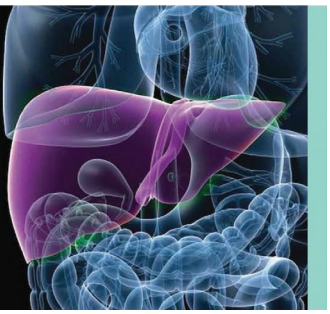

Are We Really Taking Care of Alcohol-Related Liver Disease in Latin America?

Juan Pablo Arab, Ramon Bataller,† and Juan Pablo Roblero‡*

Latin America is a region in the Western Hemisphere with a population of 626 million people who make up 58% of the population of the Americas. Although the countries in this region share cultural characteristics and languages, there is significant heterogeneity regarding geographical, social, and economic diversity. The region is usually subdivided geographically into Andean Latin America (Bolivia, Ecuador, Peru), Central Latin America (Colombia, Costa Rica, Guatemala, Honduras, Mexico, Nicaragua, Panama, El Salvador, Venezuela), Tropical Latin America (Brazil, Paraguay), and Southern Latin America (Argentina, Uruguay, Chile). Dominican Republic, Cuba, and Haiti are island countries that belong to Latin America. From an economic point of view, most countries are of lower or upper-middle income with deep socioeconomic inequalities among and within each country.[1]

ALCOHOL CONSUMPTION IN LATIN AMERICA

Excessive alcohol consumption represents an important public health issue in Latin America. More than 50% of people ≥15 years of age are current drinkers (people who have consumed alcohol in the last year), and the prevalence is increasing (Table 1). The prevalence of episodes of heavy drinking among adults is also high (Table 1).[2] Alcohol consumption in adolescents is particularly worrisome. In most countries, more than 50% of the population between 15 and 19 years of age has drunk alcohol in the last month. The prevalence at this age group is very similar in both genders. Notably, in Costa Rica, Dominican Republic, Chile, and Paraguay, women have a higher prevalence. More than half of schoolchildren aged 13 to 15 years in Argentina, Colombia, and Ecuador had consumed

Abbreviations: ALD, alcohol-related liver disease; ALEH, Latin American Association for the Study of the Liver; APC, alcohol per capita consumption; ASDR, age-standardized death rate; AUD, alcohol use disorder; WHO, World Health Organization.

From the *Departamento de Gastroenterologia, Pontificia Universidad Catolica de Chile Facultad de Medicina, Santiago, Chile; †Center for Liver Diseases, Division of Gastroenterology, Hepatology and Nutrition, University of Pittsburgh Medical Center, Pittsburgh, PA; and ‡Servicio de Gastroenterologia, Universidad de Chile Facultad de Medicina, Santiago, Chile.

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alcohol in the past month, and 20% had been intoxicated at least once.[3]

Another especially vulnerable group is the indigenous population, which constitutes 14% of the population of Latin America. Although there are few epidemiological studies in this group, it is known that alcohol consumption is frequent and often excessive.[3] In addition, a high prevalence of PNPLA3 G/G allele polymorphism, which has been associated with increased susceptibility to severe alcohol-related liver disease (ALD), has been reported in this population.[4]

TABLE 1. ALCOHOL CONSUMPTION INDICATORS IN LATIN AMERICAN REGIONS

	Prevalence Rate of Current Drinking		Prevalence Rate of Lifetime Abstinence		Prevalence Rate of Heavy Episodic Drinking Among All Adults*	
Region	2017	2030	2017	2030	2017	2030
Andean	68%	72%	11.5%	8.9%	33.1%	38.1%
Central	48.3%	51.1%	25.2%	22.3%	20.4%	22.1%
Southern	74.9%	78.1%	8.3%	6.6%	27.5%	32.4%
Tropical	56.1%	58.9%	18.4%	16.6%	25.6%	27.8%
Global	47.1%	59.8%	43%	40%	20.3%	23.1%

*Heavy episodic drinking refers to at least one occasion in the last 30 days with at least 60 g pure alcohol intake.

Globally, the alcohol per capita consumption (APC) in the population >15 years old was 6.4 L of pure alcohol in 2016. In Latin America, it was 6.3 L, but there are significant differences among the regions (Fig. 1).[5,6] It is predicted that there will be an increase of around 3% in the prevalence of alcohol consumption in Latin America by 2025. Although APC had decreased by 4.6% since 2010, it is predicted to increase to 6.7 L by 2025 (Fig. 1).[5,6]

The most consumed alcoholic beverage in the region is beer, constituting 50% of the total registered alcohol consumed. In the Central Latin American countries, the majority of consumption is from distillates, and in Uruguay, Argentina, and Chile, 30% to 44% of the total alcohol consumed corresponds to wine. The unregistered alcohol consumed in the region is estimated to correspond to about 14% of the total alcohol consumed, which is lower than observed worldwide;

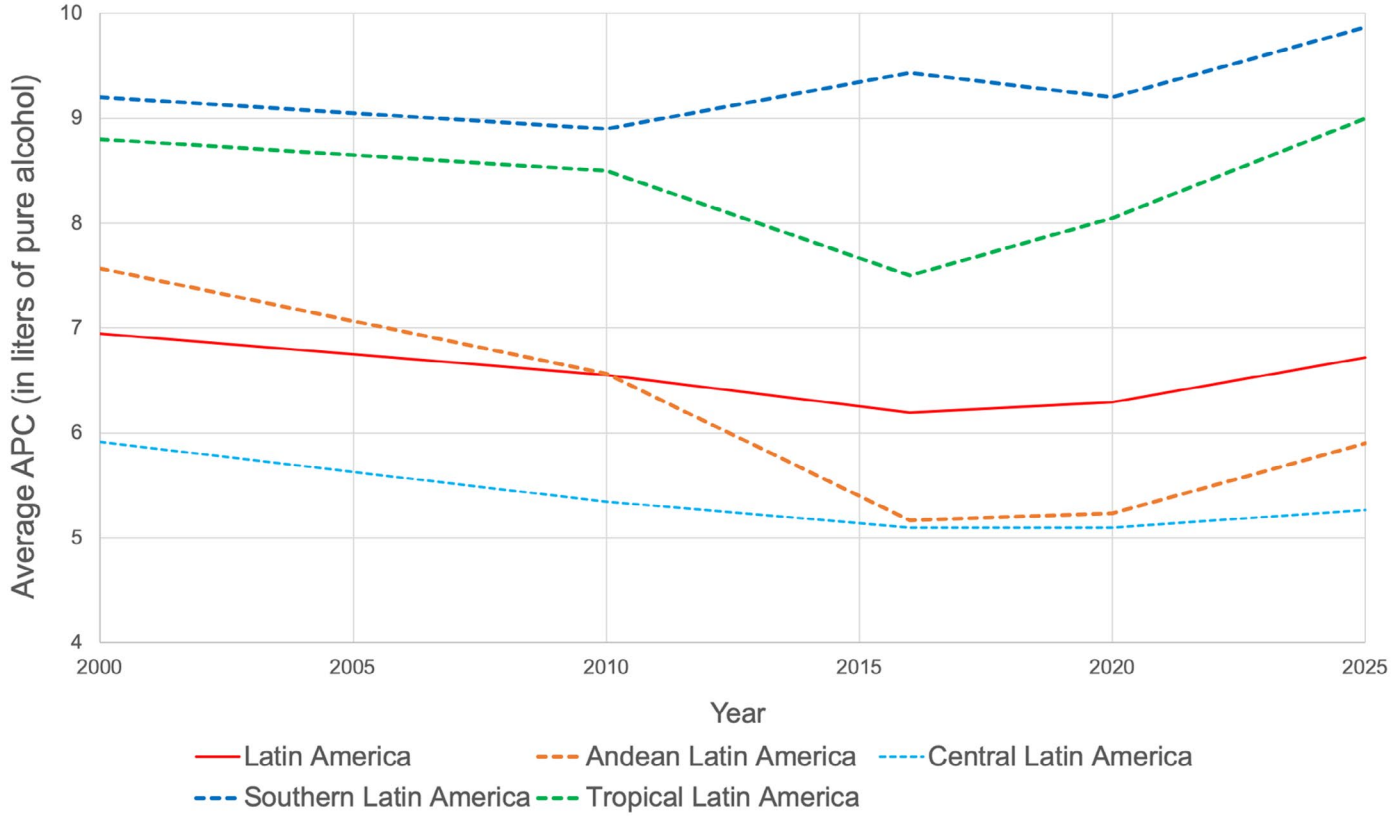

FIG 1 Regional trends in APC in population >15 years of age in liters of pure alcohol.[5,6]

however, in many countries, there are no updated data.[7] With the limited data available, it is believed that Guatemala, Ecuador, and Bolivia are the countries with the highest consumption of unregistered alcoholic beverages in the region (42%, 42%, and 36%, respectively).[7]

HEALTH CONSEQUENCES OF ALCOHOL CONSUMPTION

Alcohol was estimated to be responsible for 5.3% of all deaths globally in 2016. The Americas had the second highest alcohol-attributable fractions of deaths (5.5%). Within Latin America countries, 241,000 deaths were attributed to alcohol use, mainly due to alcohol use disorder (AUD), cirrhosis and alcohol-related violence.[7] Prevalence of AUD is a major problem in the region (8.6% in men and 1.7% in women). In Colombia, Haiti, Peru, and Venezuela, the AUD prevalence rate among women is 3.8%, being among the highest observed worldwide.[5]

The estimated number of deaths from alcohol-related cirrhosis worldwide was 308,227 in 2016, whereas in Latin America it was around 54,000.[2] Alcohol-attributable fraction of cirrhosis in Latin America was around 53%, and the age-standardized death rate (ASDR) attributable to alcohol was 24 per 100,000 population aged >15 years.[7] ASDRs for alcohol-related cirrhosis are significant in Andean Latin America[5] (Figs. 2 and 3).

THE ALCOHOL HARM PARADOX IN LATIN AMERICA

The scenario in Latin America is consistent with the concept of "alcohol harm paradox."[8] It has been observed that lower-income countries have higher mortality because of alcohol-related cirrhosis, despite reporting lower consumption (Fig. 4). Among other factors, this could be explained by the fact that low income is associated with health inequality, leading to increased overall mortality. This is something we have already analyzed, but we have not yet published our data.

PUBLIC POLICIES TO REDUCE ALCOHOL CONSUMPTION IN LATIN AMERICA

Latin American countries approved the "Action Plan" proposed by the Pan American Health Organization, based on the World Health Organization (WHO) Global Strategy to Reduce Harmful Use of Alcohol in 2010. The target is to reduce APC by 10% worldwide by 2025.[9] However, the implementation of these measures has been slow and deficient in the region. In fact, only

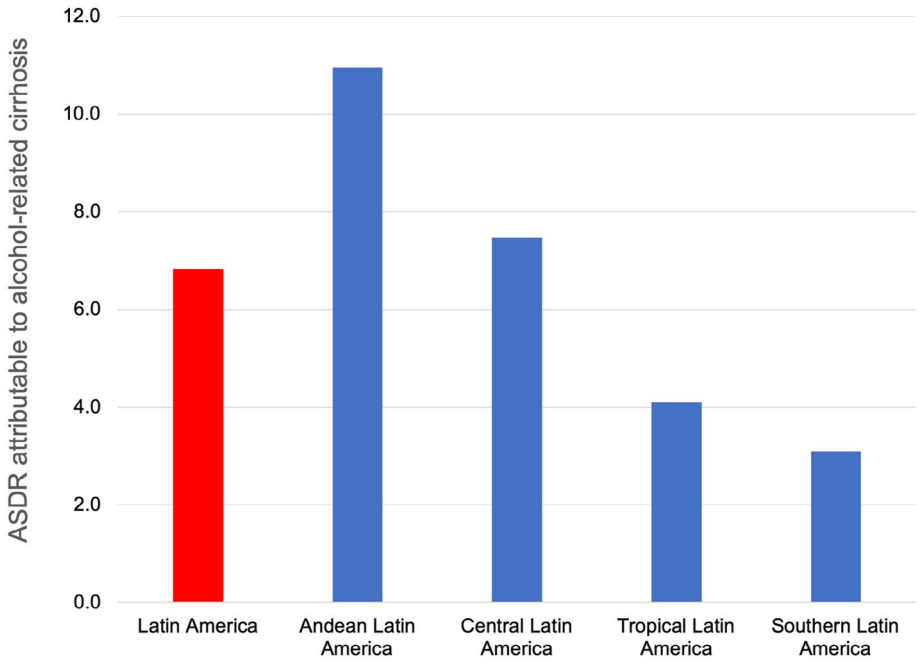

FIG 2 Average ASDR attributable to cirrhosis, per 100,000 population grouped by region of Latin America. Based on data from WHO.[5]

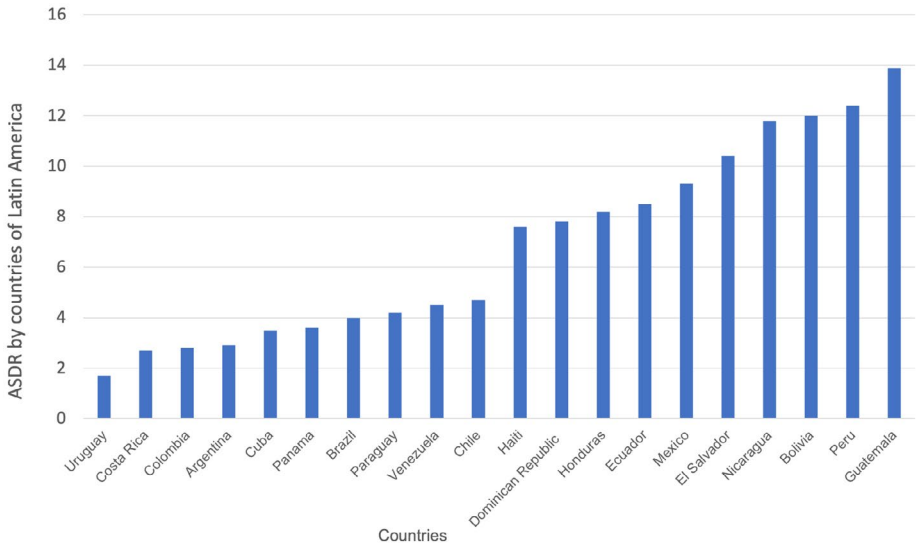

FIG 3 ASDR attributable to alcohol-related cirrhosis, per 100,000 population in 2016. Based on data from WHO.[5]

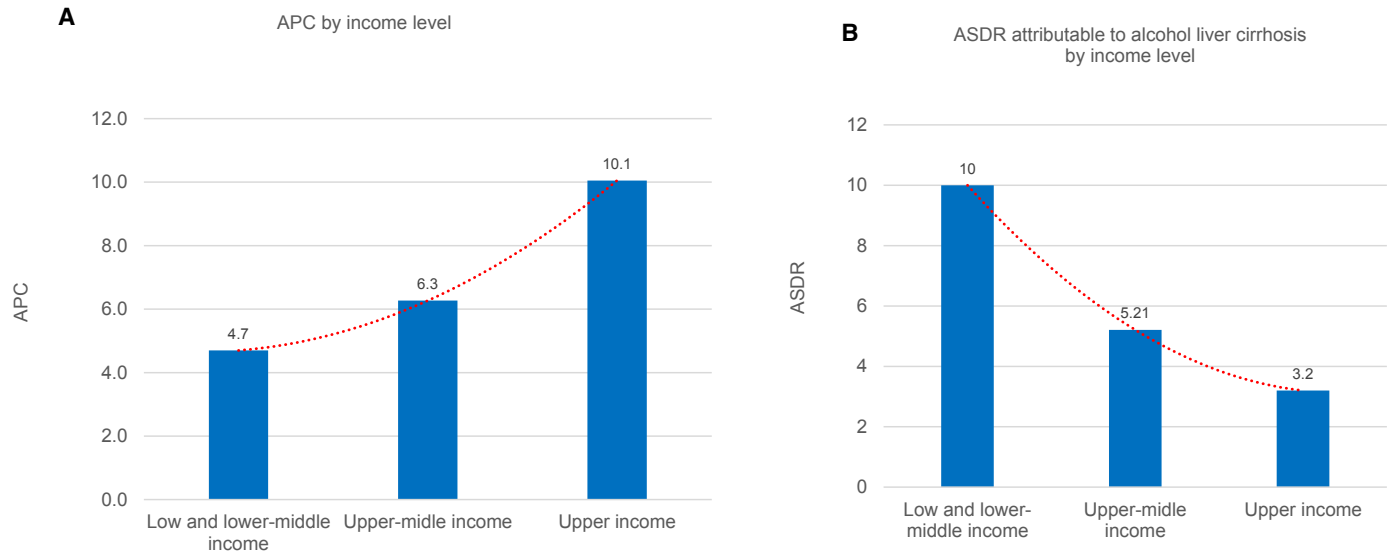

FIG 4 Relation between APC and ASDR by levels of income. (A) APC in grams per year by income level. (B) ASDR attributable to alcohol-related cirrhosis by income level.

30% of countries have written public policies regarding alcohol, and only 10% have a written national plan. The implementation of measures that have proved to be more effective in reducing alcohol consumption ("best buys"), policies to restrict easy access to alcohol, restriction of advertising, and specific pricing regulations have also been very limited. In addition, less than half of the countries in the region monitor compliance with these policies.[10] It is important to mention that scientific research in this area is not a priority in the region. There are few local epidemiological studies on alcohol and its health, social, and economic consequences. Undoubtedly, this has also contributed to the lack of implementation of public health policies focusing on the prevention and treatment of ALD.

A few years ago, we formed a special interest group in ALD, belonging to the Latin American Association for the Study of the Liver (ALEH). Aware of the great social and health problem that constitutes alcohol in the region, we publish this year the first clinical guidelines

of the ALEH on the subject. Currently, we are initiating a large multicenter study of alcoholic hepatitis with participation from centers in most countries of the region.[11]

In conclusion, in Latin America, the harmful consumption of alcohol represents an important health, social, and economic burden. ALD, specifically cirrhosis, remains one of the leading causes of death associated with alcohol. The level of income in each of the countries in the region and associated health disparity make the population especially vulnerable to the consequences of alcohol. Currently, scientific activity and implementation of effective public policies to reduce alcohol consumption in the region are insufficient. According to forecasts on alcohol consumption, it is unlikely that, as a region, we will achieve the objectives set by WHO for 2025.

CORRESPONDENCE

Juan Pablo Roblero, Servicio de Gastroenterologia, Universidad de Chile Facultad de Medicina, Av. Santos Dumont #999, 8380456, Independencia, RM Chile. Santiago, Chile. E-mail: jproblero@gmail.com

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