TEXTO & CONTEXTO ENFERMAGEM

THE ROLE OF MOOD STATES IN ALCOHOL CONSUMPTION, A STUDY WITH WORKERS

Letícia Yamawaka de Almeida[1]

Jaqueline Lemos de Oliveira[1]

Lilian Carla de Almeida[1]

Ana Carolina Guidorizzi Zanetti[1]

Sandra Cristina Pillon[1]

Jacqueline de Souza[1]

[1]Universidade de São Paulo, Escola de Enfermagem de Ribeirão Preto, Programa de Pós-graduação em Enfermagem Psiquiátrica. Ribeirão Preto, São Paulo, Brasil.

ABSTRACT

Objective: to identify factors related to harmful alcohol consumption, considering both sociodemographic characteristics and mood states.

Method: a quantitative cross-sectional study, carried out with 395 non-teaching workers on a campus of a public university in the interior of the state of São Paulo, from July 2017 to June 2018. Information on the sociodemographic profile, mood state and alcohol use pattern were used. Pearson's Chi Square, Fischer Exact and Logistic Regression Tests were performed for data analysis, using the SPSS statistical program.

Results: it was identified that 66% of workers had consumed alcoholic beverages in the last 12 months. Of these, 19% were classified in the range of harmful alcohol consumption. It is noteworthy that 35.2% (n=139) of workers mentioned the use in binge and 26.5% (n=105) consume alcohol two to four times a month. These variables were statistically associated with gender, religion and educational level. In addition, a negative correlation was identified between the AUDIT score and the "fatigue" factor of the mood scale. In the end, it was observed that male individuals and those with less education were more likely to consume alcohol in the harmful pattern.

Conclusion: it is suggested the development of health promotion and disease prevention initiatives through health education actions and other psychosocial strategies for welcoming these workers.

DESCRIPTORS: Consumption of alcoholic beverages. Mood. Workers. Health promotion. Socioeconomic conditions.

O PAPEL DOS ESTADOS DE HUMOR NO CONSUMO DE ÁLCOOL, UM ESTUDO COM TRABALHADORES

RESUMO

Objetivo: identificar os fatores relacionados ao consumo nocivo de álcool, considerando tanto as características sociodemográficas quanto os estados de humor.

Método: estudo quantitativo transversal, realizado com 395 trabalhadores não docentes em um campus de uma universidade pública do interior do estado de São Paulo, no período de julho de 2017 a junho de 2018. Foram utilizadas informações sobre o perfil sociodemográfico, o estado de humor e o padrão de uso de álcool. Foram empreendidos os Testes de Qui Quadrado de *Pearson*, Exato de *Fischer* e Regressão Logística para análise dos dados, utilizando o programa estatístico SPSS.

Resultados: identificou-se que 66% dos trabalhadores consumiram bebidas alcoólicas nos últimos 12 meses. Desses, 19% foram classificados na faixa de consumo nocivo de álcool. Destaca-se que 35,2% (n=139) dos trabalhadores mencionaram o uso em *binge* e 26,5% (n=105) consomem álcool de duas a quatro vezes ao mês. Essas variáveis foram associadas estatisticamente com o sexo, religião e nível de escolaridade. Além disso, identificou-se correlação negativa entre o escore AUDIT e o fator "fadiga" da escala de humor. Ao final, observou-se que os indivíduos do sexo masculino e aqueles com menor escolaridade tinham mais chances de consumir álcool no padrão nocivo.

Conclusão: sugere-se o desenvolvimento de iniciativas de promoção de saúde e prevenção de agravos por meio de ações de educação em saúde e outras estratégias psicossociais para o acolhimento destes trabalhadores.

DESCRITORES: Consumo de bebidas alcoólicas. Humor. Trabalhadores. Promoção da saúde. Condições socioeconômicas.

EL PAPEL DE LOS ESTADOS DE ÁNIMO EN EL CONSUMO DE ALCOHOL, UN ESTUDIO CON LOS TRABAJADORES

RESUMEN

Objetivo: identificar factores relacionados con el consumo nocivo de alcohol, considerando tanto características sociodemográficas como estados de ánimo.

Método: estudio cuantitativo transversal, realizado con 395 trabajadores no docentes en un campus de una universidad pública del interior del estado de São Paulo, de julio de 2017 a junio de 2018. Se utilizó información sobre el perfil sociodemográfico, el estado de ánimo y el patrón de consumo de alcohol. Se realizaron Pruebas de Chi-cuadrado de *Pearson*, Regresión Logística y Exacta de *Fischer* para el análisis de datos, utilizando el programa estadístico SPSS.

Resultados: se identificó que el 66% de los trabajadores había consumido bebidas alcohólicas en los últimos 12 meses. De estos, el 19% se clasificó en el rango de consumo nocivo de alcohol. Es de destacar que el 35,2% (n=139) de los trabajadores mencionó el uso *binge* y el 26,5% (n=105) consumen alcohol de dos a cuatro veces al mes. Además, se identificó una correlación negativa entre la puntuación AUDIT y el factor de "fatiga" de la escala del estado de ánimo. Al final, se observó que los hombres y los que tenían menos educación tenían más probabilidades de consumir alcohol en el patrón nocivo.

Conclusión: se sugiere el desarrollo de iniciativas de promoción de la salud y prevención de agravios a través de acciones de educación en salud y otras estrategias psicosociales para la acogida de estos trabajadores.

DESCRIPTORES: Consumo de bebidas alcohólicas. Ánimo. Trabajadores. Promoción de la salud. Condiciones socioeconómicas.

INTRODUCTION

The reduction of harmful alcohol consumption has been a priority for public health policies[1–3] and the economically active population is characterized as an important subgroup, in view of the health complications and work losses that the consumption of such substance can culminate.[4–5]

Sociodemographic and occupational risk factors related to alcohol consumption have been extensively investigated in previous studies,[5–7] which highlight the importance of emotional aspects as a repertoire of knowledge in discussions about the predictors of consumption.[8–9]

Analyses on the potential influence of emotional factors on workers' alcohol consumption have highlighted the importance of aspects related to mood in this group,[5,8–10] because these aspects are considered based on the individual's reactions to life events, including his/her feelings, behaviors, bodily and emotional states.[11]

It is worth mentioning that such studies have been developed with individuals from the general population[8] and with students,[9–10] addressing themes about emotional states and alcohol consumption among already dependent individuals,[8] their different motivations[9] and the negative effects on the next day of consumption in binge on the mood.[10]

Thus, although previous research has already addressed the general population, this study considered a sample of adults with differentiated socio-demographic characteristics and stability, suggesting that the risk factors involved in consumption and the influence of mood states are distinct from the others.

Thus, we sought to identify factors related to harmful alcohol consumption among workers at a Brazilian public university, considering both sociodemographic characteristics and mood states.

METHOD

This is a quantitative cross-sectional study, carried out on the campus of a public university in the interior of the state of São Paulo.

The eligibility criteria were: to be a non-teaching worker on that campus and not to be an outsourced employee. During the development of the study, the campus had 2,075 workers distributed in 10 teaching and/or administrative units.

The sampling plan adopted was stratified sampling with proportional allocation by strata, in which each was formed by the campus units. The formula for calculating the sample size is given by (1),

$$n = \frac{z_{\alpha/2}^2 N(1-P)}{\varepsilon^2 P(N-1) + z_{\alpha/2}^2(1-P)} \qquad nc = \frac{n}{(1+n/N)} \qquad n_h = n\frac{N_h}{N}$$

$$(1) \qquad\qquad\qquad (2) \qquad\qquad\qquad (3)$$

Where "P" represents the prevalence of the event of interest, $Z_{\alpha/2}$ represents the level of significance adopted and ε is the relative sampling error.

If the sample size calculated by the expression given in (1) is greater than 10% of the population, the following finite correction procedure is adopted (2). Where "N" is the total size of the study population and "n" is the value obtained in (1).

The prevalence of physical inactivity taken as the basis for the sample calculation was assumed to be unknown. In this case, a study that aimed to obtain a conservative estimate of the sample size[12] suggested a prevalence value of 50%, resulting in a sample size that includes any "P" value.

A The sample was allocated proportionally among the "*H*" strata according to the formula (3), where "*N*" is the total population of campus employees (*N*=2075), and N_h is the total for each strata "*H*". The parameter of relative error of 10%, significance level of 5%, prevalence of 50% in each stratum and the total population of 2,075 employees were adopted. As a result, a minimum sample size of 324 participants was obtained, considering the 10 units.

It was not possible to select the sample completely randomly, as the recruitment of workers requires special care, due to the particularities and requirements of the managers of each unit. Thus, such recruitment took place according to the availability and the directions obtained by the managers in relation to the approach. Thus, recruitment strategies did not take place in a uniform manner, in most units , a personal approach to the participants was made by the main researcher of the study; in one, specifically, a presentation was made by the researcher at a work meeting of the unit's team; in other units, an email was sent to the manager of the unit and to the employees, those who agreed to participate responded directly to the researcher who instructed on the next steps to answer the questionnaires; and in others, the researcher sent the emails to the participants individually with instructions and information about participating in the research.

This recruitment resulted in 395 workers who agreed to participate in the research, with a minimum of six and a maximum of 85 workers from each of the 10 units.

Data collection was carried out from July 2017 to June 2018, by a nurse, doctoral student, and a previously trained undergraduate student. Information on the sociodemographic profile, mood and alcohol use pattern were used, which were collected through the following questionnaires: Sociodemographic questionnaire; Alcohol Use Disorder Identification Test (AUDIT) and Brunel Mood Scale (BRUMS).

The sociodemographic data questionnaire contained information about the main individual attributes of the participants, developed by the researchers in this study, including questions about gender, age group, marital status, color, religion and education.

The AUDIT users assisted in the interior of the Amazon[13] and in an urban Brazilian sample.[14] It consists of 10 questions that aim to assess alcohol consumption in the last 12 months, the problems arising from this use and possible signs of dependence.[13–14] Questions from one to eight have five alternatives to answer (0,1,2,3,4), composing a Likert scale from "0" to "4" points. Questions nine and 10 have only three possible answers (0,2,4), ranging from "0" to "4" points. Thus, by adding the specific scores assigned to each of the items in this instrument, a minimum score of zero and a maximum of 40 is reached.[13–14]

It is suggested that the score be distributed in four classification zones: zero to seven, use of low-risk or abstinence; eight to 15, use of risk; 16 to 20, harmful use; over 20, probable dependence.[15] It is a questionnaire that is easy to understand, self-administered and that complies with the International Classification of Diseases (ICD-10) for harmful use and alcohol dependence. In this study, the use of risk, harmful use and probable dependence (that is, AUDIT score above seven points) were considered as harmful consumption.

The BRUMS allows to measure, in a brief way, the mood states of adults and adolescents.[16] The validation of the Brazilian version of the BRUMS was carried out in a study with athletes and non-athletes, and was shown to be sensitive and reliable in the assessment of the altered emotional states of both populations. It presented good internal consistency and Cronbach's alpha values above 0.70 for all constructs. It is a self-administered instrument, easy to understand and quick to complete.[16]

The instrument consists of a structured questionnaire with 24 items, subdivided into six domains: 1) Confusion: responses related to anxiety, manifested by feelings of uncertainty and instability to control emotions; 2) Depression: refers to a depressive state, in which personal inadequacy is present.

Indicates depressed mood and not necessarily clinical depression; 3) Fatigue: states of exhaustion, apathy and low energy level; 4) Anger: related to feelings of hostility. Emotional state ranging from mild feelings to stimuli of the autonomic nervous system; 5) Tension: refers to high musculoskeletal tension, not observed directly or by psychomotor manifestations; and 6) Vigor: states of energy, animation and activity, indicating positive mood.[16]

To calculate the score, the answer options are coded using a five-point Likert scale (0=nothing to 4=extremely). Thus, by adding the scores of each item, the score is obtained, which can vary from zero to 16 for each domain (mood state), so that the higher the score value, the greater the manifestation of the respective mood state.[16]

Participant responses were organized on Google Sheets. The consolidated database was transported to Microsoft Excel, in which the data was categorized and double entered. Subsequently, the data was checked using the Microsoft Excel EXACT function. After completing the data entry and checking stage, the bank was transferred to the Statistical Package for Social Science for Windows SPSS®20, in which statistical analyses were carried out.

The calculations of mean and standard deviation of the continuous variables were used: age, income, score of the factors of the mood scale (tension, depression, anger, vigor, fatigue, confusion) and AUDIT score. The distribution of variables was assessed by the Shapiro Wilk test and observed in the histogram.

The absolute (n) and relative (%) frequency of sociodemographic characteristics (gender, age group, color, marital status, religion, education, family monthly income) and characteristics of alcohol consumption (frequency of consumption, typical dose when drinking, use in binge, injuries arising from the use of alcohol) were also considered.

Bivariate analyses were performed (Pearson's Chi-Square Test and Fischer Exact Test) of the sociodemographic data and alcohol consumption among workers (drinks more than once a month, consumption in binge and harmful consumption) and Pearson's correlation test was performed considering the scores of the mood scale and the AUDIT.

Subsequently, a logistic regression model was developed, considering "harmful consumption" as a dependent variable, classified as "yes" or "no" and as independent variables, those that presented statistical significance in the bivariate analyses (p<0,05 namely: gender (male/female), stable union (without partner, with partner), education (elementary and high school/higher or post-graduate education), religion (has religion/has no religion). The domains of the mood scale that correlated with the AUDIT score (p<0.05) were also included in this analysis.

Information was provided regarding the voluntary nature of participation, the theme and objectives of the study and how to complete the questionnaire. Subsequently, an invitation letter for participation was given to the workers, containing the outline of the research and the Free and Informed Consent Form (FICF). Confidentiality and anonymity were guaranteed to the participants and the right to interrupt their participation at any time should they be emphasized. Those who agreed to participate signed the FICF in two copies.

The development of the research followed the Regulatory Guidelines and Norms for Research involving human beings, as established by the Resolution of the National Health Council No. 466/2012.

RESULTS

Regarding the sociodemographic profile, most participants were female, with an average age of 44.4 years (SD=9.7), who considered themselves white or yellow, had a partner and professed some type of religion, mainly Catholicism. A high level of education and an average family income of R$ 8,223.49 was observed among workers (SD=4.832,00).

Regarding the mood of the participants, in general, a high level was identified in the "vigor" domain, moderate levels in the "tension" and "fatigue" domains and low levels in the "depression", "anger" and "confusion" domains. The graph in Figure 1 illustrates the mood profile of the study participants, with the average score for each domain. This profile is also identified by the author of the scale as an "iceberg profile", that is, when there is an increase in the vigor factor (positive) in relation to the others (negative).[16] It is noteworthy that the minimum and maximum values of each domain were, respectively, zero and 16.
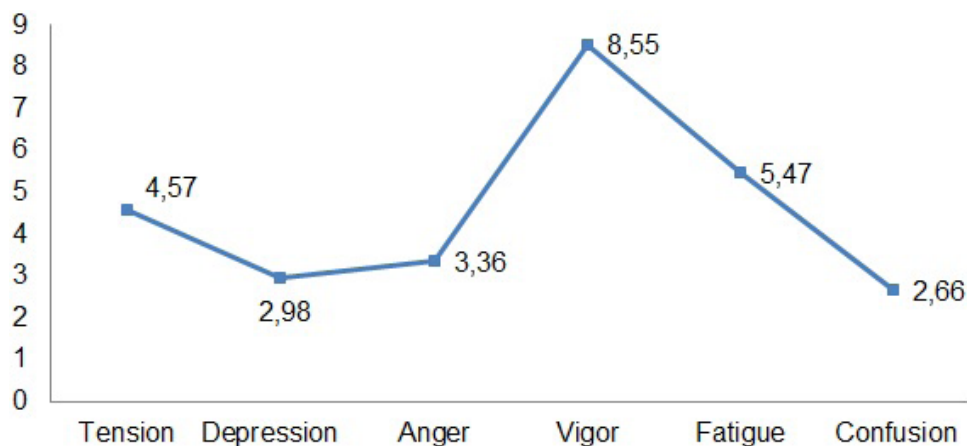

Figure 1 – Mood scores of the workers. Ribeirão Preto, SP, Brazil, 2017-2018. (n=395)

In relation to fatigue, the most prominent negative mood in the sample, 39.5% (156) of the participants reported feeling tired, 38.7% (153) exhausted and 37.8% (149) sleepy.

In relation to alcohol consumption, 34% (n=133) of workers were classified as abstaining in relation to the last 12 months and 66% (n=262) had consumed alcoholic beverages in this period. The average AUDIT score in the sample was 3.48 (SD=4.45). Figure 2 shows the consumption pattern of workers.
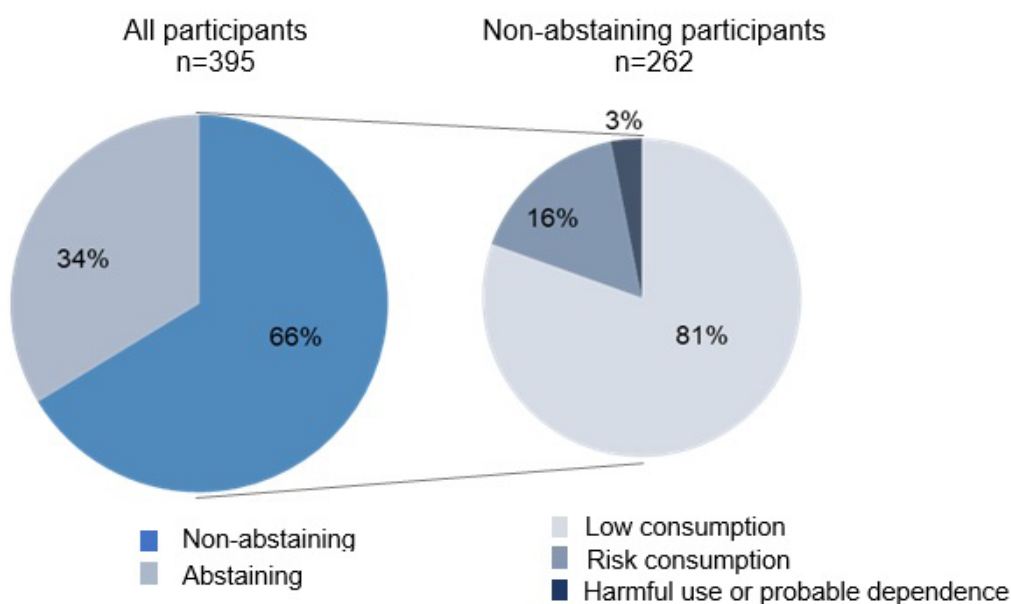

Figure 2 – Distribution of workers according to the pattern of alcohol consumption in the last 12 months. Ribeirão Preto, SP, Brazil, 2017-2018. (n=395)

Regarding the frequency of consumption, it was identified that 26.5% (n=105) of the participants (corresponding to 40.1% of drinkers) mentioned consuming alcohol two to four times a month. As for the number of typical doses when drinking, 32.6% (n=129) of the participants (corresponding to 49.2% of drinkers) reported consuming two to three doses per occasion. It is noteworthy that 35.2% (n=139) of workers (corresponding to 53.1% of drinkers) mentioned the use in binge and the majority (n=369) reported never having been injured or caused any harm to someone because of alcohol use.

Table 1 shows the frequency, consumption in binge and the pattern of alcohol consumption according to sociodemographic factors.

Table 1 – Relationship between socio-demographic characteristics of the workers and alcohol consumption. Ribeirão Preto, SP, Brazil, 2017-2018. (n=395)

Variables	Drinks more than once a month		Consumption in binge		Harmful consumption	
	Yes (%)	p[(*)]	Yes (%)	p[*]	Yes (%)	p[*]
Gender		≤0,001		≤0,001		≤0,001
Male	103(57,9)		92(51,7)		44(24,3)	
Female	75(42,1)		47(21,7)		7(3,2)	
Age range		0,951		0,734		0,646
Up to 44	89(44,9)		71(35,9)		24(12,1)	
45 or more	86(45,3)		65(34,2)		26(13,7)	
Color		0,464		0,667		0,354
White	146(44,1)		118(35,6)		40(12,1)	
Black and/or brown	30(49,2)		20(32,8)		10(16,4)	
Marital status		0,284		0,191		**0,008**
With partner	137(46,3)		109(36,8)		44(14,9)	
Without partner	38(40,0)		28(29,5)		5(5,3)	
Religion		**0,046**		**0,025**		0,147
With religion	139(42,6)		106(35,5)		38(11,7)	
Without religion	37(56,1)		31(47,0)		12(18,2)	
Education		**0,044**		**0,001**		**≤0,001**
Up to high school	52(54,2)		47(49,0)		26(27,1)	
Higher or post-graduate	125(42,4)		91(30,8)		24(8,1)	
Family income		0,546		0,410		0,113
1 to 6 minimum wages[‡]	53(42,7)		46(37,1)		20(16,1)	
More than 6 minimum wages	111(46,1)		79(32,8)		25(10,4)	

[*] Chi-Square Test or Fischer Exact Test; [‡] Minimum wage in 2017 in Brazil: R$ 937.00

As shown in Table 1, monthly frequency and consumption in binge were statistically associated with the gender, religion and level of education of the participants, suggesting that male individuals who declared themselves without religion and who had no higher education consumed alcoholic beverages more frequently and drank more than five drinks per occasion. Harmful consumption was associated with gender, stable union and level of education of the participants, suggesting that male participants in a stable relationship and with less education were more susceptible to problems in relation to alcohol consumption.

In addition, a negative correlation was identified between the AUDIT score and the "fatigue" factor of the mood scale (p=0,040; R= – 0,103), suggesting that the lower the manifestation of fatigue, the higher the AUDIT score (trend in drink).

In this way, the sociodemographic variables that were significantly associated with the harmful consumption result and the "fatigue" factor of the mood scale were used to create an explanatory model about the predictors of this consumption pattern. In the end, the model that best explained harmful consumption is described in Table 2.

Table 2 – Predictors of harmful consumption. Ribeirão Preto, SP, Brazil, 2017-2018. (n=395)

Independent variables	p value	Odds Ratio	Confidence interval (95%)	
			Lower limit	Upper limit
Gender	≤0,001	7,593	3,232	17,839
Education	0,003	2,744	1,415	5,323
Marital status	0,127	2,184	0,801	5,956
Fatigue	0,726	1,016	0,930	1,110

It was found that male individuals and those with less education were more likely to consume alcohol in the harmful pattern. These individuals were, respectively, seven and three times more likely to manifest such a pattern of consumption.

DISCUSSION

In general, the sociodemographic profile of the participants was similar to other investigations carried out with public university employees, [4,7] with emphasis on income and education above the national average.

As for the mood state, it was identified that the workers had high levels of the vigor factor (which analyzes the states of energy, animation, alertness and activity) and low/moderate levels of the negative factors, corroborating previous studies on the mood state in the general populationl.[17–18] It is worth mentioning that opposite results were identified in samples of people with some chronic condition, such as fibromyalgia[11] and epilepsy[19].

Although such a mood condition is considered promising for the mental health of individuals,[20] the moderate levels of fatigue and tension in the studied sample deserve attention, as it suggests that despite good levels of mood, work or personal conditions also influence mood manifestations, and need attention, as in the long run they can contribute to manifestations of psychological distress with consequent work losses.

Thus, actions to promote mental health, focused on coping strategies and reduction/maintenance of these emotional states can be explored in the work environment to prevent possible negative results in the health of this population.

Regarding alcohol consumption, 34% of the participants mentioned that they had not consumed alcohol in the last 12 months. Although a similar value was identified in a previous study carried out in the USA (35.6%),[21] this percentage was lower than the global prevalence of abstainers (57%),[1] and compared to the prevalence obtained in a national survey (50%)[2] and a study with servers from another university in the Southeast region of the country (49%).[4]

Despite the high prevalence of drinkers among the participants (66%), it should be noted that about 80% of them had a low-risk consumption pattern, corroborating the findings of other studies developed with Brazilian workers.[6–7]

In spite of these results, it is worth noting that paid work has been identified as an important factor of protection from pattern of harmful consumption.[22] Thus, because it is an economically active group with a standard of income and education above the national average, these factors may be playing a protective role and/or that a considerable part of the participants is aware of the risks of harmful alcohol consumption, its health complications and its consequent losses in the work, namely: delays, reduced productivity and accidents.[4]

On the other hand, it must be considered that workers with harmful consumption patterns could be away from their activities because of this or other related health issues. Thus, it is understood that institutional approaches are needed to sensitize workers about the risks involved also the consumption in binge and about the consequences of a possible increase in consumption.

In this sense, it is highlighted that more than half of the drinkers reported consumption in binge in the last year. Although this proportion is, in descriptive terms, slightly lower than the national prevalence (59.0%),[2] this value is above that identified in drinkers of the world population (39.5%).[1]

The literature points out that the use in binge increases the vulnerability to problems resulting from alcohol consumption[1,7] and is configured as an important indicator for harmful consumption. Thus, the rate identified in this study is worrying and should be considered for future preventive approaches and interventions in this group.

Consistent with previous health studies, consumption in binge was associated with males[7,23] and religion[24–25]. Thus, it is understood that preventive and health promotion actions must consider the specificities of male workers who are not involved in religious activities, who have been shown to be more vulnerable in relation to this pattern of consumption.

In addition to these two sociodemographic characteristics, a lower level of education was also related to the results "consumption in binge" and a higher frequency of use. However, previous research suggests mixed results about the relationship between alcohol consumption and education.[24,26] It is understood that this result may be related to the fact that the majority of workers with higher education were health professionals and that they were possibly better educated on the risks and consequences of excessive consumption of this substance, corroborating a more cognitive-behavioral perspective regarding this phenomenon.[27] In addition, it should be considered that a lower level of education, in the case of the sample studied, corresponded mostly to complete high school.

It was observed that about 20% of drinkers fit the pattern of harmful consumption, a percentage higher than that identified in surveys carried out with different categories of workers, which presented values between 13.2% to 16.9%.[4,6,21]

In relation to the difference between this study and the others mentioned, it is worth mentioning that the specificities of the studied populations, socio-environmental factors and methodological aspects may have influenced such disparities. However, this difference may also signal that some aspects common to the workers studied have contributed to increase the vulnerability of this group in relation to the pattern of harmful consumption. Therefore, it is important that the conditions that permeate this phenomenon are explored in greater depth in future studies, aiming to support more contextualized approaches and more resolute practices.

The marital status was associated with harmful consumption, the majority of workers who presented this consumption pattern were in a stable union, differing from some previous studies.[22,26] It is understood that such a result may be due to differences in the way of arguing such information during data collection. That is, according to the Brazilian Institute of Geography and Statistics, "marital status" refers to being married (bond formalized and regulated by the State) or not (single, widowed, divorced).[28] The "marital status" jointly considers individuals legally married or in a consensual union to the detriment of other circumstances such as dissolution of the marriage or never having married.[28]

Such differences and the lack of standardization in studies can be reflected in biases that hinder the consolidation of evidence.

Despite this, in the logistic regression model, the marital status did not show statistical significance in relation to harmful consumption, and the model that best explained this pattern of consumption in the studied sample pointed out as risk factors male gender and low education, corroborating countless previous studies.[6–7,22,26]

Men were seven times more likely to be classified in this pattern of consumption, highlighting some cultural aspects, because alcohol consumption continues to be widely accepted, encouraged and normalized for men.[3] In addition, considering that women are still more stigmatized in relation to alcohol consumption, this result also emphasizes gender norms.[3,29] Physiological factors, such as differences in the pharmacokinetics of alcohol, its effect on brain function and the levels of sex hormones can also influence this scenario.[29]

Individuals with less education were about three times more likely to be in this consumption range. Although inconsistent with the previous literature,[30] this result suggests that professionals with less education need alternative approaches in relation to the prevention of alcohol use, because they seem to be less aware of this issue.

Among the mood states studied (depression, confusion, fatigue, vigor and anger), only fatigue showed a negative correlation with the AUDIT score. This finding differs from previous studies, in which positive relationships were identified between alcohol consumption and greater manifestation of fatigue, whether it is experienced as one of the negative effects on the next day of alcohol consumption[10] or the use of alcohol as a mechanism for regulating emotions or coping with this negative emotional state.[9]

It appears that when they manifest less physical and emotional wear, workers would feel more willing to engage in activities that would favor alcohol consumption. Despite this, fatigue was not a predictor of harmful consumption in this study, suggesting that other moderating or mediating variables may be involved in this relationship, especially because alcohol consumption is a complex phenomenon that involves personal, interpersonal and environmental determinants in addition to the potential interactions between these factors.[5]

It is worth mentioning that harmful consumption, even if present in a low percentage of employees, can have a negative impact on the work environment, in addition to being a risk factor for the individual's physical, mental and social health.[4] In this sense, some recommendations were outlined.

The use of the brief intervention, a set of practices that involve the screening of risk levels associated with specific measures (according to the consumption pattern), is a strategic tool to assist both in the identification of problems related to alcohol and in counseling and awareness of individuals about harmful consumption.[7] It is a low-cost measure that can be performed by different health professionals.[7]

In this sense, nurses occupy a prominent role in the execution of this intervention, both in health services and in institutional environments, because their professional skills enable them to develop health promotion and disease prevention initiatives through health education actions and other psychosocial strategies. It is worth mentioning that the university studied has health teaching units that, if institutionally stimulated, could propose actions and programs, together with the health and safety at work sector, as an alternative for the reception of these workers, in addition to thematic prevention campaigns.

CONCLUSION

It was identified that the consumption profile of the workers studied differed, in descriptive terms, from the national profile. A lower percentage of workers reported a consumption in binge and a higher percentage was classified as a harmful consumer. Regarding the risk factors, despite the higher socioeconomic standard of the studied group, they were the same ones pointed out in previous studies, with emphasis on the male gender and less education.

Approximately 40% of workers reported feeling tired and exhausted, however there was more alcohol consumption among workers who obtained lower scores in the "fatigue" domain of the mood scale.

The non-random choice of the sample, due to the particularities and requirements of the managers of each unit, consists of an important limit to be highlighted in relation to the generalization of the results. Therefore, for future research, it is suggested a methodological design and sample that will make it possible to analyze in more depth the influence of such characteristics on these results, as well as clarifications of the possible moderating or mediating variables that operate in these phenomena.

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NOTES

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CONTRIBUTION OF AUTHORITY
Study design: Almeida LY, Souza J.
Data collection: Almeida LY.
Data analysis and interpretation: Almeida LY, Souza J.
Discussion of results: Almeida LY, Oliveira JL, Souza J.
Writing and/or critical review of content: Almeida LY, Oliveira JL, Almeida LC, Zanetti ACG, Pillon SC, Souza J.
Final review and approval of the final version: Almeida LY, Oliveira JL, Almeida LC, Zanetti ACG, Pillon SC, Souza J.

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CORRESPONDING AUTHOR
Jaqueline Lemos de Oliveira
jaquelemos@usp.br