Where Manitoba children obtain their cigarettes

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People who start to smoke as children put themselves at greater risk of dying prematurely or being disabled by tobacco-induced disease. One solution is to restrict children's access to cigarettes, thereby reducing consumption of the product and, ultimately, damage to health. This study found that in 1985 the majority of Manitoba public school children 8 to 15 years of age who smoked "regularly" (defined as usually every day) obtained their cigarettes from stores. This source could be reduced, if not eliminated, were a federal regulation passed in 1908 enforced. Under Canada's Tobacco Restraint Act it is illegal for merchants to sell tobacco to anyone under the age of 16 years. By implementing this existing law, authorities would not only be keeping the profit from almost a million dollars in cigarette sales in Manitoba alone out of tobacco company coffers but also be having an impact on the leading cause of preventable premature death and disability in Canada.

Ceux qui fument dès l'enfance encourent les plus grands risques de mort prématurés ou d'infirmité d'origine tabagique. On pourrait diminuer ces risques en rendant moins facile aux enfants l'accès aux produits du tabac. Or nous avons trouvé qu'en 1985, au Manitoba, la plupart des fumeurs "habituels" (c'est à dire qui fument ordinairement tous les jours) âgés de 8 à 15 ans achètent leurs cigarettes dans les magasins, nonobstant la loi fédérale de 1908 "sur la répression de l'usage du tabac chez les adolescents", qui interdit au tenancier d'un commerce de vendre du tabac à quiconque n'a pas 16 ans. L'application de cette loi permettrait d'agir sur la cause principale, parmi celles qui sont susceptibles de prévention, de décès prématuré et d'infirmité au Canada, tout en privant les manufacturiers des profits provenant de ventes de l'ordre de près d'un million dollars au Manitoba.

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The opinions, conclusions and proposals presented in this paper are the authors' and do not necessarily represent those of their departments.

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Cigarette smoking is the leading cause of preventable premature death and disability in Canada.[1] A quarter of all deaths in men over 25 years of age in this country can be attributed to smoking.[1] Moreover, for Canadians 35 to 49 years of age the number of deaths from cancer attributable to smoking are now greater among women than among men.[2] With 32 000 people in Canada dying of smoking-related diseases every year and 350 000 quitting smoking,[3] the tobacco industry in this country would soon collapse if these consumers were not replaced. Survey data on smoking trends indicate that new "customers" are recruited primarily from the ranks of Canadian children and adolescents, girls being more likely to smoke than boys.[4] Most of these young people start to smoke in their early teens.[3,5] By starting to smoke so early in life these individuals increase their risk of dying prematurely of tobacco-induced disease.[6] Most children who smoke do not believe that they will still be

smoking as adults.[5] However, children who begin to smoke in their early teens are, in fact, likely to continue smoking as adults.[7] On the other hand, children who postpone smoking until their later teens are not only less likely to start smoking[8] but also more likely to quit as adults.[9] Consequently, all legitimate means by which smoking could be delayed need to be explored.

The Parliament of Canada enacted the Tobacco Restraint Act in 1908,[10] before the health hazards of cigarette smoking were scientifically established. This statute, essentially unchanged since that year, prohibits merchants from selling tobacco to anyone under the age of 16 years, unless "the minor is employed for the purposes of his business, by a dealer in tobacco, either wholesale or retail". The penalties for infractions were established at $10 for the first offence, $25 for the second offence and $100 for the third and subsequent offences; they are the same today.

The purposes of the present study were to determine from what source children in Manitoba under the age of 16 years obtain their cigarettes and to estimate the value of the retail sales of cigarettes to these children.

Methods

In 1985 the Manitoba Department of Health conducted a study of smoking behaviour and attitudes of students in public schools in all regions of the province.[5] A random sample of 546 classes in 140 schools generated the study population of 11 292 pupils. The pupils ranged in age from 8 to 18 years and were enrolled in grades 3 through 12. In all, 96% of the selected classes participated in the survey, and 90% of the enrolled students completed the questionnaire anonymously.

Table I — Distribution and frequency of cigarette smoking among Manitoba students[5]

Smoking category	Age (yr); no. (and %) who smoked cigarettes		
	8–11 (n = 4159)	12–15 (n = 4746)	16–18 (n = 2387)
Current	144 (3.5)	961 (20.2)	869 (36.4)
Current and regular	30 (20.8)	509 (53.0)	634 (73.0)

Information collected on the 1974 students who were "current" smokers (had smoked in the last 4 weeks) included age, sex, whether they were "regular" smokers ("usually smoked every day") or "occasional" smokers ("smoked during the preceding 4 weeks but not every day"), where they obtained their cigarettes (from siblings, friends, parents, stores or vending machines) and, for regular smokers, number of cigarettes smoked in a week. The students were grouped into the age categories 8 to 11, 12 to 15, and 16 to 18 years.

The weekly cigarette consumption was calculated for each age category and attributed as to source. The figures were then extrapolated to the entire Manitoba population aged 8 to 15 years.[11] The number of cigarettes was converted into packs of cigarettes and priced at rates current at the time of the study. This generated an estimated annual retail value of cigarette sales to Manitoba students under 16 years of age.

Results

The percentage of students who smoked increased with age, as did the percentage who were regular smokers (Table I).[5]

The source of cigarettes for each age group is shown in Table II. Among the students 8 to 11 years old 64% of both the occasional and the regular smokers relied on friends and siblings for obtaining cigarettes. Students of this age were the largest users of vending machines.

Among the students 12 to 15 years old the occasional smokers were similar to their younger counterparts, 60% relying on friends and siblings for obtaining cigarettes. However, the percentage relying on stores was more than twice as great as in the younger group. The most pronounced difference was among the regular smokers, who were five times more likely than their younger counterparts to have cited stores as their source of cigarettes and who closely resembled the 16- to 18-year-old regular smokers in their source profile.

As the weekly consumption of cigarettes increased among the regular smokers aged 8 to 15 years, so did the proportion who relied on stores as a source: 1 to 4 cigarettes per week, 41%; 5 to 9, 50%; 10 to 19, 73%; 20 to 39, 60%; 40 to 59, 79%; and 60 or more, 83%.

Table II — Sources of cigarettes for 1974 current smokers among Manitoba students aged 8 to 18 years

Cigarette source	Age (yr) and smoking category; % who cited source					
	8–11		12–15		16–18	
	Occasional (n = 114)	Regular (n = 30)	Occasional (n = 452)	Regular (n = 509)	Occasional (n = 235)	Regular (n = 634)
Parents	15	20	2	7	2	7
Siblings	10	17	6	3	3	1
Friends	54	47	55	10	43	5
Stores	16	13	35	77	51	86
Vending machines	5	3	2	3	1	1

From the smoking patterns of this sample one can estimate that in a 1-week period Manitoba students aged 8 to 15 years who were regular smokers consumed 266 240 cigarettes, or 10 650 packs of 25 cigarettes. Of these, 210 900 cigarettes, or 8436 packs, were obtained from stores; in a year this would amount to 438 672 packs obtained from stores. In mid-1985 each pack cost an average of $2.25 (*Winnipeg Free Press* supplement, July 2, 1985: page 1). Thus, the estimated annual retail sales of cigarettes by stores to Manitoba students under the age of 16 years amounted to more than $987 000, and this figure does not include the sales to students aged 8 to 15 years who were occasional smokers.

Discussion

Stores are the major supplier of cigarettes to children under the age of 16 years in Manitoba. Federal legislation is in place that prohibits stores from selling children cigarettes, but it has not been enforced: there has not been a single prosecution in over 45 years.[12]

While the scientific rationale for restricting tobacco sales in 1908 may have been tenuous,[13] the restriction can certainly be justified 80 years later.[14,15] One underlying premise in enforcing regulations is that restricting access to tobacco will result in a reduction of cigarette consumption and, ultimately, in less damage to health. The link between accessibility and consumption has been convincingly demonstrated in the case of alcohol,[16] and access is cited as one of the key elements in the successful marketing of a substance of immense profitability.[17] The current ease of access to cigarettes in stores may be one reason for the low rate of use of cigarette vending machines by children.

This ready access to cigarettes by children under 16 years of age in Manitoba translates into just under a million dollars of sales per year for the major tobacco companies. The existing statute is directed, however, not at the large firms producing the cigarettes but at retailers for whom cigarettes are but one of many products. From the number of retail outlets for tobacco and the volume of sales found in this study — which represents less than 1% of all cigarettes sold in Manitoba (Taxation Division, Manitoba Department of Finance: personal communication, 1986) — one can conclude that most stores do not reap significant profits from their sale of cigarettes to children under 16. In addition, if the trends in Canada are similar to those in Britain,[9] most shopkeepers who sell cigarettes to children do so because they are not aware of their legal responsibilities. If the law was enforced and businesses were required to restrict sales of tobacco to those over 15 years of age, merchants would be unlikely to object to forgoing the small amount of revenue involved. Rather, their concerns would probably centre on the difficulties of implementing the policy. Retailers would be obliged to ask for proof of age before selling cigarettes to teenagers. To simplify matters, identification cards could be issued, as is done for the purchase of alcohol in some provinces. In addition, formal government notices of the age constraint would have to be prominently displayed in stores. This would avoid any misunderstanding as to the regulations and prevent shopkeepers from being blamed for the restriction.

A further step would be to require the licensing of retail outlets selling tobacco. Stores that violated the restriction would be fined and run the risk of losing their licence to sell tobacco products. This approach would also create a negative social environment for tobacco,[17] one in which cigarettes would no longer be treated as a conventional commodity but, rather, would have a distinct status as a controlled substance. This mechanism of regulation had been implemented successfully in Britain from 1789 to 1963 for taxation purposes, only to be abolished just as the health risks of tobacco were becoming known.[9]

A potential drawback of restricting access to tobacco would be that tobacco would be established as a product for adults and might therefore have increased appeal for some teenagers.

Of course, if access to tobacco is inhibited at stores, shifts in sources may occur. Although more expensive than stores, vending machines might become a more important source for children. All cigarette vending machines carry a warning that they are not to be used by anyone under the age of 16 years. However, they too could be licensed, so that their use by anyone under 16 would result in the owner's being fined and the licence revoked.

It was disturbing to find that some parents were a primary source of cigarettes for their children. In view of the profound effect that parents may have on their children's smoking behaviour,[18] such parental permissiveness is a subject that health professionals and educators must address. This need may become even more acute if access to cigarettes in stores is restricted.

Since friends and siblings are also an important source of cigarettes for children under 16 years of age, more attention must be directed to school-based smoking education programs. Significant programs have been developed to prevent children from starting to smoke,[19-21] but efforts also need to focus on children who are smoking, especially those who are occasional smokers. These students might be persuaded to stop more easily than regular smokers, who have an established habit.

Enforcement of the Tobacco Restraint Act is but one measure[22] that Canada's leaders could use to reduce the health hazard to children posed by tobacco.[1] We suggest, however, that the greatest success can be achieved through a comprehensive and well-orchestrated program of education, taxation and legislation, as was done in Norway.[23] We can only hope that our nation's current decision-makers will be as enlightened as their predecessors in this matter.

We thank Dr. Ulrick Wendt, director of the Health Promotion Directorate, Manitoba Department of Health, and Mr. David T. Sweanor, BA, LLB, of the Non-Smokers' Rights Association, for their assistance, as well as Dr. Marsha M. Cohen and Ms. Nancy Stanwick for their thoughtful reviews of the manuscript.

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Meetings

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Oct. 16-17, 1987

Atlantic Provinces Annual Scientific Radiologists Meeting
Sir Charles Tupper Medical Building, Dalhousie University, Halifax
Ms. Liz Poulsen, program coordinator, Division of Continuing Medical Education, Sir Charles Tupper Medical Building, Dalhousie University, Halifax, NS B3H 4H7; (902) 424-2061

Oct. 16-17, 1987

Symposium on Cosmetic Oculoplastic Surgery
Mount Sinai Hospital, Toronto
Dr. J.J. Hurwitz, ophthalmologist-in-chief, Mount Sinai Hospital, 408-600 University Ave., Toronto, Ont. M5G 1X5; (416) 586-5134

Oct. 17-21, 1987

Annual Meeting of the Association of Canadian Medical Colleges and the Association of Canadian Teaching Hospitals
Skyline Hotel and Calgary Convention Centre
Ms. Janet Watt-Lafleur, executive secretary, Association of Canadian Medical Colleges, 1006-151 Slater St., Ottawa, Ont. K1P 5N1; (613) 237-0070

Oct. 18, 1987

Association of Canadian Medical Colleges, Conference on Physician Manpower
Skyline Hotel and Calgary Convention Centre
Ms. Janet Watt-Lafleur, executive secretary, Association of Canadian Medical Colleges, 1006-151 Slater St., Ottawa, Ont. K1P 5N1; (613) 237-0070

Oct. 21, 1987

High Risk Infants: Facilitating Interaction and Communication
Mount Sinai Hospital, Toronto
Ms. Rosamund Corr, director, Hanen Early Language Resource Centre, Ste. 4-126, 252 Bloor St. W, Toronto, Ont. M5S 1V6; (416) 921-1073

Oct. 22, 1987

Rheumatic Diseases — Nursing Can Make the Difference
Women's College Hospital, Toronto
Ms. Wendy Lee, public relations assistant, Women's College Hospital, 76 Grenville St., Toronto, Ont. M5S 1B2; (416) 323-7700

Oct. 22-24, 1987

A Celebration of Sexual Awareness
Maritime Hotel, Montreal
Ms. Catherine Blake, congress coordinator, l'Institut de relations humaines Fay inc., PO Box 5 (Côte-des-Neiges), Montreal, PQ H3S 2S4; (514) 737-1394

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