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Tobacco Smoking in the Americas

INDEXED

Background

The consumption of tobacco on the American continent dates back to the pre-Columbian period. In colonial times, several countries held the monopoly and promoted the sale of tobacco. However, tobacco consumption only began to increase at the beginning of the current century, with the industrial production of cigarettes and it intensified notably after the First World War.

Even though scientific information on the harmful effects of smoking began to appear around 1920, it was not until the 1950s that its consequences took on the characteristics and proportions of an epidemic and began to cause world alarm. Since then, an impressive volume of scientific evidence has been accumulated that establishes beyond any doubt exposure to the burning of tobacco is associated with greater probability of death, disease, disability, loss of productivity, and impaired quality of life. There is now no doubt that smoking is associated with cancer of the lung, the oral cavity, the larynx, the trachea and bronchia, the esophagus, the pancreas, the kidney, and the bladder, as well as ischaemic heart disease, cerebrovascular and peri-

pheral vascular disease, chronic bronchitis, and emphysema, and that it can constitute a risk for human reproduction, with greater probability of spontaneous abortion, fetal and neonatal death, premature birth, and low birthweight, which in turn are closely related to perinatal morbidity and mortality.

In addition, it has also been established that non-smokers who live in the proximity of smokers are exposed to the health risks of so-called "passive smoking." This highlights both the need to protect non-smokers and to insist on "the right to a smoke-free environment."

In light of the convincing information that is now available, it may be asked why smokers continue to smoke. The answer to this question lies in part in the effects of nicotine and other active pharmacological elements produced from the burning of tobacco, which make for an addiction similar to those caused by the opiates and other substances that generate addiction. On the other hand, the pressure exerted by tobacco producers through, among other things, effective marketing strategies, work against the still timid dissemination of knowledge about the harmful effects of smoking in the population.

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The Epidemic

Some countries in the Americas, as well as several of the European countries, have been shocked to learn that in the brief period between 1920 and 1950 mortality attributable to lung cancer has at least quintupled (Figure 1). Such a sharp increase, without precedent and far beyond any expectation, represents a true epidemic.

Although initially it was thought that the increase was artificial—owing perhaps to new diagnostic methods or to coding errors—it has been possible to establish that the increase in mortality is real. In addition to other likely associations, attention has been focused on the simultaneous increase in the consumption of tobacco. Figure 1, still looking at the same 20-year period, shows that both trends, that of the tobacco consumption and that of mortality from lung cancer, were remarkably similar in Canada. It is considered that the effect of tobacco consumption far surpasses any other possible causal factor.

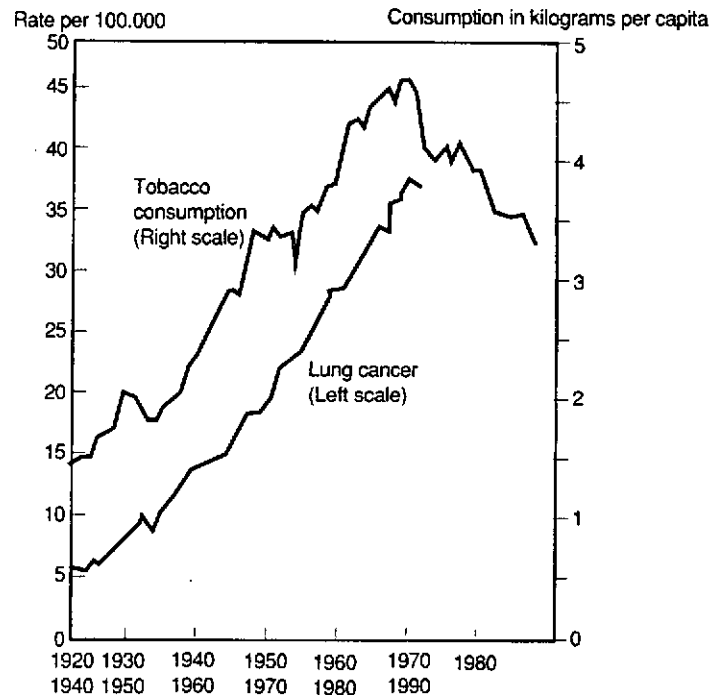
Evidence on Causality

Obviously, the similarity and the correlation of the two trends do not alone establish a cause-effect relationship. However, the extensive experience that has since been accumulated, from clinical, toxicological, and epidemiological studies (descriptive and analytical, and community interventions), meets all the currently accepted criteria for establishing causality. Such evidence confirms that the association between smoking and the highest probability of the different conditions listed above is not merely statistically significant but strong, consistent, and specific. In addition, it meets the requirements for being scientifically plausible and for bearing a precedence and dose/response relationship to exposure to the various toxic compounds that are produced when tobacco is burned.

Moreover, the observation of specific cohorts over several years has demonstrated that smokers have a 2 to 3 times greater probability of dying prematurely compared with non-smokers (relative risk of 1.86 to 3.00, depending on the degree of exposure to tobacco). With a consumption prevalence of more than 30%, smoking becomes what has been called a very high "population-attributable risk." This indicator measures the impact the elimination of a risk can have over the long term and reveals that for smoking this impact may be higher than for any other single preventive measure.

Information is gradually being gathered which has confirmed previous predictions that it is possible to reduce smoking and, after a latent period,

Figure 1. Tobacco consumption from smoking (1) 1920-1985, and lung cancer mortality rates (2). Canada 1940-1985.



- (1) Tobacco consumption from smoking was calculated in Kg. per capita (based on population 15+) and included snuff and chewing tobacco.
(2) Mortality rates are age-standardized to the 1971 Canadian population, and include deaths for all age groups.

Source: Health Division, Statistic Canada, and Surveillance and Risk Assessment Division Health and Welfare Canada.

there is also a significant reduction in cardiovascular mortality.

There is more than sufficient information right now to solve the problems caused by smoking.

The Situation in the Americas

A small number of countries of the Region have experienced a marked decline in the prevalence of smoking in the last two decades.

In the United States of America (USA), from 1965 to 1987 the prevalence of smoking in adults 20 years of age and over, was reduced from 50.2% to 31.7% among men and from 31.9% to 26.8% among women. The figures for Canada are similar, and

they also indicate an annual reduction of smokers of approximately 1% per year for men and approximately 0.7% per year for women. Cigarettes sales per capita also show a decline of 26% for men and women in the USA from 1963 to 1987, to which should be added a decline in the content of tar and nicotine in the cigarettes consumed in North America.

This decline in prevalence and consumption has been mainly attributed to the fact that a growing number of adult smokers, particularly among the more educated, have stopped. By 1987 it is estimated that 44.8% of adults that have consumed tobacco at some time in their life have given up the habit. Unfortunately, the proportion of adolescents and young adults who start to use tobacco each year, and the average age at which they begin, remain almost invariable. Moreover, by age 18 to 19 more than 30% of adolescent males are already daily smokers, and adolescent women represent an even greater proportion. In these age groups the rates of cessation are very low but they increase gradually with age. So far it has not been possible to find a satisfactory explanation for the consumption pattern in young women, but it is known that, as smoking increases among women, lung cancer is also increasing rapidly (in some communities it exceeds

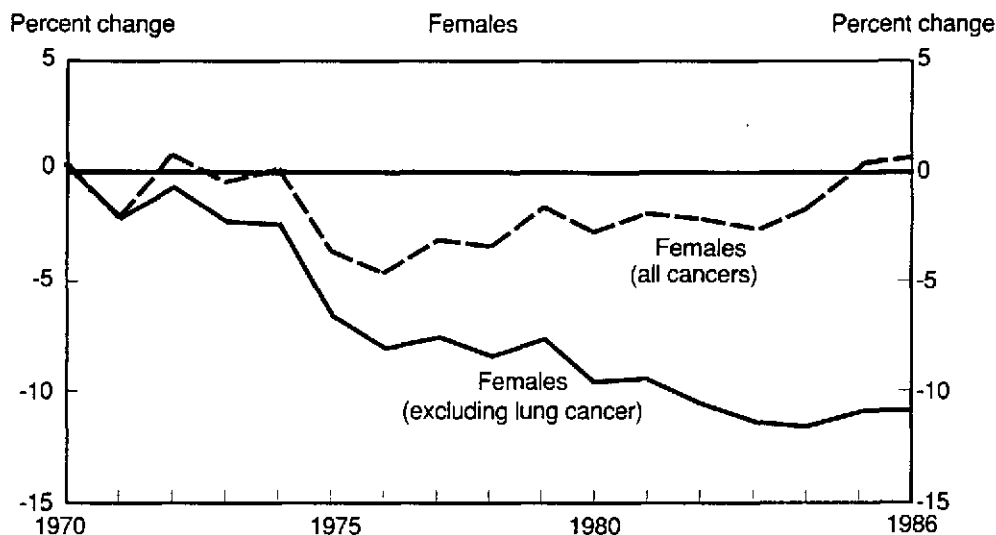
breast cancer in frequency). On the other hand, mortality for other types of cancer appears to be declining (Figure 2).

The information available on the prevalence of smoking in Latin America and the Caribbean is limited—fragmentary and with few exceptions, it does not permit comparisons over time. The data in Table 1 come from highly varied sources not strictly comparable. Although there is a considerable range in the prevalence figures for tobacco smoking (from 28% to 69% for the adult male population), most fall around the 45% level—that is, higher than the current prevalence figures for North America.

The figures on per capita consumption available for Latin America and the Caribbean are generally lower than those for North America, but there is indirect evidence they are increasing rapidly. As tar and nicotine content of cigarettes consumed in North America is usually considerably lower, the per capita consumption figures are not strictly comparable.

In several countries of Latin America and the Caribbean there has been an increase in the life expectancy of the population, with a change in the demographic structure, coupled with an accelerated appearance of health problems known to be associated with smoking, such as cancer and cardiovas-

Figure 2. Percentage change in mortality rates (1) for all forms of cancer, excluding lung cancer. Females, Canada, 1970-1986.



(1) Rates are adjusted to the age distribution of the world population.

Source: Vital Statistics and Health Status Section, Health Division, Statistics Canada.

Table 1. Smoking prevalence among adult population, by sex, in selected countries of the Americas, between 1970 and 1980.

Country	Males %	Females %	Year	Source
Argentina	58	18	1970-80	(1)
(Buenos Aires)	39.1	27.2	1981	(2)
Bolivia	62.3	37.5	1986	(3)
Brazil	54	37	1970-80	(1)
	33	20.3	1970	(2)
	50	46	1980	(3)
	59	53	1980	(4)
	41	37	1988	(5)
Canada	37	33	1986	(6)
Chile	45	26	1970-80	(1)
Colombia	52	18	1970-80	(1)
	56.2	31.4	1977-80	(3)
	37	18	1988	(5)
Costa Rica	33	9	1986	(7)
	35	20	1988	(5)
Cuba	40	...	1970-80	(1)
Ecuador	39	16	1988	(5)
El Salvador	38	12	1988	(5)
Guatemala	36	10	1970-80	(1)
(Urban area)	30	10	1972	(9)
Guyana	48	4	...	(4)
Honduras	36	11	1988	(5)
Jamaica	56	14	1970-80	(1)
	43	27	1988	(5)
Mexico	45	18	1970-80	(1)
	37	17	1988	(5)
Peru	34	7	1970-80	(1)
	28	17	1988	(5)
United States of America	29.5	23.8	1986	(8)
Uruguay	60	32	1970-80	(1)
	44	23	1988	(5)
Venezuela	45	26	1970-80	(1)
	32	23	1988	(5)

(1) World Health Organization. *Report by the Director-General. WHO Program on Tobacco and Health. 77th Meeting of the Executive Council.* Geneva, November 1985.

(2) Pan American Health Organization. *Control del ha'bito de fumar.* Subregional Workshop for the Southern Cone and Brazil. Washington, D.C. 1986.

(3) Pan American Health Organization. *Control del ha'bito de fumar.* Subregional Workshop for the Andean Area, Washington, D.C. 1987.

(4) World Health Organization. *Tobacco or health.* Report by the Director-General. 41st World Health Assembly, Geneva, March 1988, annex 2.

(5) The Gallup's Organization, Inc. *The incidence of smoking in Central and Latin America.* 1988.

(6) Federal Prevention Committee on Smoking. *National program to reduce tobacco use in Canada.* Ottawa, 1988, page 6.

(7) Cartagn and Vargas. *Prevalencia del fumador en Costa Rica.* San Jose', UCR-CCSS, 1986.

(8) U.S. Department of Health and Human Services. *The health consequences of smoking. Nicotine addiction.* Rockville, DHHS publication 88-8406, 1988, page 566.

(9) World Health Organization - International Agency for Research in Cancer. *Monographs on the evaluation of the carcinogenic risk of chemicals to humans.* Lyon, Vol. 38, 1986, page 77.

cular and respiratory diseases. In the last decade, in some countries these diseases have caused 60% of all deaths, and in others they have increased by 105% in the period from 1970 to 1980.

Obstacles for Control

The information above gives the impression of a situation of acute contrast in the Region of the

Americas. On one hand an improvement has been noted in North America, and on the other hand, in Latin America and the Caribbean, with very few exceptions, there is a serious problem. The simultaneous occurrence of these two opposing trends is not simply chance. They appear to stem from two phenomena, one economic and the other political, the effects of which are not only mutually reinforcing but also added to other concomitant sociocultural factors. The first phenomenon refers to the so-called "transnationalization" of tobacco production and marketing, and the second to the reluctance of some governments to take any decided action against smoking.

The transnational conglomerates, in control of almost all tobacco production and marketing, have been able to offset the reduction in sales in the developed countries from government-imposed restrictions on tobacco consumption, by directing their efforts toward the penetration of weaker markets—adolescents, young women, and developing economies.

Many of the governments that have been the object of these economic penetrations have failed to take regulatory action, perhaps because of the perception that the production and marketing of tobacco promotes expansion of the economy, creates jobs, and keeps taxes at comfortable levels. Many governments continue to be persuaded that anti-tobacco programs are ineffectual and beside the point, given the urgent needs created by other health problems considered of a higher priority.

Prospects for Control

The countries that have succeeded in reducing the prevalence of smoking have gone through several stages in their efforts to resolve the problem. As a result, smoking is gradually coming to be seen as "socially unacceptable," and doubt has begun to be cast on the legality of the sale, or even the promotion, of a product that is recognized to be "harmful to the consumer." Moreover, in light of the findings on the effects of passive smoking, people are beginning to demand the right to a smoke-free environment.

Perhaps the most important conclusion that can be drawn from these facts is that in practice the prevention and control of smoking has been shown to be technically and economically feasible as well as socially and politically viable.

The smoking problem is complex. It cannot be solved in the short term or with simplistic solutions. It calls for a sustained and concerted effort on the part of many participants in an intersectoral and macropolitical area.

Thus the need arises to formulate policies and national programs with broad-based participation and whose objectives should be geared to:

- Protect health and the rights of non-smokers.
- Help non-smokers to maintain a smoke-free environment.
- Raise consciousness among smokers concerning the risks, and helping them to give up the habit.

As control programs take on greater impetus, maximally effective strategic directions should be defined, namely:

- Promotion of legislation prohibiting the advertising of tobacco and its consumption in public places; compulsory warning labels on its dangers and addictive nature; reduction of the content of nicotine and tar.
- Promotion of mass, informative, educational programs for schoolchildren and high-risk specific groups.
- Promotion of cessation services and counseling.
- Development of economic interventions designed to increase the financial attractiveness of alternating crops and to generate taxes which, by raising the prices, discourage the consumption of cigarettes.
- Promotion of research to develop knowledge in such areas as: factors that lead to starting the habit, effectiveness of the cessation services, and the risks of passive smoking.

(Source: Health of Adults Program, PAHO/WHO.)