Prevention and Control (2005) 1, 311—317

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The tobacco epidemic in Latin America and the Caribbean: A snapshot

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Received 31 January 2006; accepted 1 May 2006
Available online 7 July 2006

KEYWORDS
Tobacco epidemic;
Latin America;
Caribbean;
Tobacco industry;
Tobacco smoke pollution

Summary The tobacco epidemic continues to spread through Latin America and the Caribbean. Philip Morris and British American Tobacco Company control the market through their subsidiaries. In the past, governments in this region have shown little or no commitment to tobacco control. This, however, has changed in recent years as the World Health Organization (WHO) Framework Convention on Tobacco Control has been signed by most and ratified by several countries in the region. Non-governmental organizations, sometimes rallied by the InterAmerican Heart Foundation, have played a crucial role in supporting Treaty ratification. Latin America and the Caribbean have the momentum to move forward in tobacco control and also the support to approve the necessary legislation to halt the tobacco epidemic.

Introduction

Tobacco is the number one cause of preventable deaths worldwide. Deaths caused by tobacco account for a larger number of deaths than caused by HIV, alcohol, accidents, illegal drugs, obesity, and violence, combined [1]. It has been estimated that the number of deaths caused by tobacco will increase from 4.9 million currently to 10 million in the year 2030 [2].

The tobacco epidemic has been divided into four stages based on smoking prevalence and lung cancer deaths [3]. Briefly, in the first stage smoking prevalence in men increases until reaching a peak; lung cancer deaths are rare. In the second stage, smoking prevalence in men starts to decline and in women increases until reaching a peak; male lung cancer deaths increase notably. In the third

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1573-2088/$ - see front matter
doi:10.1016/j.precon.2006.05.001

stage, smoking prevalence in men continues to decline and in women starts to decline; lung cancer deaths in men continue to increase until reaching a peak and in women there is a notable increase. Finally in the fourth stage, smoking prevalence in men reaches a plateau as it does in women; lung cancer deaths in men start to decline and in women reach a peak [3]. It has been estimated that Latin American and Caribbean countries are in the second stage of the epidemic, male smoking prevalence showing a marked increase and female prevalence just beginning to increase; male lung cancer cases are becoming more common [4].

The tobacco epidemic in Latin America and the Caribbean

Smoking prevalence in Latin America and the Caribbean varies widely, not only between countries but also within countries. According to the World Bank, in 1995 there were 95 million smokers in Latin America, corresponding to 8% of all smokers in the world [5]. Adult smoking prevalence is as high as 40% in Chile and Argentina, while it remains below 20% in Colombia, Costa Rica, and Panama [6], reflecting the different stages of the epidemic. These data need to be interpreted with caution as they have not been collected with the same instrument and the population demographics vary.

Youth smoking prevalence also varies between countries. In a recent effort by the Center for Disease Control and Prevention (CDC) and the World Health Organization (WHO), the Global Youth Tobacco Survey (GYTS) included Latin America and Caribbean countries in order to collect valid data and to make comparisons easier. This is a representative school based survey including students between the ages of 13–15 years. The prevalence of students that have ever smoked (even one or two puffs) and currently smoke cigarettes varies widely by country. The cities of Coquimbo, Chile and Montserrat, Mexico, show the highest and lowest prevalence of both the previous indicators, respectively. In Coquimbo, the prevalence of students who have ever smoked is 70% while in Montserrat it is 21%. In Coquimbo, the prevalence of students who currently smoke is 40%, while in Montserrat the prevalence is 5.6% [7]. The multiple factors that determine this difference deserve further research.

Smoking attributable mortality is high in countries with low infant mortality, e.g., Cuba and Canada and low in countries with high infant mortality, e.g., Guatemala. In the former, in 2000, smoking caused an estimated 350,000 deaths in males and 294,000 deaths in females, or 28% and 22% of all deaths, respectively. In the latter, smoking caused an estimated 5000 deaths in males and 1000 deaths in females, or 3% and 1% of all deaths, respectively [8]. An estimated 22% of cardiovascular deaths are caused by smoking in Cuba. In countries with low infant and adult mortality e.g. Argentina and Chile, 11% (77,000) of cardiovascular deaths are caused by smoking. In countries with high infant mortality, 2% (1700) of cardiovascular deaths are caused by smoking [9,10]. In the Caribbean it is estimated that 5600 deaths annually are attributable to smoking [11]. Differences in smoking attributable mortality largely reflect the stage of the smoking epidemic in each country.

The tobacco industry in Latin America and the Caribbean

Tobacco sales in Latin America are controlled by Philip Morris (PM) and British American Tobacco (BAT) [6]. In 1999, 60% of the market was controlled by BAT and the rest by PM. This varies by country, for example in Guatemala PM has the largest share of the market, while in Chile BAT virtually controls all tobacco sales [6]. These transnational companies have increasingly bought national companies as occurred in Peru and Colombia in 2005. In some countries such as Cuba and Uruguay, national companies still dominate the market. West Indian Tobacco Co. (WITCO), a BAT subsidiary based in Trinidad, controls the market in the English speaking Caribbean [12].

Latin America, as the rest of the world [13–15], has also been subject to the political and economic influence of the tobacco industry. Through the tobacco industry documents available on the internet (http://legacy.library.ucsf.edu/) we have learned how the tobacco industry has influenced policy making in the region to avoid smoke-free legislation. Since 1991, PM and BAT organized ''the Latin Project'' [12,16]. This project included hiring influential and highly placed physicians and environmental researchers as consultants to conduct research that was used to fight smoke-free legislation taking root in the region. Seven countries were included in the project: Guatemala, Costa Rica, Brazil, Chile, Ecuador, Argentina, and Venezuela. Consultants were used as ''third-person spokespersons'' to avoid exposing the industry. The most notable case of the industry's power occurred in Argentina. In 1992, the Argentinean senate passed a progressive tobacco control bill known as ''The

Neri Bill''. Tobacco industry consultant, Dr. Carlos B. Alvarez, an influential Argentinean cardiologist and personal friend of then president Carlos Menem, exerted strong influence on the President and the Senate leading to the presidential veto of the law two months after it had been approved by the Senate. According to the industry, this ''victory'' was a perfect case-study of how an influential consultant can have a great impact in favor of their interests [17,18]. To date, there is no evidence that ''the Latin Project'' is inactive [12,13,19].

In addition to ''the Latin Project'', the industry has organized a ''social responsibility'' campaign to improve its image in Latin America and the Caribbean. The industry's image has been slowly deteriorating due to challenges to the industry in the United States. This industry strategy has been described elsewhere [20,21]. In Latin America it includes the youth smoking prevention program ''Yo tengo poder'' [12,22] and funding culture and the arts. Regarding the latter, two examples are the ''Fundación BAT'' in Colombia (BAT Foundation, http://www.fundacionbat.com.co/) and the ''Organización para las Artes Francisco Marroquín'' (Organization for the Arts, http://www.organizacionparalasartes.org/) at Universidad Francisco Marroquín in Guatemala. These foundations have the objective of sponsoring cultural and educational events in each country. This theme is the same as that used by the industry in the United States to improve its image [21].

In Latin America, the tobacco industry has a great level of social recognition, acceptance and influence. Many governments consider tax income from the industry to be critical for their national economies. Agricultural organizations such as the Tobacco Growers' Association of Brazil (AFUBRA) act as fronts for the industry to oppose the FCTC claiming loss of jobs and livelihood. AFUBRA has been identified as a ''front'' institution for Brazil's BAT subsidiary Souza Cruz [23]. The industry's ''Convivencia en Armonía'' (Courtesy of Choice) Program that divides hospitality venues into smoking and non-smoking sections is well recognized in the region and has made of the hospitality industry another powerful ally against smoke-free environments [12,24].

Tobacco control in Latin America and the Caribbean

In spite of considerable advances, tobacco control in Latin America and the Caribbean still remains lax [6]. Most countries lack the key components of a comprehensive tobacco control program such as smoke-free workplaces, comprehensive advertising bans and taxation [6,25]. Even though some countries have laws banning indoor smoking, these are not enforced. A 2004 study that assessed second-hand smoke concentrations in selected cities of Latin America found that 94% of the locations had detectable levels of airborne nicotine [25]. Argentina and Uruguay had the highest levels of airbone nicotine, and overall, bars and restaurants had the highest median concentrations of airborne nicotine [25].

Advertising is still present in various ways. According to the GYTS, in the city of Monterey, Mexico, in 2000, 93% of respondents had seen ads for cigarettes on billboards. In Buenos Aires, Argentina, 89% of respondents had seen ads for cigarettes in newspapers and magazines. Shockingly, in Montevideo, Uruguay (2001 data), 22% of respondents had been offered free cigarettes by a tobacco company [7]. The lack of comprehensive tobacco control programs should not be blamed solely on health advocates, as the tobacco industry has been playing a vital role in diverting attention towards other health issues [19].

Regarding taxation, income from taxes derived from the manufacture of tobacco in Latin America is low. For example, in Bolivia, this income has ranged from 0.48% to 1.52% of the total tax income in the period from 1989 to 2002 [26]. The Pan American Health Organization (PAHO) has concluded that tax increase is an effective measure to reduce cigarette consumption. In Bolivia, a 1% price increase would lead to a 0.8% drop in demand [26]. In Chile, a 10% price increase would lead to a 2.1% drop in cigarette consumption [27].

Tobacco control in Latin America and the Caribbean as in many other regions of the developing world has been far from the minds of policy makers until recently. The increased attention has occurred as a result of the World Health Organization's Framework Convention on Tobacco Control (FCTC) and the work of a number of organizations to support the signature and ratification of this treaty. The FCTC negotiations were supported by non-governmental organizations (NGO's) represented by the Framework Convention Alliance (FCA), which brought together more than 200 organizations from more than 100 countries. The FCA played a crucial role educating and providing consultation to official delegates in specialized areas such as health, economics, agriculture and legal matters. The final text of the treaty was the result of political negotiation by powerful groups and met most but not all of the expectations of the health

Table 1 Key provisions of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC)[a]

- Comprehensive bans on tobacco advertising, promotion and sponsorship
- Placement of rotating health warnings on tobacco packaging that cover at least 30% of the principal display area and can include pictures
- Ban misleading terms such as ''light''
- Protect citizens from exposure to secondhand smoke in workplaces, public transport, and indoor public places
- Combat smuggling
- Increase tobacco taxes

[a] *Source*. The Framework Convention Alliance for Tobacco Control. http://www.fctc.org/treaty/index.php#fctc.

community (Table 1). The FCTC was approved unanimously by the Health Assembly on May 21, 2003 in Geneva. Afterwards, countries were asked first to sign it in order to indicate their broad support. By the end of the signature period on June 29, 2004, 168 countries worldwide had signed the treaty. After signature, the ratification process began, requiring each country to abide by the terms of the FCTC. As of May 29, 2006, 126 countries had ratified. Several Latin American countries have ratified the treaty (Table 2).

While the Latin American position early in FCTC negotiations was one of the weakest of any region, it strengthened considerably over time. Delegates

Table 2 Latin American and Caribbean countries that have signed and ratified the WHO framework convention on tobacco control (FCTC)[a]

Country	Signature date	Ratification date
Mexico	August 12, 2003	May 28, 2004
Guatemala	September 25, 2003	November 16, 2005
Belize	September 26, 2003	December 15, 2005
El Salvador	March 18, 2004	
Honduras	June 18, 2004	February 16, 2005
Nicaragua	June 7, 2004	
Costa Rica	July 3, 2003	
Panama	September 26, 2003	August 16, 2004
Colombia	Did not sign	
Venezuela	September 22, 2003	
Peru	April 21, 2004	November 30, 2004
Ecuador	March 22, 2004	
Bolivia	June 16, 2004	September 15, 2005
Argentina	September 25, 2003	
Brazil	June 16, 2003	November 3, 2005
Chile	September 25, 2003	June 13, 2005
Paraguay	June 16, 2003	
Uruguay	June 19, 2003	September 9, 2004
Antigua & Barbuda	June 28, 2004	
Bahamas	June 29, 2004	
Cuba	June 29, 2004	
Dominica	June 29, 2004	
Barbados	June 28, 2004	November 3, 2005
Haiti	July 23, 2003	
Grenada	June 29, 2004	
Jamaica	September 24, 2003	July 7, 2005
Saint Lucia	June 29, 2004	November 7, 2005
Dominican Republic	Did not sign	
Trinidad y Tobago	August 27, 2003	August 18, 2004
Guyana	Did not sign	September 15, 2005

[a] As of May 29, 2006. *Source*. World Health Organization. Updated Status of the WHO Framework Convention on Tobacco Control. http://www.who.int/tobacco/framework/countrylist/en/index.html.

from Brazil, Peru, Panama and Paraguay played important roles in support of strong tobacco control. The English-speaking Caribbean delegates, unlike their Latin American counterparts, were consistently favorable to a strong FCTC. Changes in the position of official delegates from Latin America had in part to do with integrated strategies by the FCA and the InterAmerican Heart Foundation (IAHF) to revert the situation. In brief, the IAHF is a federation of heart associations and foundations in the Americas. Established in 1992, one of its top priorities is tobacco control in Latin America and the Caribbean and it facilitates a network of tobacco control advocates and experts.

The tobacco control movement in Latin America and the Caribbean

In countries where tobacco control has been successful, the lay public has had a significant role. Latin America and the Caribbean is no exception. Furthermore, given its complexity, tobacco control requires regional as well as international strategies, in addition to national and local efforts.

In Latin America, in the late 1980s, individuals and organizations working for tobacco control came together in a group known as ''Comité Latinoamericano Coordinador para el Control del Tabaco'' (CLACCTA) or Latin American Coordinating Committee for Tobacco Control. This Committee was supported by US and Canadian organizations including the American Cancer Society, Health Canada, the CDC, and PAHO. CLACCTA provided a forum for discussion and helped initiate organized movements in a number of countries. Due to a variety of difficulties that limited its work, CLACCTA stop functioning in 2000. The IAHF, that joined CLACCTA in the late 1990s, became a facilitator maintaining the tobacco control movement, as a fairly loose network of people and organizations focused on the signature and ratification of the FCTC.

Over the last few years IAHF has expanded its advocacy role in tobacco control undertaking many actions to mobilize the lay public and governments to sign and ratify the FCTC, as well as promoting the strongest implementation of this treaty in Latin American and Caribbean countries. Key activities have included developing the ''Tobacco Free Americas Network'', carrying out workshops for capacity building, supporting NGOs and government delegates throughout the FCTC negotiations, initiating an InterAmerican Journalism Contest on tobacco control, and developing a website to help wade through information from each country in the region (www.ficnet.org). Some of the workshops were carried out with the FCA, some were funded through a grant from the WHO/PAHO ''Channeling the Outrage,'' while others were supported by the Canadian Public Health Association with Health Canada funding. These workshops have included press conferences, a Forum opened to government officials and the public, and a more in-depth advocacy session for NGOs. The 2002 Journalism Contest attracted journalists from 7 countries and helped identify journalists that support tobacco control. A second and third contest took place in 2004 and 2005.

The network of organizations working on behalf of the FCTC includes national coalitions, heart foundations, cancer, lung, and other medical organizations, consumer protection groups, women, children and worker rights groups. Through a Memorandum of Understanding between the IAHF and the American Cancer Society, Campaign for Tobacco Free Kids, American Heart Association and, initially, American Lung Association, with the support of PAHO and the Heart and Stroke Foundation of Canada, the IAHF obtained the necessary funding to expand its work.

The capacity of the lay public to press for tobacco control in individual countries varies greatly. Brazil is one of the tobacco control leaders in the region. It has a prohibition on tobacco advertisement since 2000, limiting advertisement to point-of-sale only. This prohibition encompasses all sports, including Formula 1 car racing. Since 2001, health warnings on cigarette packs cover 100% of one of the larger sides of a pack and include images of the health effects of tobacco use. These types of warnings have been shown to be an effective population based smoking cessation intervention [28]. In addition, Brazil has developed a program of smoke free public places and facilitates access to treatment for smokers trying to quit. Working through the Intergovernmental Tobacco Control Commission of MERCOSUR (the regional economic block of the Southern Cone), Brazil has supported regional tobacco control efforts in Argentina, Paraguay, Uruguay, Chile and Bolivia. The efforts in tobacco control in Brazil came from within the government, specifically the Cancer Institute (INCA). More recently the NGO movement in Brazil has been strengthened with a very active NGO network, TabacoZero, which was instrumental in obtaining ratification.

In Uruguay, the ''Sindicato Médico del Uruguay'' (Uruguayan Physicians Union, SMU) has been the most active NGO in tobacco control and FCTC ratification. The SMU organized and coordinates the

''Alianza Nacional para el Control del Tabaco'' (National Alliance for Tobacco Control) that brings together other governmental organizations and NGOs. In 2003, the ''Fumadores Pasivos Uruguayos'' (Uruguayan Passive Smokers) was organized to fight for smoke-free environments. In addition, they have joined forces with the SMU to form the NGO ''Uruguay Libre de Tabaco'' (Tobacco Free Uruguay). As a result of the joint efforts of the lay public, NGOs, and the support of the government lead by President Dr. Tabare Vasquez, Uruguay has become the first country in Latin America and the Caribbean to pass a law banning smoking indoors. The law, which came into effect March 1, 2006, bans smoking in public places and workplaces, including bars and restaurants. In addition, as of April 2006, cigarette packs include graphic warnings covering 50% of the pack. Misleading terms, such as ''light cigarettes'' have also been banned.

In Venezuela, a country with a long history of tobacco control, tobacco advertising has been banned from all media since 1992 (except point-of-sale). In 2005, the state of Monagas declared all public places to be smoke-free. Rotating, graphic, health warnings have appeared on cigarette packages since 2004.

Progress in tobacco control in Mexico has stalled as a result of an agreement between the Secretary of Health and the tobacco companies. The agreement signed in June 2004 restricts the application of effective tobacco control measures. Further, the agreement accepts what amounts to autoregulation by the industry of advertising and warning labels and it offers a reprieve from tax increases in exchange for a tax deductible donation to the Fund for Catastrophic Medical Expenses of $1 peso (approximately 10 cents of a US dollar) per package of cigarettes. The outrage of the national and international communities is only now beginning to be heard.

In Chile, under pressure from BAT, the main daily newspaper in the country, El Mercurio, fired its health editor for truthfully writing about the influence of the tobacco company. The action has quelled enthusiasm among journalists for reporting on the subject. Another investigative reporter, about a year earlier, had a major impact on the ratification of the FCTC by presenting a TV report on the tobacco business and thus emboldening politicians to ratify.

Caribbean countries have come together in the FCTC Caribbean Network facilitated by the IAHF. This network was set up to exchange information, provide support and help expand the number of organizations endorsing tobacco control beyond healthcare organizations. A number of Caribbean countries have signed and ratified the FCTC (Table 2). In some of these countries, the main barrier to ratification has been legal. In order to ratify some governments had the opinion that legislation required to meet the FCTC's commitments should be enacted prior to becoming a Party to the Treaty. The lack of government and lay public's involvement has also proven to be a barrier. Some progress has been made in the region regarding cigarette packs warning labels. The Caribbean Standards Bureau, based in Jamaica, is developing recommendations about warning labels. These recommendations will apply to all the English-speaking Caribbean countries. In Trinidad and Tobago, legislation banning smoking indoors will be discussed in parliament in 2006. Bermuda is tobacco free as of April 2006 and efforts are underway to declare the World Cricket Cup 2007 tobacco free.

Conclusions and recommendations

The FCTC has given a major impetus to tobacco control in Latin America and the Caribbean. Increasingly NGOs are organizing for tobacco control and learning the lessons learned many times over in other countries. Many challenges remain. The tobacco industry has worked diligently through their Latin American and Caribbean subsidiaries to scatter efforts for effective control. Governments are frequently ill-informed or misled by the tobacco industry about the effects of tobacco control measures. The media in many countries are favorable to the tobacco industry and its allies. The public is often unaware of the extent of the risk to which it is exposed from active and passive smoking.

The strategies supported by the IAHF and FCA seem to provide an appropriate road map for a healthier future for the people of Latin America and the Caribbean:

- Support the ratification of the FCTC and its strongest possible implementation. Particularly, focus on the most effective means of tobacco control:
  - Increase taxes on tobacco.
  - Promote smoke-free environments, and
  - Total prohibition on tobacco advertisement, promotion and sponsorships.
- Counteract the social responsibility campaigns of the tobacco industry in the region.

- Develop country specific leadership in tobacco control, including advocacy and smoking cessation.
- Promote and support tobacco control research in the region, particularly the use of industry documents and publications for an international audience.
- Support the PAHO lead Smoke Free Americas initiative to promote clean indoor air.

With Latin American and Caribbean healthcare systems struggling to deal with the overwhelming increase of chronic diseases, of which tobacco is the main cause, tobacco control is a must. In Brazil, compared to 2000, the number of years of productive life lost to cardiovascular disease will have increased in 2030 by 64%, compared to only 20% in the United States [29]. The FCTC has now provided the context to strengthen tobacco control in Latin America. The lay public have a crucial role to play in engaging governments, which, above all, should spearhead the fight to halt the tobacco epidemic.

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