

---

# EDITORIAL

## Latin America: a laboratory for tobacco control research

---

Latin American researchers have played a central role in tobacco control research for almost a century. An obscure scientist from Argentina named Angel Honorio Roffo was one of the first in the world to draw attention to the link between smoking and cancer.<sup>1</sup> Roffo pioneering work in tobacco carcinogenesis beginning in the 1920's helped establish that chemicals in tobacco tar caused cancer. Animal experiments conducted by Roffo testing different fractions of tobacco smoke condensate helped establish that tar rather than nicotine was the cause of cancer, and that polycyclic aromatic hydrocarbons found in the tar were one of the classes of chemicals in tobacco smoke responsible for cancer formation.<sup>1</sup> Most of Roffo's work was published prior to 1940, long before the more widely publicized smoking and health epidemiological and experimental studies of the early 1950's by American and British scientists.<sup>2-7</sup>

As illustrated by the papers in this special issue of *Salud Pública de México*, tobacco control research in Latin America has come full circle from the early work by Roffo which focused on tobacco as a cause of disease, to the current focus on evaluating the most effective interventions to reduce tobacco consumption. While Roffo would likely be saddened to know that it has taken the world so long to act upon his research on tobacco and cancer, he would no doubt be pleased to see the concerted efforts now being made under the auspices of the World Health Organization's Framework Convention on Tobacco Control (FCTC) to formulate a global movement to reduce the harm caused by tobacco use.<sup>8</sup> The FCTC is the first-ever international public health treaty, which obligates ratifying countries to broad, comprehensive tobacco control policies such as high taxes on tobacco products, complete advertising bans, enhanced pack warnings, mass media campaigns, and 100% smoke-free policies.

The FCTC has propelled tobacco control into a new era as countries all over the world consider incorporat-

ing FCTC policies and recommendations into their own legislation.<sup>9</sup> This is a time of great promise and great challenge. As tobacco control policies are formulated and implemented, it is important that policies undergo rigorous evaluation. As the FCTC continues into its critical implementation phase over the next decade – as each of the almost 170 nations around the world that have ratified the treaty decide what specific policies will be implemented to meet their treaty obligations – it is becoming increasingly important that stronger scientific evidence is needed to guide individual countries to adopt policies that will work effectively.<sup>10,11</sup>

Latin American countries are at the forefront of implementing FCTC policies as illustrated in table 1. The articles presented in this supplement represent the first wave of research evidence emerging from studies evaluating the effectiveness and the challenges of implementing the FCTC in Latin America. As illustrated by several of the papers in this supplement, we are already beginning to see how the tobacco industry is working to undermine the FCTC by encouraging countries to adopt policies that, although compliant with the FCTC, are suboptimal.<sup>12-18</sup> Governments will also need to be ready to evolve and change their policies in order to ensure they achieve their goals, as Honduras has recently done to explicitly exclude tobacco industry involvement in policy making on tobacco control following the recommendations of FCTC's Article 5.3.<sup>19</sup> However, limiting the influence of the tobacco industry will not be an easy task as the tobacco companies continue to wield enormous economic and politic influence in the region.

Latin America has become an important laboratory for learning about what policies and programs work in reducing the harm caused by tobacco. Over the next few years as existing tobacco control policies are refined and new ones are implemented, it is critically important for the public health community to devote attention and resources to evaluate what is working,

**Table I**  
**LATIN AMERICAN COUNTRIES WITH 100% SMOKEFREE POLICIES, GRAPHIC PACK WARNINGS & COMPLETE BAN**  
**OF ADVERTISING AND SPONSORSHIP OF TOBACCO PRODUCTS**

Country	100% national smokefree policies		Pictorial warning labels on cigarette packs		Complete ban on tobacco advertisements, sponsorships & promotions	
	Policy (Y/N)	Year implemented	Policy (Y/N)	Year implemented	Policy (Y/N)	Year implemented
Bolivia	N	-	Y	2010*	N	-
Brazil	N	-	Y	2002	N	-
Chile	N	-	Y	2006	N	-
Colombia	Y	2008	Y	2010	Y	2011*
Guatemala	Y	2009	N	-	N	-
Honduras	Y	2011*	Y	2011*	Y	-
Mexico	N	-	Y	2010*	N	-
Nicaragua	N	-	Y	2011*	N	-
Panama	Y	2008	Y	2008	Y	2008
Paraguay	Y	2010*	Y	2010*	N	-
Peru	Y	2010*	Y	2009	N	-
Uruguay	Y	2006	Y	2006	N	-
Venezuela	N	-	Y	2005	N	-

\*To be implemented

Y: yes  
 N: no

and what is not. Good public health practice, the same as clinical medicine, demands evidence from rigorously conducted evaluation research to guide the adoption of evidence based interventions as well as to aid in the discovery of new and more effective interventions. The Latin American region is uniquely positioned to play a prominent role in helping guide public health efforts to stem the global epidemic of premature deaths caused by tobacco.

### Acknowledgements

The authors gratefully acknowledge funding support from the following sources: National Cancer Institute P50-CA111326 and P01-CA138389 and the Flight Attendant Medical Research Institute (FAMRI). The opinions expressed in this commentary are those of the authors and not necessarily reflective of those of the funding agencies.

K. Michael Cummings,<sup>(1)</sup>  
 Ernesto M Sebríe.<sup>(1)</sup>

### Declaration of conflicts of interest

We declare that we have no conflicts of interest.

### References

1. Robert PN, Angel H Roffo: The forgotten father of experimental tobacco carcinogenesis. Bull World Health Organ. 2006; 84(6):494-96.
2. Schrek R, Baker LA, Ballard GP, Dolgoff S. Tobacco smoking as an etiologic factor in disease. I. Cancer: Cancer Research, 1950;10(1):49-58.
3. Doll R, Hill AB. Smoking and carcinoma of the lung. BMJ, 1950; 221 (ii):739-748.
4. Wynder EL, Graham EA, Tobacco smoking as a possible etiologic factor in bronchogenic carcinoma, JAMA, 1950;143(4):329-336.
5. Levin ML, Goldstein H, Gerhardt PR. Cancer and tobacco smoking. JAMA, 1950; 143(4):336-338.
6. Wynder EL, Grahmam EA, Croninger AB. Experimental product of carcinoma with cigarette tar. Cancer Research, 1953;13:855-864.
7. Hammond EC, Horn D. The relationship between human smoking habits and death rates: a follow-up study of 187,766 men. JAMA, 1954;55(15):1316-1328.
8. WHO. 2003. World Health Organization Framework Convention on Tobacco Control. Available at: <http://www.who.int/tobacco/framework/download/en/>

(1) Department of Health Behavior, Roswell Park Cancer Institute, New York, USA. Email: Michael.cummings@roswellpark.org

9. WHO Report on the Global Tobacco Epidemic, 2009: Implementing smoke-free environments. Geneva, Switzerland: World Health Organization. Available at: <http://www.who.int/tobacco/mpower/2009/en/index.html>
10. IARC Handbooks of cancer prevention, Tobacco control, Vol 12: Methods for evaluating tobacco control policies. Lyon, France: IARC, 2008.
11. Cummings KM, Fong GT, Borland R. Environmental influences on tobacco use: evidence from societal and community influences on tobacco use and dependence. *Annual Review of Clinical Psychology*, 2009;5: 211-236.
12. Schoj V et al. Informing effective smokefree policies in Argentina: Air quality monitoring study in 15 cities (2007-2009). *Salud Publica Mex*, 2010; 52(suppl 2):S155-S165.
13. Thrasher JF et al. Differential impact of local and federal smoke-free legislation in Mexico: A longitudinal study among adult smokers. *Salud Publica Mex*, 2010;52(suppl 2):S242-S251.
14. Sáenz de Miera-Juárez B & Iglesias R. Impuestos para el control del tabaquismo: las experiencias de Brasil y México. *Salud Publica Mex*, 2010;52(suppl 2):S170-S183.
15. Ramos A & Curti D. Política fiscal, asequibilidad y efectos cruzados de precios en la demanda de productos de tabaco: El caso de Uruguay. *Salud Publica Mex*, 2010;52(suppl 2):S184-S194.
16. Thrasher JF et al. Assessing the impact of cigarette package health warning labels: A cross-country comparison in Brazil, Uruguay and Mexico. *Salud Publica Mex*, 2010;52(suppl 2):S204-S213.
17. Sebríe EM, Blanco A, Glantz SA. Cigarette Labeling Policies in Latin America and the Caribbean: progress and obstacles. *Salud Publica Mex*, 2010;52(suppl 2):S231-S241.
18. Hammond D. "Plain packaging" regulations for tobacco products: The impact of standardizing the color and design of cigarette packs. *Salud Publica Mex*, 2010;52(suppl 2):S224-S230.
19. IHADFA República de Honduras. Ley Especial para el Control del Tabaco. Tegucigalpa, Honduras, June 9, 2010. Available at: [http://www.ihadfa.hn/index.php?option=com\\_content&view=article&id=145:ley-control-del-tabaco&catid=6:leyes&Itemid=20](http://www.ihadfa.hn/index.php?option=com_content&view=article&id=145:ley-control-del-tabaco&catid=6:leyes&Itemid=20)