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# **Short Communication**

# Have countries offered the best data to the Pan American Health Organization? Evidence of potential inconsistencies found in a study on alcohol policies in Brazil



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#### ABSTRACT

*Objective:* The objective of this study was to verify the agreement between the alcohol policies score estimated from documental analysis of Brazilian federal regulatory documents (RD), with primary data collection, and the results previously presented by the Pan American Health Organization (PAHO) in its Alcohol Policy Scoring (APS) report.

Study design: Document identification and content analysis.

Methods: Documental research was carried out in two phases: a document identification and content analysis. In the first phase, we carried out the search, identification, and systematization of laws, decrees, and federal ordinances in Brazil, with primary data collection. The second phase consisted of three steps: 1) an RD content analysis and classification into the 10 PAHO/World Health Organization (WHO) policy domains; 2) a score estimation of alcohol policies, based on the APS instrument attached to their report; and 3) comparison of the results for Brazil presented at the APS report and the one estimated by the researchers.

Results: The study showed divergences between the results for APS published by PAHO about Brazil and the one achieved with primary data collection. 1146 federal promulgated RD were identified, of which 21 were eligible for content analysis. Only the domains "Community and workplace action" (Domain 3) and "Reducing the public health impact of illicit and informally produced alcohol" (Domain 9) had convergent scores. On the other domains, usually the APS score estimated by PAHO differs from the one estimated with the primary data collection.

Conclusions: We conclude that Brazil is not providing the best data for PAHO/WHO estimate its APS report, leading to the dissemination of imprecise results worldwide.

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# Introduction

In 2010, the World Health Assembly (AMS) of the World Health Organization (WHO) adopted the Resolution WHA63.13, endorsing the global strategy to reduce harmful alcohol use. Soon after, in 2011, the resolution aimed to define priority areas for global action to reduce the harmful use of alcohol was adopted by all Member

States in the Americas. Finally, in 2018, the Pan American Health Organization (PAHO) developed the Alcohol Policy Scoring (APS), which describes the construction of a standardized method, using a series of composite indicators developed to support the governments' decision-making in adopting the recommended best practices, reflected in the global strategy.<sup>2</sup>

We recently started a study on the analysis of gaps in alcohol policies in Brazil using APS and its indicators. In the analysis, we found evidence that data presented by PAHO in its APS report were not as accurate as we previously imagined because of several inconsistencies found when assessing the Brazilian federal regulation on alcohol.

The APS is a report created by PAHO with 10 domains of action that quantify the number of alcohol policies and the degree to which

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each policy meets certain standards among the 33 member states of the Americas.<sup>2</sup> Considering the need to understand the possible flaws in PAHO's data collection methods, we propose a comparison between data published by PAHO's APS on the score of alcohol policies in Brazil with the data obtained with our primary data collection on the Brazilian national regulations and decrees of alcohol.

The purpose of this study is to verify the agreement between the score for alcohol policies in Brazil estimated based on primary documental analysis and the results previously presented by PAHO in its APS report. In addition, it aims to understand the quality of the data that member states send to PAHO, which allows them to generate indicators from the member countries.

#### Methods

Documental research was carried out in two phases: document identification and content analysis. In the first phase, we carried out the search, identification, and systematization of regulations, decrees, and federal ordinances, referred to in this text as regulatory documents (RDs). The second phase consisted of three steps: 1) an RD content analysis (categorical analysis subtype<sup>3</sup>) and classification into the 10 PAHO's APS policy domains;<sup>2</sup> 2) a score of alcohol policies estimation, based on the APS instrument<sup>2</sup> and a comparison of the scores between Brazilian states; and 3) comparison of the results for Brazil presented at the PAHO's APS report and the one estimated by the researchers.

The authors conducted the structured searches on the RD registration bases with the following descriptors: 'alcohol' and 'alcoholic beverages'. Data were extracted from the official websites of the Federal Government (www.planalto.gov.br) and Congress Lower House (www.camara.leg.br).

The RD submitted to content analysis included federal ordinances, regulations, and decrees on alcohol in Brazil, based on both enacted and in effect documents until December 31, 2017—year previous to the of publication of the PAHO's report. Regulatory documents dealing with alcohol for purposes other than human consumption, declarations of public utility, and draft bills were excluded.

The final scores were estimated for each one of 10 domains (Table 1) and then compared separately and as a total final value, which is the sum of all domains. Finally, a comparative analysis of the final score of each domain was performed between the data available in the APS for Brazil<sup>2</sup> (page 32) and the data collected in our research to show the possible identification of bias.

#### Results

In total, 1146 enacted federal RDs were identified, of which 19 were eligible for content analysis. Table 1 describes the

comparison between the data published by the APS and our study findings. Only the domains 'Community and workplace action' (Domain 3) and 'Reducing the Public Health Impact of Illicit Alcohol and Informally Produced Alcohol' (Domain 9) presented an identical score. In Domain 9, the regulations analyzed were: Decree No. 6871/2009; Law No. 9243/1995 and Law No. 8.918/1994 (Supplementary File).

In 'Leadership, Awareness, and Commitment' a single decree before 2018 was found to regulate this domain, being the law No. 6117/2007. According to PAHO, its score is 63%, whereas ours is 56.5%.

On 'Health Services' response' (Domain 2) it was possible to score its indicators with two ordinances: Ordinance No. 3733/2018 and Ordinance No. 3088/11. According to PAHO, this indicator reached 100% of the score; however, this study identified that the domain only obtained 70%, as no RD on special treatment programs for women were found and the only pharmacological treatment available for alcohol dependence or alcohol withdrawal are benzodiazepines. In the next domain, 'Community and Workplace Action' no laws and decrees were found to punctuate. The same result was found in the APS.

Notably, only the 'Drink-Driving Countermeasures' (Domain 4) follows all recommended policies; thus, it has 100% of the score predicted, that is not corresponding to the score published by PAHO, with 86%. The scores obtained for this domain emerged from six regulatory documents, they are: Law No. 13,546/2017; Law No. 12,971/2014; Law No. 12,760/2012; Law No. 11,705/2008; Law No. 11,275/2006, and Law No. 9503/1997 (Supplementary File).

About Domain 5 ('Availability of alcohol'), there was only a little difference between PAHO Report (45%) and ours (48%), through RDs: Law No. 13,106/2015; Law No. 11,705/2008; Decree No. 6489/2008 and Law No. 10,167/2000, with 45% reported in the PAHO report.

Regarding 'Marketing of Alcoholic Beverages' (Domain 6), the APS score does not inform the value of the domain because according to PAHO, Brazil did not have enough data to estimate the composite indicator of alcoholic beverage marketing. However, our study identified three regulatory documents for this domain, namely Law No. 10,167/2000; Decree No. 2018/1996, and Law No. 9294/1996. Therefore, the score obtained was 50%. The other domains did not present such attenuating divergences in the values.

The largest divergence was found at the Domain 8 (reducing the negative consequences of drinking and alcohol intoxication) with 37% difference between scores with the Laws No. 9.294/1996 and No. 10.167/2000.

Finally, in 'Monitoring and Surveillance', our study reported that this domain obtained 67%, but PAHO reported 56%. Although this domain does not have specific legislation, we have scored points through the National Policy on Alcohol (Decree No. 6117/2007) that

**Table 1**Comparison between data from primary data analysis and data published by PAHO.

Ten domains by PAHO/WHO	Score Brazil's APS score from this study	% Brazil from present study	% Brazil PAHO's report (PAHO, 2018)	Percentual points of difference found at PAHO's report
1. Leadership, awareness, and commitment	15	65%	63%	-2%
2. Health services' response	31	70%	100%	+30%
3. Community and workplace action	0	0	0	0
4. Drink-driving policies and countermeasures	66	100%	86%	-14%
5. Availability of alcohol	42	45%	48%	+3%
6. Marketing of alcoholic beverages	24	50%	Not available	_
7. Pricing policies	9	13%	17%	+4%
8. Reducing the negative consequences of drinking and alcohol intoxication	10	63%	100%	+37%
<ol> <li>Reducing the public health impact of illicit alcohol and informally produced alcohol</li> </ol>	6	20%	20%	0
10. Monitoring and surveillance	54	67%	56%	-11%

monitoring to obtain the epidemiological situation of alcohol use in the country. However, Ministry of Health is responsible by largely known annual survey that must be included (Vigitel—Surveillance of Risk and Protection Factors for Chronic Diseases by Telephone Survey—Sanchez et al., 2020).<sup>4</sup>

#### Discussion

This study is the first to systematically identify, score and classify Brazil's public alcohol policies, in addition to compare to the results of Brazil's data released in PAHO's Alcohol Policy Scoring (APS). The study showed divergences between the data published at PAHO's APS report concerning Brazil and primary data found with this documental analysis.

One significant limitation of the APS report is the fact that it does not describe how countries reported which alcohol regulations and decrees were considered and included in the analyzes and how they retrieved them. Generally, we imagine that countries sent the completed APS form for PAHO and PAHO central team used this form to estimate scores for each country, without assessing the validity of the information reported. Apparently, no standardized method of searching for regulations has been used by countries and it seems that there was no information checking by PAHO team because none of these procedures are described in the report.

We imagine that the same inconsistency is possibly occurring with data sent by other countries. This is worrying because the evidence of alcohol policy implementation and the evaluation of these interventions effectiveness in the Americas can be flawed. However, these data, if precise, would be useful to inform future decisions-making in the implementation of the WHO for alcohol policy.<sup>5</sup>

Notably, a lack of data in 21 countries regarding important domains was found in the report, mainly in 'Health Services' response' (eight countries), followed by 'Pricing Policies' (six countries), 'Marketing of Alcoholic Beverages' (four countries), and 'Availability of Alcohol' (three countries).

These findings have significant implications for the way in which public health policies are designed, monitored, and evaluated. We hypothesized that PAHO does not have enough human resources to verify the quality of data sent by the member states and, then, they use the data sent by the countries, fully trusting in its validity. Moreover, there may even be a lack of staff to clearly advise on data collection procedures that would allow legitimate data comparison between countries. The issue of WHO and PAHO funding may be one of the crucial aspects of its crisis. Voluntary contributions—which complement fixed revenues—are intended to specific programs, which they are formally linked, distorting the programmatic priorities defined by the member states. 7.8

The main limitation of this study is the fact that the evaluation was performed for only a single country and we cannot generalize the evidence for other countries. Moreover, we opted to limit RD for this study in the 31st December 2017, since the APS was published in 2018.

We conclude that the APS report, carried out by PAHO/WHO, lacks fundamental data to determine the real situation of alcohol policies in Brazil. We suggest that Brazil is not offering the best data to PAHO/WHO estimate its APS report, leading to the dissemination of imprecise results worldwide. Possibly, there may be the same biases found in data from other member states, hampering a global analysis of the alcohol policies necessary to change the countries' political agendas.

# **Author statements**

Ethical approval

Not required.

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# Competing interests

The authors are aware of the journal's conflict of interest policy and have no related activities to disclose.

# Data availability statement

The data that support the findings of this study are available on Supplementary File.

# Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.puhe.2021.03.013.

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