

# Binge drinking among young Brazilians and the role of alcoholic drinks sale: a Public Health concern

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The harmful use of alcohol is responsible for about 3.3 million deaths worldwide, each year.<sup>1</sup> Time comparisons of estimates of the global burden of diseases attributed to different risk factors suggest that deaths and years lost (Disability-Adjusted Life Years – DALYs) due to alcohol use have increased in recent decades at global level. These changes led to an increase in the alcohol position in the ranking of the leading causes of death and disability in the world, moving from the eighth place in 1990 to fifth in 2010. The data available in many countries suggest that the harmful use of alcohol is the leading risk factor for death and disability of individuals between 15 and 49 years old.<sup>2</sup>

It is important to mention that the severity of the consequences of alcohol depends on the consumption frequency and amount.<sup>3</sup> A pattern of risk consumption that has aroused international interest and only recently began to be investigated in Brazil is the so-called binge drinking (BD),<sup>4</sup> or 'episodic heavy drinking'.<sup>5</sup> This pattern is usually characterized by the intake of at least four doses of alcohol in one occasion for women and five doses for men, leading to an ethanol concentration in the blood of 0.08% or higher.<sup>6</sup> However, BD definition is controversial, permeated by conceptualizing conflicts influenced by the culture and pharmacokinetic aspects of alcohol.<sup>7,8</sup>

Episodes of acute alcohol abuse not only affect general mortality, but also contribute to health problems, especially from accidents<sup>9</sup> and aggressions,<sup>10</sup> putting the intoxicated individual and the community at risk. Among the general population, BD is associated with higher occurrences of sexual abuse, suicide attempts, unprotected sex, unwanted pregnancy, acute myocardial infarction, alcohol overdose, falls, gastritis and pancreatitis.<sup>11</sup>

However this issue is still little studied in the Brazilian population,<sup>12</sup> despite its relevance for Public Health. The

first national survey on patterns of alcohol intake in Brazil, conducted in 2005-2006, identified a prevalence of BD in the year that preceded the study of 28% in adults, 40% in the age groups from 18 to 24 years,<sup>13</sup> and 53% among male adolescents.<sup>14</sup> A study conducted in 2010 with high school students from 27 municipalities in the country revealed a 32% prevalence of BD practice that year, which was higher among richer adolescents and in the North and Northeast regions.<sup>15</sup>

Although alcohol is a legal drug, its sale and supply for persons under 18 years old is prohibited by law in Brazil (Federal Law No. 13,106, dated March 17, 2015).<sup>16</sup> This prohibition did not extinguish the practice, nor the consumption of alcohol among adolescents; however, there are evidences that the improvement of laws have contributed to the reduction of alcohol consumption among Brazilian adolescents from the late 1980.<sup>17</sup>

Bars and nightclubs are the main places for BD practice by the general population<sup>18</sup> and students.<sup>19</sup> Worldwide, these establishments are known as places of intense consumption of alcohol, and other drugs.<sup>20</sup> However, little attention has been given to these environments as risky places and of extreme exposure to BD practice and other associated behaviors.

Binge drinking is also the most prevalent risk behavior in São Paulo-SP nightclubs. A study conducted in 2013,<sup>21</sup> among young people from that city in different nightclubs, showed that about 30% of the interviewed individuals left those establishments with alcohol dosage in the blood equivalent to BD practice. This practice increased by 9 times for men and 5 times for women the chance of suffering blackouts, or not knowing what had happened to them after leaving the nightclub, when compared to "clubbers" who had drunk but had not practiced BD. The same study showed that the 'open bar' nightclubs favored BD practice

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in both sexes. The fact that the establishments that adopt open bar system to charge a fixed amount (usually low) and allow people to drink unlimited amounts, all night long, makes its visitors feel compelled to drink as much as they can, to justify their expenses.<sup>22</sup>

The strategy of bars' and clubs' managers and owners is to focus on stimulating excessive alcohol consumption in order to attract more customers, whom, in most cases, end up choosing the establishment where they will spend the night, according to the best deals for alcohol.<sup>23</sup> Here are some examples of this appeal: alcohol sales such as open bar, minimal consumption (fixed-price, paid on the entrance of the club, which can be converted into alcoholic drinks; in case this value is not consumed, it is not returned to the customer), special offers as 'pay 1 and take 2' and combos – combined sale – of distillates (usually vodka) and energetic drinks, where the purchase of the products mix ends up being financially advantageous, compared to sales of individual products. It is worth mentioning that charging minimal consumption, although being a widespread practice in nightclubs, is prohibited by the Consumer's Defense Code (Law No. 8,078 dated September 11, 1990),<sup>24</sup> characterized as an abusive sale practice, because the customer pays the minimum amount charged even if they do not consume the equivalent amount in beverages; i.e., they pay for something that they will not receive. In this sense, monitoring is essential so the law can be complied. The combined sale of distillates and energetic drinks is another example of abuse, and must be strictly suppressed. Besides, energetic drinks mask the depressant effects of alcoholic beverages and increase the appetite for alcohol, stimulating much larger intake of doses than tolerated by the organism. The combined consumption has been identified as a predictor of BD practice.<sup>25</sup>

The open bar is the form of alcoholic beverage sales more associated with intense alcohol consumption in the country<sup>22</sup> and abroad.<sup>26</sup> In Brazil, the sale of alcoholic drinks in open bar is allowed and widespread. In the past, a bill aiming to ban it (Bill No. 3,414/2008) was presented, but it has been filed. It is essential that the society discusses the suitability of this type of fun, responsible for many alcoholic intoxication, coma cases – maximum degree of consciousness alteration caused by excessive consumption – and even death.

International studies show that excessive intake of alcoholic beverages in nightclubs and bars is associated with more episodes of physical aggression,<sup>27</sup> sexual risky behavior,<sup>28</sup> sexual violence,<sup>29</sup> traffic accidents<sup>30</sup>

and violence on the streets, not to mention the various instances of violence within night leisure facilities, affecting the youngsters and the community.<sup>31-32</sup>

The violence in these establishments is seen as a complex relation between personal characteristics of the goers, patterns of alcohol and other drugs intake, environmental factors, behavior of employees and type of place,<sup>33</sup> and can only be effectively reduced with the implementation of measures aimed at reducing the amount of alcohol doses taken.<sup>34</sup> A study conducted in 2007, in night recreational settings in Spain, found that 45% of its visitors had gotten drunk more than 2 times in the previous month, and 23% of them had been involved in fights in the previous year, inside those establishments.<sup>27</sup>

Based on this evidence, an immediate intervention is necessary for a reduction on individual and social damage from BD practice. We know that the best way to prevent the harm associated with alcohol abuse in a community is the implementation of public policies in different dimensions, and taxation on alcohol sales and sales control have demonstrated greater success, according to international studies of severe restriction policies on alcohol advertising.<sup>35</sup> For individuals who go to bars and clubs, policies as laws that prohibit the sale of alcohol to people who are already drunk would be important from the point of view of immediate individual and collective protection.<sup>36</sup> In many countries, one of the most effective legislations to prevent the damage caused by alcohol intoxication is controlling the density of licensed sites for the alcoholic beverages sales, imposing a limit on the number of outlets selling alcohol in each administrative region of the city.<sup>37</sup> In Brazil, a first step to be taken would be to establish the need for differentiated licenses to establishments for selling alcohol. The control in the concession of licenses as well as increased taxation on alcohol must be monitored properly, in order not to encourage illegal sales by street sellers who usually assemble in front of bars and clubs offering drinks of dubious origin with really low prices. The license control for sale is, therefore, the previous step to all other known effective public policies aimed at reducing harm associated with alcohol abuse.

The necessary changes are not easy to achieve and may not have sufficient social support, as they confront the culture of extreme drinking, which is widespread in the country. Therefore, the success of measures to regulate trade of alcohol firstly depends on the choice of evidence-based policies, in addition to a broad public and political support so the implementation of a preventive law of alcohol abuse can succeed in Brazil.

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