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## Commentary

# Obesity prevention lessons from Latin America



Michael Pratt<sup>a,b,\*</sup>, Ana Sofia Charvel Orozco<sup>c</sup>, Mauricio Hernandez-Avila<sup>d</sup>, Rodrigo S. Reis<sup>e,f</sup>, Olga L. Sarmiento<sup>b</sup>

- <sup>a</sup> Hubert Department of Global Health, Rollins School of Public Health, Emory University, Atlanta, GA, USA
- <sup>b</sup> Schools of Medicine and Government, Universidad de los Andes, Bogotá, Colombia
- <sup>c</sup> Instituto Tecnológico Autónomo de México, Ciudad de México, Mexico
- <sup>d</sup> National Institute of Public Health of México, Cuernavaca, Mexico
- e Research Group of Physical Activity and Quality of Life (GPAQ), School of Health and Biosciences, Pontificia Universidade Católica do Paraná, Curitiba, Brazil
- f Department of Physical Education, Universidade Federal do Paraná, Curitiba, Brazil

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## ABSTRACT

This is an invited commentary for the Active Living Research (ALR) special issue. The commentary focuses on the lessons that can be learned from Latin America regarding obesity prevention. Examples from Brazil, Mexico, and Colombia that may inform US policy are described.

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We are in the midst of global pandemics of physical inactivity and obesity (Kohl et al., 2012; The Lancet Diabetes and Endocrinology, 2014). Nearly a third of the adult population around the world is physically inactive, and this is especially true in the Americas: North, Central and South (Hallal et al., 2012). As in most areas of public health, evidence from many countries suggests that policy and environmental strategies will be an essential part of combating obesity and sedentarism (Kohl et al., 2012; The Lancet Diabetes and Endocrinology, 2014; WHO, 2009). However, population level policy change is rarely easy, and only infrequently is the result of the traditional pathway from basic to applied research to community demonstration to widely applied policy. More often than not advances in public health policy related to noncommunicable disease (NCD) prevention result from implementation and evaluation of innovative policies developed in communities or countries that for one reason or another are ahead of the curve. For example, tobacco control policy in the United States benefited from many communities and states independently implementing and evaluating tobacco control policies related to taxation, youth access, and smoke free restaurants and public spaces (Green et al., 2006). It seems likely that this will be the case for obesity prevention as well. Given the widespread political deadlock currently blocking public policy reform in the United States, we may need to look farther afield for creative policy solutions for obesity and physical inactivity. Fortunately, we do not have to look very far.

In the last decade there has been a proliferation of national policy initiatives in Latin American countries focused on physical activity and obesity. Brazil has led the way in taking well evaluated examples of community-based physical activity promotion and turning them into national policy and funded programs (Malta and Barbosa da Silva, 2012). In Colombia the movement to reclaim public space and purpose it for physical activity promotion, best exemplified by the Ciclovía program in Bogotá, has become part of national health and recreation policy (Sarmiento et al., 2010). This policy shift was undergirded by legislation that created a comprehensive national obesity prevention law in 2009 (Anon, n.d.). Mexico faces an especially challenging situation with one of the highest and most rapidly increasing prevalences of obesity among large countries (Barquera et al., 2013). The Mexican Government promoted a national agreement to enhance inter-sectoral collaboration to address obesity control which involved actions within the public and private sectors, resulting in new legislation addressing obesity prevention through taxes on sugar sweetened beverages and junk food (Bonilla-Chacín, 2014). These and other examples from Latin America are large scale natural policy experiments from which much may be learned and perhaps applied in the United States. In the following paragraphs we briefly examine salient points from these examples in Colombia, Mexico, and Brazil.

## Ciclovía in Bogotá and beyond

The Ciclovía recreativa is a community program in which streets are closed to motorized transport, transforming them into temporary linear parks focused on recreational activities (Sarmiento et al., 2010). Bogotá's Ciclovía recreativa program started in 1974 and is the largest in the

<sup>\*</sup> Corresponding author at: Hubert Department of Global Health, Rollins School of Public Health, Emory University, 1518 Clifton Road NE, Atlanta, GA 30322, USA. E-mail address: michael.pratt@emory.edu (M. Pratt).

world. Every Sunday and holiday from 7 am until 2 pm, 121 km of main streets are closed. Between 600,000 and 1.4 million individuals participate per event, and 92% of the participants are from low to middle income strata (Torres et al., 2013). In 2007, the Ciclovía program was incorporated into the Colombian National Public Health Plan as a strategy for promoting physical activity and reducing chronic diseases, and in 2009 it became part of the national obesity law (Anon, n.d.). The Ciclovía of Bogotá serves as a model for 66 other programs in Colombia that form the Colombian Network of Ciclovías, supported by the national sports and recreation directorate (COLDEPORTES). The "Network of Ciclovía of the Americas" has grown to include more than 300 programs that are in good part modeled upon the Bogotá experience. Ciclovías (open streets initiatives) have gained traction in the United States as well. Between 2008 and 2013 over 90 cities in the United States hosted at least one event (Hipp et al., 2014). Studies conducted in Bogotá and in the United States show that users of the open streets or Ciclovía programs are more likely to meet physical activity guidelines and that Ciclovía programs are cost beneficial (Montes et al., 2012). The potential benefits of these programs go well beyond increasing physical activity. Participants report higher quality of life, neighborhood social capital increases as people replace cars on the streets, and air and noise pollution decrease (Sarmiento et al., 2010; Torres et al., 2013). Ciclovías are a promising way of increasing physical activity at the population level, and simultaneously addressing other important urban issues such as equity, quality of life, and the environment.

## Obesity prevention in México

Over the last decade México has seen a dramatic increase in the prevalence of obesity. About one-third of Mexican adults (32.4%) and children (34.4%) are overweight or obese (Barquera et al., 2013). In México the obesity epidemic went largely unaddressed until 2007 when an effort was launched by the Ministry of Health to position obesity as a matter of national interest. In 2010, obesity gained a place as one of the top priorities in the national public health agenda with the launching of the National Strategy to Control Obesity and Overweight, commonly known as ANSA for its acronym in Spanish: Acuerdo Nacional para la Salud Alimentaria (Acuerdo Nacional para la Salud Alimentaria, 2010). ANSA was an innovative, multi-sectoral public health policy designed within the federal government but with the participation of academia, civil society, and the private sector. ANSA delineated priority actions for all of the ministries addressing aspects of obesity such as potable water, high caloric food and beverage intake, breastfeeding, nutritional literacy, and food labeling. Within the education sector, ANSA resulted in a national school policy aimed at increasing physical activity, nutrition literacy in children, and access to healthy food. The short duration of the school day in Mexico (4 1/2 h) prevented the implementation of a daily physical activity education program, leaving the focus on health education for physical activity during the school day and complementary after school programs to increase physical activity. Nutrition objectives were supported by including material on food, nutrition, healthy eating, and physical activity in required national textbooks. ANSA also transformed the public school breakfast program so that it now provides a healthy, nutritionally balanced meal. The ANSA mandate led to the creation of national guidelines for school nutrition and food and beverage sales and distribution in schools. The school guidelines demonstrated that a joint effort of the Ministries of Health and Education could have a significant influence on the foods and beverages available in schools.

However, the challenges of implementing many new policies have been significant. ANSA lacks strong monitoring and accountability mechanisms, and it lacks a specific budget to support implementation. ANSA is not a legally binding agreement; it was launched late in a presidential term and has been subject to powerful food industry opposition to taxes and restrictions on unhealthy food in schools. Despite these challenges, ANSA has framed obesity as a complex issue that needs coordinated trans and inter-sectoral work with government playing a critical role. ANSA has also provided the basis for creating a healthy national fiscal policy that includes innovative taxes on junk food and sugary beverages, and regulation of food marketing aimed at children.

# Physical activity promotion in Brazil

In Brazil over the last three decades, a number of cities have implemented free physical activity classes, often after rehabilitating small parks and plazas in poor neighborhoods (Simoes et al., 2009; Heath et al., 2012). Initiatives in three large cities in Brazil (Recife, Curitiba, and Vitoria) have been evaluated and show consistent positive associations between participation in the programs and living in the neighborhood, and higher levels of physical activity (Simoes et al., 2009; Reis et al., 2010; Reis et al., 2014a). Data from the program evaluations coupled with the Brazilian national risk factor surveillance system suggest the community physical activity classes are especially effective at reaching populations otherwise unlikely to be physically active; in particular poor women over the age of 40 (Simoes et al., 2009). The community classes provide free access to physical activity and in many cases to other public services organized around the class sites for those who cannot afford or easily access private physical activity facilities and community services (Simoes et al., 2009; Reis et al., 2014a). The programs reach large segments of the underserved urban population in a way that is popular not only with community residents but also with local politicians. These characteristics have manifested as widespread scaling-up and dissemination of the community class programs, first within their original cities, then to surrounding states, and finally nationally (Reis et al., 2014b). In 2011, Brazil launched a strategic plan for preventing chronic disease supported by national legislation that will scale up physical activity promotion programs built around community classes to 4000 municipalities in Brazil (Malta and Barbosa da Silva, 2012). This appears to be the largest and most comprehensive national commitment to physical activity promotion in the world to date.

We live in a new world of global health (Pratt and Lamarre, 2013). Good public health policy and practice are truly global. If we are to optimize policy and practice we must draw on and adapt examples from around the world. The Americas represent an especially good opportunity for this type of sharing and adaptation. The commonality of public health issues and culture across the hemisphere is substantial. The burden and cost of NCDs, high levels of inactivity and obesity, social inequity, large diverse populations, and multiple levels of government are key aspects of public health across the region. Thus, the policy innovations related to obesity prevention described in three countries here are likely to be relevant in most other countries in North, South, and Central America. While full implementation and good evaluation will never be easy, the opportunities for the United States to learn from our Latin American neighbors' bold steps forward on obesity policy are immense.

## Disclaimer

The findings and conclusions in this commentary are those of the authors and do not necessarily represent the official position of the institutions of the authors.

All authors declare no conflict of interest.

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