



Alcoholism and factors associated with binge drinking among women in the municipality of vilhena

Alcoolismo e fatores associados ao binge drinking em mulheres vilhenenses

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ABSTRACT

Cross-sectional study, with the objective of describing alcohol consumption and identifying the factors associated with binge drinking among women in the municipality of Vilhena. The instruments for investigation were a sociodemographic questionnaire and the Alcohol Use Disorders Identification Test (AUDIT) scale. It was identified that 78.4% (n = 236) consume low-risk alcoholic beverages or abstinence, 14.9% (n = 45) make use of risk, 3% (n = 9) use of high risk and 3.7% (n = 11) probable dependence. Of those surveyed, 57.4% (n = 135) consumed three or more drinks of alcohol on the same occasion. Binge was associated with young adults, single, paid work and income less than three minimum wages, elementary and high school education and non-exercisers. The study showed a high and worrying alcohol consumption among women who practiced binge drinking, and it is important to early detect risk groups and develop policies to prevent abuse and dependence on these substances.

Keywords: Alcoholism. Binge drinking. Drinks. Women health.

RESUMO

Estudo transversal, com objetivo de descrever o consumo de álcool e identificar os fatores associados ao *binge drinking* entre mulheres vilhenenses. Os instrumentos para investigação foram um questionário sociodemográfico e a escala *Alcohol Use Disorders Identification Test* (AUDIT). Identificou-se que 78,4% (n = 236) fazem consumo de bebida alcoólica de baixo risco ou abstinência, 14,9% (n = 45) fazem uso de risco, 3% (n = 9) alto risco e 3,7% (n = 11) provável dependência. Das pesquisadas, 57,4% (n = 135) fizeram consumo de três ou mais doses de álcool em uma mesma ocasião. O *binge* foi associado com as jovens adultas, solteiras, trabalho remunerado e renda inferior a três salários mínimos, escolaridade de níveis fundamental e médio e não praticantes de exercício físico. O estudo mostrou um consumo de álcool elevado e preocupante entre as mulheres que fizeram uso em *binge*, sendo importante detectar precocemente grupos de risco e desenvolver políticas de prevenção do abuso e dependência dessas substâncias.

Palavras-chave: Alcoolismo. Bebedeira. Doses. Saúde da mulher.

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INTRODUCTION

The latest survey carried out by the World Health Organization, on the prevalence of alcohol consumption in the world, indicates that 2.3 billion people consume alcohol. Among these, 237 million men and 46 million adult women suffer from Alcohol Use Disorders¹.

In the regions of the Americas, the prevalence of Alcohol Use Disorders (AUD) is 11.5% among men and 5.1% among women. The incidence of the disorder among women in the Americas is the highest among the regions of the world¹. The difference between genders tends to deepen due to the biological, psychological and social factors involved, as they are more vulnerable to the effects of alcohol than men^{1,2}.

To identify problematic alcohol consumption, WHO developed the AUDIT (Alcohol Use Disorders Identification Test) instrument. The Audit identifies the pattern by groups: low risk or abstaining; risk use; harmful use; and possible dependence, for alcohol consumption. The instrument consists of ten questions: items 1 to 3 verify the “frequency and quantity”, serving as a basis for indicating heavy and episodic use (binge or binge drinking, a term used by the WHO to designate the practice of heavy drinking, in a short period of time) of alcohol consumption; questions 4 to 6 refer to “possible dependence”, and items 7 to 10

check the “adverse consequences” of consumption³.

The practice of binge drinking is measured according to the parameters presented by the WHO, which is equivalent to 60 grams or more of pure alcohol consumed at the same time in most countries. In the typical adult, this pattern may correspond to six or more drinks for men and four or more for women. A drinks of alcoholic beverage is understood as a drinks of distilled beverage (30 mL), a can of beer (330 mL) or a glass of wine (100 mL) corresponding to 10 - 12 grams of pure alcohol^{4,5}. This way of drinking is considered dangerous for the user and for society.

Binge consumption contributes to situations of violence and acute alcohol intoxication. Compared to men, a lower consumption can lead women to drunkenness and its frequent use can advance to the development of alcohol-related disorders and other health disorders⁶.

In 2018, the World Health Organization¹ released the global report on alcohol and health. In the analysis, the prevalence rate of alcohol consumption in the female population decreased, in most regions the consumption was 37.3% (2000) and reduced to 32.3% (2016), however, there were approximately 91,000 more women who consumed alcohol in 2016 compared to 2000, the issue is justified by

the global increase in population. Heavy and episodic drinking by women corresponded to 24.4% in 2000 and decreased to 19.9% in 2016. According to these data, it is possible to suggest that there was a change in the prevalence and in the way women drink in the international context.

Contrary to the global trend, in Brazil, recent data presented by the Ministry of Health through the survey of VIGITEL⁷ (Surveillance of Risk and Protection Factors for Chronic Diseases by Telephone Survey), carried out in 2019, indicate an increase in the prevalence of alcohol abuse among Brazilian women, from 11% in 2018 to 13.3% in 2019. In another survey, the National Anti-Drug Secretariat (SENAD) indicates a higher incidence of binge drinking in women in the last 12 months. The statistical data presented by the studies on alcohol consumption and binge mode among women were: 36% (2007), 49% (2012) and 59% (2017), which indicate a gradual increase in the practice⁸⁻¹⁰.

Data collected in the VIGITEL survey, carried out in Brazilian capitals, show that 9.3% women interviewed, in the state of Rondônia, consumed alcohol in the 30 days prior to the survey date, in a way that can be considered a dangerous and harmful attitude⁷. Except for the data presented in the VIGITEL survey, there is a lack of research in the northern region of the country.

Studies^{1-2,7} in the literature point to a greater number of publications in relation to alcohol consumption by men, however the female population deserves more accurate analysis, as recent studies have shown a worrying increase in alcohol abuse in this population. Based on the literature survey carried out, “it is important that women are aware of these health risks”¹¹ and that the gender issue is highlighted in public policies on drug use¹².

Studies addressing regional differences are of paramount importance for understanding the different types of behavior of a population in relation to problems related to alcohol consumption, especially in regions where there is greater vulnerability in their environmental context, involving women.

In view of the above, the following question was raised: “What is the pattern of alcohol consumption among women from the municipality of Vilhena, state of Rondônia? And what is the relationship with the practice of binge drinking?”. Therefore, the aim of this study was to describe the prevalence of alcohol consumption and identify the factors associated with binge drinking in an urban population of a medium-sized city in the state of Rondônia, Northern Brazil.

METHODOLOGY

This is an epidemiological, non-probabilistic, cross-sectional exploratory

study (Strengthening the Reporting of Observational Studies in Epidemiology statement)¹³ carried out in the municipality of Vilhena, state of Rondônia, located west of the Northern region of Brazil and part of the Western Amazon, comprising an estimated population of 102,211 inhabitants and IDHM 0.731¹⁴.

The population consisted of women, aged 18 years or over. The sample was based on data from the 2010 census. The estimated population of women residing in the urban area of Vilhena was 37,796. To determine the sample size, a prevalence of 50% alcohol consumption greater than or equal to three drinks was adopted, a sampling error of five percentage points with a confidence interval of 90%, plus 12% to compensate for losses and refusals, which resulted in a sample of 301 women. After that, it was decided to present the power ($1 - \beta$) 98% ($\beta = 1.6\%$) and 95% confidence level ($\alpha = 5\%$) to detect areas under the Receiver Operating Characteristic (ROC) curve equal or greater than 0.50 as significant.

DATA COLLECTION INSTRUMENTS

To collect information about the investigated variables (independent), a structured questionnaire was developed to obtain sociodemographic data and behavioral variables, in order to check for possible associations with alcohol consumption. The sociodemographic

variables were: age (young adult: 18 to 39 years old; and intermediate adult 40 to 65 years old)¹⁵; marital status (married, stable union or living together; single, divorced, widow or living alone); form of work (paid; and other forms of work: for their own consumption, voluntary work, household chores and care for people living in their own home or family members living in other homes); income (minimum wage = R\$1,045.00 - Law 14013/20)¹⁶; education; religion. For behavioral variables, the following self-reported questions were elaborated: physical exercise: do you practice weekly physical exercise? (yes and no); age at onset of alcohol use (never used, child 0-10 years old, adolescent 11-19 years old, or adult ≥ 20 years old)¹⁵; and alcohol use in life: (yes and no).

The AUDIT, developed by the World Health Organization³ and already validated in Brazil¹⁷, classifies the pattern of alcohol consumption based on the level of risk. For each answer given by the individual to one of ten questions, there is a score ranging from 0 to 4 points. At the end of the application of the AUDIT, the scores presented in each question are added up and, based on that, the individual alcohol consumption pattern is classified.

Therefore, participants in this study were classified into one of four possible risk zones for alcohol consumption, namely: Risk Zone I - individuals who had a low-risk alcohol consumption pattern or were abstainers. Score between 0 and 7; Risk

Zone II - individuals who had a risky alcohol consumption pattern. Score between 8 and 15; Risk Zone III - individuals who had a harmful pattern of alcohol consumption. Score between 16 and 19; and Risk Zone IV - individuals who had a consumption pattern of probable alcohol dependence. Score between 20 and 40.

It is important to mention that binge drinking, as reported in the introduction, is from 4 drinks for women. In this study, the consumption of “3 or 4 drinks” was considered binge drinking, as the AUDIT instrument does not separate these categories. Thus, the cutoff point adopted in the present study was consumption of binge drinking equal to or greater than three drinks.

DATA COLLECTION AND ANALYSIS PROCEDURES

Due to the worldwide pandemic (Covid-19)¹⁸, snowball sampling was chosen, sending an invitation to a network of well-known women and allowing the guest to send the request to other women, until the calculated sample was reached.

Data was collected online, sent by invitation, where the access link to the Informed Consent Form (ICF) was inserted, after reading the term and accepting the participation, the subsequent questionnaires were made available, which may be completed by cell phone or computer with Internet access. Invitations were sent

through the cell phone application (WhatsApp), electronic address (e-mail) and made available on social networks (Facebook and Instagram), contacting approximately 400 women individually. The study was carried out from December 2020 to January 2021.

The study was approved by the Research Ethics Committee of the Federal University of Rondônia Foundation, under opinion 4445053, following the guidelines of the National Health Council based on resolutions 466/12 and 510/16 regarding research involving human beings.

STATISTICAL ANALYSIS

For data processing and analysis, the Statistical Package for Social Sciences (SPSS) version 20.0 (SPSS Inc., IBM, IL, United States) and Stata version 11.0 (Stata Corp., College Station, United States) were used. To assess the instrument reliability, internal consistency was used, through the standardized Cronbach's coefficient. Cronbach's Alpha (α) is an index used to measure the internal consistency reliability of a scale, checking the magnitude to which the items of an instrument are correlated. Therefore, it consists of the average of the correlations between the items that are part of an instrument. The distribution of the sample was presented through absolute and relative frequencies (%). The Chi-square test for heterogeneity (categorical variables) and linear trend (ordinal

variables) was applied to compare the prevalence of alcohol consumption equal to or greater than five drinks between the categories of independent variables. To assess the association, the crude and adjusted Odds Ratio (OR) was used between alcohol consumption greater than or equal to three drinks (< 3 drinks=0 and ≥ 3 drinks=1); for sociodemographic and behavioral variables, binary logistic regression was used. The significance of the model variables was assessed using the Wald test for heterogeneity and linear trend, when appropriate. Variables with p-value < 0.20 in the crude analysis were considered for elaboration of the multivariable model, all of which were kept in the final model. The level of significance was set at 5%.

RESULTS

The final sample consisted of 301 women from Vilhena, with a mean age of 34.14 years \pm 10.47. Most were young adults (70.1%), married (61.1%), with paid work (77.4%), monthly income between two to three minimum wages (41.9%), higher education (57.5%), with religion (84.1%). Regarding behavioral aspects, 57.5% revealed that they did not practice weekly physical exercise, 94.7% declared that they had used alcohol in their lifetime and 70.8% started drinking alcohol in adolescence with a mean age of 16.97 \pm 4.70 (Table 1).

Table 1. Profile of the characteristics of women in the municipality of Vilhena - state of Rondônia, Brazil, 2020. n = 301

Variables	M	SD (variation)
Age of participants	34,14	10.47 (18 to 65 years)
Age of onset of alcohol use	16,97	4.70 (5 to 41 years)
Sociodemographic	n	%
Age		
Young adult	211	70.1
Intermediate adult	90	29.9
Marital status		
Married, stable union or living together	184	61.1
Single, divorced, widow or living alone	117	38.9
Form of work		
Paid	233	77.4
Other forms of working	68	22.6
Monthly income		
0 to 1 minimum wage	113	37.5
2 to 3 minimum wages	126	41.9
≥ 4 minimum wages	62	20.6
Education		
Up to elementary school	22	7.3
High school	106	35.2
Higher education	173	57.5
Religion		
Yes	253	84.1
No	48	15.9
Behavioral aspects		

Physical exercise		
Yes	128	42.5
No	173	57.5
Age of onset of alcohol use		
Never used	14	4.7
Child (0 to 10 years old)	13	4.3
Adolescent (11 to 19 years old)	213	70.8
Adult (≥ 20 years old)	61	20.3
Alcohol use in life		
Yes	285	94.7
No	16	5.3

The participants reported using the following alcoholic beverages, respectively: beer 83.1%, wine 79.4%, vodka 53.5%, whiskey 41.2%, sugarcane spirit 38.5%, tequila 32.6%, liquor 28.6%, other beverages 22.9% and cognac 13.6%.

The reliability analysis of the AUDIT scale was measured by internal consistency through Cronbach's alpha coefficient, in all questions the alpha value

was equal to or greater than 0.80, the average was 0.83 with almost perfect internal consistency¹⁹ (Table 2).

Table 2. Item-total correlation coefficient, alpha value of the total of the Alcohol Use Disorders Identification Test (AUDIT) questionnaire, Vilhena, state of Rondônia, Brazil, 2020

Questions	M	S ²	r	α
Cronbach's Alpha Coefficient				0.83
How often do you drink alcohol-containing beverages?	4.48	29.31	0.53	0.81
When you drink, how many drinks do you usually take?	5.21	25.49	0.64	0.80
How often do you drink 6 (six) or more drinks on a single occasion?	5.07	26.12	0.62	0.80
How often in the last year have you felt unable to stop drinking once you started?	5.95	28.61	0.56	0.81
How often, in the last year, have you been unable to meet a commitment because of alcohol?	6.14	32.58	0.31	0.83
How often over the past year, after drinking heavily, have you had to drink in the morning to feel better?	6.16	31.59	0.48	0.82
How often in the last year have you felt guilt or remorse after drinking?	5.89	28.83	0.57	0.81
How often in the last year have you been unable to remember what happened the night before because of drinking?	6.00	29.63	0.59	0.81
Have you ever been injured or has someone else been injured because of your drinking?	5.91	29.03	0.41	0.82
Did a family member or friend or a physical or other health care provider worry about you about drinking or tell you to stop drinking?	5.83	26.79	0.55	0.81

M = Mean of the scale if the item is eliminated; S² = Scale variance if the item is eliminated; r = corrected item/total correlation; α = Cronbach's Alpha Coefficient if the item is eliminated; Mean, standard deviation for each question, total item correlation and internal consistency by Cronbach's Alpha; Cronbach's Alpha overall value = 0.83 - classification by score = almost perfect (≥ 0.80).

According to the AUDIT scale, 78.1% (n = 235) women surveyed reported drinking alcohol. With regard to the AUDIT classification, based on the participants who reported using alcoholic beverages, 78.4%

were classified as low-risk or abstinent consumers, 14.9% made risky consumption, 3.7% problematic use or probable dependence and 3% fall into high-risk consumption (Table 3).

Table 3. Classification of the AUDIT scale among women, Vilhena, state of Rondônia, Brazil, 2020

	n	%
Low risk consumption or abstinence	236	78.4
Risk consumption	45	14.9
High risk consumption	9	3
Probable dependence	11	3.7

Table 4. Multiple adjusted logistic regression for alcohol consumption with less than three and greater than or equal to three drinks and associated factors in 235 women from Vilhena, state of Rondônia, Brazil, 2020

Variables	<i>Binge drinking</i> (≥ 3 drinks) n = 135				
	n (%)	OR _{crude} (95% CI)	p	OR _{adjusted} (95% CI)	p
Age					
Young adult	109 (63.7)*	2.57 (1.43-4.63)*	0.002*	2.55 (1.34-4.85)*	0.004*
Intermediate adult	26 (40.6)	1		1	
Marital status					
Single, divorced, widow or living alone	61 (62.2)*	1.40 (1.05 – 2.38) *	0.014*	1.32 (1.02 – 2.26) *	0.030*
Married, stable union or living together	74 (54.0)	1		1	
Form of work					
Paid	99 (54.1)*	1.91 (1.10-3.68) *	0.037*	1.82 (1.07-3.27) *	0.040*
Other forms of working	36 (69.2)	1		1	
Monthly income					
0 to 1 minimum wage	57 (65.5)**	1.98 (1.09-4.04)**	0.002**	1.87 (1.03-3.71) **	0.005**
2 to 3 minimum wages	54 (54.5)**	1.25 (1.03-2.48)**	0.016**	1.19 (1.01-2.19)**	0.037**
≥ 4 minimum wages	24 (49.0)	1		1	
Education					
Up to elementary school	10 (71.4)**	1.52 (1.04-2.21)**	0.030**	1.53 (1.04-2.22)**	0.027**
High school	60 (72.3)**	1.53 (1.23-1.92)**	0.001**	1.50 (1.18-1.90)**	0.001**
Higher education	65 (47.1)	1		1	
Religion					
Yes	109 (56.5)	1		1	
No	26 (61.9)*	1.18 (0.68-2.05) *	0.541*	-	-
Physical activity					
Yes	52 (53.6)	1		1	
No	83 (60.1)*	2.51 (1.64-3.80)*	0.001*	2.49 (1.59-3.87)*	0.001*

OR = Odds Ratio; *Wald test for heterogeneity; **Wald test for linear trend. CI: Confidence Interval.

Based on the sample, binge drinking consumption equal to or greater than three drinks was 57

4% (n = 135). The multiple adjusted logistic regression analysis in Table 4 showed the variables retained in the final model. The variables associated with alcohol consumption in binge drinking were: being a young adult 63.7% (OR_{adjusted} = 2.55; 95%CI: 1.34-4.85; p = 0.004), being single 62.2% (OR_{adjusted}) =

1.32; 95%CI: 1.02-2.26; $p = 0.030$), having paid work 54.1% (ORadjusted = 1.82; 95%CI: 1.07-3.27; $p = 0.040$), income of up to one minimum wage 65.5% (ORadjusted = 1.87; 95%CI: 1.03-3.71; $p = 0.005$), from two to three minimum wages 54.5% (ORadjusted = 1.19; 95%CI: 1.01-2.19; $p = 0.037$), elementary education 71.4% (ORadjusted = 1.53; 95%CI: 1.04-2.22; $p = 0.027$), high school 72.3% (ORadjusted = 1.50; 95%CI: 1.18-1.90; $p = 0.001$) and non-exercises 60.1% (ORadjusted = 2.49; 95%CI: 1.59-3, 87; $p = 0.001$).

DISCUSSION

The aim of the study was to describe alcohol consumption and identify the factors associated with binge drinking among women in the municipality of Vilhena. Thus, the use of alcoholic beverages reported by the majority surveyed (78.1%) was considered higher than that of Recife (state of Pernambuco)²⁰, 42%. In relation to the abusive consumption of alcohol found in participants from Vilhena, classified by means of the AUDIT instrument, 14.9% made risky consumption; 3% high risk; and 3.7% problematic use or probable dependence, results higher than those found in Recife (state of Pernambuco), with 11.9% as at risk; 3% high risk; and 3.4% possible alcohol dependence²⁰.

In Bogotá, remarkably similar results were found in the cross-sectional study by Heredia et al.²¹ (2017), who investigated the effect of sociodemographic variables of vulnerability in the use of alcoholic beverages in 301 Colombian university students. From the Colombian sample, 80.4% participants moderately consumed alcohol and 19.6% had harmful alcohol consumption.

Data obtained emphasize the presence of alcohol use, as well as risky consumption, which is higher than the results found in Recife²⁰ and similar to those of Bogotá²¹. The studies above are consistent with the results presented, demonstrating the prevalence in the risk consumption pattern among the participants, suggesting the urgency of preventive and harm reduction actions aimed at female drinking.

Among the main findings of the present study, the prevalence of binge drinking equal to or greater than three drinks, assessed by AUDIT was 57.4%, considered high. In the municipality of Camaçari (state of Bahia)²², among the participants, 56.2% practiced binge drinking. In the global report on alcohol and health¹, women who practiced binge drinking accounted for 19.9%.

In the final model of the analyses, variables that remained associated with the variable of exposure to the binge drinking outcome (AUDIT ≥ 3 drinks): being a young adult, single, with paid work, income

less than or equal to three minimum wages, elementary school to high school and non-exercisers, showing, therefore, factors that may indicate vulnerabilities for female drinking.

A study examined the differences in alcohol consumption and binge drinking between Mexicans and Americans living along the border, young women were associated with high alcohol consumption and a higher proportion of women reporting binge drinking²³. In the Brazilian sample of Mendonça et al.²⁴ (2018), a similar relationship to the one presented in this study is indicated, as researchers verified the occurrence of binge drinking among 865 students and identified higher consumption among single participants ($p = 0.010$) and non-exercisers ($p = 0.005$), highlighting both factors as predisposition to binge drinking among women.

In the studied sample, an association was found between binge drinking and young adults (18 to 39 years old) surveyed, this age group was also mentioned by the WHO, together with the global report on alcohol and health of 2016. The organization mentioned that young people between 20 and 39 years of age are disproportionately more affected by alcohol compared to older people. Regarding deaths attributed to alcohol consumption, 13.5% ($n = 578,000$) of the occurrences in this age group were associated with the use of this substance, among men and women¹. Binge drinking can quickly lead to drunkenness,

putting their own lives and those of other people at risk².

Although binge drinking is a phenomenon that has been studied in recent decades by numerous researchers^{1,6,8-10}, there is still a shortage of studies correlating the several variables that involve this practice.

With the intention of verifying the instrument reliability (AUDIT), the Cronbach's Alpha test was applied, which resulted in a substantial or almost perfect evaluation, indicating good temporal stability¹⁹. The scale has already been used with the female^{6,20,24} and male²⁵ population, as well as, in studies that investigate both sexes²⁶, to verify the pattern of alcohol use.

According to the data collected, beer is among the most consumed beverages among the inhabitants of Vilhena (83.1%), followed by wine (79.4%) and then vodka (53.5%), which is in line with national studies with similar results^{27,28}, as well as the global report on alcohol and health released by the WHO, which indicates beer (61.8%), spirits (34.3%), wine (3.4%) and others (0.5%), with the drinks most consumed by Brazilians in general¹.

Regarding sociodemographic characteristics, the prevalence was young adult women, married, with paid work, monthly income between two and three minimum wages, higher education and with a religion. Similar sociodemographic data were reported by studies on alcohol consumption in Brazil^{6,20,22,24,26}.

The predominant behavioral aspects in the participants were: non-exercisers, age at onset of alcohol use in adolescence, and consumption of alcohol present in life, data that have already been surveyed and found in other studies on the use of alcoholic beverages in the country^{24,27,29}.

The onset of alcohol consumption in adolescence was presented in this and in the aforementioned studies, even though in Brazil the sale of alcoholic beverages is prohibited for children under 18 years old³⁰. There are studies that indicate a higher rate of alcohol consumption in adult life among those who start using it early^{21,24,28}. From this perspective, the importance that should be given to the initial factor is highlighted, and the need for preventive work for this audience through appropriate means, such as in school life, in an attempt to find different results in the short and long term. It is important to mention that the research was carried out in a period when the world is going through a pandemic (COVID-19), social isolation measures were established, and the behavior of alcohol consumption at home has been an option³¹. A Brazilian survey, carried out with 44,062 people of both sexes, in 2020, revealed that 17.1% female population reported having increased their alcohol consumption during the pandemic³².

Possible limitations are related to the cross-sectional design of the present study. Causal inferences are limited, requiring caution in data interpretation,

such as the possibility of memory and reverse causality biases in some association factors. The pandemic contributed to the selection of snowball sampling. Despite limitations, snowball sampling can be useful for researching groups that are difficult to access or study, as well as when there is no precision about their number. In addition, this specific type of sampling is also useful for studying sensitive, private issues and, therefore, it requires the knowledge of people belonging to the group or recognized by them to locate informants for study. Nevertheless, the weight of this limitation can be reduced in occasions when there is the possibility of obtaining seeds from different networks, increasing the possibility of accessing different networks and, consequently, more plural narratives.

CONCLUSION

Most of the investigated women in Vilhena consume alcohol, and a considerable portion uses it at levels that indicate risk or probable dependence. About binge drinking, the study revealed this behavior by a significant part of those surveyed. The sample indicated that young adults from Vilhena, single, with paid work, income less than three minimum wages, education up to high school and non-exercisers are more likely to binge drinking.

Preventive measures and health promotion strategies that guide and warn about the harm caused by alcohol

consumption and binge drinking are emerging, especially for this population that experiences more harmful effects with the use of alcohol. The development of preventive programs and regulatory policies that address the supply and access to alcohol is recommended.

The research is of utmost importance in the current scenario, highlighting the pandemic period and the lack of studies, especially to shed light on the discussion of the female relationship with alcohol, and may corroborate the development of other studies, also demonstrating the need to improve public policies of health and education that intervene to reduce this phenomenon, specifically aimed at the female population, shown here as of greater vulnerability.

In terms of impact, women from Vilhena have higher alcohol consumption compared to the national average (16% in 2020), a data presented by the Ministry of Health through a telephone survey, signaling the need for new epidemiological studies to better understand the phenomenon.

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