacco company executives have sat on the boards of hospitals affiliated with medical schools, and officials of hospitals have sat on the boards of tobacco companies.¹²

Some data on links between the tobacco industry and medical schools in other jurisdictions are available, mostly concerning situations that prevailed prior to 1995. An analysis of papers published from 1988-94 revealed that all medical schools in the United Kingdom but one had accepted tobacco money.¹³ A survey of medical schools in the United States conducted in the early 1990s reported that 55% had received research funding from the tobacco industry.¹⁴ Another survey found that eight of the ten institutions of higher learning with medical faculties in Australia had received research funding from tobacco industry sources from 1991-92.⁸ The authors also reported that institutions with medical faculties were significantly more likely to have received such

funding than institutions without medical faculties.

Of all university faculties, medical faculties have the greatest conflict of interest regarding relationships with the tobacco industry. However, links between the tobacco industry and faculties of medicine in Canada have not been studied systematically. Therefore, the purpose of this paper is to identify the practices and policies of Canadian faculties of medicine regarding tobacco industry research funding and financial donations from 1996-99.

METHODS

This research was carried out at the Ontario Tobacco Research Unit, University of Toronto, from 2000-02, as part of a larger cross-sectional survey-centred study that examined the extent of relationships between the tobacco industry and universities in Canada. Information on research funding and donations from 1996-99 and relevant policies was requested from all faculties of medicine in Canada ($n=16$) and their parent universities. The questionnaires used to obtain this information were pilot tested prior to the study. We found that the data required to complete the questionnaires were available and accessible, and respondents indicated that the questionnaires were clear and of ideal length. Ethics approval was obtained from the Office of Research Services at the University of Toronto.

Data from the survey

As part of the larger survey, the central donations and research offices of the parent universities provided information regarding research funding and donations received by the faculties of medicine from tobacco industry sources. Each faculty was asked to provide information on total research funding and donations received from all sources. In addition, faculties were asked whether they had policies regarding sources of research funding and donations. Information about the institutional policies of parent universities was also obtained from the larger study. The statistical package, Stata,¹⁵ was used to determine percentages, means and ranges. We present aggregate data only, in compliance with our ethics protocol, which ensures the confidentiality of respondents.

RESULTS

We obtained research funding amounts from tobacco industry sources for all 16 faculties of medicine in Canada. Donation amounts from tobacco industry sources were obtained for 11 institutions; 5 were unwilling to disclose this information. All 16 faculties provided information regarding their policies.

Research funding

Twenty-five percent (4/16) of the faculties of medicine received tobacco research funding from 1996-99. This funding represented less than 1% of total research funding received by these faculties between 1996 and 1999. It consisted of four grants and two contracts awarded to individual researchers, from three industry sources (Smokeless Tobacco Research Council, Council for Tobacco Research, and RJ Reynolds). The average value per award was \$160,592.

Donations

Twenty-seven percent (3/11) of the faculties of medicine that provided information received tobacco industry donations from 1996-99. These donations represented less than 1% of total donations from all sources for two of the three faculties of medicine that received tobacco industry donations (one of these faculties did not provide the value of total donations from all sources). This funding consisted of four separate donations, with an average value of \$18,415, from three industry sources (IMASCO Ltd., Imperial Tobacco, and Rothmans, Benson & Hedges).

Policies

None of the faculties of medicine had specific policies regarding acceptance of research funding and donations. Rather, they deferred to the institutional policies of their parent universities. However, none of the parent universities had policies in place regarding the acceptance of research funding or donations from the tobacco industry.¹⁶

DISCUSSION

These data provide evidence for recent funding links between the tobacco industry and faculties of medicine in Canada.

Although tobacco sources represent only very small percentages of the total research funds and donations received by Canadian faculties of medicine, 6 of the 16 faculties had received either funds or donations or both.

These findings likely underestimate actual links between Canadian faculties of medicine and the tobacco industry due to incomplete information and the limited scope of our research. The fact that 5 institutions (30%) declined the opportunity to disclose information about donations from the tobacco industry suggests the possibility of additional unreported links. Indeed, in the larger study, we uncovered discrepancies between university and tobacco industry reports¹⁷⁻¹⁹ on research funding and donations from The Council for Tobacco Research, Center for Indoor Air Research and IMASCO.¹⁶ However, we were unable to use the industry reports to verify whether all relevant funds from tobacco industry sources to the faculties of medicine had been reported, because it was not always possible to identify the faculty to which the funds were directed. In addition, we did not examine all possible ties with the tobacco industry, such as individual faculty members acting as expert witnesses or reviewers for the tobacco industry.

Despite these limitations, this research provides the most comprehensive picture to date of links between Canadian faculties of medicine and the tobacco industry. These relationships could affect how both medical schools and the tobacco industry are perceived by the public, academics, students and funders.

Many of the arguments made against links with the tobacco industry^{20,21} are particularly relevant to faculties of medicine. Ethics and conflict of interest are two of the primary areas of concern. Medical research funding has been used by the tobacco industry as a strategy to generate uncertainty and controversy about the negative impact of smoking on health and to gain respectability by association.⁸ Sources of funding may, consciously or unconsciously, influence how researchers design or conduct their studies, how they interpret results, or how and when they choose to report their results.^{8,22} Furthermore, researchers and universities that receive tobacco industry funds may refrain from

speaking publicly about the negative impact of the industry and its products on health.⁸ It is also possible that they may be more reluctant to address other related issues, such as the appropriateness of tobacco industry holdings in university pension funds.

In recent years, research funding agencies in some countries have acknowledged this conflict of interest and made moves to deny funding to researchers whose institutions receive tobacco support. For example, Australian cancer councils will not fund researchers if anyone in their institution receives support from the tobacco industry,²¹ and Cancer Research UK is considering strengthening its Code of Practice on Tobacco Industry Funding to Universities to a similar extent.²³

In 2001-02, Canadian universities with medical faculties received more than \$26 million in funding (grants and awards) from the National Cancer Institute of Canada (NCIC).²⁴ Currently, the NCIC "will not provide funds to individuals who receive support directly from tobacco manufacturers or from the Council for Tobacco Research or from the Smokeless Tobacco Council".²⁵ However, if a major Canadian funding agency such as NCIC were to refuse grants to researchers whose institutions receive money from tobacco industry sources, institutions might be persuaded to reconsider their relationships with this industry.

Medical associations also have begun to discourage relationships between medical schools and the tobacco industry. In 1992, the American Medical Association (AMA) House of Delegates adopted a resolution to "strongly discourage all medical schools and their parent universities from accepting research funding from the tobacco industry".¹⁴ The American College of Preventive Medicine and the American Association of Public Health Physicians also introduced similar resolutions. The Canadian Medical Association (CMA) recommends that physicians refuse to invest in tobacco industry stocks,²⁶ but it has not implemented formal policies to discourage medical schools from forming links with the tobacco industry. As further evidence of concern about these links, three scientific journals that publish medical research will not review papers that report on research funded by the tobacco industry.¹⁰

Concerns about conflict of interest and research bias have also been raised about pharmaceutical industry funding in medical institutions.^{27,28} As a result, some medical schools in Canada have developed guidelines to regulate financial ties between faculty members and this industry.²⁹ The CMA has also developed a policy that provides guidelines to assist physicians, including residents and medical students, in determining when a relationship with the pharmaceutical industry is appropriate.³⁰

In contrast, while 7 of 10 medical faculties in Australia have policies not to administer tobacco funds,⁸ Canadian faculties of medicine and their parent universities have been slow to address this issue. The lack of policy development in this area may reflect the small proportion of funding from the tobacco industry compared to total funding from all sources, including the pharmaceutical industry. However, accepting even a small amount of tobacco industry money is significant because it raises ethical issues, including conflicts of interest within institutions whose mission is to improve the health of individuals and populations.

The ethical implications of relationships with the tobacco industry need to be examined and discussed by medical school administrators, faculty members and students. Faculties of medicine can lead the way by developing their own policies and encouraging their parent institutions to develop policies that restrict the acceptance of research funding and donations from the tobacco industry. These policies will both protect the interests of the medical community and preclude the possibility of contributing to tobacco industry objectives that undermine public health.

REFERENCES

- World Health Organization. The World Health Report 2002. Geneva: World Health Organization, 2002.
- Monardi F, Glantz SA. Are tobacco industry campaign contributions influencing state legislative behavior? *JAMA* 1998;280:918-23.
- Rosenberg JN, Siegel M. Use of corporate sponsorship as a tobacco marketing tool: A review of tobacco industry sponsorship in the USA, 1995-99. *Tob Control* 2001;10:239-46.
- Landman A. Push or be punished: Tobacco industry documents reveal aggression against businesses that discourage tobacco use. *Tob Control* 2000;9:339-46.
- Shamasunder B, Bero L. Financial ties and conflicts of interest between pharmaceutical and tobacco companies. *JAMA* 2002;288:738-44.
- Saloojee Y, Dagli E. Tobacco industry tactics for resisting public policy on health. *Bull World Health Organ* 2000;78:902-10.
- Sweda Jr EL, Daynard RA. Tobacco industry tactics. *Br Med Bull* 1996;52:183-92.
- Walsh RA, Sanson-Fisher RW. What universities do about tobacco industry research funding. *Tob Control* 1994;3:308-15.
- Report of the Committee of Experts on Tobacco Industry Documents. Tobacco company strategies to undermine tobacco control activities at the World Health Organization. Geneva: The World Health Organization, July 2000.
- Cohen JE, Ashley MJ, Goldstein AO, Ferrence R, Brewster JM. Institutional addiction to tobacco. *Tob Control* 1999;8:70-74.
- Cohen JE, Ashley MJ, Kaufman P, Ferrence R, Stewart DE, Turcotte F, et al. Institutional "addiction" to tobacco: Defining links between the tobacco industry and Canadian universities and medical schools. Research proposal funded by the National Cancer Institute of Canada (grant #011045), 1999.
- Halyk AL, Cohen JE, Kaufman PE, Ashley MJ. Network of directorships: Links between the tobacco industry and Canadian universities and medical schools. Under review 2004.
- Lewison G, Dawson G, Anderson J. Support for UK biomedical research from tobacco industry. *Lancet* 1997;349:778.
- Blum A. Ethics of tobacco-funded research in US medical schools. *Tob Control* 1992;1:244-45.
- Stata Corporation. Stata reference manual: Release 6. College Station, TX: Stata Corporation, 1999.
- Cohen JE, Ashley MJ, Kaufman P, Halyk AL, Ferrence R, Turcotte F, et al. Institutional 'addiction' to tobacco: Defining links between the tobacco industry and Canadian universities and medical schools. Report submitted to the National Cancer Institute of Canada, Grant #011045, June 30, 2002.
- Report of The Council for Tobacco Research. New York: The Council for Tobacco Research - USA, Inc., 1996 and 1997.
- Center for Indoor Air Research. Project status reports. Linthicum, MD: Center for Indoor Air Research, 1996 and 1998.
- Center for Indoor Air Research. Center for Indoor Air Research: 1998 funding cycle. Lausanne, Switzerland: Philip Morris Europe, 1998.
- Chapman S, Shatenstein S. The ethics of the cash register: Taking tobacco research dollars. *Tob Control* 2001;10:1-2.
- Cohen JE. Universities and tobacco money: Some universities are accomplices in the tobacco epidemic. *BMJ* 2001;323:1-2.
- Relman A. Dealing with conflicts of interest. *N Engl J Med* 1984;310:1182-83.
- Cancer Research UK. Preventing lung cancer: Isolating the tobacco industry. Reviewing the Cancer Research UK code of practice on tobacco industry funding to universities. Consultation document. London: Cancer Research UK, July 2002.
- National Cancer Institute of Canada. Funding to universities with medical schools: Total by year of all grants and awards. Toronto: National Cancer Institute of Canada, November 2002.
- National Cancer Institute of Canada. Support for research and training. Toronto: National Cancer Institute of Canada, 2002.
- Canadian Medical Association. Tobacco and health. Policy summary. *CMAJ* 1997;156:240A-C.
- Angell M. Is academic medicine for sale? *N Engl J Med* 2000;342(20):1516-18.
- Bodenheimer T. Uneasy alliance - clinical investigators and the pharmaceutical industry. *N Engl J Med* 2000;342(20):1539-44.
- Naylor D. Early Toronto experience with new standards for industry-sponsored clinical

research: A progress report. *CMAJ* 2002;166(4):453-56.

30. Canadian Medical Association. Physicians and the pharmaceutical industry (update 2001). Policy statement. Ottawa: Canadian Medical Association, 2001.

Received: June 16, 2003

Accepted: December 2, 2003

RÉSUMÉ

Contexte : L'industrie du tabac fait appel à diverses stratégies pour projeter l'image d'une industrie socialement responsable et éthique, notamment en tissant des liens avec des établissements sanitaires et des chercheurs médicaux. Nous avons voulu cerner les relations entre l'industrie du tabac et les facultés de médecine du Canada, tout particulièrement les fonds de recherche et les dons provenant de l'industrie du tabac, ainsi que les politiques des facultés à l'égard de l'acceptation de l'argent de l'industrie du tabac.

Méthode : Dans le cadre d'une grande enquête transversale étudiant les liens entre l'industrie du tabac et les universités canadiennes, nous avons demandé aux 16 facultés de médecine canadiennes et à leurs universités mères de nous fournir de l'information sur leurs politiques et leurs pratiques concernant les fonds de recherche et les dons entre 1996 et 1999.

Résultats : Les 16 facultés de médecine (100 %) ont répondu à la question sur les fonds de recherche, et 11 facultés sur 16 (70 %) à la question sur les dons de l'industrie du tabac. Vingt-cinq p. cent (4/16) des facultés avaient reçu des fonds de recherche de l'industrie du tabac, et 27 % (3/11) en avaient reçu des dons. Aucune école de médecine canadienne n'avait de politique interdisant les fonds de recherche ou les dons provenant de l'industrie du tabac.

Interprétation : L'industrie du tabac a fait des dons aux facultés de médecine du Canada et en a financé les recherches. Cette situation peut présenter d'importants conflits d'intérêt, dommageables pour la santé publique et pour l'intégrité scientifique de la recherche médicale. Les facultés de médecine devraient songer à élaborer des politiques interdisant les fonds de recherche et les dons de l'industrie du tabac, afin de prévenir les conflits et d'empêcher que les liens avec l'industrie du tabac ne posent un jour des dilemmes éthiques. Elles devraient également inciter leurs universités mères à se doter de politiques institutionnelles semblables.

Directives de rédaction de la RCSP

La *Revue canadienne de santé publique* publie des articles originaux sur tous les aspects de la santé publique, de la médecine préventive et de la promotion de la santé qui ont été évalués par des pairs. Tous les manuscrits soumis pour publication dans ses colonnes doivent respecter les Directives de rédaction de la RCSP. On trouvera une version complète sur le site Web de l'ACSP à l'adresse suivante < www.cpha.ca/francais/cjph/stylreq/style.htm >. Les auteurs qui n'ont pas accès à Internet peuvent se reporter aux pages 7-8 du numéro de janvier/février 2003 (Vol. 94, No. 1) de la *Revue canadienne de santé publique* ou se mettre en rapport avec le bureau de la rédaction pour en recevoir un exemplaire par télécopieur.

La Rédaction doit recevoir un exemplaire imprimé de l'original et deux copies pour l'évaluation par les pairs (dactylographié à double interligne, sur un seul côté de la feuille) avec toutes les figures et tous les tableaux, et accompagné d'une version électronique. Veuillez numéroter les pages les unes à la suite des autres, y compris le résumé et sa traduction (le cas échéant), le texte, les remerciements, les références, les tableaux et les figures.

Les articles originaux ne doivent pas dépasser **2 000 mots**. Veuillez indiquer le nombre de mots de votre article. Les brefs comptes-rendus peuvent être soumis et doivent inclure des résumés structurés (voir le paragraphe « Les documents sont... »).

La Revue a adopté une politique d'évaluation des articles par des pairs, en double aveugle. Auteurs et évaluateurs restent anonymes. Afin d'assurer l'anonymat de cette évaluation par des pairs, les auteurs doivent s'assurer de ne donner les renseignements les identifiant que sur la page titre de l'original seulement; seul le titre doit apparaître sur les deux copies à l'intention des évaluateurs.

La page titre de l'original doit comporter : 1) le titre; 2) un bref sous-titre de 40 caractères au maximum (y compris les blancs); 3) les noms, prénoms et initiales du milieu (le cas échéant) des auteurs, accompagnés de leurs diplômes d'études de plus haut niveau avec les noms du service et de l'organisme dans le cadre duquel le travail publié a été effectué; 4) le nom, l'adresse, le numéro de téléphone, le numéro de télécopieur et l'adresse électronique de l'auteur à qui adresser toute correspondance; 5) le nom et l'adresse de l'auteur à qui les demandes de réimpression doivent être envoyées (s'il s'agit de la même personne, regroupez 4 et 5 ensemble).

Les déclarations relatives aux limites de responsabilité et les mentions concernant l'aide reçue doivent aussi figurer sur la page titre. Une lettre signée par tous les auteurs comme quoi ils acceptent d'être publiés doit être incluse.

Les documents sont acceptés en anglais ou en français. La page deux doit présenter un résumé structuré pouvant avoir jusqu'à 250 mots, avec les titres : Objectif, Méthodes, Résultats, Discussion (ou Interprétation). En outre, la *RCSP* demande une traduction professionnelle du résumé. Pour garantir une qualité constante de la traduction de la Revue, la *RCSP* se réserve le droit de faire retraduire les résumés soumis, aux frais des auteurs après les en avoir avisés. S'ils le préfèrent, les auteurs peuvent demander de faire traduire directement leurs résumés par le traducteur officiel de la Revue à raison de 22 cents le mot plus la TPS de 7 % (ou la TVH de 15 %).

Nous vous encourageons à écrire à la Rédaction, en vous priant d'envoyer des lettres aussi courtes que possible.

La Rédaction se réserve le droit de modifier les articles.

Les documents à publier doivent être soumis au rédacteur scientifique de la *Revue canadienne de santé publique*, 1565 avenue Carling, bureau 400, Ottawa, Ontario (Canada) K1Z 8R1.