Alcohol Use during the COVID-19 pandemic in Latin America and the Caribbean

8 September 2020
Introduction

Alcohol is a major risk factor for mortality and morbidity in the Region of the Americas. Alcohol consumption levels in the Region are higher than the global average, while abstention rates for both men and women are consistently lower. In terms of the burden of disease, alcohol caused approximately 379,000 deaths (6.5% of all deaths), and over 18.9 million disability-adjusted life-years in the region of the Americas in 2016 (1). Men drink more and more often compared to women, although women seem to be increasing their consumption at a faster rate than men (2).

As the COVID-19 pandemic spread to all countries in the Americas, governments ordered the mandatory closure of all non-essential services and businesses (3). National quarantines, curfews, and shelter-in-place policies were implemented to decrease the spread of the virus. The scope of essential or priority services varied among countries and jurisdictions, but in general, any service, facility, or activity deemed necessary for the safety or security of the public or specific groups, was considered essential. In some countries, liquor stores were considered essential, while other countries completely banned the sale of alcoholic beverages (4, 5). Most jurisdictions have closed bars, restaurants, casinos, night clubs, and canceled festivals, concerts, and other celebrations often sponsored by the alcohol industry and in which alcohol consumption was prevalent. As expected, alcohol consumption shifted from public and licensed premises to homes (6).

Alcohol is often used for socialization and by some to cope with difficult emotions. As the rates of anxiety, fear, depression, boredom, and uncertainty became more commonly reported during the pandemic, alcohol consumption is reported to have increased as well, despite the closure of licensed premises. However, the impact of the pandemic on alcohol consumption and related harms remains unknown (5, 7).

Alcohol poses many acute and chronic risks to health and is associated with an increased risk of weakening the immune system which can make individuals more susceptible to contracting infectious diseases, including COVID-19 (8). Heavy use of alcohol increases the risk of acute respiratory distress syndrome (ARDS), which is one of the most severe complications of COVID-19 (8). As a result, the Pan American Health Organization (PAHO) has published information materials on alcohol and COVID-19 for the general public, alerting persons about the risks related to alcohol consumption in general and particularly during the pandemic (3). However, there continue to be limited data available about alcohol consumption or related harms during the pandemic.

Therefore, PAHO implemented a rapid, exploratory survey in 33 Latin American and Caribbean countries1 to assess the drinking habits of the respondents before and during the pandemic.

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1 Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and Grenadines, Suriname, Trinidad and Tobago, Uruguay and Venezuela.
Survey Methods

A standardized anonymous online questionnaire (see Appendix A) was developed in four languages (English, Spanish, Portuguese, and French) using Qualtrics software. The structured 15-minute survey consisted of 55 questions that covered the following areas: (1) demographic data; (2) COVID-19 related questions, including precautionary measures taken in daily life; (3) mental health impacts, including negative emotional symptoms and feelings in the past 14 days; (4) alcohol consumption in 2019; and (5) alcohol consumption during the pandemic. Following approval from the Ethics Review Committee of PAHO, the survey was disseminated through PAHO’s Communication platforms including, Facebook, Twitter, the Pan American Network for Alcohol and Public Health (PANNAPH), the Healthy Caribbean Coalition, the Healthy Coalition of Latin America, as well as through advisors from the Noncommunicable and Mental Health Department, and individual contacts.

Data collection took place between 22 May and 30 June, 2020. All respondents were 18 years old and older, residents of one of the 33 Latin American or Caribbean countries, and did not travel out of their country since March 15th, 2020. The participants were informed of the purpose of the study and provided electronic consent prior to commencing the questionnaire. Descriptive analyses were performed using means and standard deviations, as well as proportions and numbers of cases. Some variables were created by grouping answers for other variables. Comparisons for gender were evaluated using chi-square tests. Stata SE 16 was used to conduct all analyses.

Results

Survey Respondents

A total of 12,328 (53.5%) valid questionnaires were available from the 23,058 respondents who agreed to participate and completed the anonymous web-based survey. Table 1 shows the number of respondents from the four subregions: Andean, Mesoamerica, Southern Cone, and Non-Latin Caribbean. Figure 1 shows the number of respondents by country. Brazil had the highest number of respondents representing 30.8% of the total sample (n = 3,799), and Mexico had the second highest number of respondents representing 12.9% of the total sample (n = 1,593).

<table>
<thead>
<tr>
<th>Subregions*</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andean</td>
<td>2,719</td>
</tr>
<tr>
<td>Mesoamerica</td>
<td>4,016</td>
</tr>
<tr>
<td>Southern Cone</td>
<td>5,190</td>
</tr>
<tr>
<td>Non-Latin Caribbean</td>
<td>403</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12,328</strong></td>
</tr>
</tbody>
</table>

* Andean (Bolivia, Colombia, Ecuador, Peru, Venezuela); Mesoamerica (Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama); Southern Cone (Argentina, Brazil, Chile, Paraguay, Uruguay); Non-Latin Caribbean (Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Curacao, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago).
Demographics

Gender identity is presented in Table 2. The respondents of the survey identified as the following for sexual orientation: 87.9% as heterosexual, 3.9% as homosexual, 4.1% as bisexual, 1.0% as other, and 3.1% as prefer not to answer.

**TABLE 2: Distribution of Gender Identity**

<table>
<thead>
<tr>
<th>Gender Identity</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man</td>
<td>3,563 (33.7)</td>
</tr>
<tr>
<td>Woman</td>
<td>6,881 (65.1)</td>
</tr>
<tr>
<td>Transgender Man</td>
<td>7 (0.07)</td>
</tr>
<tr>
<td>Transgender woman</td>
<td>2 (0.02)</td>
</tr>
<tr>
<td>Non-binary/genderqueer</td>
<td>29 (0.3)</td>
</tr>
<tr>
<td>Other</td>
<td>17 (0.2)</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>70 (0.7)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10,569 (100)</td>
</tr>
</tbody>
</table>

* Missing data for those who did not select any of the options above for gender identity; n = 1,759.

Demographic characteristics are presented in Table 3. All of the gender stratified analysis stated in this report only includes individuals who declared man (n = 3,563) or woman (n = 6,881) as their gender identity.
The majority of respondents were women (65.5%), aged 18-39 years (58.9%), white (41.7%), married or living with a partner (53.5%), well-educated (high school diploma or higher; 98.1%), working (74.9%), and with a total monthly household income of 1-4 minimum wages (32.1%) or between 5-10 (22.9%). For race, ‘mixed, other or not sure’ was the most prevalent for the total sample (52.6%) and in the stratified samples of men (56.4%) and women (50.4%). 10.2% of the respondents reported living with someone who has a disability.

**TABLE 3: Respondent Demographic Information**

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Total (n = 12,328)</th>
<th>Men (n = 3,563)</th>
<th>Women (n = 6,881)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age group (years)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>3,632 (29.5)</td>
<td>980 (27.5)</td>
<td>1,982 (28.8)</td>
</tr>
<tr>
<td>30-39</td>
<td>3,619 (29.4)</td>
<td>1,045 (29.3)</td>
<td>2,058 (29.9)</td>
</tr>
<tr>
<td>40-49</td>
<td>2,550 (20.7)</td>
<td>742 (20.8)</td>
<td>1,778 (22.1)</td>
</tr>
<tr>
<td>50-59</td>
<td>1,643 (13.3)</td>
<td>514 (14.5)</td>
<td>902 (13.1)</td>
</tr>
<tr>
<td>60+</td>
<td>884 (7.1)</td>
<td>282 (7.9)</td>
<td>463 (6.7)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>4,402 (41.7)</td>
<td>1,354 (38.1)</td>
<td>3,016 (43.9)</td>
</tr>
<tr>
<td>Black</td>
<td>443 (4.2)</td>
<td>140 (3.9)</td>
<td>299 (4.4)</td>
</tr>
<tr>
<td>Indigenous</td>
<td>154 (1.5)</td>
<td>56 (1.6)</td>
<td>92 (1.3)</td>
</tr>
<tr>
<td>Mixed/Other/Not sure</td>
<td>5,551 (52.6)</td>
<td>2,007 (56.4)</td>
<td>3,463 (50.4)</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 minimum wage</td>
<td>1,684 (16.1)</td>
<td>522 (14.8)</td>
<td>1,162 (17.6)</td>
</tr>
<tr>
<td>1-4 minimum wages</td>
<td>3,353 (32.1)</td>
<td>1,098 (31.2)</td>
<td>2,213 (32.6)</td>
</tr>
<tr>
<td>5-10 minimum wages</td>
<td>2,388 (22.9)</td>
<td>818 (23.2)</td>
<td>1,556 (22.9)</td>
</tr>
<tr>
<td>11-20 minimum wages</td>
<td>1,554 (14.9)</td>
<td>537 (15.2)</td>
<td>1,017 (15.1)</td>
</tr>
<tr>
<td>&gt; 20 minimum wages</td>
<td>1,457 (14.0)</td>
<td>550 (15.6)</td>
<td>895 (13.2)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school diploma</td>
<td>210 (2.0)</td>
<td>80 (2.3)</td>
<td>127 (1.9)</td>
</tr>
<tr>
<td>High school diploma or higher</td>
<td>10,216 (98.0)</td>
<td>3,448 (97.7)</td>
<td>6,666 (98.1)</td>
</tr>
<tr>
<td><strong>Disability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondent has a disability</td>
<td>213 (1.7)</td>
<td>48 (1.4)</td>
<td>132 (1.9)</td>
</tr>
<tr>
<td>Living with someone who has a disability</td>
<td>1,254 (10.2)</td>
<td>293 (8.2)</td>
<td>800 (11.6)</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td>2,675 (24.9)</td>
<td>730 (22.7)</td>
<td>1,941 (28.3)</td>
</tr>
<tr>
<td>Working</td>
<td>8,055 (75.1)</td>
<td>2,480 (77.3)</td>
<td>5,534 (81.7)</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/Partner</td>
<td>5,378 (53.5)</td>
<td>1,949 (57.1)</td>
<td>3,389 (51.7)</td>
</tr>
<tr>
<td>Divorced/Separated/Widowed</td>
<td>1,291 (12.8)</td>
<td>297 (8.7)</td>
<td>981 (15.0)</td>
</tr>
<tr>
<td>Never married</td>
<td>3,387 (33.7)</td>
<td>1,170 (34.2)</td>
<td>2,216 (33.3)</td>
</tr>
</tbody>
</table>

2 A physical, mental or intellectual/developmental disability
Prevalence of Drinking

Table 4 shows the prevalence of drinking by sex for the total sample and by the four subregions for the year 2019 and during the pandemic in 2020. Overall, the prevalence of drinking is lower during the pandemic when compared to the prevalence of past year use. It is important to note that the period of coverage in the year 2019 is 12 months whereas in the year 2020, the period of coverage is during the first 4 months of the pandemic (March to June). Therefore, 2020 does not reflect the yearly prevalence of drinking but rather the prevalence during the assessed period of the pandemic. Moreover, the questions for both years inquired about usual consumption patterns in different locations, and from these questions, we created a variable that reflected the prevalence of drinking in each year.

TABLE 4: Prevalence (%) of drinking* by sex for the total sample and by the subregions for the year 2019 and during the pandemic in 2020.

<table>
<thead>
<tr>
<th></th>
<th>Total**</th>
<th>Men**</th>
<th>Women**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2020*</td>
<td>2019</td>
</tr>
<tr>
<td>Total Sample</td>
<td>75.8</td>
<td>63.4</td>
<td>81.1</td>
</tr>
<tr>
<td>Andean</td>
<td>70.0</td>
<td>50.2</td>
<td>77.2</td>
</tr>
<tr>
<td>Mesoamerica</td>
<td>73.4</td>
<td>59.8</td>
<td>79.1</td>
</tr>
<tr>
<td>Southern Cone</td>
<td>81.4</td>
<td>73.8</td>
<td>86.3</td>
</tr>
<tr>
<td>Non-Latin Caribbean</td>
<td>67.0</td>
<td>55.6</td>
<td>71.3</td>
</tr>
</tbody>
</table>

* From March to June 2020, during the pandemic.
** Prevalence of drinking extracted from questions C1a and C1b for 2019 and questions D1a and D1b for the pandemic (2020). If the participant reported at least one positive answer of drinking at one of the locations listed in the year, he/she were considered a drinker.

Table 5 shows the beverage type most consumed by drinkers for the year 2019 and during the pandemic in 2020. Beer was the alcoholic beverage of choice as it accounted for 52.3% in 2019 and 48.7% during the pandemic, followed by wine consumption which increased from 21.8% in 2019 to 29.3% during the pandemic.

There were subregional differences in the consumption of different beverages. Beer was the preferred choice in the Andean, Mesoamerica, and Southern Cone regions for 2019 and during the pandemic. However, in the Non-Latin Caribbean, wine was the preferred beverage consumed by 35.7% in 2019 and 37.4% during the pandemic, with spirits being the second most consumed by 32.2% in 2019 and 33.2% during the pandemic.
TABLE 5: Beverage type most frequently consumed by drinkers in the year 2019 and during the pandemic in 2020.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Andean</th>
<th>Mesoamerica</th>
<th>Southern Cone</th>
<th>Non-Latin Caribbean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019 %</td>
<td>2020%</td>
<td>2019 %</td>
<td>2020%</td>
<td>2019 %</td>
</tr>
<tr>
<td>Beer</td>
<td>52.3</td>
<td>48.7</td>
<td>49.9</td>
<td>51.6</td>
<td>58.1</td>
</tr>
<tr>
<td>Wine</td>
<td>21.8</td>
<td>29.3</td>
<td>17.0</td>
<td>22.9</td>
<td>14.9</td>
</tr>
<tr>
<td>Spirits</td>
<td>17.3</td>
<td>13.8</td>
<td>24.8</td>
<td>16.9</td>
<td>19.5</td>
</tr>
<tr>
<td>Homemade Alcohol*</td>
<td>5.8</td>
<td>3.5</td>
<td>6.1</td>
<td>3.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Other</td>
<td>2.8</td>
<td>4.7</td>
<td>2.2</td>
<td>5.4</td>
<td>2.3</td>
</tr>
</tbody>
</table>

* From March to June 2020, during the pandemic.

Even though the consumption of spirits and homemade alcohol seems higher in the year 2019 (spirits: 17.3%; homemade alcohol: 5.8%) when compared to the months during the pandemic in 2020 (spirits: 13.8%; homemade alcohol: 3.5%), illicit or informal alcohol consumption increased during the pandemic with respondent consumption increasing from 2.2% to 4.9% monthly; 1.9% to 3.0% weekly; 0.4% to 0.6% daily, in 2019 and 2020, respectively (Table 6). Informally produced alcohol includes homemade fermented/distilled beverages and small-scale production of traditional beverages, and illicit alcohol is alcohol smuggled across borders or produced illegally to avoid taxes and tariffs (1). Informal and illicit alcohol production poses unique health and policy challenges as it may have a higher ethanol content, potential contaminants and the low cost can promote heavy drinking (1). Informal or illicit alcohol consumption was higher in men than women in 2019 and 2020 (Table 6).

TABLE 6: Prevalence (%) of informal or illicit alcohol consumption by sex for the total sample for the year 2019 and during the pandemic in 2020.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Men*</th>
<th>Women*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019 %</td>
<td>2020%</td>
<td>2019 %</td>
</tr>
<tr>
<td>Never</td>
<td>85.8</td>
<td>91.6</td>
<td>83.7</td>
</tr>
<tr>
<td>Daily</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Weekly</td>
<td>1.9</td>
<td>3.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Monthly</td>
<td>2.2</td>
<td>4.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Few times in the year**</td>
<td>9.7</td>
<td>-</td>
<td>10.6</td>
</tr>
</tbody>
</table>

* From March to June 2020, during the pandemic.

** Chi-square test between informal or illicit alcohol consumption and genders was significant for years 2019 and 2020; $P < 0.001$

** The category ‘Few times in the year’ is not available for the year 2020 – during the pandemic.
Heavy Episodic Drinking

Heavy episodic drinking (HED) is defined as consuming 60+ grams of pure alcohol (roughly five standard alcoholic drinks) on at least one occasion during the past 30 days (1). This threshold aims to detect persons who consume alcohol in quantities that are large enough to result in intoxication and/or harm although the threshold for increased risk is different across socio-demographic groups, and may be lower for more vulnerable subgroups like women. The utility of this indicator is not limited to intoxication-related harms, however, because many alcohol-attributable chronic diseases have a dose-response relationship whereby the odds of harms increase as the volume of alcohol ingested increases (9).

Table 7 shows that the overall prevalence of HED was very high in both men (62.7%) and women (43.5%) in 2019. It also shows that HED was 49.8% in the year 2019 for the total sample and 32.0% during the pandemic in 2020. The prevalence of HED was higher in men than women in both years (2019 and 2020) for the total sample and all four subregions.

**TABLE 7**: Prevalence (%) of heavy episodic drinking* by sex for the total sample and by subregion for 2019 and during the pandemic in 2020.

<table>
<thead>
<tr>
<th>Subregion</th>
<th>Total**</th>
<th>Men**</th>
<th>Women**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>2020</td>
<td>2019</td>
<td>2020</td>
</tr>
<tr>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Total Sample</td>
<td>49.8</td>
<td>32.0</td>
<td>62.7</td>
</tr>
<tr>
<td>Andean</td>
<td>51.4</td>
<td>24.0</td>
<td>60.6</td>
</tr>
<tr>
<td>Mesoamerica</td>
<td>49.5</td>
<td>31.2</td>
<td>63.5</td>
</tr>
<tr>
<td>Southern Cone</td>
<td>50.7</td>
<td>37.7</td>
<td>64.7</td>
</tr>
<tr>
<td>Non-Latin Caribbean</td>
<td>30.0</td>
<td>20.5</td>
<td>43.6</td>
</tr>
</tbody>
</table>

* From March to June 2020, during the pandemic.
* Answers to questions C11 (for 2019) and D9 (for 2020). Any answer different from ‘never’ was considered a positive for HED.
** Chi-square tests between years (2019 vs. 2020) and between genders were significant for the total sample and across all subregions; $P < 0.001$

Figure 2 shows the change in frequency of HED by sex from 2019 to 2020 within subjects. Respondents could select 7 profiles of frequency varying from never to every day. If the subtraction of frequency in 2020 (during the pandemic) and 2019 (usual frequency) was zero, we considered that there was no change in HED. If it was a positive number, we considered an increase in frequency, and if it was a negative number, it was categorized as a decrease. Overall, 11.2% of the participants reported an increase in the frequency of HED, compared to the usual frequency of HED in 2019 and the usual frequency during the pandemic; 27.1% reported a decrease; and 61.6% reported no change, indicating that most of them reported the same usual frequency of HED in 2019 and during the pandemic in 2020. Men had a larger increase in frequency of 13.2% compared to the 10.3% increase in women. Similar results were seen among the four subregions (Figure 3). The increase was largest in the Southern Cone (15.6%) with the largest decrease in the Andean subregion (34.9%). Increased frequency of HED was higher for men than women in all four subregions.
FIGURE 2: Change in frequency of heavy episodic drinking by sex from 2019 to 2020 (during the pandemic) for total sample size.

* Chi-square test between the change in frequency of HED and genders was significant; $P < 0.001$

FIGURE 3: Change in frequency of heavy episodic drinking by sex and subregion from 2019 to 2020 (during the pandemic).

* Chi-square test between the change in frequency of HED and genders was significant for Mesoamerica and Southern Cone; $P < 0.001$

** Chi-square test between the change in frequency of HED and genders was not significant for Andean ($P = 0.002$), and Non-Latin Caribbean ($P = 0.443$)

When considering only respondents that have reported HED in 2019, 16.9% presented an increase in the frequency of HED during the pandemic, 54.4 % presented a decrease and 28.7% reported no change.
Among those who did not report HED in 2019, 5.6% increased their drinking to meet the criteria for HED during the pandemic.

Table 8 shows that HED was most prevalent among younger respondents (aged 18 to 39 years) both in 2019 and during the pandemic in 2020. Higher the age, the lower the practice of HED. Similar results were seen in respondents who did not change and those who increased their frequency of HED during the pandemic compared to their regular pattern in 2019. However, respondents aged 18 to 29 years have the greatest decrease in their frequency of HED (40.8%) while the age group of 30 to 39 years increased the most.

Table 8: Prevalence (%) of heavy episodic drinking and change in frequency by age group for the year 2019 and during the pandemic in 2020.

<table>
<thead>
<tr>
<th>Age group*</th>
<th>Total</th>
<th>HED 2019</th>
<th>HED 2020</th>
<th>No change**</th>
<th>Increased frequency**</th>
<th>Decreased frequency**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>18 to 29</td>
<td>29.5</td>
<td>36.2</td>
<td>31.2</td>
<td>23.9</td>
<td>23.3</td>
<td>40.8</td>
</tr>
<tr>
<td>30 to 39</td>
<td>29.4</td>
<td>31.7</td>
<td>33.7</td>
<td>28.8</td>
<td>35.0</td>
<td>29.7</td>
</tr>
<tr>
<td>40 to 49</td>
<td>20.7</td>
<td>17.9</td>
<td>20.1</td>
<td>22.7</td>
<td>24.8</td>
<td>16.0</td>
</tr>
<tr>
<td>50 to 59</td>
<td>13.3</td>
<td>9.9</td>
<td>10.8</td>
<td>15.9</td>
<td>11.8</td>
<td>9.1</td>
</tr>
<tr>
<td>60+</td>
<td>7.1</td>
<td>4.4</td>
<td>4.2</td>
<td>8.7</td>
<td>5.1</td>
<td>4.4</td>
</tr>
</tbody>
</table>

* Chi-square test comparing age groups was significant across years; \( P < 0.001 \)
** Change in frequency of HED; comparison of usual frequency in 2019 and frequency during the pandemic (March-June 2020).

Table 9 shows that the help seeking behaviour of respondents was very low (0.4%) before the pandemic and further decreased during the pandemic in 2020 (0.3%), despite the worsening in the pattern of heavy episodic drinking. No differences were found at the subregional level. The majority of respondents who reported HED never sought help in 2019 (87.5%) and during the pandemic (90.9%). A similar pattern was seen at the subregional level.

TABLE 9: Help seeking behavior in 2019 and during the pandemic in 2020 for respondents who reported heavy episodic drinking.

<table>
<thead>
<tr>
<th>Total Sample</th>
<th>Andean</th>
<th>Mesoamerica</th>
<th>Southern Cone</th>
<th>Non-Latin Caribbean</th>
</tr>
</thead>
<tbody>
<tr>
<td>On your own</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Any help sought</td>
<td>10.2</td>
<td>7.4</td>
<td>10.7</td>
<td>8.1</td>
</tr>
<tr>
<td>Did not find help</td>
<td>1.9</td>
<td>1.4</td>
<td>1.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Never</td>
<td>87.5</td>
<td>90.9</td>
<td>87.0</td>
<td>90.0</td>
</tr>
</tbody>
</table>

* From March to June 2020, during the pandemic.
Mental Health Impacts

The COVID-19 pandemic has a profound and wide range of mental health impacts on the population at the individual, community, country and international levels (10). It is normal and understandable that individuals are more likely to experience fear, worries, stress, nervousness, anxiety and restlessness as we are faced with uncertainty. Adding to the fear of contracting the virus is the impact of significant changes to the daily lives of individuals in order to contain and slow the spread of the virus. Therefore, it was important to understand the mental health status of respondents which was evaluated based on 8 questions (see Table 10). Respondents were to select the answer according to the frequency of emotional symptoms/feelings in the past 14 days as: (1) not at all; (2) several days; (3) over half the days; (4) nearly every day.

The survey found that 52.8% of respondents reported at least one emotional symptom/feeling, with women experiencing more feelings than men (Table 11). The prevalence of respondents who felt the following emotional symptoms/feelings nearly every day is:

- 18% felt nervous, anxious or on edge
- 18% had trouble falling asleep
- 15% had trouble relaxing
- 13% were worrying too much about different things
- 12% would become easily annoyed or irritable
- 12% felt afraid as if something awful might happen
- 10% were not able to stop or control worrying
- 10% felt so restless that it’s hard to sit still

**TABLE 10:** Mental health impacts of COVID-19 on respondents in the past 14 days.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Over half days</td>
<td>Nearly every day</td>
<td>Over half days</td>
</tr>
<tr>
<td>Feeling nervous, anxious or on edge</td>
<td>1,261 (10.2) 2,210 (17.9)</td>
<td>325 (9.1) 484 (13.6)</td>
<td>748 (10.9) 1,331 (19.3)</td>
</tr>
<tr>
<td>Not being able to stop or control worrying</td>
<td>1,149 (9.3) 1,278 (10.4)</td>
<td>290 (8.1) 273 (7.7)</td>
<td>704 (10.2) 758 (11.0)</td>
</tr>
<tr>
<td>Worrying too much about different things</td>
<td>1,191 (9.7) 1,582 (12.8)</td>
<td>299 (8.4) 349 (9.8)</td>
<td>716 (10.4) 934 (13.6)</td>
</tr>
<tr>
<td>Trouble relaxing</td>
<td>1,338 (10.9) 1,904 (15.4)</td>
<td>355 (10.0) 420 (11.8)</td>
<td>802 (11.7) 1,155 (16.8)</td>
</tr>
</tbody>
</table>
Table 11 summarizes the sum of emotional symptoms/feelings reported by respondents, categorized into those who had none, those who reported between 1-4 emotional symptoms/feelings over half of the days or nearly every day, and those who reported 5-8 emotional symptoms/feelings over half of the days or nearly every day. Women reported a higher number of negative emotional symptoms/feelings with higher frequency than men. Overall, 36% of the total sample had 1-4 emotional symptoms/feelings frequently and 16.8% had 5-8 emotional symptoms/feelings with that same higher frequency.

### TABLE 11: Prevalence (%) of the number of emotional symptoms/feelings for over half of the days or nearly every day over the past 14 days.

<table>
<thead>
<tr>
<th>Emotional Symptoms/Feelings</th>
<th>Total</th>
<th>Men*</th>
<th>Women*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>None</td>
<td>47.2</td>
<td>53.7</td>
<td>45.1</td>
</tr>
<tr>
<td>1-4</td>
<td>36.0</td>
<td>33.4</td>
<td>36.8</td>
</tr>
<tr>
<td>5-8</td>
<td>16.8</td>
<td>12.9</td>
<td>18.1</td>
</tr>
</tbody>
</table>

* Chi-square test between genders and emotional symptoms/feelings; P < 0.001

Further analysis revealed that those with a physical, mental or intellectual/developmental disability or those who live with someone with a disability experienced more emotional symptoms/feelings (P = 0.025) and most did not change or increase their frequency of HED (P = 0.026) in comparison to the rest of the respondents (Table 12).

### TABLE 12: The relationship between disability and (a) the change in frequency of HED and (b) number of emotional symptoms/feelings.

<table>
<thead>
<tr>
<th>Disability***</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Change in frequency of HED*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No change</td>
<td>61.2</td>
<td>65.1</td>
</tr>
</tbody>
</table>
TABLE 13: The relationship between number of emotional symptoms/feelings and drinking during the pandemic in 2020.

<table>
<thead>
<tr>
<th>Number of Emotional Symptoms/Feelings**</th>
<th>None</th>
<th>1-4</th>
<th>5-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of Drinking (2020)**</td>
<td>60.2</td>
<td>66.6</td>
<td>66.0</td>
</tr>
<tr>
<td>Heavy Episodic Drinking (2020)***</td>
<td>27.2</td>
<td>35.5</td>
<td>38.3</td>
</tr>
</tbody>
</table>

* Chi-square test between the number of emotional symptoms/feelings and prevalence of drinking during the pandemic in 2020; P < 0.001
** Chi-square test between the number of emotional symptoms/feelings and prevalence of heavy episodic drinking during the pandemic in 2020; P < 0.001
*** Chi-square test between the number of emotional symptoms/feelings and prevalence of heavy episodic drinking during the pandemic in 2020; P < 0.001
the highest decrease and lowest increase in the change in frequency of HED. The highest increase of change in frequency of HED was among the higher socioeconomic strata (upper middle and high).

**TABLE 14:** The relationship between total monthly household income, drinking during the pandemic and the number of emotional symptoms/feelings.

<table>
<thead>
<tr>
<th>Total Monthly Household Income*</th>
<th>Very Low</th>
<th>Low</th>
<th>Lower-Middle</th>
<th>Upper-Middle</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>

**Change in frequency of HED**

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change</td>
<td>61.6</td>
<td>61.7</td>
<td>61.1</td>
<td>59.9</td>
<td>62.4</td>
</tr>
<tr>
<td>Increased</td>
<td>7.6</td>
<td>9.0</td>
<td>12.9</td>
<td>15.0</td>
<td>14.8</td>
</tr>
<tr>
<td>Decreased</td>
<td>30.8</td>
<td>29.3</td>
<td>26.0</td>
<td>25.1</td>
<td>22.8</td>
</tr>
</tbody>
</table>

**Prevalence of Drinking (2020)**

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>42.3</td>
<td>58.1</td>
<td>70.3</td>
<td>72.7</td>
<td>75.2</td>
</tr>
</tbody>
</table>

**Prevalence of HED (2020)**

<table>
<thead>
<tr>
<th># of Emotional Symptoms/Feelings *****</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>44.1</td>
<td>45.1</td>
<td>48.2</td>
<td>51.2</td>
<td>53.9</td>
</tr>
<tr>
<td>1-4</td>
<td>35.3</td>
<td>37.1</td>
<td>35.7</td>
<td>35.9</td>
<td>33.2</td>
</tr>
<tr>
<td>5-8</td>
<td>20.7</td>
<td>17.8</td>
<td>16.1</td>
<td>12.9</td>
<td>13.0</td>
</tr>
</tbody>
</table>

* Total Monthly household income categorization: (a) Very Low = up to the equivalent of 1 monthly minimum wage; (b) Low = between 1-4 monthly minimum wages; (c) Lower-Middle = 5-10 monthly minimum wages; (d) Upper-Middle = 11-20 monthly minimum wages; (e) High = over 20 monthly minimum wages.

** Chi-square test between the total monthly household income and change in frequency of HED; \( P < 0.001 \)

*** Chi-square test between the total monthly household income and prevalence of drinking during the pandemic in 2020; \( P < 0.001 \)

**** Chi-square test between the total monthly household income and prevalence of heavy episodic drinking during the pandemic in 2020; \( P < 0.001 \)

***** Chi-square test between the total monthly household income and number of emotional symptoms/feelings; \( P < 0.001 \)

**Conclusions**

The data suggest a stability in the HED frequency among the respondents, when the data is analyzed within subjects, considering the usual consumption pattern in 2019 compared to the usual pattern during the first 4 months of the pandemic in 2020. HED is a pattern of consumption that poses several acute and chronic risks to health and it is often the target of prevention programs.

The prevalence of drinking and HED in 2019 is slightly higher compared to the duration of the first 4 months of the pandemic covered by the present study. As the prevalence of 2019 referred to alcohol use over a 12-month period, it is expected to be higher than the prevalence found for a period of four months in 2020. Most of the participants (75.8% in 2019 and 63.4% during the pandemic in 2020) report alcohol consumption, with more men drinking alcohol than women. During the pandemic, 32% of the sample reported at least one episode of HED. HED was the most prevalent among younger respondents (18 to 39
years old) both in 2019 and during the pandemic in 2020. The higher the age, the lower the practice of HED.

Those in the lower socioeconomic strata consumed less alcohol and experienced more emotional symptoms/feelings than the higher socioeconomic strata. Respondents who experienced at least one or more emotional symptom(s)/feeling(s) was associated with a higher prevalence of drinking and HED. Those with a disability or living with someone with a disability experienced more emotional symptoms/feelings but higher stability (no change) in HED. Despite the high levels of HED that was not significantly reduced during the pandemic, most people never seek help (87.5% in 2019 and 90.9% in 2020). A small proportion of respondents tried to reduce their drinking on their own (10.2% in 2019 and 7.4% in 2020).

**Limitations**

This exploratory study has several limitations. The results represented only the sample of self-selected respondents and may not represent the current situation of the general population in the countries; thus the results cannot be generalized. In addition, most countries did not have enough respondents to enable a full analysis of their sample. However, given the uniqueness of the questions and our unawareness of any similar attempt in the Region, the information at subregional and regional levels can be of value to policy makers. The prevalence of events occurred in 2019 considered the complete year of 12 months while for 2020, only the first 4 months of the pandemic (March to June) were included.

**Recommendations**

The results show a high prevalence of heavy episodic drinking during the pandemic, which is considered a health risk to COVID-19 (8). At the same time, such risk can be avoided with policies to limit the availability and access to alcohol, and interventions to improve physical and mental health, both during the ongoing COVID-19 pandemic and in the post recovery time period.

It is vital to provide information, technical guidance and communication materials related to alcohol and COVID-19, particularly aimed at young people, those with NCDs, alcohol use disorders and other mental health conditions. Heavy episodic drinking is causally linked to violence and injuries. Therefore, reports of increases in domestic violence during the pandemic may be partially related to alcohol consumption (11).

The population-based policies aimed at reducing harmful use of alcohol, now summarized in the WHO technical package, SAFER\(^3\), can guide actions during the pandemic as well as in the post-pandemic time (12). Raising taxes on alcoholic beverages can generate critically important revenues to assist

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\(^3\) SAFER is a WHO-led technical package outlining five high-impact, evidence-based, cost-effective strategies:  
- Strengthen restrictions on alcohol availability;  
- Advance and enforce drink driving countermeasures;  
- Facilitate access to screening, brief interventions and treatment;  
- Enforce bans or comprehensive restrictions on alcohol advertising, sponsorship and promotion;  
- Raise prices on alcohol through excise taxes and pricing policies.
governments in the recovery efforts, whilst benefitting the health of the public and reducing inequities. Providing screening and brief interventions for reducing harmful use of alcohol is another strategy that can become a part of the rebuilding of health services to become stronger and more responsive to the needs of the people. Reducing hours of alcohol sales and density of outlets can be critical in preventing the resurgence of cases when economies open up again. Controlling advertising and sponsorships can not only prevent underage drinking and delay initiation in drinking but also reduce the many incentives to drink in crowds including sports events, festivals and cultural events. Finally, as economies open up, the drink-driving countermeasures can be strengthened as the increase in traffic, will increase the risk of road traffic crashes.

Relaxing existing measures aimed at controlling harmful use of alcohol are not justified and this is a prime opportunity to further strengthen them to meet the United Nations’ Sustainable Development Goal of reducing harmful use of alcohol and per capita consumption by 2030.

Acknowledgements

This report would not have been possible without the contributions of the following individuals and organizations to the planning, execution, data analysis, and reporting of this report: Maristela Monteiro and Ivneet Sohi, PAHO Department of Noncommunicable Diseases and Mental Health; Zila M. Sanchez, Juliana Y. Valente, and Rodrigo Garcia-Cerde, Department of Preventive Medicine, Universidade Federal de São Paulo (UNIFESP).

References


Appendix A: Questionnaire in English
ALCOHOL USE AND COVID-19

Drinking alcohol is primarily a social activity, often done in the public, in public venues, festivals, sporting events. The availability of alcohol in these places have decreased with the implementation of quarantine and other measures to contain the spread of the COVID-19. It is important to know what has changed in the drinking habits of the population so we can better respond with information, education, services and other strategies as needed and in a timely manner.

This survey takes about 15 minutes to complete. It is for those older than 18 years of age only. It is an anonymous and confidential survey. None of the information you provide will be linked to you. We will not ask for your name or address, and we cannot trace your phone number or IP address. We will only ask for general demographic information that cannot identify you, and we will use this information to prepare statistics of the population from your country who also answer this survey.

If you do not feel comfortable answering any of the questions, you do not need to answer it. There are no benefits to you from participating but your participation can help public health experts to learn about the situation in their country and region and plan solutions that will help in the prevention and management of the consequences of COVID-19 and related measures to contain its spread.

This survey is funded by the Pan American Health Organization (PAHO) and it was approved by the Ethics Committee of PAHO.

You are welcomed to share the survey link to your contacts over 18 years of age for completion too.

I HAVE READ THIS DESCRIPTION AND CONSENT TO PARTICIPATE

☐ Yes

☐ No
A1. How old are you? (Please enter a numerical value only)

_________________________________________________________________
A2. In which country do you live?

- Antigua and Barbuda
- Argentina
- Aruba
- Bahamas
- Barbados
- Belize
- Bolivia
- Bonaire
- Brazil
- Chile
- Colombia
- Costa Rica
- Cuba
- Curaçao
- Dominica
- Dominican Republic
- Ecuador
- El Salvador
- Grenada
- Guatemala
- Guyana
A3. Which city do you live in?

________________________________________________________________________
A4. Have you been out of your country since March 15th, 2020?

- No
- Yes

End of Block: FILTER

Start of Block: Current Situation

The next few questions are related to the COVID-19 pandemic.

**B) Current Situation:**

B1. How many individuals do you live with?

_____________________________________________________________________________
B2. Who do you live with? SELECT ALL THAT APPLY.

1. Partner
2. One or more children aged 3 and under
3. One or more children aged 4-6
4. One or more children aged 7-12
5. One or more children aged 13-17
6. One or more children aged 18+
7. With one or both parents
8. Other adult relatives
9. Non-related adults
10. None of the above, I live alone
11. Prefer not to say

B3. Do you or any child or adult you live with have a physical, mental or
intellectual/developmental disability? SELECT ALL THAT APPLY.

☐ Yes, I do
☐ Yes, a child or adult
☐ No

B4. Have you, or those close to you (e.g., close relative/friend), tested positive for COVID-19 or are at high risk of COVID-19? SELECT ALL THAT APPLY.

☐ I, or someone close to me, has tested positive for COVID-19
☐ I, or someone close to me, has had symptoms of COVID-19 but has not been tested
☐ I, or someone close to me, has been tested for COVID-19 but it was negative (i.e., they did not have COVID-19)
☐ I, or someone close to me, is elderly and/or has a health condition that increases the risk of serious illness from COVID-19
☐ I have a job that exposes me to high risk of getting COVID-19
☐ Someone close to me has a job that exposes them to high risk of getting COVID-19
☐ None of the above
B5. Have you engaged in any of the following as a consequence of COVID-19? SELECT ALL THAT APPLY.

☐ 1. Avoiding public transport and social gatherings
☐ 2. Working/studying from home
☐ 3. Home-schooling children/keeping pre-school children home from day care
☐ 4. Asked to stay in isolation at home after travel overseas
☐ 5. Staying in isolation at home due to own or household members vulnerability to COVID-19
☐ 6. Home quarantine (tested positive for COVID-19 and stayed at home)
☐ 7. Admitted to hospital (tested positive for COVID-19 and admitted to hospital)
☐ 8. Quarantined to a hotel room
☐ 9. Isolated people within your home (i.e. split your home in two so that some members do not come into contact with other members)
☐ 10. None of the above
☐ 11. I don’t wish to say
B6. How worried are you about the impact of COVID-19 on your personal financial situation?

- Very worried
- Somewhat worried
- Not very worried
- Not at all worried

B7. Since the start of the new coronavirus pandemic, what is your work situation?

- Public servant
- Employed in the private sector with a contract
- Employed in the private sector without a formal contract
- Company owner
- Self-employed
- Worked without pay (including as housemaker)
- Searched but found no job
- I am not working because I am a student
- I am not working because I am retired/disabled
- I am not working for another reason

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B8. How have physical distancing measures affected your employment situation? SELECT ALL THAT APPLY.

☐ Working from home instead of my usual work location

☐ Still working at my usual work location (outside the home)

☐ Working more hours

☐ Working fewer hours

☐ No longer working / laid off / let go due to pandemic

☐ Not employed prior to pandemic (e.g., retired, student, paid leave)

☐ None of the above

B9. How worried are you that you or someone close to you (close relative or friend) will get ill from COVID-19?

☐ Very worried

☐ Somewhat worried

☐ Not very worried

☐ Not at all worried

The next few questions are about how you have been feeling lately.

Over the PAST 2 WEEKS, how often have you been bothered by the following problems?
B10. Feeling nervous, anxious or on edge

- Not at all
- Several days
- Over half the days
- Nearly every day

Over the PAST 2 WEEKS:

B11. Not being able to stop or control worrying

- Not at all
- Several days
- Over half the days
- Nearly every day

Over the PAST 2 WEEKS:

B12. Worrying too much about different things

- Not at all
- Several days
- Over half the days
- Nearly every day
Over the PAST 2 WEEKS:

B13. Trouble relaxing

- Not at all
- Several days
- Over half the days
- Nearly every day

Over the PAST 2 WEEKS:

B14. Being so restless that it’s hard to sit still

- Not at all
- Several days
- Over half the days
- Nearly every day

Over the PAST 2 WEEKS:
B15. Becoming easily annoyed or irritable
- Not at all
- Several days
- Over half the days
- Nearly every day

Over the PAST 2 WEEKS:
B16. Feeling afraid as if something awful might happen
- Not at all
- Several days
- Over half the days
- Nearly every day

Over the PAST 2 WEEKS:
B17. Having trouble falling sleep
- Not at all
- Several days
- Over half the days
- Nearly every day
C) Consumption:
Next up we are going to ask you some questions about your alcohol consumption. The first lot of questions are going to be about your usual consumption patterns in 2019. We are interested in both weekday and weekend drinking occasions.

We will consider weekends to be Friday, Saturday and Sunday while weekdays will cover Monday to Thursday.

C1a. Which of the following locations did you usually drink at during the weekend (Friday, Saturday and Sunday) in 2019?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a) At your home</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b) At someone else’s home</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>c) At a licensed premise such as a bar, pub, restaurant or special event</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>d) In public spaces such as beaches, parks, etc.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
C1b. Which of the following locations did you usually drink at during the week (Monday-Thursday) in 2019?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a) At your home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) At someone else's home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) At a licensed premise such as a bar, pub, restaurant or special event</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) In public spaces such as beaches, parks, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C2a. I want you to think about a usual drinking occasion in 2019 when you are drinking at your home on a WEEKEND. On this usual occasion, how many standard drinks would you usually drink?

*One STANDARD drink is equivalent to a can of beer (355 ml), a glass of wine (150 ml), or a
C2b. I want you to think about a usual drinking occasion in 2019 when you are drinking at your home on a WEEKDAY. On this usual occasion, how many standard drinks would you usually drink?

*One STANDARD drink is equivalent to a can of beer (355 ml), a glass of wine (150 ml), or a shot of distilled spirits (40 ml).*

- a) At your home
- b) At someone else’s home
- c) At a licensed premise such as a bar, pub, restaurant or special event
- d) In public spaces such as beaches, parks etc.

---

shot of distilled spirits (40 ml).*
C3. What type of beverage did you most often consumed in 2019?

- 1. Beer
- 2. Wine
- 3. Spirits (vodka, whisky, aguardiente, rhum, cachaca, tequila, gin and other distilled beverages, any mixed drinks, ready made drinks)
- 4. Homemade alcohol: ___________________________________________
- 5. Other: ___________________________________________
- 6. I do not drink

C4. In 2019, how often did you drink any informally produced or illicitly produced alcoholic beverage?

- 1. Never
- 2. Daily
- 3. Weekly
- 4. Monthly
- 5. Only a few times in the year

For the next set of questions please use the slider to indicate your response. If your response is 0% please move the indicator away from 0 and back again as your response will not be recorded if it has not been moved from its original position.  

C5. In 2019, approximately how much of your alcohol consumption happened when you were at home or in someone else’s home?

<table>
<thead>
<tr>
<th></th>
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<th>40</th>
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C6. In 2019, approximately how much of your alcohol consumption happened when you were out in a public location (park, beach) or venue such as a bar, restaurant, night club, in a festival or event?

C7. In 2019, approximately how much of your alcohol consumption occurred while you were socialising with friends or family online (i.e. via Skype, Zoom, FaceTime, videocall, houseparty app etc)?

C8. In 2019, approximately how much of your alcohol consumption occurred while there were children under the age of 13 present?

C9. In 2019, approximately how often did you have your first drink of the day before 5pm?
C10. How often did you have had alcohol delivered to your home in 2019?

- 1. Never
- 2. Less than monthly
- 3. 2-4 times a month
- 4. Weekly or more often

C11. How often did you drink 5 or more standard drinks in one occasion, in 2019?

*One STANDARD drink is equivalent to a can of beer (355 ml), a glass of wine (150 ml), or a shot of distilled spirits (40 ml).*

- 1. Never
- 2. About once a month
- 3. About 2 to 3 times a month
- 4. About once every 2 weeks
- 5. About 1 day a week
- 6. About 2 to 3 times a week
- 7. Every day
C12. Have you EVER tried or sought help (online or in person) to reduce your drinking or quit in 2019?

☐ 1. Yes, on my own
☐ 2. Yes, I sought help online
☐ 3. Yes, I contacted a health professional or specialist
☐ 4. Yes, I contacted a self-help group
☐ 5. Yes, but I did not find any help
☐ 6. No, I never sought help

End of Block: Consumption

Start of Block: Consumption in response to COVID-19

Thank you for letting us know about your consumption and purchasing patterns in 2019. Next up we are going to ask some questions about your usual alcohol consumption since the major social changes that started in response to COVID-19. We are interested in both weekday and weekend drinking occasions.

**D) Consumption in response to COVID-19:**
D1a. So, since the beginning of the pandemic measures taken in your country, at which of the
following places have you consumed alcohol during the weekend (Friday, Saturday and Sunday)?

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<tr>
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<tbody>
<tr>
<td>a) At your home</td>
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<tr>
<td>b) At someone else’s home</td>
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<tr>
<td>c) At a licensed premise such as a bar, pub, restaurant or special event</td>
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<tr>
<td>d) In public spaces such as beaches, parks, etc.</td>
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</tbody>
</table>
D1b. So, in the past month, at which of the following places have you consumed alcohol during the weekday (Monday-Thursday)?

<table>
<thead>
<tr>
<th>Place Description</th>
<th>1. Never</th>
<th>2. About once a month</th>
<th>3. About once every other week</th>
<th>4. About once a week</th>
<th>5. About two to three times a week</th>
<th>6. Every weekday</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) At your home</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>b) At someone else's home</td>
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<tr>
<td>c) At a licensed premise such as a bar, pub, restaurant or special event</td>
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<tr>
<td>d) In public spaces such as beaches, parks, etc.</td>
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</tbody>
</table>

D2a. I want you to think about a usual drinking occasion when you are drinking at your home on a WEEKEND in the past month. On this usual occasion, how many standard drinks would you usually drink?
*One STANDARD drink is equivalent to a can of beer (355 ml), a glass of wine (150 ml), or a shot of distilled spirits (40 ml).*

- a) At your home ____________________________
- b) At someone else’s home ________________________________
- c) At a licensed premise such as a bar, pub, restaurant or special event ________________________________
- d) In public spaces such as beaches, parks etc. ________________________________

D2b. I want you to think about a usual drinking occasion when you are drinking at your home on a WEEKDAY in the past month. On this usual occasion, how many standard drinks would you usually drink?

*One STANDARD drink is equivalent to a can of beer (355 ml), a glass of wine (150 ml), or a shot of distilled spirits (40 ml).*

- a) At your home ____________________________
- b) At someone else’s home ________________________________
- c) At a licensed premise such as a bar, pub, restaurant or special event ________________________________
- d) In public spaces such as beaches, parks etc. ________________________________
D3. What type of beverage do you most often consume since the beginning of the pandemic?

- 1. Beer
- 2. Wine
- 3. Spirits (vodka, whisky, aguardiente, rhum, cachaca, tequila, gin and other distilled beverages, any mixed drinks, ready made drinks)
- 4. Homemade alcohol: ____________________________
- 5. Other: ____________________________
- 6. I do not drink

D4. Since the beginning of the pandemic, how often do you drink any informally produced or illicitly produced alcoholic beverage?

- 1. Never
- 2. Daily
- 3. Weekly
- 4. Monthly

For the next set of questions please use the slider to indicate your response. If your response is 0% please move the indicator away from 0 and back again as your response will not be recorded if it has not been moved from its original position.

D5. Since the beginning of the pandemic, approximately how much of your alcohol consumption occurred while you were socialising with friends or family online (i.e. via Skype, Zoom, FaceTime, video call, house party app etc)?

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<thead>
<tr>
<th>0</th>
<th>20</th>
<th>40</th>
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</table>

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D6. Since the beginning of the pandemic, approximately how much of your alcohol consumption occurred while there were children under the age of 13 present?

<table>
<thead>
<tr>
<th>%</th>
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</table>

D7. Since the beginning of the pandemic, approximately how often did you have your first drink of the day before 5pm?

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</table>

D8. Since the beginning of the pandemic, how often did you have alcohol delivered to your home?

- 1. Never
- 2. Daily
- 3. Weekly
- 4. Monthly

D9. How often did you drink 5 or more standard drinks in one occasion, since the beginning of the pandemic response?
“One STANDARD drink is equivalent to a can of beer (355 ml), a glass of wine (150 ml), or a shot of distilled spirits (40 ml).”

- 1. Never
- 2. About once a month
- 3. About 2 to 3 times a month
- 4. About once every 2 weeks
- 5. About 1 day a week
- 6. About 2 to 3 times a week
- 7. Every day

D10. Have you tried or sought help (online or in person) to reduce your drinking or quit since the beginning of the pandemic?

- 1. Yes, on my own
- 2. Yes, I sought help online
- 3. Yes, I contacted a health professional or specialist
- 4. Yes, I contacted a self-help group
- 5. Yes, but I did not find any help
- 6. No, I never sought help

End of Block: Consumption in response to COVID-19

Start of Block: Demographics

Thank you very much for participating in this survey, these are the last few questions.

E) Demographics:
E1. How do you describe your gender identity?

- Man
- Woman
- Transgender man
- Transgender woman
- Non-binary/genderqueer
- Other
- Prefer not to answer

E2. How do you describe your sexual orientation?

- Heterosexual (straight)
- Homosexual (lesbian, gay)
- Bisexual
- Other
- Prefer not to answer
E3. What is the highest level of education you have completed?

- Did not graduate from elementary school
- Did not graduate from high school
- Completed high school
- Some post-high school education (e.g. technical)
- College/University diploma / degree
- Prefer not to answer

E4. What is your current marital status?

- Married
- Living with a partner
- Widowed
- Divorced
- Separated
- Never married
- Prefer not to answer
E5. What is your racial/ethnic group?

- White
- Black
- Indigenous
- Mixed
- Other: ___________________________________________
- Not sure

E6. What was the TOTAL MONTHLY household income you and other members of your household received in the YEAR ending December 31st, 2019? Please include income FROM ALL SOURCES such as savings, pension, disability benefits, social security, rent, informal work, and unemployment insurance as well as salaries.

- Up to the equivalent of 1 monthly minimum wage
- Between 1-4 monthly minimum wages
- 5-10 monthly minimum wages
- 11-20 monthly minimum wages
- Over 20 monthly minimum wages

E7. Do you consider yourself to be living in a…

- Urban area
- Rural area

End of Block: Demographics